Positioning affordable and backyard rental housing as a key target in Kenya’s Affordable Housing Programme DRAFT Findings

Presentation to the KMRC Affordable Housing Conference 2022

Prepared for the World Bank Group Kenya
Contract 7205595
Draft findings: 25 November 2022

Kecia Rust
Beatrice Mwangi

Illana Melzer
Jess Breier

Fatou Dieye, Consultant
Carol Matiko, Gmaurich
Rental is a critical form of tenure... That has seen significant growth despite a weak enabling environment...

3.67 Million (78%) urban households rent their primary dwellings in Kenya.

Between 2009 and 2019, each year...

- 158,000 new urban renter households
- 39,000 new urban owner-occupied households

Delivered almost entirely by the private sector...

89% urban households rent from private individuals.

This significant delivery through the rental market is not explicitly recognised in policy. Targeted support in affordable neighbourhoods can address qualitative backlogs while an enabling environment can support the development of new affordable rental units at scale.
Understanding demand & supply

Limited access to services, particularly water and sanitation, is a key feature of urban rental housing in Kenya

### URBAN RENTER HOUSEHOLDS: 3.67 MILLION HOUSEHOLDS (78%)

<table>
<thead>
<tr>
<th><strong>SOURCES OF DRINKING WATER</strong></th>
<th><strong>MAIN MODE OF HUMAN WASTE DISPOSAL</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Selected categories</strong></td>
<td><strong>51%</strong></td>
</tr>
<tr>
<td><strong>26%</strong></td>
<td><strong>Have a flush toilet</strong></td>
</tr>
<tr>
<td>Main source of drinking water piped into yard / plot</td>
<td>Of which…</td>
</tr>
<tr>
<td><strong>18%</strong></td>
<td><strong>29%</strong></td>
</tr>
<tr>
<td>Main source of drinking water piped into dwelling</td>
<td>Are connected to the main sewer</td>
</tr>
<tr>
<td><strong>17%</strong></td>
<td></td>
</tr>
<tr>
<td>Main source of drinking water public standpipe</td>
<td>The remaining 47% of households use pit latrines, while 2% use buckets or cess pool</td>
</tr>
<tr>
<td><strong>25%</strong></td>
<td></td>
</tr>
<tr>
<td>Main source of drinking water is water vendor or bottled water</td>
<td></td>
</tr>
</tbody>
</table>

Source: Census 2019, IHBS 2015/16 Community survey

Note: *The remaining 14% say their main source of drinking water is boreholes, protected well or spring, a stream or river, or rainwater.* **Considered flush toilet if answered: main sewer, septic tank or bio-septic tank
Renter Segments: Private individuals and companies currently deliver rental housing across a spectrum of formality and quality. This is shaped by many factors including, but not limited to, access to land and formal tenure, access to finance, construction costs, access to skilled builders and professionals, provision of critical infrastructure and services (e.g. water, sanitation), and government capacity to drive compliance with appropriate building standards.

Urban renter household segments (number of households; % of urban households)

Segmented based on area type* & housing quality

<table>
<thead>
<tr>
<th>Segment</th>
<th>Informal area, non-durable materials</th>
<th>Informal area, durable materials</th>
<th>Formal area, non-durable materials</th>
<th>Formal area, durable materials, non-flush sanitation</th>
<th>Formal area, durable materials, flush toilet shared</th>
<th>Formal area, durable materials, flush toilet not shared</th>
</tr>
</thead>
<tbody>
<tr>
<td>Size</td>
<td>227 100 (6%)</td>
<td>119 450 (3%)</td>
<td>600 470 (16%)</td>
<td>1 145 780 (31%)</td>
<td>945 760 (26%)</td>
<td>628 350 (17%)</td>
</tr>
</tbody>
</table>

Source: Census 2019. Note: *Area type defined as formal and informal as per the data provided in the Census 2019.
**Renter Segments:** Incrementalism and lack of formal finance are key features of the current rental market. This has knock-on effects on the quality of housing that can be delivered. There is significant opportunity for Government to support the private sector in addressing the quality concerns in the sector through improved infrastructure development, water and sanitation specifically. Lenders are poised to invest but also struggle with key regulatory and administrative barriers. Enabling and supporting quality and compliant construction should also be priority for Government.

