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Achieving Scale, Social Inclusion, and Multifaceted Shelter Solutions

Lessons from the Special Planning Area (SPA) in Mukuru, Nairobi: City Briefing





Author Information and Acknowledgments

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About the project

This research project is an 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-provisioneast-african-cities-understanding-transformative-politics-forinclusive-cities or contact: Lucy Earle, lucy.earle@iied.org

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Slum Dwellers International Kenya (SDI Kenya) works closely with Kenya's slum dweller federation Muungano wa Wanavijiji and its urban poor fund Akiba Mashinani Trust (AMT). This tripartite Muungano Alliance works to improve shelter, services and quality of life of slum dwellers through policy advocacy and dialogue with government officials, civil society and the private sector. See www.muungano.net/about

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Contents

| Summary | 2 |
|--|------|
| Key Findings | 2 |
| Abbreviations | 2 |
| Introduction: Creating Novel Upgrading Strategies in Mukuru, Nairobi | 3 |
| Far-reaching Scale and Scope, but Committed to Local Benefits and Inclusion | 4 |
| A. Innovations in Multisectoral Action-Research and Planning Strategies | 5 |
| Pivotal Role of Data-Collection in Motivating and Informing the SPA | 5 |
| SPA Consortia: Creating Joined-up Planning Strategies in Mukuru | 5 |
| B. Fostering Vigorous Participation and Civil Society/Government Engagemer | ıt 7 |
| Establishing New Organisational Structures and Cadre of Community Leaders | 7 |
| Understanding Risks and Priorities at Grassroots Forums | 9 |
| Improving governance and enhanced grassroots engagement with official stakeholders | 9 |
| C. Creative Strategies to Overcome Constraints and Foster Shared Benefits | 10 |
| D. Development of Infrastructure Standards Fit for Informal Settlements | 12 |
| E. Conclusions and Recommendations | 13 |
| Recommendations | 14 |
| References | 15 |

Summary

Mukuru is one of Nairobi's largest informal settlements. It is home to approximately 300,000 residents who face a range of risks linked to poor quality shelter and the area's hazardous location. In 2017, after years of advocacy and action-research by civil society groups, Nairobi's County Government declared Mukuru a Special Planning Area (SPA) to enable the development of innovative upgrading strategies. The County has had 2 years to prepare an Integrated Development Plan (IDP), which will improve Mukuru's physical and social infrastructure and uses inputs from residents themselves and experts from different disciplines. Following the SPA declaration, the Kenyan slum-dweller federation *Muungano wa Wanavijiji* and its academic, civil society, private-sector, and government partners have collaborated to develop multisectoral upgrading strategies. In the process of designing interventions for the settlement, the partners roundly rejected conventional planning strategies as inadequate and exclusionary. Instead, Mukuru residents worked with diverse actors to develop pioneering solutions that offer an inclusive, locally rooted and yet far-reaching way to transform informal settlements.

Key Findings

- The SPA's overarching principles have a) sought to minimise relocation; b) utilised flexible
 approaches to funding and partnerships; and c) promoted social inclusion and shared community
 benefits throughout its participatory planning.
- Careful sequencing is key to inclusive upgrading, and strategies that prioritise services/ infrastructure can especially benefit low-income residents, with associated gains in their health and social inclusion. Interventions may reduce gentrification risks in informal settlements by postponing the more contentious issue of housing, which can be addressed after improving services/infrastructure.
- The partners are working with informal providers to develop appropriate regulations and
 organisational models that can eliminate predatory informal practices, while recognising the
 potential contributions of experienced informal providers. They are also exploring alternative
 delivery models (e.g. delegated services and co-produced solutions), which may have added
 benefits for responsive governance and social inclusion.
- Multidisciplinary consortia emerged as a valuable vehicle for upgrading informal settlements, particularly if 1) an array of experts and officials can partner closely with communities and 2) members are given adequate institutional support and resources.
- The SPA's diverse partners have pursued a delicate balancing act in their approach: combining ambition and incrementalism, grassroots knowledge alongside wide-ranging interdisciplinary partnerships, and reaching scale while seeking affordability and respecting the spatial constraints in Mukuru.

Abbreviations

AMT: Akiba Mashinani Trust

HIC: Housing and Infrastructure Consortium

IDP: Integrated Development Plan SDI: Slum Dwellers International SPA: Special Planning Area

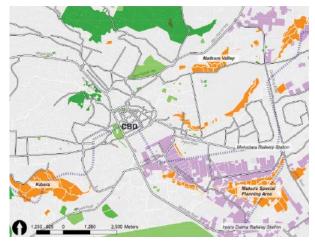
WSE: Water, Sanitation, and Energy consortium

