The complex dynamics of Nairobi’s low-income housing services and land markets

Shelter provision in East African Cities: Understanding Transformative Politics for Inclusive Cities: City Briefing
Author information

This report was written by: Baraka Mwau and Alice Sverdlik (alice.sverdlik@iied.org). Contributing authors: Dennis Mwaniki, Jack Makau, Sammy Muinde.

About the project

This research project is a comparative analysis of systems of shelter provision in three East African cities: Nairobi, Hawassa and Mogadishu. It is funded by UKAid’s East Africa Research Fund and is identifying policy-relevant, locally-driven solutions to improve shelter for low-income women, men and vulnerable groups. The programme is led by IIED in partnership with SDDirect, Tana, SDI-Kenya and Econvalue. More information can be found here: https://www.iied.org/shelter-provision-east-african-cities-understanding-transformative-politics-for-inclusive-cities or contact: Lucy Earle, lucy.earle@iied.org

IIED is a policy and action research organisation. We promote sustainable development to improve livelihoods and protect the environments on which these livelihoods are built. We specialise in linking local priorities to global challenges. IIED is based in London and works in Africa, Asia, Latin America, the Middle East and the Pacific, with some of the world’s most vulnerable people. We work with them to strengthen their voice in the decision-making arenas that affect them — from village councils to international conventions.

Published by IIED, January 2019

http://pubs.iied.org/10867?IIED
# Contents

<table>
<thead>
<tr>
<th>Section</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Key findings</td>
<td>2</td>
</tr>
<tr>
<td>Summary</td>
<td>2</td>
</tr>
<tr>
<td>Introduction</td>
<td>3</td>
</tr>
<tr>
<td>Critical issues</td>
<td>4</td>
</tr>
<tr>
<td>Varieties of shelter for low-income Nairobi residents: an emerging typology</td>
<td>4</td>
</tr>
<tr>
<td>Land and housing markets</td>
<td>6</td>
</tr>
<tr>
<td>Gender, vulnerability, and shelter quality in Nairobi</td>
<td>7</td>
</tr>
<tr>
<td>Feedback from stakeholder workshops</td>
<td>9</td>
</tr>
<tr>
<td>Next steps</td>
<td>9</td>
</tr>
</tbody>
</table>
Key findings

- Affordable housing is an increasingly salient policy priority at national levels, but formal provision is failing to address Kenya’s housing deficit
- Informal markets are flourishing and are a key provider of shelter in Nairobi
- Nairobi has a wide array of housing options for low-income populations, but are often low-quality with only meagre services, overcrowding, and limited privacy
- Gender, ethnicity, and marital status may act as barriers to shelter access, and housing is poorly-adapted for people with disabilities

Summary

This paper identifies the housing typologies available for low-income Nairobi residents and analyses other findings on land, gendered access to shelter, and housing market dynamics. Nairobi’s formal housing market is vibrant but often inaccessible to lower-income households, who rely overwhelmingly on informal housing markets. Although rental housing is the norm in Nairobi, there is a wide range of low-income rental options. One particularly salient finding of the research to date is the growing dominance of tenement housing, which is often of poor construction and without adequate connections to basic services. The paper notes that future shelter interventions will need to respond to residents’ household- and community-level challenges, paying attention to the diverse informal housing markets across Nairobi.
Introduction

Housing Policy and Practice in Kenya

Affordable housing has become a priority of the Government of Kenya (GoK): as part of the Big 4 Agenda, launched in December 2017, President Kenyatta promised to build 500,000 affordable homes. From 2013-2017, GoK expenditure on housing had already more than doubled from Ksh. 6.1bn to Ksh. 16.5bn (US$ 59m to USD 162m) (KNBS 2018a, p. 178). Ambitious plans will also seek to reduce construction costs, unlock land for development, and improve the mortgage finance market. However, inadequate shelter remains a key challenge in Nairobi and there is limited analysis of low-income housing markets. To realise the GoK’s inclusive goals, it will be essential to understand complex informal housing markets and to develop tailored strategies for accommodating Kenya’s low-income households.