**Urban renter household segments (number of households; % of urban households)**

*Segmented based on area type* & housing quality

<table>
<thead>
<tr>
<th>Segment</th>
<th>Area Type</th>
<th>Housing Quality</th>
<th>Delivery Model</th>
<th>Income &amp; Spend</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Informal</td>
<td>Non-durable</td>
<td>Not investigated in this study</td>
<td>Median monthly HH income is Ksh 26 000</td>
</tr>
<tr>
<td></td>
<td>area</td>
<td>materials</td>
<td></td>
<td>Median rental amount is Ksh 35 000</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Rent expense = 9% of HH expenditure/mnth</td>
</tr>
<tr>
<td>2</td>
<td>Informal</td>
<td>Durable</td>
<td>Funded through own-savings</td>
<td>Median monthly HH income is Ksh 30 000</td>
</tr>
<tr>
<td></td>
<td>area</td>
<td>materials</td>
<td>Incremental build using fundi builders or targeted building solutions (e.g. Kwango Kwako)</td>
<td>Median rental amount is Ksh 2 448</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Rent expense =12% of monthly HH expenditure</td>
</tr>
<tr>
<td>3</td>
<td>Formal</td>
<td>Non-durable</td>
<td>Funded through own-savings</td>
<td>Median monthly HH income is Ksh 27 000</td>
</tr>
<tr>
<td></td>
<td>area</td>
<td>materials</td>
<td>Incremental build using fundi builders, or leveraging targeted solutions (e.g. Kwango Kwako)</td>
<td>Median rental amount is Ksh 2 312</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Rent expense =9% of monthly HH expenditure</td>
</tr>
<tr>
<td>4</td>
<td>Formal</td>
<td>Non-durable, non-flush sanitation</td>
<td>Funded through own savings or loans from non-bank lenders who cater to incremental build (e.g. Letshego)</td>
<td>Median monthly HH income is Ksh 26 000</td>
</tr>
<tr>
<td></td>
<td>area</td>
<td>materials</td>
<td>Incremental build or once off</td>
<td>Median rental amount is Ksh 2 448</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Use of fundi builders and some use of formal contractors (e.g. engineers)</td>
<td>Rent expense =11% of monthly HH expenditure</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>• Includes tenements</td>
<td></td>
</tr>
<tr>
<td>5</td>
<td>Formal</td>
<td>Durable</td>
<td>Financed with own savings, or equity (in the case of companies), potentially some use of bank loans</td>
<td>Median monthly HH income is Ksh 39 000</td>
</tr>
<tr>
<td></td>
<td>area</td>
<td>materials, flush toilet shared</td>
<td>Likely to be once off build by formal contractors</td>
<td>Median rental amount is Ksh 4 603</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Includes tenements</td>
<td>Rent expense =13% of monthly HH expenditure</td>
</tr>
<tr>
<td>6</td>
<td>Formal</td>
<td>Durable</td>
<td>Includes tenements</td>
<td>Median monthly HH income is Ksh 72 000</td>
</tr>
<tr>
<td></td>
<td>area</td>
<td>materials, flush toilet not shared</td>
<td>• Includes tenements</td>
<td>Median rental amount is Ksh 12 665</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Rent expense =16% of monthly HH expenditure</td>
</tr>
</tbody>
</table>

Source: Census 2019. Note: *Area type defined as formal and informal as per the data provided in the Census 2019.
Segments by Neighborhood: The 6 segments rental housing segments and corresponding delivery models can be found in different pockets across the city where they evolve according to interpretation of building standards, block configuration, access to basic services (infrastructure, transport) and proximity to employment opportunities. The incremental nature of residential housing development means that different segments can be present in adjacent buildings or on the same plot. A case study of 8 rental units in neighborhoods across Nairobi County reveal the opportunistic nature of many speculative residential housing developments.
Landlord experiences

Due to the incremental nature of the rental housing delivery, the same landlord can cater to different tenant segments (oftentimes on the same plot of land)

Case study: Incremental, small-scale landlord

Mary* (not her real name) is a small-scale landlord in Kawangware, Nairobi. She has 49 rental units on her ¼ acre plot of land that she owns with her husband. Mary and her family also live on the plot in a shack structure.

