

LOCALLY LED PLANNING

**A Guide for Building
Climate Resilience in
Urban Informal Settlements**



**GLOBAL
CENTER ON
ADAPTATION**

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Mukuru SPA Team



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Foreword



More than half the world's population today lives in cities and, of this burgeoning urban population, one in four citizens lives in informal settlements. Successive generations are condemned to pass their lives on the margins, enduring a hand-to-mouth existence where basic services are out of reach and fear of eviction prevents them from taking a stand against the injustice they suffer.

Climate change is making this hard-scrabble existence even tougher for the world's billion urban poor. They increasingly face and endure flooding, heatwaves, landslides, and drought – with the consequent effects on their already meagre assets, their health, and livelihoods.

In this bleak scenario, Mukuru is leading the way in developing a new approach. Working collaboratively with residents, the Nairobi County government has declared Mukuru a “Special Planning Area”, with needs that could not be met through the traditional urban master plan approach.

This has brought together the Mukuru community to seek solutions and face challenges together. The “lightbulb moment” could not have been more revelatory: it was as simple as asking residents to offer their own solutions, guided by their personal experiences. Listening, consulting and acting on local needs are the basic ingredients of a paradigm shift.

The Mukuru plan is a breakthrough for all of us who seek basic infrastructure and services as a critical safety net for the residents of informal settlements. But a word of caution: there is no “one size fits all” solution to this global phenomenon. Mukuru stands as a model to emulate, not as a blueprint.

Financing resilience-building in informal urban settlements is still in its infancy. Of the funds spent to date on adaptation, only an estimated three to five percent is spent in urban spaces. New funding models are clearly needed.

Many of the lessons on resilience-building from Mukuru are deeply relevant even beyond the boundaries of informal settlements.

While space does not permit me to name all of them here, I wish to extend my heartfelt thanks to the Nairobi City County Government, Nairobi Metropolitan Services, and the 44 organizations drawn from civil society, academia and the private sector who have contributed to making Mukuru a model for others to follow by ensuring that its residents are at the heart of planning a brighter, more resilient future.

Finally and above all, my gratitude to the residents of Mukuru for pushing and advocating for change. They are trailblazers who have created a path for other informal settlements both in Kenya and across Africa.



Prof. Dr. Patrick Verkooijen
Chief Executive Officer
Global Center on Adaptation

Preface

The invisible “informal” populations that service our cities – but whose basic needs are not met by the city – have historically inhabited the margins. They are pushed further to the margins as cities expand, often into more dangerous environments, because city governments and urban planners fail to recognize them as legitimate citizens and continue to ignore their needs. Paying far more for basic services like rent, water, sanitation, and electricity than “formal” citizens, the residents of informal settlements hesitate to stand up and be counted, afraid that a registered address will result in eviction and the loss of even the precarious spaces they inhabit.

Informal settlements in cities are growing, in many cases driven by climatic stresses in rural areas. At the same time, the rise in climate risks is making their harsh environments even less hospitable. These settlements are regularly battered by flooding, heat stress, extreme precipitation, landslides, drought, and water scarcity, with extreme impacts on the assets, health, and livelihoods of residents. Representing over half the urban population in many developing countries, they can no longer remain ignored and unseen. Urban resilience is impossible to achieve without building resilience in informal settlements.

Traditional urban planning tools, education and master plans have little relevance for promoting resilience in confined, resource-scarce informal settlements (at least without mass displacement), where little is known about the needs and vulnerabilities of residents. This is where Mukuru has led the way.

Working collaboratively with residents, the Nairobi County government declared Mukuru a “Special Planning Area” with special planning need that could not be met through the conventional master plan approach. Residents were engaged in a two-year process to profile and “enumerate” their own needs and vulnerabilities and develop their own solutions through a participatory and multisectoral planning process. This created critical local ownership and leadership, reduced the need for displacement, and resulted in integrated solutions for intersecting problems. Most of all, the process brought together the Mukuru community to seek common solutions to address collective vulnerabilities and face challenges together. Civil society partners followed, forming consortia to put their weight behind something larger than the sum of the parts of their previous piecemeal efforts in individual sectors.