Kenya is urbanising by 4.4% per year and, with just 50,000 formal housing units produced annually, the formal market is failing to address Kenya’s estimated deficit of 2 million housing units (World Bank 2018, p. 41). The Kenya Property Developers’ Association (KPDA) suggests that the nation should be developing 200,000 units per year, rather than the 50,000 units built currently (CAHF 2018, p. 162). Although such deficits underscore the severity of Kenya’s housing needs, these figures neglect the flourishing informal markets already creating most shelter in its cities, including Nairobi. Given the shortfalls in formal housing provision, providers in informal markets are crucial in accommodating Kenya’s urban expansion (and low-income residents in particular) but may still produce inadequate shelter or services.

The reality on the ground in Nairobi

Pressures on housing and services are especially acute in Nairobi, where over half of residents reside in informal settlements (‘slums’) and other areas with low-quality shelter. The population of metro Nairobi was nearly 4.39m in 2018, more than doubling from 1.755m in 1995, and its average annual growth rate reached 3.8% from 2015-2020. Half of the population live in dense slums occupying just 2% of the land area; most residents are tenants in informal units (Lines and Makau 2017). In a 2013 survey with nearly 600 slum-dweller households in Nairobi, 49% lived below Kenya’s poverty line and living conditions were typically far worse than in formal areas (Talukdar 2018). For instance, less than 36% of slum households had in-house or in-compound piped drinking water, far below the 84% of formal households with piped provision (ibid.). But slums are not a temporary phenomenon, and residents’ average length of stay in their current neighbourhoods was nearly identical: 6.3 years for slum-dwellers and 6.9 years in formal areas (ibid.). Although there are several case studies of Nairobi’s informal settlements and tenements, it is essential to jointly analyse land, housing, and infrastructure provision across the city, including differences between and within low-income areas.

Nairobi’s formal housing market is vibrant but often inaccessible to lower-income households, who rely overwhelmingly on informal housing markets. Official data underscore Nairobi’s burgeoning residential sector, yet formal private developers inevitably cater for wealthier households. In 2013, Nairobi’s private residential buildings (with a certificate of occupancy from the County Government) had a reported value

---

1 The President’s Big 4 policy agenda focuses on 1) manufacturing, 2) food security and nutrition, 3) universal health coverage, and 4) affordable housing (see https://big4.president.go.ke/).
2 See http://www.president.go.ke/affordable-housing/
of Ksh. 45.2m, rising markedly to Ksh. 74.2m in 2017 (KNBS 2018a, p. 177). But from 2013-2017, the total private residential construction completed in Nairobi just increased slightly from 5,447 to 9,564 buildings (ibid., p.176). In 2017, Nairobi’s County Government issued a mere 1,699 building permits for residential construction (KPDA 2018, p 15). Not only do these formal developments provide a small fraction of Nairobi’s housing, the price of the cheapest formal unit (Ksh. 1.155m or US$ 11,500) is still out of reach for low-income residents (CAHF 2018, p.161). Furthermore, this unit is a bedsitter too small for a typical family and located in the satellite town of Mlolongo (20 km from the CBD), with correspondingly longer travel times to central Nairobi and fewer local jobs.5

Critical issues

Varieties of shelter for low-income Nairobi residents: an emerging typology

Official data indicate that the vast majority of Nairobi households live in 1-room dwellings, but it is also essential to analyse the particular land and shelter dynamics for these residents. In 2016, the Kenya Integrated Household Budget Survey (KIHBS) found that 56% of Kenya’s urban residents live in 1-room dwellings with an average of 2.1 people per habitable room (KNBS 2016, p.36). But in Nairobi, 1-room dwellings are even more pervasive: about 1.04m Nairobi households (69.5%) live in just 1 room with an average of 2.3 people per habitable room (ibid.). Nairobi’s housing is thus especially crowded and dominated by single-room occupancies, but such findings overlook how residents access shelter and the variations in housing dynamics across the city.