<table>
<thead>
<tr>
<th>Two-storey walk up (durable building materials)</th>
<th>Shack / ‘mabati’ structures</th>
</tr>
</thead>
<tbody>
<tr>
<td>Nine units in total, all bedsitters:</td>
<td>Forty units in total</td>
</tr>
<tr>
<td>• Six units have a shared toilet / washroom</td>
<td>• All one room shacks</td>
</tr>
<tr>
<td>• Three units have their own toilet / washroom</td>
<td>• Shared washroom / toilet in yard</td>
</tr>
<tr>
<td>Rentals charged range from Ksh 6 000 / month (shared toilet) – Ksh 8000 / month (own toilet)</td>
<td>Rentals charged Ksh 3 000 / month</td>
</tr>
<tr>
<td>Construction financed through a loan of Ksh 2 million initially with a top up of Ksh 500 000 from Letshego Financial Services (MFI) at 15% interest over 5 years</td>
<td></td>
</tr>
<tr>
<td>Building plan was drawn up for the construction (requirement of loan) but actual build was done by local ‘fundi’ builders</td>
<td></td>
</tr>
</tbody>
</table>
Anthony has rented the same flat in Pipeline, Nairobi for the past six years. He shares a one-bedroom flat with his wife and two children. They have a toilet / washroom in their unit but no piped water in their dwelling. Water for washing is collected from a central point in the building when it is made available by the landlord, and stored outside the unit in large jerry cans.

Their space is very cramped, and he wishes they had a more reliable source of water, and that there was a better refuse collection system in their building. But his access to water and sense of security in his current building is better than what he experienced in his previous rental (also in Pipeline), so he feels some satisfaction that his family’s living conditions have improved.

Anthony says he will move from his current building when he “finds the house he is looking for”, but he is also very aware of his affordability constraints. His priority is also to be close to a good school for his children that he can afford.

Renting in Nairobi is also not the long-term vision for Anthony and his wife. He has built a house on land he purchased “away from my parent’s land” and regularly visits the house with his family.

Water is not reliable if you are not in the house during the week you may not get water, and that does not exempt you from paying water bill at the end of the month, we also don’t know when the water will come, if they could say on Monday 1st and 2nd floor will get water that will be orderly but this is a case where we don’t know when the water will come. That water supply service is not reliable.
Neighbourhood experience

Many of the factors driving tenant dissatisfaction with their living conditions relate to basic urban management and infrastructure.

R7: Sewage that have busted not necessarily in my place but in the surrounding area you find a sewage has busted and sewage is all over.

R1: What I don't like about the surrounding is the noise, you find one has wines and spirit, then next person has a salon the next person has a shop and every one puts loud music. You find one has put one in Kamba, the other has put reggae and the other one has put gospel music, so they compete and the noise is unbearable.

R5: There is no space where children can play, when a child wants to ride a bike they will have to go ride at the road which is not safe. They need to have a plan, there should be a playground.

Source: Pipeline tenant focus group: October 2022
Understanding demand & supply

If rental housing was included in the Government's Affordable Housing Programme, the majority of urban renter households fall within the income bracket for 'Low-Cost' housing. A further 10% fall within the income bracket for 'Social Housing', living in rental accommodation that is not currently supported with subsidy.

MONTHLY INCOMES* OF URBAN RENTER HOUSEHOLDS

3.2 million households

AHP Low-Cost Housing range: 60% of urban renter households (1 848 000)

AHP Social Housing range: 10% of urban renter households (322 000)

*Total household monthly expenditure used as a proxy for household income due to limitations on calculating income in the IHB survey 2015/16

Source: Integrated Household Budget Survey 2015/16
Note*: Expenditures have been inflated to May 2022
Policy & Regulatory Environment

Kenya's national policy and economic development framework is keenly focused on affordable housing. With the recent election of the new administration, the emphasis on affordable housing as a key pillar in the government's development strategy has been re-confirmed. New targets have been set and all players in the housing sector are driving towards the common goal of affordable housing. Rental is hardly mentioned, however, and the activities of small-scale / individual landlords in the affordable market are not accommodated.

Overarching policy & legislation

Kenya Vision 2030 | Sessional Paper No. 3 of 2016 National Housing Policy | Affordable Housing Programme | National Land Use Policy

Vision 2030 explicitly focuses on housing and within that, acknowledges the need for landlord and tenant legislation. Beyond this, no attention is given to rental. While the 2016 Housing Policy makes explicit reference to rental in detail, none of the proposed measures have been implemented and the reliance on the NHC is misguided given the dominance of individual household landlords. The Affordable Housing Programme is clearly focused on new build of ownership housing – it makes no reference to rental. While the National Land Use Policy acknowledges the need for densities to overcome land price increases, as well as the gap in service delivery, it does not address rental tenure arrangements.