Introduction: Creating Novel Upgrading Strategies in Mukuru, Nairobi

Mukuru is one of Nairobi's largest informal settlements, home to 100,561 households, where residents face several risks linked to deficient shelter and the area's hazardous setting. Located on over 689 acres of private land in the industrial area, Mukuru regularly experiences fires and floods, alongside elevated levels of air pollution due to nearby factories and unclean household energy sources (Corburn *et al.* 2017; Figure 1). Flooding has multiple causes including Mukuru's low-lying location next to the Ngong River, with some residents living on reclaimed land along the riparian reserve. Poor drainage and solid waste management only exacerbate flood risks in Mukuru, as rubbish often clogs the already inadequate open drains (Figure 2). About 95% of residents are tenants who rent rooms in single- or double-storey shacks, typically built of mud and/or galvanised iron sheets (AMT *et al.* 2014). Hazardous electricity connections are linked to Mukuru's frequent fire outbreaks; fire risks are compounded by the area's high-density shacks, paltry road networks, and limited access to emergency services (University of Nairobi and Red Cross 2016). Residents usually have very limited access to water, sanitation, and hygiene (WASH) and typically endure long queues to access contaminated standpipes. Mukuru's water and electricity networks are dominated by low-quality, often predatory informal service providers locally called 'cartels' (Corburn *et al.* 2017).

Figure 1: Map of Mukuru in Nairobi

Figure 2: Flooded paths and dense shacks in Mukuru





Source for Figures 1 and 2: Corburn et al. (2017)

But after years of advocacy and action-research, Nairobi's County Government declared Mukuru a Special Planning Area (SPA), which enabled the development of innovative upgrading strategies.¹ Mukuru was designated an SPA in August 2017, with particular support from the County's Lands, Urban Planning, Urban Renewal, Housing, and Project Management departments. Previously, SPAs in Kenya had been used for developing military installations or hydroelectric dams, not for improving informal settlements like Mukuru. Following this declaration, the County Government had 2 years to prepare an

¹ Kenya's Physical Planning Act (2012) defined a 'Special Planning Area' as 'an area that cuts across the boundaries of two or more local authorities and which has spatial or physical development problems and is declared as a SPA. The newly enacted Physical and Land Use Planning Act (PLUPA) [has] replaced the PPA... [and] provides a broader definition of the SPA under Section 52 and the conditions under which a SPA may be declared by a County Government. These include where (i) the area has unique development, natural resources, environmental potential or challenges; (ii) the area has been identified as suitable for intensive and specialized development activity; (iii) the development of that area might have significant effect beyond that area's immediate locality; (iv) the development of that area raises significant urban design and environmental challenges; or the declaration is meant to guide the implementation of strategic national projects; or guide the management of internationally shared resources' (UN-Habitat 2019: 6, emphasis added).

Integrated Development Plan (IDP) using inputs from Mukuru residents and interdisciplinary experts; the IDP is expected to be approved later in 2020. As explained below, action-research in Mukuru played a pivotal role in motivating the SPA declaration and securing a new policy commitment to inclusive, multi-sectoral upgrading at scale.² Initial research was jointly led by Kenya's slum-dweller federation *Muungano wa Wanavijiji* ('Muungano'); its financial facility Akiba Mashinani Trust (AMT) and technical support organisation SDI-Kenya; and researchers from the Katiba Institute, University of Nairobi, Strathmore University, and University of California, Berkeley. Since the SPA declaration, Muungano, AMT and SDI-Kenya (together called the 'Muungano Alliance') led the grassroots engagement in Mukuru and collaborated with wide-ranging partners to develop holistic, inclusive ways of upgrading at scale.³

Far-reaching Scale and Scope, but Committed to Local Benefits and Inclusion

This report will discuss the SPA's pioneering contributions including its multisectoral action-research, novel partnerships between government and civil society, and scaled-up participatory planning mechanisms. The SPA has developed a pathbreaking combination of 1) large-scale upgrading, with 300,000 beneficiaries in Mukuru, 2) strong community participation, 3) minimal displacement, 4) interdisciplinary consortia that created multi-sectoral interventions, and 5) partnerships between government, civil society, residents, and other stakeholders. Mukuru's 6) central location on valuable private lands may set an important precedent for upgrading informal settlements on other contested sites. To promote affordability, the partners 7) transformed conventional planning approaches and developed carefully sequenced interventions to enhance both physical and social infrastructure. The SPA is distinguished by its ambitious scale and scope, while also seeking to benefit all residents regardless of their age, incomes, and tenure status. Mukuru households can vary markedly in their shelter provision and length of stay; compared to structure-owners, tenants are typically more mobile but with lower incomes or fewer assets. Many Mukuru residents are young,⁴ and community mobilisation strategies helped ensure that youth could voice their concerns alongside elders.

Alongside these ground-breaking strategies, the SPA upholds a commitment to participatory planning and learning exchanges between community organisations. Muungano, AMT, and SDI-Kenya are affiliated with a global network of urban poor federations called Slum Dwellers International (SDI), and upgrading strategies in Mukuru partly built on exchanges with fellow SDI members. Community savings groups have also been reinvigorated in Mukuru: these groups are integral to Muungano and other SDI affiliates, as savings can significantly promote feelings of trust, solidarity, and social capital amongst residents (Lines and Makau 2017). Below we begin by discussing the SPA's use of action-research and multidisciplinary consortia, before analysing its grassroots participation and government engagement strategies; ways to overcome constraints; and alternative planning standards.

² For more on the initial research supported by the International Development Research Centre (IDRC), see https://bit.ly/38nkEBS. The SPA will benefit three distinct informal settlements of Mukuru kwa Reuben, Mukuru kwa Njenga, and Viwandani (hereafter called 'Mukuru').