Although the GoK’s minimum monthly wage in Nairobi is Ksh. 19,831 (US$ 198.31) (KNBS, 2018c), our focus group discussions (FGDs) indicate that the average monthly expenditure for a typical household in slums and tenements is about Ksh. 17,000 (US$170).6 Low-income households are officially defined as having monthly incomes of up to Ksh. 23,671 (US$ 236.71),7 but most jobs in Nairobi are in the informal economy with often unreliable earnings. Not only do these residents struggle with erratic incomes, there are important variations in costs based on housing type and amenities. According to our land and housing markets survey in Nairobi, the monthly rent for a single-room dwelling ranges from Ksh. 500 to 4,000 (US$ 5-40) for shacks, and from Ksh. 2,000 to 5,500 (US$ 20- 55) for tenements, depending on factors such as type of wall, finishing, location, room size, and utilities.

Our findings underscore the importance of rental housing, (echoing a World Bank survey that found that 91% of Nairobi’s households rent) as well as the ongoing transformation of informal settlements via densification (e.g. Mathare Valley), ‘eradication’ of shacks to facilitate tenement construction (e.g. Pipeline), or a mix of both processes in a single settlement. New areas characterised by a mix of formal and informal tenement housing (e.g. Kayole) have also emerged in the city. Based on our analysis of Census and spatial data, slums and tenement areas correspond to residential areas with Nairobi’s highest population and building densities (see Figure 1 below). These housing developments, largely produced by informal markets, offer sub-standard shelter to low-income Nairobi residents (for tenements, see Maina and Mwau 2018; Huchzermeyer 2011). In turn, these households may suffer from a ‘poverty penalty’ linked to lower-quality but more costly informal shelter and infrastructure (AMT et al. 2015, Talukdar 2018).

Figure 1: Distribution of slums and tenement areas in Nairobi

5 See http://www.suraya.co.ke/?property=encasa-mombasa-road
6 During FGDs, we recorded the estimated average monthly expenditures for typical households in the respective areas, including breakfast, lunch, supper, airtime, data, water, toilet, and transport (but excluding education, healthcare, etc.).
7 As defined by KNBS (2018b, p.53), “low-income households” in Kenya have incomes of “up to Ksh. 23,671 per month. Middle-income ranges from Ksh. 23,671 to Ksh. 120,000,” while upper-income households exceed Ksh. 120,000.
Although rental housing is the norm in Nairobi, there is a wide range of low-income rental options, as captured in the following typology of low-income shelter:

Informal shack settlements are usually built of iron sheets, mud, or other temporary materials; layouts vary from spontaneous (organic) settlements with minimal planning, to hybrid and planned areas with better-defined plot and street patterns. By contrast, tenements are built of stone and may rise from 5 to 10 storeys and typically encompass the entire plot, with only narrow streets between blocks. For both shack and tenement areas, the built-up area density is extremely high and usually exceeds 75% and they mainly offer single-room units. Meanwhile, ageing public housing and informal extensions are typically located near Nairobi’s central business district (CBD), but range in their densities and amenities. For instance, an FGD in Huruma Kiamaiko noted that the City Council’s 4-bedroom houses were transformed into extensions and rooms rented to other tenants by the original owners. Built-up densities in such areas are generally low (under 75%, even as low 10–25%), but also may reach higher densities for large-scale extensions.

Notably, mixed-typology areas highlight the 1) increasing blurring between Nairobi’s shack and tenement areas as well as the 2) recent trend towards densification and ‘eradication’ of shacks (see Figure 2). Shacks are still a widespread housing option in informal settlements, but they are increasingly being displaced by higher-density options like multi-storey shacks or tenements. Nairobi’s patterns of densification and heterogeneous array of shack and tenements that house a burgeoning low-income population will be explored in greater detail during the EARF research.

Additional options in Nairobi include a bedsitter or studio unit (single room lacking delineation between living/sleeping areas) that often has a water-point in the dwelling, and 1-bedroom units with a kitchen,
sanitation, and separate rooms for sleeping and living. There are 2- or 3-bedroom and other larger dwellings available, but such options are beyond the means of low-income households. Our research will continue to analyse the affordability of these housing options, including any gendered or other barriers encountered, and with attention to the key role of alternative financing providers such as Savings and Credit Cooperative Organisations (SACCOs) in creating affordable shelter.