Building & refurbishment / redevelopment of rental housing

- Building approval permitting process involves four mandatory construction approvals: Physical Planning Office, Public Health Office, National Environmental Management Authority, National Construction Authority
- Draft National Building Code 2022
- National Building Code 1968
- Value Added Tax Act, No 35 of 2013
- Housing Act of 1953
- Poor enforcement at the bottom end of the affordability ladder
- Fundi builders often do not follow NCA requirements, and are not called to account
- Draft NBC does not accommodate small scale rental developers
- State has power to condemn & demolish bad buildings but has no plan to recover lost units

Financing of rental housing

- Housing Act of 1953 establishes the National Housing Corporation (NHC) which provides funding for development, and undertakes development itself (public housing)
- The Housing Bill 2021 acknowledges rental but not the particular emphasis of current supply. Incentives to investors do not include a focus on rental.
- Capital Markets (Real Estate Investment Trusts (Collective Investment Schemes) Regulations, 2013 but application to affordable housing is questionable
- KMRC fails to accommodate financing of rental development in its mandate

Management of rental housing

- Rent Restriction Act, 1959 Cap 296
- The Distress for Rent Act, 1938 Cap 293
- Landlord and Tenant Bill, 2021 still in draft & proposes a Tribunal
- The Housing Bill of 2021 proposes a Tribunal
- Unclear regulatory context

Taxation & governance of rental activity

- Income Tax Act Cap 470 – Section 6A Residential Income Tax
- Finance Act, No. 22 of 2022
- National Tax Policy 2022
- Explicit attention by KRA on expanding the tax net to include landlords
- Pending adoption of the National Tax Policy
- No specific attention to governance of dense urban spaces

Gaps in the policy and legislative environment

- Failure to engage with small-scale landlord models – the vast majority of rental
- AHP incentives inaccessible to rental; no incentives specific to rental
- National Building Code sits in a regulatory vacuum, and is ultimately unenforceable
- Poor enforcement of building approval guidelines due to capacity constraints
- Failure of the NHC to engage with the reality of rental markets in its public estates
- Poor integration of the NHC with county governments
- Failure of the draft NBC 2022 to recognize and provide for a wider array of professionals in the sector beyond architects and engineers
- Jurisdictional overlap on Tribunals proposed in Landlord & Tenant Bill and the Housing Bill of 2021
## Principles of the approach

<table>
<thead>
<tr>
<th>Scale</th>
<th>The government of Kenya has committed itself to the delivery of 250,000 units of affordable housing per annum. According to the 2019 Census, between 2009 and 2019, the Kenyan population grew by about 1.6 million new renter households versus about 400,000 new owner households. This suggests that about 80% of new delivery is rental, at a rate of about 138,000 units per annum. This is delivered under the radar, not counted in the official delivery statistics that say the country is delivering only 50,000 units per annum.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Currently, the Affordable Housing Programme champions scale delivery by incentivizing developers to deliver large-scale projects of over 100 units per development. Scale can also be achieved through well-supported investment in multiple, small-scale initiatives. This &quot;massive small&quot; approach can leverage the existing activity of small-scale operators applying their capital at the very local level, leveraging allowable densities in land pockets with existing infrastructure, providing opportunities for entrepreneurs and diversifying the delivery approach.</td>
<td></td>
</tr>
<tr>
<td>Affordability</td>
<td>In Kenya, today, the price of the cheapest newly built home is KSh 1.5 million. At an interest rate of 11% over 25 years and with a 5% deposit, this would be affordable to 63% of the urban population. However, many with this in-principle affordability might not be able to access mortgage finance, or they might not have the savings for even a 5% deposit. And the supply side is not yet delivering that much accommodation for ownership to meet even some of those who might afford such a unit.</td>
</tr>
<tr>
<td>The Affordable Housing Programme champions home ownership through a series of supply-side incentives for developers, and demand-side support via the KMRC. This is important, but insufficient given the breadth of the challenge. There is an opportunity to leverage existing assets – inner city land that is already serviced, buildings that are already built, delivery agents who are already delivering – and improve the quality of their offerings while maintaining the affordability that reaches far deeper than an ownership approach enables.</td>
<td></td>
</tr>
<tr>
<td>Investment</td>
<td>The scale of Kenya’s affordable housing ambitions stretch far beyond the capacity of the state. Private sector investment is critically needed to enable the delivery of affordable housing. Key barriers to such investment in the current context include the level of risk associated with low-income housing investment, and the cost of capital which raises return expectations.</td>
</tr>
<tr>
<td>Lenders are keen to engage in a market segment that demonstrates clear cashflow opportunities as well as the potential for property appreciation. Information asymmetry, poor local governance, and a very high cost of capital undermine the potential, however. Targeted interventions that explicitly address risk and return in this market segment, are likely to shift appetite in its favour.</td>
<td></td>
</tr>
<tr>
<td>Sustainability</td>
<td>The sheer scale of activity already underway in the affordable rental sector despite a lack of government support, highlights the significance of this sub-market. No matter the poor quality of many existing investments, these represent embedded carbon which should and could be leveraged. A concern is the significant risk that a qualitative deficit will turn into a quantitative one.</td>
</tr>
<tr>
<td>Shifting the delivery approach in the affordable rental market to one that elevates quality and the longevity of the built environment, will provide substantial opportunities to the fundi and micro-developer sector, while growing the overall economic contribution of their efforts. Working with existing assets is also an inherently green approach, critical to the long-term sustainability of Kenyan cities.</td>
<td></td>
</tr>
<tr>
<td>Local relevance</td>
<td>The capacity and direction of housing delivery is inherently local, responsive to context – land tenure, the interpretation and enforcement of building standards, block configuration, access to basic services, and proximity to employment opportunities. While policy can set the rules, implementation guidelines must be flexible to local context if they are to be effective.</td>
</tr>
<tr>
<td>The Affordable Housing Programme engages with the delivery challenge through a series of incentives and rules targeted at housing projects. An area-based approach that brings together these housing intentions with investments in infrastructure, land tenure interventions, and local (informal and unrecognized) delivery capacity will enable more relevant and effective interventions.</td>
<td></td>
</tr>
</tbody>
</table>
1. Count rental