³ For additional background on Muungano, AMT, and SDI-Kenya, see www.muungano.net/about

⁴ Mukuru's 182 informal schools serve over 42,000 children and youth (Education, Youth Affairs, and Culture Consortium 2019: 4).

⁵ For more on exchanges and SDI's model more generally, see http://knowyourcity.info/our-practices-for-change/

A. Innovations in Multisectoral Action-Research and Planning Strategies

Pivotal Role of Data-Collection in Motivating and Informing the SPA

The SPA declaration was preceded by advocacy and action-research highlighting Mukuru's shelter shortfalls, predatory informal service providers, 'poverty penalty,' and vibrant informal economy, all of which helped persuade the County to intervene. The Muungano Alliance already had ample experience with community-led data-collection, savings schemes, and upgrading partnerships in Kenyan informal settlements (Weru 2004, Karanja 2010, Lines and Makau 2017). Beginning in 2013, the federation helped gather data on Mukuru's shelter with Kenyan researchers, and publication of this IDRC-funded research was complemented by vigorous grassroots advocacy. For instance, women in Muungano held demonstrations underscoring the gender-inequitable impacts of Mukuru's inadequate sanitation.⁶ The settlement's sanitation is limited to poorly-maintained latrines or public toilets that typically create several health and dignity challenges, particularly for women and girls (Sommer et al. 2015). Based on surveys with 800 Mukuru households, a mere 7% had adequate toilets and only 29% had adequate water (Muungano et al. 2015). Furthermore, Strathmore researchers uncovered a major 'poverty penalty': as compared to nearby formal estates, Mukuru's services and shelter were far more expensive (per unit) but of lower quality.7 The annual total informal economy was an estimated Ksh. 7 billion (based on Mukuru residents' typical expenditures for rent, water, toilets, and electricity to informal providers), a sizable figure that garnered the attention of policymakers and the media.8 Informal service providers had offered a range of hazardous services in Mukuru, but more positively, the large informal economy they had created powerfully demonstrated residents' ability to pay for service delivery.

Combined with the Muungano Alliance's sustained advocacy, this research convinced the County that upgrading Mukuru was both a financially viable proposition and a politically compelling strategy. Formalising services could significantly enhance revenue-collection for the County and utilities, helping to eliminate their prior losses to cartels. Furthermore, County officials recognised the opportunity to transform Mukuru's poverty penalty and improve service delivery to slum-dwellers, who are a significant political constituency. As explained below, interdisciplinary consortia became the key vehicle for developing plans to address Mukuru's complex, interrelated challenges and the corresponding need for multisectoral solutions (in line with findings from the IDRC-funded research).

SPA Consortia: Creating Joined-up Planning Strategies in Mukuru

To develop holistic interventions, the partners launched eight consortia with 46 partners/ organisations, who range from academics and civil society groups to government officials, utilities agencies, and private firms. Each consortium is led by a corresponding department from Nairobi's County Government, which help to manage workplans and outputs. Consortia were established specifically to align with the County's departments for 1) housing, 2) education, 3) health, 4) land, 5) water, sanitation, and energy, 6) finance, and 7) environment (Figure 3). Meanwhile, the Muungano Alliance has spearheaded a cross-cutting

⁶ Anderson, M. (2014) Nairobi's female slum dwellers march for sanitation and land rights, *Guardian* https://bit. ly/2txGQue

⁷ Mukuru's typical structure is a 10ft² rented room lacking amenities that is 10% to 26% more expensive per ft2 than neighbouring formal estates (with all services provided). For water, Mukuru residents pay tariffs per m3 that are as much as 172% the rates of formal water customers (AMT *et al.* 2015). See Lines *et al.* 2019: 13 for more data on Mukuru's rents.

⁸ For coverage in *Business Daily*, see https://bit.ly/2uX4u3w

eighth consortium on 'coordination, community mobilisation, and communication' to enhance links between residents, other consortia, and wider stakeholders.9

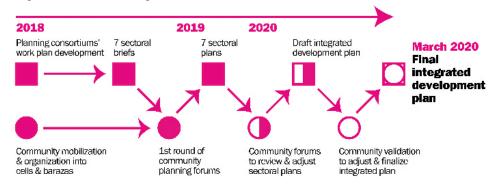
The consortia were tasked with preparing sector-specific briefs and plans; the latter were subsequently merged into an IDP that includes sectoral policy and planning proposals, a spatial plan, and recommendations for finance and implementation (Horn *et al.* 2020). After declaring the SPA, the County placed a two-year hold on Mukuru's physical development and building approvals to permit the preparation of an IDP. The consortia's findings and recommendations, as well as community feedback at consultations, would form the basis of this IDP (Figure 4; Section B). In 2019, partners at UC Berkeley led the drafting of Mukuru's IDP. Strategies to improve roads and other infrastructure were shared across all consortia, so that other interventions could readily align with these networks and create a unified IDP. Not only does the IDP provide water, sanitation, electricity, and roads (thus supporting access to emergency services), but it has also encompassed healthcare centres, schools, and community facilities like markets and social halls.