The Mukuru upgrading plan will be merged into the citywide Nairobi Integrated Development Plan, providing an important model and precedent. A plan provides government a starting point – government does not invest where there is no plan, no official document to coordinate bureaucratic action and draw local, national and even international development partners and resources.

The Mukuru plan is a breakthrough for all of us who seek basic infrastructure and services as a critical safety net for the residents of informal settlements. While it is already a very important milestone, we need to acknowledge that many improvements and changes will be needed to follow a similar process elsewhere. No two places will have the same histories or capacities (within the community or the professionals who support the process). There are important aspects that readers should keep in mind when seeking to learn from Mukuru:

- Ideally, all external and internal stakeholders should agree on the process and its outcomes. In reality, this may not always be possible. Implementors should invest in dialogue, negotiations, and trust-building throughout the entire process.
- Ensuring the participation of the residents is an uphill task that must not be taken for granted. The protocol followed to ensure democratic governance is vital.
- There are many who will constantly seek ways to disrupt the process in order to maintain a status quo that works in their favor. These risks will have to be carefully managed.
- Evidence must produce the foundations for making decisions in each step of the process to ensure that the plan serves all and that those who lose out are adequately compensated.
- Aspirations will have to be pragmatically balanced with available (or potentially available) financing. There is no point having a great plan that cannot be executed because of lack of funding.

Financing resilience-building efforts in urban informal settlements is not without challenges. In stark contrast to urbanization trends and the rapid growth of informal settlements, most climate action funding goes towards mitigation instead of adaptation. Of the funds spent to date on adaptation, only an estimated three to five percent is spent on urban adaptation.

Historically, upgrading costs are paid by the public agency supporting the initiative along with, in some cases, a small household or community contribution (usually in the form of labor for building infrastructure). Partnering with local governments is essential as household – and neighborhood – level investments do not have the scale needed to adequately address climate-related hazards. Residents cannot act outside their locality or provide trunk infrastructure for water, sanitation and storm drains.

Local funds have proven a highly effective approach to addressing climate vulnerability and building resilience in informal settlements. Financing can come from community savings schemes as well as grants, subsidies and loans from government and international agencies. However, despite the great need, to date little to no international funds have effectively worked with local funds to support grassroots organizations and city governments to upgrade informal settlements. While international and national commitments to climate action, including under the Sustainable Development Goals, recognize the need for upgrading, they remain vague about “how, by whom and with what resources”.¹ New funding models are clearly needed.

In Mukuru to date, government has funded the necessary trunk and other arterial infrastructure while last mile infrastructure has been paid for by civil society partners as well as residents themselves (for instance, through sewer connection fees and in-kind labor).

Many of the lessons on resilience building from Mukuru on local leadership, government and non-government partnerships, and integrated approaches are deeply relevant even beyond the boundaries of informal settlements. The commitment to share those lessons through this Guide reflects the generosity of spirit of those who created the Mukuru plan and to whom we are grateful.

Sources

1. Satterthwaite, D (2018). In Garschagen et al. (eds). [Will the New Urban Agenda Have Any Positive Influence on Governments and International Agencies?](#) *The New Urban Agenda: From Vision to Policy and Action/Will the New Urban Agenda Have Any Positive Influence on Governments and International Agencies?Informality in the New Urban Agenda: From the Aspirational Policies of Integration to a Politics of Constructive Engagement/ Growing Up or Growing Despair? Prospects for Multi-Sector Progression City Sustainability Under the NUA/ Approaching Risk and Hazards in the New Urban Agenda: A Commentary/Follow Up and Review of the New Urban Agenda*, *Planning Theory & Practice*, 19:1, 117-137.

