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Urban Transformation and Informal Shelter

Actors, Interests and Change in Mathare Valley: City Briefing
Author information

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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

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Key Findings

- Nairobi’s Mathare Valley is undergoing a significant transformation, characterized by intense densification, increased land tenure contestation, displacement and environmental degradation.

- This transformation is unfolding alongside a reconfiguration of governance arrangements including the increasing power of outside actors (mainly tenement developers), informal planning, and normalization of violence as a mechanism for accessing resources.

- Spatial analysis reveals that high-rise tenements now comprise about 40% of Mathare’s structures.

- The city’s high demand for centrally located low-cost rental housing is one of the main forces shaping the transformation of Mathare. Proximity to the central business district and to other opportunity areas makes the settlement a first option for many, especially young people.

- Tenants (the majority of residents) endure poor living conditions as a result of the unplanned and poorly managed transformation of Mathare.

- Resident structure owners’ difficulties in accessing finance, combined with insecure land tenure, are major barriers to improving shelter, making them vulnerable to buy-outs and forced dispossession.

1. Introduction

Nairobi is the largest city in Kenya, with a population that has rapidly grown from 400,000 in 1965 to a current population of 4.7 million.¹ This rapid growth is accompanied by the city’s unresponsive urban planning and land administration, failure to adequately meet infrastructure and housing needs, and socio-economic polarization.² One outcome has been proliferation of informal settlements and ‘slums,’ as well as dominance of the informal economy. According to the World Bank,³ underemployment in the agricultural sector has fuelled an influx of rural migrants to Kenya’s urban centres, but unemployment is higher in urban than in rural areas, and there are few formal sector jobs.

Recently there has been a positive policy turn, with government returning to a central role in housing delivery through the Affordable Housing Program (AHP).⁴ This signals a renewed focus on the city’s housing challenge. However, past interventions have had little impact on informal settlements or on low-cost rental housing, which is the dominant tenure form in Nairobi. Official statistics highlight the significance of this sector, with 86.4% of the city households residing on rental basis and 69.5% of households occupying a single-roomed unit.⁵ The high demand for single-room unit, owing to its affordability, is associated with unfolding transformation of informal settlements, from shack to tenement housing.⁶ This case study examines various dimensions of this transformation in Mathare Valley, one of Nairobi’s largest informal settlements.

1.1. Methodology

This case study relied on a mixed method to analyse spatial transformation, with a focus on actors, interests, relations and processes related to supply of shelter and services in Mathare Valley. The analysis relied on a set of primary and secondary data, collected through both fieldwork and desktop research. Primary data generation comprised of 20 Key Informant Interviews (KIIs) involving residents, community leaders, land brokers, structure caretakers, structure owners and landlords. There were also six Focus Group Discussions (FGDs) with youth, women and elders (men and women), and a combination of participatory mapping, photography and informal interviews with residents. This was combined with spatial analysis, where georeferenced imagery was analysed through Geographic Information System (GIS) software. Spatial data was extracted from aerial Landsat imagery of Mathare for different years (2003, 2010 and 2019). Secondary data analysis relied on literature on Mathare Valley, and on Nairobi’s broader housing and growth dynamics.

1.2. Mathare Valley: Overview of study setting

The study area falls within Mathare sub-county, located close to the city centre (see Figure 1), and covers six wards: Hospital, Huruma, Kiamaiko, Mabatini, Mango Kubwa, and Ngei, within which there are thirteen smaller neighbourhoods known as ‘villages’ (see Figure 2). Three of these wards (Hospital, Mabatini and Mango Kubwa) fall within the study area.
According to Kenya’s Population and Housing Census from 2019, this sub-county had a population of 206,550 persons, 74,967 households and a density of 68,940 persons per sq.km. This is the highest density of a sub-county in Nairobi, and in Kenya. The area was reported to have a population of 114,259 persons (see Table 1).

