Unlocking the Poverty Penalty and Up-Scaling the Respect for Rights in Informal Settlements in Kenya

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<th>University of Nairobi</th>
<th>SDI Kenya</th>
<th>Katiba Institute</th>
<th>UC Berkeley</th>
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Executive Summary
Between 2013 - 2015, IDRC financed a groundbreaking and multidisciplinary research project entitled “Improving Access to Justice and Basic Services in Informal Settlements of Kenya”. This research, quantified the poverty penalty, provided evidence on gendered burdens, insecure land tenure and inadequate provision of basic services in Mukuru. The findings of this research formed the basis for the development of a meaningful relationship with the Nairobi City and Kiambu County Governments and further supported the development of the present 2016 - 2018 research project entitled “Unlocking the Poverty Penalty and Up-Scaling the Respect for Rights in Informal Settlements in Kenya” under IDRC’s Grant Number 108242-001.

In this project a multi-disciplinary team comprised of University of Nairobi, Strathmore University, Slum Dwellers International (K) and Akiba Mashinani Trust sought to understand the root cause of the poverty penalty suffered by the residents of Mukuru and to develop practical solutions for enhancing justice and improved access to basic services in the informal settlements of Kenya. The project additionally planned to use the lessons learnt from these practical interventions to up scale the respect of rights through policy influence.

To achieve the above objectives the research team approached the Nairobi City and Kiambu County Governments and persuaded the two counties to commence settlement planning in two informal settlements; Kiandutu in Kiambu County and Mukuru in Nairobi. As a result of these efforts, the County Government of Nairobi on the 11th of August 2017 declared Mukuru kwa Njenga, Kwa Reuben and Viwandani as a Special Planning Area. Upon declaration the county government was required to prepare integrated development plans for the area within a period of 2 years. The County government of Kiambu also gazetted its intention to plan the informal settlement of Kiandutu on 9th January 2017.

The declaration of Mukuru as a Special Planning Area provided an opportunity for both the residents of Mukuru and the City County of Nairobi to develop inclusive plans that would address the unique development challenges faced by the residents of Mukuru. Through this project, systems geared towards the shared ownership of planning and delivery processes between communities, the state and technical teams were developed. This led to the mobilizations of over 42 different institutions keen on bringing sustainable improvements to communities living in informal settlements. These institutions were organised into 8 consortia focusing on 8 key thematic areas aligned to various departments within the county.

Additionally, the research team continued to lead the process of community organization within Mukuru through training of community researchers and mobilizers. Various public participation and community consultation processes supported by the mobilizers led to the formation of multiple community structures. A series of radio talk shows, workshops,
and consultation meetings helped increase public awareness and engagement in the planning process.

A community-led research process formed the basis upon which planning in the SPA was anchored. A total of 23,000 structures with a population of about 300,000 people were numbered and mapped by community research assistants. Some of the key findings of the research are that the SPA settlements are poorly served by basic services, with only 3,000 toilets, mostly pit latrines, available to 100,561 households. In the provision of basic education, only 5 governments supported schools exist despite the government’s commitment to provide universal free primary education.

Continuous reflection, knowledge sharing and collaboration across the different consortia, throughout the research period was enhanced through inter-consortia workshops and meetings. Specialized expertise from the different disciplines and the rich resources and experiences of each of the institutions helped to develop new knowledge and deepen understanding of the living realities in the SPA. By the end of this project five sectoral plans, covering education, health, water sanitation and energy, land, and housing and infrastructure were developed by the eight consortia. These draft plans are awaiting presentation to the residents for validation and eventual adoption by the County Assembly.

Similarly, planning commenced in Kiandutu through; the collection of data and GIS mapping of structures and public facilities, the development of a situation analysis report, the holding of community meetings to obtain community inputs on planning and the development of preliminary designs. Unfortunately, the Kiambu County was not keen to take the planning process forward after the 2012 elections when a new county government took office.

The Research Problem

Nairobi has 158 slum settlements, which occupy 2.1 percent, or 10.92 sq km of the city’s 695.1 sq km land space. The settlements accommodate 458,000 households in contrast to the city’s total estimated household population of 1 million (Muungano 2013). Access to water, sanitation, and electricity in slums is limited with very poor-quality services. In addition, huge disparities in provision exist between the formal and the informal sections of the city. These disparities extend to tenure rights with almost all slum residents living as squatters on either public or private land. Further, research by the Basic Services and Justice Consortium (Supported by IDRC) established that slum resident’s pay three or four times more for basic services than residents in formal parts of the city. This scenario is mirrored across Kenya’s urban landscape.

The country’s 2010 Constitution seeks to address decades of exclusion by providing a corrective framework for legislative processes and policy formulation. As a result, there is greater political acceptance for improving conditions in informal settlements. The last decade has therefore seen
some efforts by government to turn around the large levels of disparity in access to basic services. At the same time, the country’s 10-year average annual economic growth rate of 5.4%, points to potential for greater government investment. Yet, in spite of these changes, access to justice and basic services in informal settlements continues to deteriorate. It is therefore apparent that a better performing economy and a more accountable government will not automatically lead to improvements for slums.