Upgrading Informal Settlements for Climate Resilience



As Africa rapidly urbanizes and climate change accelerates urbanization,¹ the poor, most vulnerable and least culpable are bearing the brunt of the colliding climate and urban infrastructure crises. This collision is taking place where 60 percent of urban Africans — and one billion people worldwide — already live, in urban informal settlements.²

Across Africa, climate resilience³ in informal settlements requires urgent attention. Residents are highly vulnerable to multiple climate hazards like extreme rainfall, floods, water- and vector-borne diseases and extreme heat, fires and water scarcity.⁴ During a heat wave in Nairobi in 2015, for example, informal settlements were 3-5°C hotter than in other parts of the city.⁵

Existing vulnerabilities due to the lack of adequate income and assets, infrastructure, basic services, and voice in governance are further exacerbated by the degradation of ecosystems and habitats and climate change-related disasters and stresses. Informal settlements are particularly vulnerable to climate change due to three underlying factors:

- Their physical location, which is often environmentally fragile.
- The socioeconomic characteristics of residents, including high levels of poverty.
- Political and institutional marginalization, resulting in the absence of risk-reducing infrastructure and support to cope with shocks.⁶

While upgrading is yet to be mainstreamed as climate change adaptation, it is a widely accepted practice in urban governance that can greatly increase the resilience of residents and infrastructure in informal settlements to climate change impacts. Flexible by nature, upgrading adapts well to different local contexts.⁷ As emphasized by the Intergovernmental Panel on Climate Change (IPCC), “urban governments are uniquely situated to reconcile development with climate change adaptation because they understand local contexts, raise local awareness, respond to citizens’ and civil society pressures and work to build an inclusive policy space”.⁸ And as demonstrated by the Mukuru SPA, government and community partnerships are crucial for upgrading informal settlements not just for improving physical infrastructure but for more inclusive, enduring resilience to social drivers of vulnerability.

Social drivers of vulnerability like low-income and gender discrimination intersect with environmental risks. Political exclusion and social vulnerability impair resilience. Because residents in informal settlements are often trapped in clientelist relationships, they struggle to enlist the support needed from local governments for upgrading. Moreover, because they are often viewed as apart from and inferior to the formal city, local governments are often reluctant to engage in the community dialogues and partnerships required to undertake meaningful upgrading projects. This exclusion is embodied by the lack of a registered address for households living in informal settlements. Without an address, residents are often denied access to infrastructure (such as piped water, sanitation, electricity, even

roads) and services (such as public schools, health care, social protection, voter registries, banking, property insurance) crucial for resilience.⁹

Upgrading alone does not ensure inclusion. Inclusion is fundamental to resilience. Just because a local government undertakes upgrading does not ensure that all residents will be engaged, or benefit, equally. Some groups are more vulnerable to climate change impacts than others. It is therefore important to pay particular attention to what may exclude or undercut these groups by asking how does the project:

- protect infants and children?
- address the needs of residents discriminated against on the basis of age, sex, gender, ethnicity or other social group?
- account for tenants who may be excluded by providing land tenure (in particular women who are often disproportionately renters)?¹⁰

Informal settlements often play important roles in their city's economy and therefore to its resilience to disasters and shocks. As demonstrated by research done in Mukuru and elsewhere in Kenya in 2017, informal settlement residents make major contributions to their city's economy. The lack of risk-reducing infrastructure and services in settlements leaves these economies vulnerable to disasters and shocks. Therefore, upgrading builds resilience not only within settlements but for the city more broadly.

While upgrading reduces many climate-related risks, it has limits. Without investments in and integration with risk-reducing infrastructure beyond a settlement's boundaries, residents remain vulnerable to hazards like flooding that originates elsewhere in a watershed. There are also residual risks that inevitably remain even after interventions to address vulnerabilities and reduce risks have been completed.¹¹

Relocation is not viable unless it accounts for affordability, accessibility and quality. It might be tempting to try to relocate residents from informal settlements that are located in environmentally hazardous locations to formal developments that are better served by risk-reducing infrastructure and services. However, many will not want to go if the new location does not offer comparable or better access to employment, affordable housing and services, and tenure security.