Table 1. Population of the Study Area

<table>
<thead>
<tr>
<th>Sub-location</th>
<th>Total Population</th>
<th>Land (sq.km)</th>
<th>Density (Persons per sq.km)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mabatini</td>
<td>28504</td>
<td>0.4</td>
<td>80039</td>
</tr>
<tr>
<td>Mathare</td>
<td>23922</td>
<td>0.8</td>
<td>28445</td>
</tr>
<tr>
<td>Mlango Kubwa</td>
<td>41100</td>
<td>0.4</td>
<td>98610</td>
</tr>
<tr>
<td>Mathare 4A</td>
<td>20733</td>
<td>0.2</td>
<td>89096</td>
</tr>
<tr>
<td><strong>Total Population</strong></td>
<td><strong>114,259</strong></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Data Source: KNBS (2019a:238-239) - 2019 Kenya population and housing census

The higher density in Mlango Kubwa is attributed to the prevalence of tenement housing in the area. Other areas have a mix of tenements and shacks. Indeed, the sub-locations dominated by tenement housing have Nairobi’s highest population densities. According to the 2019 census, Huruma sub-location covers an area of 0.7 sq.km and has a population of 75,498 persons, generating a density of 106,445 persons per sq.km.

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Early leaders and residents played a key role in resettling rural migrants in Mathare, helping to create settlement patterns that in some areas are linked to ethnicity. As a result, some villages became dominated by certain tribes, such as the Kamba in Kiamutisya or the Kikuyu in Village 3C. But this pattern of ethnic domination has significantly changed and now composition varies across Mathare’s villages.

Currently Mathare attracts tenants, especially youth, from varied ethnicities, who prefer the location for its centrality and relatively affordable rental units. At the same time, there is also fragmentation and emerging segregation of foreign immigrants e.g. Ugandan migrants found in a section of Village 2.

2. Key emerging issues from the case study

The unfolding transformation of Mathare is part of the settlement’s long history. The on-going transformation in Mathare, just like previous phases, has impacted significantly on the settlement’s built form and the nature of its governance institutions.

2.1. Spatial change stemming from high demand for land and shelter

Spatial analysis reveals that Mathare Valley’s densification and increased land coverage is linked to high demand for low-cost housing. This has had significant impacts on the settlement’s land access, spatial organization, living conditions and governance. It is likely that the settlement’s elevated densities will escalate in the future, particularly if the on-going ‘land grabs’ and unregulated construction persist.

Mathare’s physical form has significantly changed since 2009, with its built-up area increasing from 76% to 82% (see Figure 3), alongside a heightened demand for land by developers. Elderly residents in Mathare confirmed this finding, noting that change in permanent housing materials escalated since 2000: “Since the year 2000, Mathare has changed significantly; in the late 1990s there were iron sheets all over, save for very few concrete buildings” (KII with Elderly Residents). The elders linked this change to increased demand for housing, accompanied by the arrival of external private investment. Mathare now has an emerging landscape of multi-level structures, most prominently high-rise tenements.

Figure 3. Land Coverage Change in Mathare Valley

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There has been a significant reduction in Mathare’s open spaces, including increasingly narrow streets/pathways and a declining riparian reserve, which is now largely lined with shacks. This densification has also affected the availability of amenities and public facilities (such as schools, health care facilities etc.), which are placed under ever more strain.

Currently, private ownership is now claimed on virtually all space, built or unbuilt. This occurs at different scales, including large land-grabs. For instance, in some villages, sections of streets are converted into private spaces, mainly to provide extra room for a growing family or to increase units for rent: “In this village, there are no compounds but ‘chochoro’ [converting a street into a private structure]. What happens is you put up a gate and add an extra room, which you either rent out or give to your children” (KII with Elderly Resident in Kiamutisya). There are also intense informal land subdivisions, resulting in extremely small plots such as “10x13 feet plots which can hold up to three structures” (KII with Resident in Village 2).

Mathare’s land ownership is heavily contested, save for Mlango Kubwa and Kosovo Village. Villages are either located on public or private land, and sometimes both forms occur in a single village, with varied degrees of tenure security. This highly complex land ownership is linked to the decades of contestation (often involving violence and court battles), with multiple transfers that are hard to trace due to their informal or illegal nature. The entrenched land contestation in Mathare features land buying companies/cooperatives, the local administration and village leadership, brokers, land grabbers, politicians and structure owners. In addition, youth born and raised in Mathare are increasingly agitating for land rights. This generation is determined to participate in Mathare’s lucrative local rental housing market, which they believe has been dominated unjustly by established local power brokers and more recently by external actors. Recently, youth have been involved in forced dispossession of some structure owners.