Existing evidence suggests that the disparity between the informal and formal city in Kenya is widening as conditions for the residents of slums continue to deteriorate. Prevailing planning tools and methods are traditionally geared towards developing plans in areas where development takes place after planning. In conventional planning processes land ownership is formally established and the owners known. This position is in complete contrast with informal settlements where development often happens before any formal planning is undertaken and settlement construction does not adhere to formal planning standards. Structure ownership in informal settlements is also often distinct from land ownership and the owners of structures are often unknown. Current government efforts to upgrade informal settlements, based on decades-old practice are not only ineffective, but accelerate the challenges. This research assumes that these initiatives are not enough to transform Kenya’s urban landscape and that a better performing economy, and the current infrastructure led slum improvement programs are not enough to improve the lives of the urban poor.

The Project Scope
This research project assumes that the inability of the state to respond to urban poverty adequately is, more than a question of positive policy intention and fiscal capacity. The planning and implementation approach currently in use by the state were developed with very different social spatial conditions than those that the poorer half of the country’s urban populations find themselves living in. A major drawback in changing the approach and mechanisms for delivering land tenure rights and basic services is a dearth of actionable information to address the complexity of informal settlements, as well as an oversight of the state to recognize the centrality of communities in shaping the city.

The special circumstances in informal settlements call for unique planning tools and methods that especially rely on the residents to fill in the information gaps through community led data gathering processes. The need for developing negotiated positions on who should or should not benefit from upgrading, and what benefits different categories of beneficiaries should derive, calls for a strong community led engagement process with sufficient external oversight to ensure that the weakest are not marginalized. A key outcome of this research is the development of new methods of work that place slum residents at the center of decision making. In order to scale up the lessons the research project was designed to work at three level;
1. At the settlement level through the design of two pilot projects situated in two informal settlements in Kiambu and Nairobi counties.
2. At the County level through the creation of actionable information on all the informal settlements in the counties of Nairobi and Kiambu.
3. At a policy level through testing the applicability of the models developed across different settlements in the two counties and making policy recommendations.

**Progress Towards Milestones**

**Project Objective**
The main objective of the research was to **Upscale the respect for basic rights in informal settlements by developing information, knowledge and practical solutions that can be implemented through a process of co-production between researchers, communities, the state and other implementing agencies**.

This objective was broken down into three specific objectives:

**Specific Objective 1.**
To enhance the knowledge base that informs the development of solutions for addressing disparities between the informal and formal city.

It was expected that this objective would have three outputs. The first was the development of a comprehensive map and baseline survey of all informal settlements in Nairobi and Kiambu counties. The second was an indicator framework that would distinguish settlement forms across the two counties whilst the third was a matrix of settlement preparedness and viability for intervention.

To achieve this specific objective, the research project anticipated that additional funds would be raised, to carry out county wide profiling of all the informal settlements in both Nairobi and Kiambu counties. This plan was however over taken by the Nairobi County Government’s decision to declare the whole of Mukuru as a special planning area. With this decision, the initial pilot project in Riara targeting 8,000 households increased more than tenfold and the capacity of research partners to deal with this expansion was extremely overstretched. So, instead of carrying out the county wide profiling and developing a framework for assessing settlement preparedness for intervention as earlier anticipated the research team, with the approval of IDRC, decided to deepen its work in Mukuru to support the Nairobi County’s planning process in Mukuru.
Objective 2
To demonstrate through two preparatory projects mechanisms for unlocking the poverty penalty

The complexity of urban poverty and the huge disparities that exist between the formal and informal city can be mitigated by developing new methods of work, influencing policy and taking advantage of political opportunities that accentuate these possibilities. This research project appreciated that the challenges of access are systemic and therefore to realization the adoption of the upgrading models developed, action would be required at the city or County scale.

Three outputs were therefore expected under this objective:

1. Identification of the tenure forms that would allow for improved service delivery for the inhabitants of Mukuru and Kiandutu
2. The development of physical plans for upgrading through a community led planning process
3. The development of a project financing plan

The Poverty Penalty
A central finding of the consortium’s earlier research was that slum households pay considerably more for lower quality water, toilet use and electricity, than households in formal neighbourhoods of the city. They also pay exploitative rents for the quality and amount of space that they get. Provision of services and housing in informal settlements is strongly controlled by local cartels, which emerge to exploit the governance gap in slums. Individual slum households pay a direct penalty averaging up to US$ 10 every month with a far higher indirect cost associated to safety, security, time and the indignity of accessing these services.

In this project therefore, the poverty penalty demonstrates the latent capacity of communities to be involved in the design of solutions. It also demonstrates that the solutions developed can attract, in the case of Nairobi, direct leverage from poor communities amounting to US$ 5 million every month.

Kiambu
Community led planning teams constituting of Nairobi University, AMT and SDI-Kenya conducted a 100% enumeration of all households and GIS of all structures and public facilities in Kiandutu. A rigorous process of practical engagement with communities through interactive “dreaming” sessions where community members discussed their vision for the sustainable future of their settlements in regard to land ownership, service provision and house designs was undertaken. During the dreaming process community members were categorized into various groups such as youth, women etc. to ensure equal representation of all community members. These sessions gave the residents an avenue to add their input to the plans. From these sessions,
the technical team was also able to identify the key priorities of the community and ensure that these priorities were captured in the plan.