Figure 2: Shack to tenement housing transformations in Pipeline, Nairobi

Source: Google Earth Images: left to right from 2009, 2010, and 2018

Land and housing markets

Our analysis reveals that most developable land in Nairobi’s urban core is already built-up, creating a scarcity of land, but demand for centrally-located parcels has remained high, leading to escalating land values. For example, in the last quarter of 2018, an acre of land in Donholm sold for Ksh. 70 million (US$ 700,000) but in Eastleigh the price per acre reached Ksh. 293 million (US$ 2.93 million) and in Kilimani Ksh. 426 million (US$4.26 million) (HassConsult, 2018). Our field survey in June 2018 showed that land prices vary significantly across the city, but they often remain expensive and highly speculative. Even in areas with informal settlements and tenements, the ordinary Nairobi resident has been priced out. In Baba Dogo, a 30x40-foot plot costs Ksh. 1.5 million (US$ 15,000), in Mathare North, a 50x100-foot plot costs Ksh. 4 million (US$ 40,000), and in Pipeline, a 30x60-foot plot sold for an average of Ksh. 20 million (US$ 200,000). Consequently, high land prices have led to developers, including those building informal

---

8 Meanwhile, official data suggest that 46.3% of Nairobi residents live in a flat, with another 36.9% live in landhi (one-row structure with at least 2 rooms), 5.8% in bungalows, 5.2% in shanty housing, and 3.1% in maisonettes (KIHSB 2016, p.30). We will continue to compare our findings with official data and other available findings in subsequent stages of research.

9 Wood (2018) notes there is only limited data on SACCOs‘ role in housing finance, but they represent a key provider of housing finance in Kenya.

10 See also https://ageofzinc.wordpress.com/2018/09/24/i-have-seen-the-future-an-essay-by-diana-mitlin-photos-by-baraka-mwau/ . We will discuss these survey findings more fully in our forthcoming papers.
housing, to opt for densification so as to leverage returns on land. Even underserviced lands and areas lacking legal tenure are still relatively expensive, resulting in rising costs of shelter production. Importantly, these land prices are out of reach for low-income Nairobi residents, underscoring the exclusionary and dysfunctional land market.

Nairobi’s land pressures are ever more acute, but some residents may access land on the periphery that still lacks key amenities. According to 2009 Census data, slums in Nairobi’s outlying areas typically were more spacious and constructed of higher-quality building materials than those in the CBD (Bird et al. 2017). Residents thus faced a stark trade-off in housing quality and accessibility, with peripheral areas enjoying better-quality shelter but poorer connectivity to jobs or other amenities. More recently, the GoK has registered over 2.43 million title deeds (from July 2013 to February 2017) and is digitising its land registries (CAHF 2018, p.163). Although the Nairobi land registry is said to be fully digitized, titling remains onerous for private developers (ibid.) and development is often occurring informally in Nairobi’s outlying lands. Without title deeds, developers lack proof of ownership, which is a requirement to obtain planning approval from the County; hence, many opt for illegal or informal ways of undertaking construction. This includes interactions with other state and non-state actors (e.g. informal contractors, local administration, community leadership, local gangs, gatekeepers, tenants), creating forms of ‘hybrid governance’ that perpetuate the informal housing markets (cf. Meagher 2012). We will continue analysing these emerging patterns of peripheral development, as well as how land tenure insecurity helps to explain low-quality services and housing densification in Nairobi.

Land grabs are common in informal settlements (including by individuals, land-buying companies, and other groups), and land constraints also contribute to poor-quality services. For informal settlements, land development often entails informally paying chiefs or other officials and sometimes buying ‘protection’ from local gatekeepers or gangs (FGDs in Mathare, Dandora and Huruma). Meanwhile, land constraints and tenure insecurity are often linked to sanitation challenges, as the areas are unplanned and lack space for new pit latrines or are unable to connect sewer lines officially (Kawangware FGD). In a settlement like Mathare, land ownership is highly complex, including public land, private land, and land owned by housing cooperatives, who have increasingly developed multi-storey buildings (tenements). Thus, even in a single informal settlement, land tenure patterns can vary widely, and Mathare’s public land is sometimes grabbed and turned into cooperative or private land with support from corrupt officials (FGD with Mathare women; Mathare Key Informant Interview). Partly due to these land pressures, our FGDs found that some Mathare residents are increasingly investing in shelter in outlying areas like Ruai or Njiru, rather than in their own settlements.