However, this use of force and violence is also linked to other actors involved in Mathare’s land market. Violence and forced evictions are common tactics in the governance of Mathare informal land markets. For example, it is common for external actors, with the help of local agents, to use violence to evict tenants to pave way for redevelopment. In other cases, it is through threats and intimidation, or even through court orders that are sometimes executed by use of force. A young resident asserted: “From my experience growing-up, most of the early tenements can be linked to evictions. ‘Fire outbreaks’ were used to clear sites for construction. After a fire incident, it couldn’t take long to see a perimeter fence around the site and then construction follows” (FGD with Youth Leaders). Many Mathare residents are suspicious of fire outbreaks as this has been an instrument of violence designed for evictions and land grabbing.

2.2. Convergence of Interests and Actors from Outside and Within

As housing demand increases alongside heightened land contestation, construction is becoming increasingly dense. Until the recent wave of rapid change, shack structures had dominated Mathare’s shelter markets (except for in Mlanog Kubwa). A resident observed that previously, “there was an assumption that residents of Mathare (informal settlements) couldn’t afford to pay rent demanded by the tenement developers. On realizing the few tenements were returning lucratively, they are now scrambling for plots in the slum. This is compounded by the growing population. Now tenements and multi-level mabati (shacks) structures are changing the skyline of Mathare” (KII Village 2). In order to optimize space for higher rental income, Mathare’s shelter suppliers are opting for vertical densification of shacks, but the more prevalent and most attractive option is construction of tenements. Although both shacks and tenements provide a single-roomed unit, tenements require higher capital investments but offer better returns.


The residents indicated that sometimes fake court orders are used to evict unsuspecting tenants

Mwau et al. (2020) Op Cit. p. 50
The recent burgeoning of tenements can in part be explained by the informal local governance arrangements in Mathare that facilitate external actors’ participation in these markets. Without the presence of these local arrangements, it would be difficult for an outsider to develop rental housing in Mathare. According to a key informant, various leaders at the village level benefit from construction and play an important role in manipulating local politicians: “Community leaders operate as a cartel manipulating every local administration that comes in. Although chiefs are changed regularly, the village elders rarely change. The power they have on issues of the villages have enabled them to manipulate every new chief who comes around; hence, protecting and retaining their interests.” (KII with Kiamutisya Resident).

Informal planning and regulatory systems, intertwined with local governance arrangements, have created the necessary institutional arrangements to ‘buy’ and build in Mathare. The area chief and village elders/leaders have essentially assumed the role of a planning authority. Usually, developers seek consent from these actors before beginning construction: “The chief ‘approves’ the constructions in the area” (KII with Kiamutisya Resident). The ward administrator was also alleged to play a similar role: “Residents seek consent from the ward administrator, but I feel it is not appropriate since the ward administrator has no such authority nor expertise” (KII with Village 2 Resident). This is not the formal statutory approval for building construction. These informal approvals are one of the tools used to govern Mathare in the absence of formal interventions by Nairobi’s planning authority. Fundamentally, they illustrate how the state in informal settlements is informalized, and at the same time generate major concerns about the safety of buildings constructed through these informal planning arrangements.

In Mathare, there appears to be an emerging form of land agreement that lies between quasi-legal/informal sale agreements and legitimate transactions. But these arrangements have exposed the settlement’s land market to external speculators and grabbers. As a participant born and raised in Mathare noted: “...we have witnessed ‘foreigners’ flocking into this area with papers claiming ownership. We have remained hopeless, as these people have information that we do not have. They claim to have titles and other ownership documents, while on the other hand we do not have any document.” (FGD with Youth Leaders). External influence is linked to suspicious claims of land ownership and attempted acts of land grabbing. In Mathare, these ‘land grabbers’ often tend to be persons seeking to develop tenements.

The informalization of land supply and housing has served as a way of incorporating a large section of the city’s middle-class, who are excluded from formal markets, into profitable real estate transactions.12 In Mathare, it is also a means of dispossessing less-powerful actors in these markets. Structure owners who cannot afford to improve their shacks or redevelop their structures as tenements are at risk of dispossession or buy-out from wealthier persons eying the local rental market: “…there are those who are structure owners but struggle with maintenance of the structure. Those who are unable to harness support to repair the structures end up living in dilapidated structures. In the end they sell the structures” (KII with Elderly Resident).