A planning studio with planning and architectural students and representatives from other consortia was undertaken. The studio’s participants studied the information collected in the situational analysis phase and the additional information collected throughout the research process. This analysis provided crucial planning information that helped in designing possible upgrading options that addressed the needs identified in the situational analysis phase. Current planning laws and regulations in slum upgrading and their practicality based on existing conditions such as land size and population densities were also reviewed.

After the gazettement of the county’s intention to plan Kiandutu, the research team continued its focus on preparing Upgrading Plans for Kiandutu. The residents of Kiandutu were involved in designing their future settlement through an intense community driven planning process. The process brought together the professional planning team from the University of Nairobi, the community mobilizing team from SDI and AMT and community members from Kiandutu who were mobilized through an intense process aimed at “leaving no one behind”. Ten Meetings were carried out in the settlement. Each meeting was conducted at cluster level where members of the cluster engaged in giving views and “dreaming” through drawing their visions for the upgraded Kiandutu. The visioning focused on various sectors including economic, social facilities housing physical infrastructure among others.

The planning teams then used this information to develop preliminary planning and designs that incorporated the desires and needs of the residents. These designs were returned to the community for review. The reviewed plans will then form the foundation for negotiations among various interest groups. Only plans that have the consensus of the people will be forwarded to the county authorities for approval.

- Identification of suitable land tenure options that will allow for improved service delivery and land tenure security for the residents are yet to be completed.
- Physical plans for upgrading developed through a community dreaming and planning process are yet to be adopted by the Kiambu County Government

**Nairobi**

Informal settlements are complex systems and any planning process must deal with a multiplicity of complicated and highly contentious challenges from layered property interests to the existence of strong service cartels, keen to maintain the status quo. In a bid to deal with this complexity, an inception report that laid down strategies and developed a roadmap on how the planning process would be undertaken was prepared by the research team. The inception report proposed the establishment of eight key planning sectors supported but eight multi-disciplinary consortia
aligned to the relevant county departments. The county adopted the inception report and eight sectoral consortia were set up to assist the county in planning. The eight planning sectors are:

a. Education, youth and culture,
b. Public Health and Health Services

c. Environment and Natural Resources.
d. Housing, Infrastructure and Commerce

e. Land and Institutional Arrangements

f. Finance

g. Water, Sanitation and Energy

h. Community Mobilization, Communication and Coordination.

Each consortium is comprised of professionals from various county and government departments, academic institutions, public service providers, civil society and religious organization. A county sectoral head provides overall leadership to the consortium team working under him or her. A lead partner organization that is responsible for coordination and the day to day management of the work of the consortium was identified. AMT provided leadership and worked closely with SDI(K) and Muungano in coordinating the work of the other seven consortia. Nairobi University and SDI-Kenya provided the leadership in the Housing, Infrastructure and Commerce while Katiba provided the leadership in the Land and Institutional Arrangements and Strathmore in the Finance Consortium.

Five draft sector plans have been developed in the following areas: Public Health and Health Service, Education Youth and Culture, Water Sanitation and Energy, Land and Institutional arrangements consortia.

Community at the Centre of Planning

Leave No One Behind

The challenge that was before the County Government and its partners was to ensure that the plans developed for the SPA are true, flexible, interactive and customized to context. A successful plan will be crucial to lifting the residents of Mukuru out of systemic structures that perpetuate poverty, by placing the people at the centre of the planning process.

Leave no one behind is a global commitment in the realization of the Sustainable Development Goals. In our Kenyan context the principle of Leave No One Behind encompasses the rights of inclusion and citizen participation as enunciated in Kenya’s Constitution and both National and County legislation.

Leave No One Behind strategy was adopted by the Nairobi County Government and its partners in the planning of Mukuru SPA. AMT provided leadership in the design of the strategy and worked closely with SDI-Kenya and Muungano Wa Wanavijiji in its implementation.

The main thrust of the strategy was to develop a governance and institutional framework that ensured inclusivity and accountability in planning and project implementation. The strategy above all sought to ensure that the residents of the Mukuru SPA, who are amongst the city’s most
marginalized were informed, involved and heard in the development of urban renewal plans for their settlements. The ultimate aim was to leave no one behind in the development of a vision for a new Mukuru.

The main objective of the strategy was to:

- **Facilitate the formation of 13 representative, accountable and transparent segments that would assist to actively engage the residents of Mukuru in planning through a robust and inclusive participation process that effectively captures the needs and aspirations of the stakeholders of Mukuru.**

**Formation of Participation Structure**

The community mobilization strategy for Mukuru borrows and builds upon the present “Nyumba Kumi” model adopted by government to fight insecurity and counter terrorism. This model is based on the premise that communities are best placed to identify untoward activities as they know their areas well. By creating a strong bond between citizens and the police, crucial information on abnormal or suspicious occurrences within neighborhoods is observed and reported to the police in weekly meetings. Though the community mobilization strategy for Mukuru is not focused on community policing, it nonetheless borrows the organization of households into groupings of ten that is the linchpin of the "Nyumba Kumi" model.

The basic organization strategy for the SPA is to ensure inclusion through the establishment of 13 segments that are representative of the residents in the 30 villages of Mukuru. Like the "Nyumba Kumi" model these segments were organized and anchored on the mobilization of households into cells of ten. The cells of ten households created the basic organs of organization in each of the segments. These cells of ten are made up of residents living in the same plot and sharing a common courtyard, bathroom and toilet facilities. Within their cells, neighbors meet to discuss immediate issues that affect them in their plots such as cleanliness and security. Ten cells are then clustered to make a sub-cluster of 100 households.