1.6m new renter households between 2009 – 2019 = delivery of 158,000 additional units per annum

For urban renter households...

Only 44% have piped water into their dwellings or yard

Only 51% have access to flush toilets

And 77% share toilets facilities with other households

2. Prioritise service delivery

3. Enable construction quality

Large number of structurally unsound and unsafe rental buildings due to poor construction and building materials, lack of finance, limited professional supervision, and limited enforcement of building plans, bylaws and inspections

4. Clarify & capacitate roles, rights & responsibilities

Low awareness of tenants’ rights

No clear mechanism or channels for tenants to seek recourse against contractual obligations of landlord (e.g. water provision) and against abusive management practices (particularly with respect to rental collection)

Limited capacity at county level to engage with rental

5. Pilot an approach

Current policies & statutes lack implementation guidelines & measures appropriate for Kenya’s own urban rental market.

89% of renter households have landlords who are individuals

International experience offers useful insights.

National policy recognition of rental

Focused attention on the serious qualitative deficit will support existing, currently unquantified delivery.

Emphasize market transparency & data: monitoring rental levels, escalations, revenue streams, service delivery, etc. to encourage investment.

Bulk infrastructure prioritisation, funding & delivery

A dedicated programme to deliver bulk infrastructure (water, sanitation, roads & stormwater services) in situ, prioritised in line with densities (number of households served) will improve the quality and decency of rental and generate revenue streams for local government via payment for services & taxes

Strong interface with the private sector

Improved municipal capacity for building inspections & the provision of technical assistance to support new build and in situ upgrading will raise the bar on quality, even within affordable units.

Focused attention at the local level on enabling the full delivery & financing value chains.

Capacity to govern & administer actual densities

Enforcing tenant rights & responsibilities, will leverage capacity towards quality residential environments.

County governments need additional capacity to manage the scale of delivery already underway.

Targeted, funded neighbourhood-based intervention

The roles & responsibilities, amendments to policy & legislative framework required, capacity and financing needed can all be tested through two pilot interventions, focused on 1) refurbishment of existing buildings and 2) new rental build, in backyards and tenement areas.
Pilot an approach

A national pilot initiative is proposed. At the national level, government will work out the arrangements with other departments and agencies to ensure that services are prioritised for the identified pilots. County governments will be invited to apply to drive two pilot programmes in their jurisdiction with national government subsidy support. The primary approach involves the establishment of two local level offices (these may be linked) – with technical assistance services delivered by the private and non-governmental sector, while regulatory and administrative services are delivered by the public sector. The two offices would work in cooperation with one another, feeding data to national government in support of policy development and refinement. Over time, the experience will allow for the national policy and regulatory framework and for the local administrative and management framework to be replicated in centres across Kenya’s cities.