Whereas some developers have found ways to bypass Nairobi’s land titling processes and avoid planning regulations, de facto tenure can sometimes form the basis for advocacy and greater legitimacy. In Maili Saba, the area’s initial residents engaged land surveyors to subdivide private land and later advocated successfully for ownership certificates (FGD in Maili Saba). Although they still lack title deeds, tarmacked roads, or other improvements, Maili Saba residents have continued advocating for regularisation. Their de facto tenure has also enabled structure-owners to gradually transform shelter, shifting from mud-walled shacks to an emerging pattern of stone-walled row housing and tenement developments in the settlement.

Gender, vulnerability, and shelter quality in Nairobi

Based on initial findings from our focus group discussions (FGDs), we highlight concerns such as limited privacy or poor-quality services and identify vulnerable groups. It is also important to note that living in
slums, socioeconomic deprivation, and gendered disadvantages can interact in complex ways. According to a recent survey with nearly 1,200 Nairobi residents, slum-dwellers were significantly less likely than residents of formal areas to have positive living conditions on 10 of 12 indicators including water/sanitation, electricity, flood risks, garbage collection, and paved access roads (Talukdar 2018, p. 49). Living in a slum was the key factor shaping flood risks and electricity provision; however, residents’ access to water, sanitation, and surfaced roads was determined both by slum-level and household-level economic characteristics (Talukdar 2018). Surprisingly, gender of the household head did not emerge as a significant factor in slum-dwellers’ living conditions, although further research is needed on gendered aspects of vulnerability (ibid., p.47).

Limited Privacy, Multiple Sources of Discrimination, and Spatial Constraints

Women with children may face discrimination from landlords, who typically prefer to rent to smaller households, although single men are also seen as suspect for being potentially criminal or unreliable in paying rent (FGDs with Mathare Women; Dandora Women; Pipeline Women). Young, single women also face discrimination by some landlords and even other tenants. In particular, young women are perceived as likely to engage in commercial sex work and are often believed to be financially incapable of paying rent regularly (FGDs with Mathare Youth; Dandora women). Furthermore, residents of single-room housing noted that privacy is a critical concern, especially for couples and for adolescent girls. According to several FGDs, space constraints (overcrowding) and limited privacy may even be linked to cases of sexual abuse and unwanted early marriages (for both boys and girls) in informal settlements. In response, families may install a bunk bed or rent (sometimes jointly) an extra room for adolescent children. Alternatively, boys may need to move out after reaching puberty, due to cultural norms that do not permit their continued stay in their parents’ house.

Although many tenants said that housing provision is overwhelmingly determined by their ability to pay rent, sometimes their tribal or national origin may hamper their access to shelter. For instance, a landlord may ask about tenants’ tribal background and may refuse to rent to certain ethnic groups, especially during Kenya’s contested elections (FGD with Mathare recent migrants). Additionally, Ugandan immigrants are sometimes charged higher rents than Kenyans and may claim to be from Bungoma County (in Western Kenya) in hopes of avoiding rent discrimination (ibid.).

Tenements: Risky Construction and Poor-Quality Services

Nairobi’s residents have suffered several high-profile tenement collapses, including in 2016 when over 50 people were killed in Huruma. Residents in these areas are acutely aware of the dangers and felt disempowered by inadequate and ineffective government action, as explained by a focus group in Huruma: This year, 4 houses have collapsed. The last house to collapse, I was seated with this friend…I had projected [that] it would collapse [but] there is nothing could I do. Even though I am not an engineer, I saw the house had a weak structure. It eventually collapsed and killed tenants (Ngei-Huruma FGD). In the remaining tenements, although built of durable materials (e.g. stone, concrete mix, steel), residents still lack adequate infrastructure or services. For instance, Ngei youth reported that 80% of the area’s households had no water and often relied on illegal electricity, even as some tenants are beginning to adopt prepaid electricity tokens. In Pipeline, residents complained of inadequate water provision that may require carrying water up several floors; inconveniences arising from shared toilets; garbage disposal challenges; and poor hygiene in some of the blocks.