This continuous dialogue at the plot and cluster levels helps neighbors to know each other and to begin to build relationships that foster a sense of community and that provide mutual help in times of hardship. With a tenancy rate of about 94% most of the members of the cells and sub clusters are tenants who pay rent to a small group of structure owners, some of whom are absentee structure owners. It is crucial that the voices of this large segment of the population is heard.

**Segment Formation**

Mukuru Kwa Njenga, Kwa Reuben and Viwandani have 30 villages with populations that range from 616 – 8757 households. Ideally each thematic consortium was supposed to hold consultative forums in each one of the 30 villages. This however, would have been rather tedious process with no clear benefits as findings were likely to be repetitive since many of the villages have similar social, economic characteristics. To overcome this challenge and to
optimize on the creation of effective neighborhood associations with an adequate yet manageable membership, the 30 villages were clustered into 13 segments.

Four of the largest villages in the SPA are situated in Mukuru Kwa Njenga. These four villages have populations of 7,737 to 8,757 households. After taking into consideration the population sizes of the largest settlements, a population of about 8,000 households per segment was set. Generally, segments have a household population of about 8,000 and are comprised of villages that are situated in the same geographic location with common social economic characteristics.

Four factors were taken into consideration when delineating the segments these are:

1. A need for parity in the number of households that make up a segment;
2. The geographic proximity of villages that comprise a segment;
3. The economic, social political affinity of villages in a segment;
4. The average size of the largest villages in the three settlements.

To create a robust and inclusive participation process that effectively captures the needs and aspirations of the stakeholders of Mukuru two objectives had to be achieved:

1. **Creation of Segment Consultative Teams**

The segment provided the forum in which the community consultation forums took place. Each sub-cluster (100 households) in a segment elected one person to represent them at each thematic consultation meeting. With an average number of 80 clusters in a segment (8,000 divided by 100 households in a cluster) each thematic group had 80 representatives in each segment. consultative forums. Community mobilizers were tasked to mobilize the 80 representatives and worked closely with each consortium to ensure attendance of residents in consultative fora.
2. Segment Consultative Meetings

To ensure an effective consultative process, it has been agreed with consortia partners that each consortium will hold at least three meetings in each segment.

1. The first set of meetings, will be segment dreaming sessions, where residents share their views, dreams and aspirations with the various consortia.

2. In the second set of meetings, each consortium will share a draft sectoral plan derived from the dreams shared and tested against the existing reality of Mukuru. Feedback will be received from the residents and sectoral plans will be revised accordingly.

3. In the third set of meetings, the different consortia will share the final sectoral plans for adoption by the residents.
Below is a diagram illustrating the structure of the community participation:

1 HOUSEHOLD
1 household representative

1 CELL = 10 household representatives

1 SUBCLUSTER ('baraza') = 10 cells (100 household representatives)

1 SEGMENT = about 80 sub-clusters

100,561 households in Mukuru
10,000 cells across Mukuru
1,000 sub-clusters across Mukuru
13 segments across Mukuru

Mobilizers Training
To foster ownership and to build the capacity of the residents to organize, the Community Mobilization, Communication and Coordination Consortium commenced a process of training community mobilizers in each of the 13 segments. Once trained, four trained organizers were attached to each consortium for support. A total of 420 mobilizers were trained in data collection, formation of cells and sub-clusters, savings and financial intermediation, leadership and governance, facilitation of meetings, conflict management and resolution, issue development, identification, framing and prioritization, monitoring and evaluation. In addition, 29 youth received training on photo and video documentation.

Some of the actions undertaken by the mobilisers and community in general due to their greater awareness of rights?

The mobilizers that were trained held numerous sub-cluster meetings (100 households) to sensitize residents about the SPA and the opportunities it presents. During these sessions’ community members were also given an opportunity to participate in planning their settlement by suggesting their preferred development priorities. These proposals were used to inform planning decisions. This led to greater SPA support and participation in the planning process. The total numbers of meetings held at the sub cluster level were about 120.

The Mukuru community has successfully stopped forced evictions in Mukuru due to the awareness created on land ownership and the community’s rights to the land. The campaign on land that was done in Mukuru has empowered many residents to stand up against the perpetrators of these evictions.
The mobilisers have been using the community radio to sensitize the residents on different issues affecting them and discussing ways in which they can unite in tackling the challenges.

In one village in Mukuru called Rurie a community group has started addressing the issue of waste management and has launched a fundraising campaign to get resources to buy tools, gloves, waste bags and hand carts to be used during the waste collection. The group is also receiving support from the Nairobi City County in terms of waste collection out of Mukuru. In addition to this, groups within Mukuru have created a culture of cleaning up their respective villages at least once a week.