Figure 3: SPA planning consortia



Source: Corburn and Asari (2017)

Figure 4: SPA Planning Timeline



Source: Kate Lines/Muungano Alliance

⁹ Following the recent reorganisation, the relevant County departments are as follows: **A.** Education, Youth and Social Services, **B.** Health Services, **C.** Lands, Urban Planning, Urban Renewal, Housing and Building Services (aligning with the SPA's consortia for Land and Institutional Frameworks; Housing, Infrastructure and Commerce (HIC); and the Coordination consortium), **D.** Finance and Economic Planning, **E.** Roads, Public Works and Transport (again aligned to the HIC consortium), and **F.** Environment, Energy, Water and Sanitation (aligned with SPA's consortia on Environment and Natural Resources and on Water, Sanitation, and Energy).

The consortia model enabled members to contribute different types of expertise, thereby promoting synergies and helping to inform appropriate, inclusive interventions. Consortia have gathered updated data on Mukuru's services and infrastructure, which were disseminated at community forums and informed the ensuing strategies (see Section B). Notably, some consortia critically assessed conventional planning standards and helped develop more appropriate proposals for informal settlements (see Section D). In the future, consortia members may help in creating or revising relevant Kenyan policies and, more broadly, the approach generated several opportunities for action-learning amongst residents, government, civil society groups, and interdisciplinary researchers. Thanks to grassroots advocacy and participation by officials or utilities, some consortia are already exploring implementation strategies in Mukuru (e.g. planning to lay water pipes or expanding access to health centres). Through complementarities between wide-ranging actors, consortia can offer a valuable institutional structure when crafting multisectoral upgrading projects (see Recommendations).

But given the consortia members' competing priorities, it was sometimes challenging to maintain their involvement and participants usually worked in a pro bono capacity. Since 2017, consortia members have given \$1.6m in their time to the SPA.¹⁰ Some experts could not remain engaged throughout the process, often due to funding shortfalls, but the diverse skills and perspectives provided were still useful. Despite having scarce resources for consortia members' participation, major activities were still completed largely on schedule. In particular, the Muungano Alliance worked closely with consortia to hold consultations in Mukuru with strong community participation.

B. Fostering Vigorous Participation and Civil Society/ Government Engagement

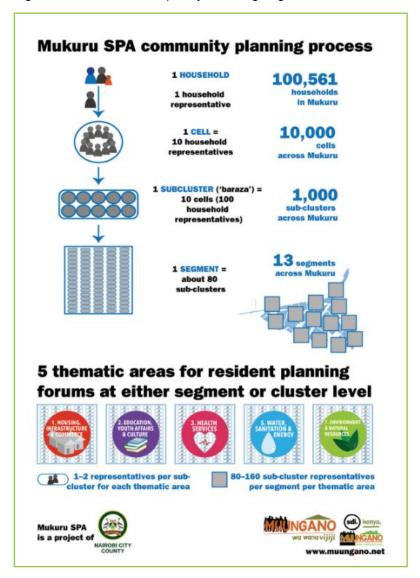
Establishing New Organisational Structures and Cadre of Community Leaders

Recognising the need for broad participation across Mukuru's vast population, the Muungano Alliance created multi-scalar organisations and new mobilisation strategies. Every 10 households in Mukuru comprise a **cell** that selected a representative to receive information about the planning process (Figure 5). Every 100 households (10 cells) were invited to participate in **baraza ndogo** (public meetings) that were organised at the **sub-cluster** level, with 1,000 sub-clusters established across Mukuru. The entire settlement was divided into **13 segments** (i.e. neighbourhoods), each with about 8,000 residents. Such multi-tiered units with representation from across Mukuru effectively shared information about the SPA throughout the settlement and, equally important, ensured that all residents could contribute to planning processes (regardless of their membership in Muungano).

¹⁰ This figure is based on calculations by Caritas, a member of the SPA's Water, Sanitation, and Energy consortium.

¹¹ See https://www.muungano.net/mukuru-spa-resident-participation and Horn *et al.* (2020) on participation in SPA.

Figure 5: Multilevel Participatory Planning Organisations



Source: Corburn and Asari 2017)

In a related strategy to promote vibrant participation and build capacities of new grassroots leaders, the Muungano Alliance trained over 450 **community mobilisers** across Mukuru. Often youth and women without prior experience in settlement-level activities, these residents became a key fulcrum for the SPA's activities and a valuable community asset. Mobilisers kept local officials apprised of progress, resolved any community conflicts or misunderstandings, and emerged as new leaders contributing to local ownership of the SPA. Along with sharing information about the SPA's aims and addressing local concerns (thus promoting horizontal accountability to fellow residents), mobilisers helped to enhance relations with government (fostering vertical accountability). An essential element of the SPA's planning was the creation of community forums, and mobilisers helped ensure that a wide array of Mukuru residents engaged in these discussions.

Understanding Risks and Priorities at Grassroots Forums

Since 2018, monthly *baraza ndogo* meetings were convened across Mukuru, in which residents identified their major concerns and critically assessed or adjusted the consortia's plans. ¹² Mobilisers sought to ensure that the forums engaged women/men, residents of all ages, and people living with disabilities; participant lists were checked to ensure representation from across Mukuru. Although forums were open to all residents, the mobilisers especially encouraged participation by relevant stakeholders (e.g. teachers at the education forum). Structure-owners were asked to help select spaces for constructing roads and other infrastructure; their participation was especially vital during forums with the housing and infrastructure consortium (HIC) and water, sanitation and energy consortium. Gaining structure-owners' support was often a challenge, but their willingness to create space for infrastructure will be pivotal to minimise displacement when upgrading Mukuru (Section C).