Tenants are also affected: Mathare’s ‘tenement invasion’ (as described by some residents) is pushing up rental prices and has resulted in increased displacement of low-income renters. Many households cannot pay tenement rents, which are usually at least double the price of a shack unit. A young resident remarked that external developers “construct tenements that we cannot afford to rent. Therefore, we see this new housing provision as a way of edging us out of Mathare. Indeed, the new houses are mostly taken-up by outsiders, leaving us with no other alternative.” According to our field survey, as of November 2019, rent in newly constructed tenements ranges from Ksh.4,500 (USD 45) to 5,000 (USD 50), and usually tenants must pay a deposit equivalent to one month’s rent as ‘security’. These ‘formal-like’ agreements seem to be the future, as spatial analysis reveals that tenements now comprise about 40% of Mathare’s structures.

Essentially, the interaction between local and outside actors has created a form of displacement, as well as increasingly hazardous construction of shacks. The high rental price of new tenement units has led to increasing demand for shack units. This has led in turn to the building of multi-level shacks, often in highly unsuitable sites e.g. along riverbanks. This is typical of Nairobi’s speculative land markets, where proximity to a main road (or simply a paved road) is often viewed as the reference point for setting land price. \(^{13}\) In this case, areas that are closer to Juja Road or further from the river (“the valley”) entail higher land prices. Importantly, these are the spaces where some youth groups have found opportunities to participate in the settlement’s rental markets as shelter providers.

Recent improvements in infrastructure within and around Mathare have also increased pressure on the settlement, with increased demand for land to build rental housing. For instance, the expansion of Thika Highway and link roads that connect the highway to Juja Road/Eastleigh through Mathare and the grading of Mau Mau Road (within Mathare) have improved Mathare’s connectivity. This has increased land values within the settlement.

### 2.3. Infrastructure and Services and their Governance

The research established that utilities are provided through a complex web of formal and informal actors, and that there is increasing competition and conflict over control of provision. Although there has been some level of improvement in provision, many households still cannot access adequate services and infrastructure. For instance, recent data indicates that in Mathare sub-county, only 10.1\% of households have in-house water connections. \(^{14}\)

![Fig. 4. Source of Drinking Water in Mathare Sub-County](image)

In Bondeni and Kosovo, residents can access water at an affordable price from Nairobi City Water and Sewerage Company through ‘water ATMs’. Typically, a payment of Ksh.300 (USD 3) can last a month accessing water from the ATM (KII with Bondeni Leader). Evidently, the water from the utility is less costly, \(^{13}\) Given the huge infrastructure deficit in Nairobi, and the skewed provision of existing resources for infrastructure investments, availability of infrastructure services on site or nearby has become a major factor enabling the speculative land markets in the metro region.


\(^{15}\) Source: KNBS and Republic of Kenya (2019b) Op Cit p. 309
and considered affordable by many. The challenge, however, is to extend the network coverage through the entire settlement, where control is largely by ‘utility gangs’. Indeed, having a legal connection in some villages is burdensome, as illegal connections from service lines can significantly multiply consumption bills. ‘there are those who claim to be the leaders over water provision matters. They disconnect the officially connected water and redirect to other households where they can collect fees. If you go to tap your own line from the county government line, the youths demand money.’” (KII with Leader Village 2)

Several factors help explain the persistence of informal water services in Mathare. These include:

- ‘Utility gangs’ that control service provision typically find formal services as threat to their income and seek to thwart efforts to extend formal water services.
- Contested land tenure in some villages is considered a risk for investments in formal services.
- Water ATMs have limited returns for vendors, resulting in their low uptake despite the affordable services they offer.

Regardless of the mode of provision, water services in Mathare are unreliable, with questionable quality of the water; similarly, access to sanitary facilities and electricity remains highly unreliable. For sewerage, the main challenge lies in the lack of collection network for most villages, and difficulties in connecting to the city’s trunk infrastructure, despite its passing through the settlement. Tenement constructions have introduced a need for a new system of sewerage management in Mathare. In Kosovo, a privatized informal sewerage system (which drained into the river) was built to address this new demand. In other villages, tenement developers with assistance from other local actors also channel raw sewerage into the rivers. This is an indication that the unplanned densification of Mathare will only escalate environmental challenges and compound the existing public health challenges.

Many households must rely on pay per use toilets and bathrooms, where charges are negotiated at weekly or monthly rates, and women/girls may be disproportionately affected by inadequate sanitation. For instance, women and children fear using toilets run by groups of young men. Access to sanitation is typically worse during the night, when women and girls may resort to using buckets (kasuku) or other improvised solutions due to a combination of factors: hygiene, physical safety concerns, finance etc. According to Corburn and Karanja (2016:266), ‘Mathare women endure indignity from a lack of private, safe, well-lit, near-by toilets’.