The SPA Community Consultations

The first round of consultations occurred between September 2018 and January 2019. Out of the eight consortia only the following five did community consultations:

- Housing, Infrastructure and Commerce
- Water, Sanitation and Energy
- Education, Youth Affairs and Culture
- Health Services
- Environment and Natural Resources

Each consortium was expected to conduct community consultation in each of the 13 segments as the figure above shows. However, this was reduced to 10 segments after we decided to omit the five villages that occupy the Orbit Chemicals land. The villages are in Mukuru kwa Njenga, and sit on about 75 acres out of the total 100 acres owned by Orbit Chemicals. This decision was arrived at due to complexity of the leasehold and an ongoing court case which was filed in 2004 by Orbit Chemical Industries Limited against the State claiming for loss of user, loss of profits, and for menses profits. The Orbit Chemicals contention was that it had suffered considerable damage as a result of the Registrar of Titles action of lodging a caveat in 1987 against the property, which prohibited Orbit Chemicals from “dealing with the land in any way”. It further contended that as a result its Property could not be protected and so “squatters” moved into the land. It further argued that it was the Registrar of Titles action of lodging the caveat that caused the property to be “invaded” by squatters. The Attorney General filed a defense but, in a ruling, made by Justice Ojwang’ in 2006, the Attorney General’s defense was struck out and judgment was entered in favor of Orbit Chemical Industries Limited. The matter proceeded to formal proof and Orbit Chemicals Limited was awarded Kshs. 13 billion. (More information in the Legal Brief)

Water, Sanitation and Energy, Health Services and Education, Youth Affairs and Culture each conducted 3 pre-consultation meetings in each settlement in the SPA that is; Kwa Rueben, Kwa Njenga and Viwandani. In the meetings, the consortia shared with the community mobilizers and community members an overview of the SPA process and the simplified segment- specific briefs.
This was useful as it helped the community understand what the consultation in each sector would entail. The segment level consultations were then conducted in each of the 10 segments. The meetings had an average of 78 participants who included women, men, youth and people with disability mobilized from each sub-cluster. The participants selected in the sub-clusters would submit their names to the mobilizers before the day of the consultations and the list would be used to confirm the attendance before each meeting commenced. Majority of the participants in these three consortia meetings were tenants.

The Housing, Infrastructure and Commerce (HCI) consultations were different from the rest. HCI conducted their consultations at the village level. In this case the small villages were consulted as one unit while the big ones were divided into small consultation clusters. HCI decided to hold consultations this way in order reduce contention and also ensure decisions are arrived at faster and accurately. The participants of the HCI consultation meetings were structure owners. The reason for choosing the structure owners was to ensure they agree amongst themselves on how they will provide the spaces for the four levels of roads and other infrastructure development such as markets, schools and community centres. Through the discussion the structure owners agreed to apportion spaces for roads and other infrastructure development and used the maps provided by the consortium to indicate the proposed areas. Each consultative meeting had an average number of 30 people and in total HCI conducted 57 meetings in the 10 segments.

The Environment Consortium conducted their consultations at the settlement level. The consortium held a meeting each in Kwa Njenga and Viwandani and four meetings in Kwa Reuben. The participants were mostly tenants drawn at the village level.

**Community Validation Meetings**

The aim of community validation is to give the community a platform to review the draft plans developed as a result of the first round of community consultations. In the validation meetings, the community shall verify the plans to see if their views were incorporated. Any corrections and adjustments of the plans will be done at this point. The five consortia that consulted with the community in the first round will undergo another round to validate the draft plans developed. To date, only Water, Sanitation and Energy consortium have validated their plans in the 10 segments.

**Documentation**

**Note:** In order to comply with the Nairobi City County planning process procedures, all meetings were documented in form of minutes, signed participants lists, pictures and videos. The minutes and participant lists will be annexed in each of the sector plan during the hand over to the Nairobi City County Government.
The Consortia Contribution and Other Partnerships

The planning process in the SPA is founded on the recognition of the need for deepening the principle of partnership and shared ownership of planning and the delivery of services. It is in this spirit that eight thematic consortia aligned to the seven sectors were formed. The research project leveraged funds and human and other in-kind resources from over 41 civil society and public sector organisations.

The following are some of the organisations that made direct financial contribution to help in the SPA process:

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<th>Partners</th>
<th>Area of Funding</th>
<th>Amount in CAD</th>
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<td>Slum Dwellers International (SDI)</td>
<td>2 international exchanges, support for Community Mobilization and Technical support for energy consultants</td>
<td>146,442</td>
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<td>Caritas</td>
<td>Staff Salaries, Fees for a Water and Sanitation Technical Engineer, further support for community mobilization and consultation meetings</td>
<td>106,506</td>
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<td>Bosch</td>
<td>Local and International Community Exchanges</td>
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<td>Urban Ark</td>
<td>Community Mobilization</td>
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<td>Oxfam, Concern and Yu Yamakami</td>
<td>Community Consultation meetings</td>
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<td>ICChange</td>
<td>Health Facilities Research</td>
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<td>Stockholm Environment Institute</td>
<td>Community Mobilization for Air Pollution Research for Environment Consortium</td>
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<td><strong>Total</strong></td>
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The Mukuru SPA process is markedly different from partnership approaches where communities participate in projects conceptualized and developed by the state. This process instead showcases that planning processes can be the result of real engagement between the state and communities through a well-planned and inclusive processes. The intensive involvement of residents and other stakeholders have ensured that the Mukuru community is at the centre of the planning process.
Scenario Modelling and Preparation of Sector briefs:
Scenario modeling was aimed at exploring different planning scenarios and establishing which of these alternatives would be most viable for the Mukuru SPA. A preliminary task before modelling commenced was the establishment of the prevailing situation of each sector in the planning area. This was done through the identification of existing information gaps, the conduct of relevant research to address the identified gaps and the preparation of sectoral situation analysis reports.