1. Inner-city area-based urban regeneration & building renovation

Establish neighbourhood-based non-governmental Technical Support Offices, to co-ordinate support at the local level. These advice centres would provide free building assessments, free technical advice and drafting services, and the development of regularisation plans. Advice offices could also offer inspection services, working with the city to reduce the inspections backlog.

2. Urban infill new-build with entrepreneurial landlords

Establish neighbourhood-based County-satellite building approval Offices, to review and approve building plans, provide construction and occupancy permits, and facilitate access to subsidies and finance. This office would also monitor development in the area, and deliver this information to the relevant offices for attention.

Count rental:
To gather real, on-the-ground data on:
- The nature of problems and effort / funding required to build new quality buildings and to remediate existing buildings
- To understand required amendments to by-laws, zoning and building regulations

Prioritise service delivery
Area-based assessment of immediate and long term needs given existing and anticipated densities. Pilot approach assists in determining how prioritisation would work, and which stakeholders need to be brought into the process.

Enable construction quality
Area based assessment of qualitative deficit and identification of measures to address these. Engagement with local financiers to link state subsidies with finance.

Clarify & capacitate roles, rights & responsibilities
Implementation of a landlord/tenant tribunal
Capacity building programme for the local county office of development approvals
Mwiki: Incremental growth in a low and medium-rise residential district

A case study of plots in the Mwiki

ZONING GUIDELINES
Per the City Council of Nairobi’s Guide of Development Ordinances and Zones, construction in Mwiki shall adhere to the following guidelines:

- Permitted uses: Agriculture and Residential Mixed-Use Development
- Ground Coverage: 50%
- Plot Ratio: 200%
- Min. Lot Size for Residential: 0.1 – 0.5 Ha

STANDARD BLOCK: 450m x 40m
STANDARD PLOT: 18m x 18m

DRAFT FINDINGS: 25 November 2022
Mwiki: Analysis of Existing Development

Although transport connections to and commercial activity in Mwiki have drastically improved over the last 20 years, the neighborhood's residential development remains largely low-rise and low-density. Could this be as a result of zoning, building and finance regulations?
Mwiki: Analysis of Existing Development

Case Study no. 1
INCREMENTAL LOW RISE ON CORNER PLOT

Case Study no. 2
INCREMENTAL MEDIUM RISE ON MIDDLE PLOT

DRAFT FINDINGS: 25 November 2022
Mwiki: Incremental growth in a low and medium-rise residential district

As-of-right zoning guidelines leave the developer little incentive to comply with building regulations

**CORNER PLOT CONFIGURATION**

*As per Zoning Guidelines*

```
20m

Courtyard

18m

Building Footprint

20m
```

**MIDDLE PLOT CONFIGURATION**

*As per Zoning Guidelines*

```
18m

Building Footprint

18m

Front Yard
```

*As per Zoning Guidelines and Draft Building Code 2022*

```
18m

Rear Yard

20m

Building Footprint

18m
```

DRAFT FINDINGS: 25 November 2022
Mwiki: Incremental growth in a low and medium-rise residential district

As-of-right zoning guidelines leave the developer little incentive to comply with building regulations

**CORNER PLOT CONFIGURATION**

*As per Zoning Guidelines and Draft Building Code 2022*

**MIDDLE PLOT CONFIGURATION**

*As per Zoning Guidelines*  

*As per Zoning Guidelines and Draft Building Code 2022*
Mwiki: Low-Rise Mixed-Use Residential on Corner Plot

Landlord lives on premises. Purchased the building in 1998 and it has been under construction since then.
Mwiki: Low-Rise Mixed Use Residential on Corner Plot

Construction phasing is both guided and constrained by budget concerns and market priorities. A corner plot offers commercial revenue and drives development.
Mwiki: Medium-Rise Residential on Middle Plot

Construction phasing is both guided and constrained by budget concerns and market priorities. A corner plot offers commercial revenue and drives development.
THANK YOU!

Prepared for the World Bank Group Kenya
Contract 7205595
Draft Findings: 25 November 2022

Fatou Dieye, Consultant
Carol Matiko, Gmaurich