For electricity, the majority rely on informal services (commonly termed as ‘mulika mwizi’), despite a recent drive for formal connections. The consequences of these informal and illegal control of utilities include fire outbreaks and fatalities linked to illegal electricity. At the same time, they are considered less costly in terms of initial connection and regular consumption charges. They also offer flexibility as delays in settling monthly bills can sometimes be negotiated between the client and the service provider. “I use the mulika mwizi for my electricity supply and it is 300/- per month. It is mostly the youth who do the tapping and supply of the mulika mwizi as they are jobless.” (KII with Bondeni Resident). Participants in this research linked the failure of the recent formal connections project to: (1) lack of consultations with targeted households on their preference for type of connection (post-paid or pre-paid); (2) lack of joint consultations involving tenants and structure owners; (3) and the failure to involve the informal service providers whose livelihoods rely on provision of such services.

For example, a participant indicated that their household is accustomed to “… pay for both a toilet and bathroom for ksh 200 (USD2) per month, for the whole family” (FDG with Mathare Women).


18 Loosely translated to imply ‘stolen electricity’.
Overall, the huge utility gap in Mathare has created a large informal services market, which is associated with ‘gang control’ or ‘cartels’. These groups of youth control specific ‘utility zones’, mainly for water, electricity and solid waste collection. The process of territorializing a ‘utility zone’ can sometimes involve violence. Indeed, respondents noted that the use of violence as a tool to control services is increasing. This has also resulted in deepened environmental injustices in Mathare. For instance, at the edge of Kiamutisya Village a solid waste dumping and ‘transfer centre’ has emerged. An informal group has control over the site, and charges are imposed for disposal. Sometimes a Nairobi City County truck collects the waste for transfer to Dandora dumpsite (the city’s main waste disposal site), but this is not reliable. Thus, residents are exposed to pollution from the solid waste accumulating at the site.

Conclusion and recommendations for future research

The case study demonstrates that the ongoing transformation of Mathare is a process involving multiple actors, interests and complex power relations. On one side are the interests of landlords/structure owners and external developers to profit from rental housing, while on the other side are the interests of current residents and future tenants seeking to access centrally located ‘low-cost’ rental housing. The interests and power relations of these multiple actors have resulted in a highly speculative land and housing market, characterised by high demand for land, informal planning, insecurity of tenure, and increased conflicts and tensions. The outcome is a rapidly changing built environment where densification of the built environment (vertically and horizontally) has generated extreme population densities, with overcrowding in sub-standard rental units.

Governance of this space also presents challenges, with the increasing influence of external actors that is reconfiguring power relations. The continued densification brought about by tenement constructions is leading to much reduced face-to-face interactions between tenants and (often absentee) landlords. This is because most of the external developers have their interests focused on rental income and not residency in Mathare; hence, relations could shift towards interactions that appear more formal, often brokered through agents who could be building caretakers, local leaders or other actors on the ground. As noted by Kamau-Gatabaki & Gitau-Karirah,19 interventions in such contexts “should therefore not only be sought in the legal frameworks for land supply, housing development standards and the development control agency’s capacity to enforce them. They must also be sought in the political-economic conjuncture.”

This case study has aimed to provide an introduction to Mathare’s transformation. A comprehensive understanding of the processes of change currently underway in Mathare, and their implications for residents requires further research. Key areas in need of more detailed consideration include:

- The implications of increasing immigration to the area and the significant youth population for local governance arrangements and housing needs;
- The social impact of single-roomed occupancy in high density and unplanned housing areas is an urgent research agenda. This entails issues of early childhood development, youth development, public health, psychological implications and mental health, and possible links to delinquency and rising violence in Mathare;
- Financing issues related to production of tenements, with a focus on opportunities to leverage funds for better quality shelter in a structured multi-stakeholder intervention.

This city briefing presents findings from research on access to shelter and services in Nairobi, Kenya and focuses specifically on informal housing and service provision in the low-income settlement of Mathare. It is part of a three-city study in East Africa also covering Mogadishu, Somalia and Hawassa, Ethiopia. Guided by political economy analysis, the two-year research project investigated why and how city dwellers make certain shelter choices, and generated recommendations to improve access to adequate shelter and basic services for the most vulnerable urban residents.

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