The different consortia further identified strategies and best practices used in projects in Kenya and other countries through literature reviews. International exchanges were organised for the Water Sanitation and Energy Consortium who visited the Mwanza and Dar-es-Salaam Water and Sewerage Authorities in Tanzania to learn about decentralized sewer systems for informal settlements. This consortium also visited the Namibian Housing Action Group to learn about community contracting models for infrastructure development in informal settlements. Additionally, the Housing Infrastructure and Commerce Consortium worked closely with the Indian Centre for Environmental, Planning and Technology and several learning and working exchanges were organised to India and Nairobi by the Kenyan and Indian teams. These exchanges were complementary efforts organized to give exposure to consortium members to learn from other countries within the SDI family. Example; In Tanzania we learnt how to develop decentralized sanitation systems while in Nambia we acquired knowledge on how to undertake community project contracting.

Various planning scenarios were built by each consortium and tested against the existing realities in the planning area. An assessment of the viability of each strategy was undertaken and a sector brief was prepared by the consortia. The briefs contained a situation analysis, a review of relevant legislation and identified best practices. After the preparation of the sector briefs each of the five consortia Held various stakeholders’ workshops and meetings to share, and receive feedback on the proposed planning strategies and to further build broad consensus on the strategies to be adopted for development. The sector briefs represented the menu of possible solutions available and are an output of broad stakeholder consultation, exploration of solutions, and exchange visits.

Preliminary Plan Preparation: As earlier indicated a series of consultative meetings involving various stakeholders were held by the five consortia. The various alternative strategies identified at the modelling stage were discussed in community consultative fora and these discussions formed the basis for the development of preliminary plan designs.

Thereafter the consortia prepared draft sector plans based on the prioritized strategies identified during the stakeholder consultations. A series of inter consortia meetings were held in which the draft sector and spatial plans were shared, critiqued and competing or conflicting proposals harmonized. The sector plans developed are aimed at addressing stakeholder aspirations and the challenges and opportunities identified within the sectors. They amongst other things contain; a detailed situational analysis, the planning methodology, a sector policy and legislative
framework, short, medium- and long-term sector and spatial plans, a financing plan and a monitoring and evaluation framework. All five sector plans are now almost complete and are the result of consensus built on workable and practicable solutions.

Apart from the land and water and sanitation consortia the three other consortia still need to share the draft plans with the residents by holding community validation meetings in all the segments. After the validation meetings each consortium will review the sector plans developed, taking into account stakeholder contributions, and finally prepare spatial plans that reflect the interests of each sector. A Mukuru Integrated development Plan (MIDP) that rationalizes and consolidates all the sector plans will be developed. The MIDP has not been finalized since all consortia have not validated their plans with the residents of Mukuru.

Specific Objective 3.
To build, through the use of research, and stakeholder engagement policy recommendations for informal settlement upgrading.

All the planning consortia reviewed existing sector legislation, rules, regulations and practices that govern slum upgrading projects and their relevance to the existing realities in informal settlements in the Mukuru SPA.

Some of the policies reviewed include the Basic Education Act and the Alternative Provision for Primary and Basic Education and Training Guidelines (APPBET) developed under the Act to address the challenges of unregistered informal schools. A review of the APPBET guidelines revealed that the standards set for the registration of informal schools under the guidelines are inordinately high and cannot be achieved by most informal schools. This has led to an almost complete failure of registration by almost all informal schools in the SPA. A consequence of this failure is the complete lack of monitoring by the state of the quality of education provided, and the exclusion of students from all the benefits of universal free education. It is therefore a recommendation of the plan that the guidelines are reviewed.

A major challenge in the provision of adequate water and sanitation in informal settlements is the risk of litigation against the Nairobi Water Company.

The development of alternative planning regulations or guidelines that is responsive to the unique development challenges and opportunities that exist in informal settlements.

The Physical Planning act cap 286, Urban Areas and Cities Act, the Nairobi Integrated Development Plans among others. Based on the findings of the review, the team is moving further to define alternative policy interventions and development guidelines that suit informal settlements context.

The teams also endeavored to collaborate and strengthen both local and international partnerships as well as foster the partnership already established with the county governments. These partnerships are necessary for achieving successful financing and approval of the plans by
the county Governments. To achieve this, the planning team has engaged in meetings, retreats, and exchange visits with the county officials from the two counties.

Methodology
Five of the eight SPA consortia conducted a literature review that was aimed at establishing the prevailing situation of each sector and its impact on the residents health, productivity and general wellbeing. A sector policy and statutory analysis was also conducted in order to establish the statutory framework within which planning would be undertaken. The consortia then identified information gaps and conducted research to fill these gaps. This part of the report elaborates the research methodology adopted by key consortia in their research.