Furthermore, to sensitise residents and select preferred interventions, the Muungano Alliance utilised a grassroots risk-mapping tool called Views from the Frontline (VFL).¹³ This exercise allowed residents to analyse major risks, responses, and barriers to action ('risk' was broadly defined to encompass physical hazards, governance, and socioeconomic concerns). The VFL methodology led to thoughtful community discussions of Mukuru's frequent fires; elevated levels of air pollution; inadequate water, sanitation, and solid waste management (SWM); flooding and related disease outbreaks like cholera¹⁴; forced evictions; and chronic poverty and insecurity. As a short-term response to inadequate SWM, Mukuru residents initiated regular clean-ups (Section C). More broadly, the VFL exercise helped prepare the foundation for upgrading thanks to its participatory approach and data-collection suggesting the need for collective responses to Mukuru's multiple risks.

Improving governance and enhanced grassroots engagement with official stakeholders

Throughout the SPA process, residents had several opportunities to engage with government actors, simultaneously fostering community confidence and more accountable relations with these officials. Community mobilisers shared updates on the SPA's planning process and emerging priorities with their area chiefs and Members of the County Assembly (MCAs), thereby strengthening relations with local officials. Some mobilisers have already enjoyed greater recognition from their fellow residents, and they felt increasingly emboldened to raise their concerns with government. As mobilisers noted, the SPA "has given people in Mukuru a voice to speak out, to say what you want or don't want" (interview 22nd Jan 2020). Similarly, a County official observed that the SPA has enhanced understanding and rapport between Nairobi's government and Mukuru residents, who "now wouldn't have any fear in approaching the County for any issue" (interview 21st Jan 2020). Mobilisers appreciated their own rising exposure to local officials and residents, with a corresponding increase in their respect and prestige (potentially with gender-equitable impacts, as many mobilisers were women who had not previously engaged in high-profile settlement activities). Additionally, to share findings and SPA updates with decisionmakers, the coordination consortium held quarterly meetings with County officials that provided another set of useful communication channels.

¹² Since land and finance interventions in Mukuru are not envisioned in the short-term, these 2 consortia did not hold forums but instead contributed to background research. See Horn *et al.* (forthcoming) for discussion of community forums and other aspects of the SPA's scaled-up participatory planning processes in Mukuru.

¹³ This methodology was developed by the Global Network of Civil Society Organisations for Disaster Reduction (see https://www.gndr.org/programmes/action-at-the-frontline.html). For similar risk-mapping in Tanzania, which was again supported by the DFID/ESRC programme Urban Africa Risk Knowledge (Urban ARK), see Osuteye *et al.* (2018).

¹⁴ For instance, in April-May 2019, there were 4 cholera-related deaths recorded and 29 others affected by cholera, reflecting the area's highly inadequate sanitation and water contamination (see WSE Consortium 2019, p. 10).

C. Creative Strategies to Overcome Constraints and Foster Shared Benefits

Although it will be challenging to realise the SPA's ambitious vision, consortia members are already initiating novel strategies to address constraints and generate equitable interventions. By prioritising feasible infrastructure and service delivery (rather than starting with housing improvements), the partners can more effectively promote benefits for all residents. Strategies to improve services and infrastructure, instead of focusing upon housing, can reduce the risk of displacement since 1) housing costs can more readily spiral beyond the reach of low-income residents and 2) upgraded infrastructure can significantly enhance community health and quality of life, irrespective of tenure status (Gulyani and Bassett 2007, Corburn and Sverdlik 2017). In further innovative tactics, the partners are seeking to diversify funding sources; develop short-term interventions; overcome structure-owners' resistance and turnover in the County government; and engage constructively with informal service providers.

Short-term, Feasible Co-Produced Initiatives: Following the grassroots forums, the Muungano Alliance took several steps to maintain momentum and generate tangible benefits in Mukuru. The Alliance worked with residents to implement complementary initiatives, such as youth engagement and reinvigorating Mukuru's savings schemes. With some savings groups fairly dormant before the SPA declaration, staff at AMT helped to revive them so that the schemes can provide the groundwork for future community-led initiatives. Currently, 438 savings groups are now active in Mukuru and can apply for loans to support livelihoods, access to clean energy, or other key priorities. Additionally, a project focusing on safer cities (funded by PLAN International) helped initiate networks to promote security and build young residents' capacities, with the added benefit of creating a cohort of youth leaders working in parallel with the SPA. Meanwhile, regular clean-ups have enhanced SWM (a concern highlighted during the VFL exercises), and in a successful partnership, the County Government began collecting waste deposited by Mukuru's new youth groups. Co-producing SWM solutions with government is a particularly meaningful strategy to build community capacities and enhance their profile with official stakeholders. 15 Since it will require several years to upgrade Mukuru, it is essential that residents can enjoy short-term benefits and thereby maintain faith in the SPA process. In addition to building residents' confidence and support for the SPA via concrete improvements, small-scale initiatives can stimulate further government partnerships and demonstrate the value of community-led contributions.