Furthermore, tenements are often inaccessible or unsafe for people with disabilities, children, and the elderly while also imposing gender-inequitable care burdens (FDGs in Pipeline). Many tenements lack design considerations and building installations suitable for people with disabilities (with the absence of

---

11 As noted above, single-room housing is the most prevalent type of occupancy in shack and tenement housing areas, and in Nairobi more generally.
lifts being particularly problematic). High levels of crowding in tenements also create risks for children, who must use narrow corridors, rooftops and balconies as risky playgrounds.

**Feedback from stakeholder workshop**

A workshop was held with representatives from local and national government, civil society, academia, utility providers, professional associations and private practitioners. Participants welcomed the detailed analysis of shelter typologies, which provides a new and deeper understanding of informal housing markets, and suggested further research on the political economy associated with low-income shelters and their related informal housing sub-markets, and on the relationship between the demographic composition of the city and its relationship to shelter production. Further analysis of how planning practices and governance arrangements have impacted on informal housing markets would also be welcomed.

Planning officials are keen to see policy recommendations for alleviating living conditions in single-roomed housing areas, and for a more active government role in shelter delivery. It was noted that “the city government has come to the realization that shelter delivery- especially for the low-income-cannot be left to the private sector anymore-the government must intervene”. In addition, given that tenement housing will be increasingly dominant for low-income shelter, an examination of the drivers, actors, and implications for policy making and programming interventions for shelter and services improvements will be necessary.

Representatives from the water utility found the emerging findings critical to their on-going work on extending water and sanitation provision in slums. To date their focus has been on shack housing, but the revelation that tenements are also harbouring large populations will require the utility to rethink its strategies for universal access to adequate water and sewerage services.

In general, participants applauded the insightful application of a gender and inclusion lens to outline how inadequate housing and informal housing markets have impacted on different groups such as women and children, men, elderly, people living with disabilities and young people. There were recommendations for further analysis on shelter options for the elderly.

**Next steps**

The recent GoK pledge to build affordable housing and to upgrade Mukuru in Nairobi\(^{13}\) will need to be matched by resources and participatory strategies with residents of low-income areas, as well as adequate institutional capacities. In 2017-2018, Nairobi’s County government was allocated Ksh. 515.51m for urban renewal and housing, yet it spent only Ksh. 94.19m, signalling a worryingly-low absorption of resources (OCOB 2018, p202). Regarding land and infrastructure, Nairobi’s huge backlog and deficits will have to be addressed to accelerate delivery of serviced land for affordable housing. At the same time, achieving a functional land market is imperative to realise an inclusive housing agenda for the city.

---

\(^{13}\) See [https://www.muungano.net/mukuru-spa](https://www.muungano.net/mukuru-spa)
Future research needs

- Need to understand complex informal land, housing, and infrastructure markets across Nairobi, including the emerging developments in the urban periphery
- Additional analysis of affordability and contributions of alternative financing such as SACCOs
- Further discussion of household- and community-level constraints and responses in informal settlements and tenements
- Additional exploration of settlement transformations and private-sector responses in low-cost housing provision
- Analysis of governance arrangements and planning practices, as well as their implications for housing delivery and conditions in Nairobi

References


Wood, D (2018). The Role of Savings and Credit Cooperative Organizations in Kenya’s Housing Finance Sector, Case Study Series 12, Centre for Affordable Housing Finance in Africa (CAHF).

This report provides an update on ongoing research in Nairobi on shelter provision for low-income populations. The research was undertaken by SDI Kenya in collaboration with IIED and is a contribution to the three-city study funded by the East Africa Research Fund. It documents initial findings from the first phase of primary data collection, and focuses on land and housing markets, shelter typologies and access to shelter for vulnerable groups.