Housing infrastructure and commerce- Nairobi University, SDI-Kenya and AMT

Mapping and Enumeration
The special circumstances in informal settlements call for unique planning tools and methods that especially rely on residents to fill in information gaps through community lead data gathering processes. The data gathering processes that formed the basis of most of the information upon which the SPA plans were developed were community driven and greatly helped to commence a bottom up conversation between communities and the state. Through this process a total of 23000 structures were mapped and numbered and a detailed enumeration and mapping was undertaken in SEPU which is one of the SPA villages. A total of 2402 households were surveyed with a population of 6492. The methodology in these processes is explained below;
A process of primary data collection was designed to gather information that was not available from secondary information sources. This process also aimed to confirm and compare the information gathered and was divided into three sectors:

- **Physical and environmental**: Boundaries, Accessibility and Mobility, Landmarks, infrastructures and services (water, sanitation, power, renewable energies and solid waste collection), Housing typologies and building technologies, Environment and Physiographic.
- **Social**: Households, Community Facilities, Security, Public Spaces, Ownership Structure, Land Regulation, Social and political Structure, Leadership Structure and power relations.
- **Economic**: Household Expenditure, Economic networks, Local Economy and Business typologies, Micro-industries and other Investments.

Fieldwork Tools/Approach. Information in the field was gathered through a combination of different means using various tools as an aid. Different sources of information were compared and combined regarding the same issue in order to obtain more accurate data:

Observation: (Tools- observation sheet, photographs, notes)
Through this method qualitative data in the area was collected, e.g. the nature of households, businesses, physical state of the area, etc. Observation sheets pre-prepared guidelines on what was to be observed on the ground were used.

**Mapping:** (Tool- aerial maps, open-street map, GPS)
Previously aerial images were used to map out areas as observed on the ground i.e. state of infrastructure, location of services and facilities etc. A map from openstreetmap.com was used to confirm the location of various facilities. Community mapping process is summarized in ten broad stages as shown below:

1. **Acquisition of satellite image and boundary identification of settlement.**
2. **Settlement Clustering and numbering code development.**
3. **Blown out sections of the settlement and feature identification.**
4. **Digitization of the visible features in GIS.**
5. **Clustering of the base map.**
6. **Blown up sections of a cluster generated through the principles of aerial photography (strips and overlaps to be used for ground mapping.**
7. **Mapping team establishes overlap areas and assembles a complete strip of a cluster with overlap areas.**
8. **Each mapper gets a digitised section of the base map (in 6 above) to update features to be picked including house numbers, structure partitioning and other physical features on the ground - each mapper provides a legend for the mapped features.**
9. **All the updated sheets are arranged to demonstrate the updated map of the settlement.**
10. **Final settlement map shows the house numbers and use of structure/room within a structure.**
Informal interviews: (Tool- Questionnaires)
Four different questionnaires were randomly administered to 15-20 people per sector giving a total of 60-80 questionnaires filled per village. The questionnaires covered the social, economic physical and environmental sectors with a component on household expenditure.

Key Informants: (Tools- Interview guideline, notes, voice recorder)
Various individuals regarded to have vital information about Mukuru Kwa Njenga. This include Chairmen, Chairladies and Youth Leaders of the villages, teachers, health officials in the area, religious leaders, security officers, businessmen, community organization leaders, structure owners and service providers (water, electricity, toilets, human waste collection and solid waste collection. The Informal discussions with residents selected randomly in various all villages.

Health and Education
The health, education consortia identified their information gaps and commenced their research. Data collection for the Health Services and education Consortia took place in 2018 and research approval was obtained from the Nairobi City County (NCC). Two questionnaires were administered within the SPA to capture data regarding the social determinants of health at the household level and the quality of services provided by health facilities. The education consortium also identified research gaps and research to establish the levels of access and the quality of basic education services provided within the SPA was undertaken. The household, education and health facilities questionnaires were created using the online survey platform Open Data Kit (ODK). Research assistants and community health volunteers (CHV) were trained on the data collection protocol prior to administering the questionnaires to participants. A pilot of 10 households and health and education facilities was undertaken in each settlement to minimize challenges likely to arise during the data collection process.

Health and Educational Facilities Data
All healthcare and educational facilities in Viwandani, Mukuru Kwa Reuben, and Mukuru Kwa Njenga that are situated within the SPA were eligible to participate in the research process. Each health and educational facility that was identified by the community researchers, CHVs and research assistants were asked to complete the Mukuru SPA Health and education Facilities Questionnaires. These questionnaires were developed in partnership with the academics and professionals in the consortia who had prior research experience within informal settlement setting. A total of 209 health facilities participated in the study, with 51, 70 and 85 facilities from Viwandani, Mukuru Kwa Reuben, and Mukuru Kwa Njenga respectively.

Safety Survey
The educational consortium, utilized the findings of a youth vulnerability research conducted by Muungano with the support of PLAN International. This research strove to identify the major victims and perpetrators of crime within the SPA and further mapped out areas that are most
prone to criminal activity. An analysis of the impact of crime on society and youth was conducted and proposed initiatives that can be adopted to reduce societal crime were considered.

988 households were interviewed and 45 people participated in a focus group discussion. Many reported being victimized by a crime: robbery 84.2%, house break-ins 48.6%, pickpocketing 26.4%, mugging 20.5%, murder 16.2%, threats 13.3%, blackmail 9.5% and molestation 3.7%. Other crime/security concerns in Mukuru include drug abuse, illegal power connectivity, police brutality, sexual harassment and minimal privacy between parents and children due to undersized single dwelling units.