Working with Informal Service Providers: In a significant departure from prior tactics, the SPA consortia have recommended working with Mukuru's cartels rather than seeking to eliminate them. As noted above, informal service providers had inflicted significant losses on official providers, and upgrading will likely enhance revenue-collection for water and electricity utilities. The HIC and Water, Sanitation, and Energy (WSE) consortia have proposed that Kenya Power and Nairobi Water can partner with ex-cartels, who are being encouraged to register as regulated groups that will no longer engage in price hikes or similar predatory practices. During the proposed 'delegated' delivery model, the utility will provide water or electricity for the groups to distribute at the household or plot level. This represents a pragmatic decision seeking to reduce the risk of sabotage by informal providers, a common challenge when upgrading Nairobi's informal settlements. It also reflects the fact that informal providers offer lengthy experience of serving fellow residents and often respond quickly in emergencies (given their proximity and ties to their customers in Mukuru).

¹⁵ For further discussion of co-production in informal settlements, see Mitlin 2008 and Mitlin et al. 2019.

¹⁶ See Lines and Makau 2017: 55-56 for Mathare's water cartels, which led to Nairobi Water cutting off water in 2007.

¹⁷ Details of the proposed solutions are still being finalised, but the models will likely give ex-cartels the option to distribute electricity and/or to maintain services. During community consultations, some residents expressed reservations about working with cartels and suggested connecting directly from Kenya Power; others sought to noted approvingly that informal providers offered a valuable service and are more accessible than formal providers.

Diversifying Sources of Finance and Management Models: Relatedly, the consortia are exploring how to diversify service delivery models and to expand the range of available funding sources. The consortia's estimates suggest that it will cost USD 50 million in the first five years to provide 50 km of roads, simplified sewerage, water, schools and health centres (for a projected population of 490,000 in Mukuru). Funds for implementation are still being negotiated, but the SPA has already been made a statutory obligation and included in the County's Integrated Development Plan (Makau and Weru 2018). Currently, the partners are considering several financing models with potential support from utilities, national/county government, and aid agencies. It is hoped that Kenya's National Youth Service (NYS) will improve roads and other infrastructure, a strategy utilised previously to provide jobs for youth while also enhancing service delivery. Another approach may entail grassroots management to maintain the settlement's riparian reserves and reduce flood risks. Building upon recent initiatives in Mukuru, it is likely that co-produced SWM solutions can be scaled-up. Such discussions are still ongoing, but encouragingly, elected officials and various agencies are already interested in taking plans forward. Combined with the consortia's wide-ranging networks and openness to alternative solutions, it is anticipated that the partners will launch new collaborations and pursue several funding sources to enact the SPA's multi-pronged interventions.

Sequencing Appropriate Interventions to Minimise Displacement: The consortia prioritised delivering affordable, appropriate levels of services and infrastructure to address Mukuru's most urgent deficits, with the related benefit of reducing displacement of low-income residents. In light of the area's unmet needs and grave public health concerns (underscored by regular cholera outbreaks), the partners are currently focused on upgrading infrastructure and services. 18 Although the latter interventions may still place some pressure on rents, the fact that housing is not an immediate sectoral priority can help to keep residents in place. Nairobi's past upgrading interventions sometimes led to displacement, partly due to the use of inappropriate, high-cost housing standards (see Schramm 2017). Rather than delivering costly housing, the SPA's scaled-up infrastructure may curtail the risks of displacement and help ensure that the initiative can reach low-income residents. Improving infrastructure and services for all residents can also help to bridge community divisions based on tenure status (or other differences), helping to ensure collective needs remain paramount at the initial stages of upgrading when displacement risks may be the greatest. A core aspect of this strategy is the transformation of conventional planning approaches, thereby helping to reduce costs and keep residents in place (Section D). The SPA's proposed upgrading of services and infrastructure in Mukuru will occupy the first five years of a 20-year planning period. Plans for housing provision will follow resolution of land ownership, as Mukuru's land tenure is another key priority in the first five years.

Addressing rental housing dynamics and structure-owners' opposition: A cross-cutting challenge was opposition to the planning process by some informal structure-owners, who feared the loss of rental units and incomes. While comprising only 5 per cent of Mukuru's population, some structure-owners regularly sought to intimidate grassroots mobilisers and disrupt community consultations. Several tactics eventually helped to overcome such resistance. In particular, community mobilisers and the Muungano Alliance targeted and persuaded structure-owners to participate in grassroots consultation meetings. They further explained that 1) the SPA will not result in the County Government's construction of housing or demolition of their units, correcting misinformation via clear communication and patient engagement. Moreover, they noted that 2) improving roads, water, and sanitation could offer gains such as better access to emergency services and avoided lost houses due to fires or floods (highlighting owners' self-interested motives to support the SPA). In a different tactic, 3) smaller meetings gave structure-owners a chance to discuss the way forward, as mobilisers and the Muungano Alliance asked them to map Mukuru's current infrastructure to catalyse discussion about where new roads, water-pipes, and other networks should be placed. Further support came from 4) County officials, who helped to assuage structure-owners' fears

¹⁸ That is, future upgrading of Mukuru's services and infrastructure will be implemented in phases, based on various factors such as public health concerns, levels of pre-existing infrastructure, and land tenure.

and refuted false claims about the SPA at community forums or other interactions. Building upon these rhetorical, organisational, and governmental engagement strategies to persuade structure-owners may offer critical lessons in other informal settlements where rental housing is predominant and tenure divides can again prove contentious.