**Data Analysis**

**Health Facilities Data Analysis**

Statistical analysis of the health facilities questionnaire was performed using Microsoft SPSS Program Version 20. Descriptive statistics were used to demonstrate baseline characteristics and Students two-tailed t-tests and chi-squares were used to analyse and compare data across settlements and villages for both continuous and categorical data, respectively. All tests of significance were two-sided, and statistical significance was defined as P less than 0.05 (p<0.05).

**Mapping of Mukuru SPA**

Mapping of all healthcare and education facilities within the Mukuru SPA was done using the participatory mapping approach explained above. The Housing, Infrastructure and Commerce consortium trained research assistants from the University of Nairobi along with members from Muungano wa Wanavijiji to facilitate the mapping process. This yielded unique maps for each settlement that spatially identified all the healthcare and education facilities that were operational and the type of facility (e.g., day care center primary or secondary school, pharmacy, chemist, health clinic, etc.) within each settlement.

**Finance- Strathmore University**

In order to contribute to a comprehensive socio economic and financial services profile, the settlements were profiled - collecting information on access to land, services (water, sanitation, electricity, education and health care) as follows;

Design of survey, translation to Swahili and English; and upload on online platform survey CTO for use on tablets. This followed a full day training conducted on 16 July 2016 for the whole team to understand the purpose of the research, survey methodology and test the tool prior to commencing the data collection process. Thereafter two field days – 21st and 22nd July 2016 were designated simulation days to allow for testing of the tool and sampling technique. The researchers then undertook 39 days of data collection yielding a total of 4,737 successful interviews. Survey Data was then analyzed in STATA 12. During data analysis, data was disaggregated by sex, age and other relevant social Stratifications to compare how various categories accessed services.
Besides collection of primary data from the field this stage involved perusal of other literature and case studies to get insights on possible approaches to unlocking poverty and promoting access of basic services in informal settlements. Ethical issues were given utmost attention at four levels.

Firstly, prior to commencing the research we sought for approval from the National Commission for Science Technology and Innovation (NACOSTI) with ethical declarations.

Second, it was important for respondents to be made aware of the purpose of the survey and to give verbal consent.

Thirdly, prior to the collection of field data, the team made courtesy calls to the area chief and village elders with assistance from Muungano wa Wanavijiji. The community leaders were critical in relaying positive message about the purpose of the survey and assisting with navigators. In the case of the closed nit Kiandutu area, Navigators – who are area residents, played an additional role of introducing the team to randomly selected respondents to improve acceptance rates. Any photographs of individuals were taken with their explicit permission.

Finally, all questions were translated in languages that were well understood by the community. For all the focused group discussions English or Kiswahili was used to ensure clarity in communication with the participants.

Various approaches were adapted to integrate gender during research and analysis as discussed below. A closer focus was paid to ensuring women and youth participation in the process. Role of women and youth during the mobilization process- Women and youth were actively involved to mobilize participants of the focused group discussions during the research process. Slots were allocated for women to be represented in the group discussions.

Role of women and youth during the research process. The research team composed of 5 student graduates from the University of Nairobi 2 of whom were ladies while the other 3 were men. Besides the research assistance, women and youth from the community were actively involved in the mapping process as guides to the research assistants

**Key challenges**
The process of mobilization and preparing for community consultations has been challenging due to the perceived idea that the SPA process will lead to demolition of structures. This led to initial hesitation by the from structure owner and resulted in the consultations process being delayed beginning. Over time the resistance of structure owners has waned as effort persuade them on the advantages of the SPA has born fruits.

The year 2017 was an election year which was extremely turbulent due to various contestations. Kenya’s national elections took place in August after a long spell of campaigning. The Jubilee party’s presidential candidate, Uhuru Kenyatta, was declared the winner of the presidential race.
The presidential results were however contested and eventually set aside by the Supreme Court due to irregularities. Fresh elections were called and took place in November. The period after the first August elections was characterized by protests as the opposition continued to challenge the legitimacy of the presidential elections. This took its toll and proved difficult to carry out activities due to insecurity.

After the August elections the governors of both Kiambu and Nairobi County lost their positions. The new governors of both counties replaced their chief officers with new staff. As a result, the good will and knowledge built over time with the officials that were replaced was lost.

In Kiambu County the re-establishment of planning offices after the elections affected the planning and modelling in Kiandutu which was at the final stages and moving towards approval. However, after the re-establishment of the planning department with new officers the process stalled at community verification and approval stage. The new county government did not pick up the planning process and the county has for a large part of the research project been mired in controversy with the governor eventually been charged with corruption and barred from office.

Nairobi county was faced with numerous disruptions with county officials constantly being transferred from one department to another and in some instances being sacked from their position. This proved very disruptive and lead to numerous delays of planned activities.

Lack of or limited participation of Nairobi City County Government in the community consultations meetings was also a challenge as community had several questions directed towards the government but in most cases, there was no one to answer them.

There were challenges in social and community mobilization at Mukuru Kwa Njenga because of the land issue of Orbit chemicals, a 100-acre parcel of land that was irregularly subdivided into over 1,300 plots and sold to the structure owners who want to derail the SPA process.

Resourcing various aspects of this SPA planning process has been extremely challenging.

**Preliminary Lessons Learned**

Working with the Nairobi City County Government requires flexibility and patience, especially in light of the numerous transfers of key officers from one department to the next or even suspension. This instability has led to numerous delays in the execution the MOUs between the county government and consortia partners and the completion of the planning process.