Political Upheaval and Related Challenges: The SPA process coincided with transitions in County leadership (in 2017) that significantly changed the management of several sectors and departments. This transition affected Nairobi County managers who were initially involved in conceptualizing and declaring Mukuru an SPA; as a result, the Muungano Alliance regularly had to engage and orient new decision-makers. Governmental turnover also forestalled the signing of a Memorandum of Understanding (MoU) between the County, the Muungano Alliance, and other consortia members. The lack of MoU in turn led to uncertainty, which may have curtailed some consortia partners' investments in the planning process. Nevertheless, the Alliance successfully engaged technical staff who stayed in post, several of whom assisted in orienting new managers and many also attended grassroots meetings in Mukuru. Mobilisers, SDI-Kenya staff, and several other consortia members held meetings to brief new officials; these engagements helped overcome the lack of continuity in County staff. And in a major achievement analysed below, consortia members worked with Kenyan officials and residents to propose alternative standards that can more effectively fit Mukuru's context.

D. Development of Infrastructure Standards Fit for Informal Settlements

Through a pathbreaking reassessment, the consortia drew on local and outside expertise to redesign infrastructure standards that can better reflect Mukuru's spatial constraints and financial realities. In Tanzania, SDI's affiliate has already implemented simplified sewerage, with a narrower width and a shallower depth than conventional sewerage. During community consultations, Mukuru residents welcomed this lower-cost alternative and the fact that its construction will not significantly disrupt existing residents (although smaller pipes do require more careful maintenance). Simplified sewerage remains uncommon in Nairobi, but it is expected that Nairobi Water and Athi Water Board will explore implementation strategies over the coming months.

In a complex set of negotiations, the Housing and Infrastructure Consortium (HIC) worked with Indian partners, Kenyan utilities and officials, and residents to develop infrastructure plans that will not uproot Mukuru's population. Exchange visits to India and ongoing support from SDI's Indian affiliate (Society for the Promotion of Area Resource Centres or SPARC) and from city planners at CEPT University (in Ahmedabad) helped catalyse discussions of unrealistic planning standards, as well as how to transform them. If conventional standards were applied (such as wide roads, schools with sprawling cricket fields etc.), the HIC found that *all* Mukuru residents would be displaced.²⁰ But by adjusting standards for physical and social infrastructure, in addition to asking residents to specify the essential elements of facilities, consortia members gradually found ways to keep nearly all households in place. For Mukuru's proposed transport network, the widest road will be just 12m rather than 48m (as per Kenyan conventional road standards). Furthermore, the SPA will prioritise improved non-motorised transport and support the construction of narrower roads/paths, as most Mukuru residents are pedestrians. Based on discussions with residents and government officials, the Indian and Kenyan partners developed a second iteration of plans that would uproot 27% of residents, while a final iteration has reduced this to just 12.5% (depending on the density of settlement).

¹⁹ For more on simplified sewers by the Tanzania Urban Poor Federation (TUPF) and its partner Centre for Community Initiatives (CCI), see https://bit.ly/3alj7IG

²⁰ See also Horn et al. (2020) and https://www.iied.org/planning-for-reality-one-nairobis-largest-slums

Residents and consortia partners identified three principles to guide the new infrastructure standards, with relevance to the SPA's ambitious yet equitable approach more generally. When reconsidering standards, Mukuru residents agreed 1) to uphold 'conservative surgery' i.e. to curtail displacement as much as possible, 2) to prioritise public health, safety, dignity, and convenience above individual interests or ownership, and 3) to mitigate environmental risks and vulnerabilities. To ensure that unrealistic infrastructure standards cannot destroy community bonds, 'conservative surgery' argues for resettling residents only in cases of dire health concerns or other pressing imperatives. By emphasising collective over individual interests, promoting public health, and reducing key hazards, the principles help motivate the SPA's focus on infrastructure and services, with particular benefits for vulnerable households or precarious neighbourhoods. These overarching principles helped develop a way forward when balancing various contending priorities, thereby providing a blueprint for the SPA's extensive yet still practicable set of upgrading interventions.

E. Conclusions and Recommendations

The SPA pioneered a large-scale, holistic approach to upgrading, with a commitment to maintaining community bonds and developing strategies that befit the complexity of informal settlements. Although multi-sectoral, participatory upgrading initiatives have been implemented in several Latin American cities (Rojas 2010), Mukuru's SPA is a rare instance of such interventions in an African informal settlement. It is further distinguished by 8 planning consortia and action-research using insights from grassroots, government, and interdisciplinary stakeholders. Despite opposition from local structure-owners and other constraints, the partners have proposed a range of equitable, innovative upgrading initiatives. Plans are still being finalised, but the SPA can already offer lessons for policymakers and practitioners seeking to promote resilient, inclusive urban development when upgrading other informal settlements.²¹

Intervening in a settlement as large and complex as Mukuru necessitated joined-up, multidisciplinary strategies that rely on the consortia's wide-ranging skills, as well as vigorous coordination and grassroots mobilisation. The Muungano Alliance's coordination with officials and other stakeholders represented a critical input, especially given the urgent need to maintain political support after the County Government's turnover. Community mobilisers played central roles in fostering regular communication and transparency with residents, while also promoting stronger ties to government. Although certain consortia had shortfalls in funding or capacity, their contributions were still considerable even if not always sustained over time. For instance, a local radio station called Reuben FM had a small but essential role in publicising the SPA's forums and disseminating other information. Some consortia members helped at particular stages, including technical inputs at significant junctures in planning. More generally, consortia emerged as a valuable vehicle for upgrading informal settlements, particularly if 1) an array of experts and officials can partner closely with communities and 2) contributing members receive adequate institutional support and resources.

The consortia have created scaled-up, transformative plans to be implemented over several years (alongside small-scale, short-term initiatives) that respond to grassroots priorities and local contexts. Central tenets have been a) 'conservative surgery' to minimise relocation; b) flexibility in funding and partnerships; and c) social inclusion and shared community benefits throughout the participatory planning process. Informed by these principles, the partners developed affordable, carefully sequenced approaches to deliver Mukuru's upgrading plans. When seeking to intervene, the consortia roundly rejected conventional planning strategies as inadequate and exclusionary. Mukuru residents instead have collaborated with diverse stakeholders to develop a multi-scalar patchwork of solutions, which will provide a locally rooted but far-reaching model of transforming informal settlements. Importantly, the

²¹ See Sverdlik *et al.* (2019) and Corburn and Sverdlik (2017) for further discussion of how upgrading can create benefits for health equity, climate resilience, more robust livelihoods, and responsive urban governance.

partners have pursued a delicate balancing act in their approach: combining ambition and incrementalism, grassroots knowledge alongside wide-ranging interdisciplinary partnerships, and reaching scale while seeking affordability and respecting Mukuru's spatial constraints. It is this balancing act and, relatedly, the partners' openness to generating multifaceted solutions over short- and long-term time scales, that perhaps represent the SPA's most novel set of contributions.²²

Recommendations

1. To foster inclusive upgrading with minimal displacement:

- Rethink planning standards via plans jointly developed with residents, government officials, utilities, academics, and other stakeholders. Partnering with local/County authorities and utilities agencies can help to develop flexible, appropriate strategies that reflect the contextually specific needs in informal settlements.
- Careful sequencing is essential, and prioritising services/infrastructure can especially benefit low-income residents, with associated gains in their health and social inclusion. Interventions may reduce gentrification risks in informal settlements by postponing the more contentious issue of housing until after services/infrastructure are improved.
- Recognise differences and inequalities in informal settlements based on factors like age, gender, disability, tenure status, or ethnicity; create representative institutions and inclusive planning forums that are open to all residents (see also point 4 below).

2. To develop appropriate services and infrastructure delivery:

- Develop concrete, feasible initiatives to provide short-term improvements in quality of life that can also maintain grassroots momentum, foster local ownership, and develop partnerships with government or utilities agencies.
- Work with informal providers to develop appropriate regulations and organisational models that can eliminate predatory informal practices, while recognising the potential contributions of experienced informal providers.
- Explore alternative models of provision like delegated service delivery and co-produced solutions,
 which may have added benefits for responsive governance and social inclusion.

3. To create intersectoral strategies appropriate for local contexts:

- Detailed data-collection on shelter, services/infrastructure (including informal providers), local livelihoods, and multiple risks in informal settlements can significantly inform holistic interventions. Over several years, the SPA partners used multiple methods with inputs from local and external experts, as well as grassroots data-collection on risks and shelter provision.
- Interdisciplinary consortia are a valuable mechanism to plan and implement multisectoral upgrading projects, offering useful synergies and opportunities to address the complexity of needs in informal settlements.

²² See also Pieterse (2008) on 'radical incrementalism.'

4. To develop organisations and mobilisation strategies that foster meaningful, scaled-up participation

- Community mobilisers can serve as vital intermediaries between residents, government, and other stakeholders; address any tensions and foster local awareness; and contribute to local ownership that can all engender meaningful participation.
- Create neutral sites for community deliberation (i.e. not affiliated with any organisation or political party); ensure widespread community representation at multi-scalar planning meetings (reflecting residents' socioeconomic and other differences); and develop mechanisms to share findings widely with residents.
- Develop clear outreach strategies using multiple media outlets and ongoing engagement strategies (including local radio, public meetings, etc.). Recognise that rumours can be damaging to the process and work closely with community mobilisers, other organisations, and government officials to address any misinformation.
- Consortia members require adequate financial support and recognition; similarly, there is a need for providing sufficient funds to support grassroots mobilisers' activities and to conduct extensive community forums.

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This city briefing presents findings from research on access to shelter and services in Nairobi, Kenya focusing specifically on the participatory planning process triggered by the designation of the Mukuru informal settlement as a Special Planning Area by the Nairobi County Government. 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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