For particularly hazardous sites, relocation might be necessary. But the relocation process, in particular decision-making about how it is undertaken and where residents resettle must be done in close collaboration with residents themselves. If the new locations are far from the original

location, distant from employment and services, or have poor quality housing and services, residents will likely opt to move to other informal settlements that better meet their needs.¹²

Look beyond hazards to consider root causes of risk and vulnerability and mainstream risk management into urban development. Upgrading informal settlements can reduce climate vulnerability. The risks faced by urban populations in developing countries, particularly in informal settlements, are associated with poverty, informality, inadequate basic infrastructure, weak governance, and exclusionary planning.¹³ Climate risk management and vulnerability reduction efforts in these cities must therefore look beyond hazards to consider root causes of risk and vulnerability – such as informal settlements in dangerous locations, infrastructure deficits, and unequal access to decision-making, opportunities and resources.

Moreover, risk management and vulnerability reduction efforts should not only be restricted to climate and disaster risk management, but mainstreamed into urban development processes, including planning, policymaking and investments.¹⁴ The IPCC finds that reducing basic service deficits and building resilient infrastructure systems in urban areas can significantly reduce hazard exposure and vulnerability to climate change.¹⁵ This includes water supply, sanitation, storm and wastewater drains, electricity, transport and telecommunications, health care, education, and emergency response. Others have found complementarity between upgrading informal settlements and building climate resilience – effective upgrading can enhance resilience to climate risks and provide a foundation into which climate-change resilience and disaster risk reduction can be integrated.¹⁶

Elevate the role of local governments, community and government partnerships and community ownership in planning and decision-making to create locally-appropriate and enduring investments. Inclusive and locally led planning and governance approaches can improve the effectiveness and sustainability of resilience building efforts. The IPCC emphasizes the key role of urban governments in reconciling development and climate change adaptation; partnerships between local government and communities in upgrading informal settlements; and participatory inclusiveness, equity, awareness raising, deliberation, argument and persuasion in determining the legitimacy and effectiveness of action.¹⁷ It finds that adaptation in urban areas depends on a locally-rooted, iterative process of learning about changing risks and opportunities, identifying and evaluating options, making decisions, and revising strategies in collaboration with a range of actors. Locally led approaches to upgrade informal settlements can ensure broader buy-in and ownership of residents, reflect local needs and aspirations, be tailored to local circumstances, and therefore be more effective and long lasting.

Assessing and anticipating future climate-related risk. While in-situ upgrading where governments work closely with communities is a major improvement over the conventional response of city governments of ignoring or bulldozing informal settlements, these initiatives

often focus on addressing current risks. Although addressing land tenure and existing gaps in infrastructure and service provision can reduce climate vulnerability in informal settlements, more needs to be done to assess and anticipate future climate-related risk.

Climate change poses real risks for cities – with global warming greater than 1.5°C, human death and illness will increase significantly, exacerbated by urban heat islands, intensified heat waves, volatile weather, floods, droughts, coastal inundation and diseases.¹⁸

Planning for future risk can be challenging for local governments and communities alike. Climate change is not always a well-understood concept and seeking to assess residents' perceptions of future risks and planning to anticipate those risks requires new, unconventional ways of thinking, engaging and acting.


Some methods for planning for future risk could include using scenarios to conduct participatory vulnerability and risk assessments (PVRA) with informal settlement residents and co-developing community-led data collection tools to fill large data gaps for environmental hazards in informal settlements (such as the knowledge of residents on water and flooding levels in the past).

Also note that while upgrading mainly addresses vulnerabilities to climate change, it can also be an opportunity to decarbonize development as in-situ upgrading counteracts sprawl.

While considering future risk is becoming increasingly necessary, it is important to weigh it against competing priorities. Funding for upgrading is limited so in some cases it may be necessary to prioritize the immediate needs of residents over uncertain future risks.

Climate change concepts may be unfamiliar to some but social and economic vulnerability will not be. As previously noted, climate change and its impacts are not always well understood by both informal settlement residents and local professionals. This includes the language used to describe climate change and build resilience to address related hazards, vulnerabilities and risks. Upgrading is a widely accepted practice and a practical language has grown with it that is well understood by communities and professionals alike. Instead of learning to speak in the language of international organizations, funders and partners should instead learn how existing practices in informal settlements aid adaptation and resilience. And as upgrading evolves to be more sensitive to climate change, residents and local governments can also learn more about related risks and begin to speak the language of funders and partners.

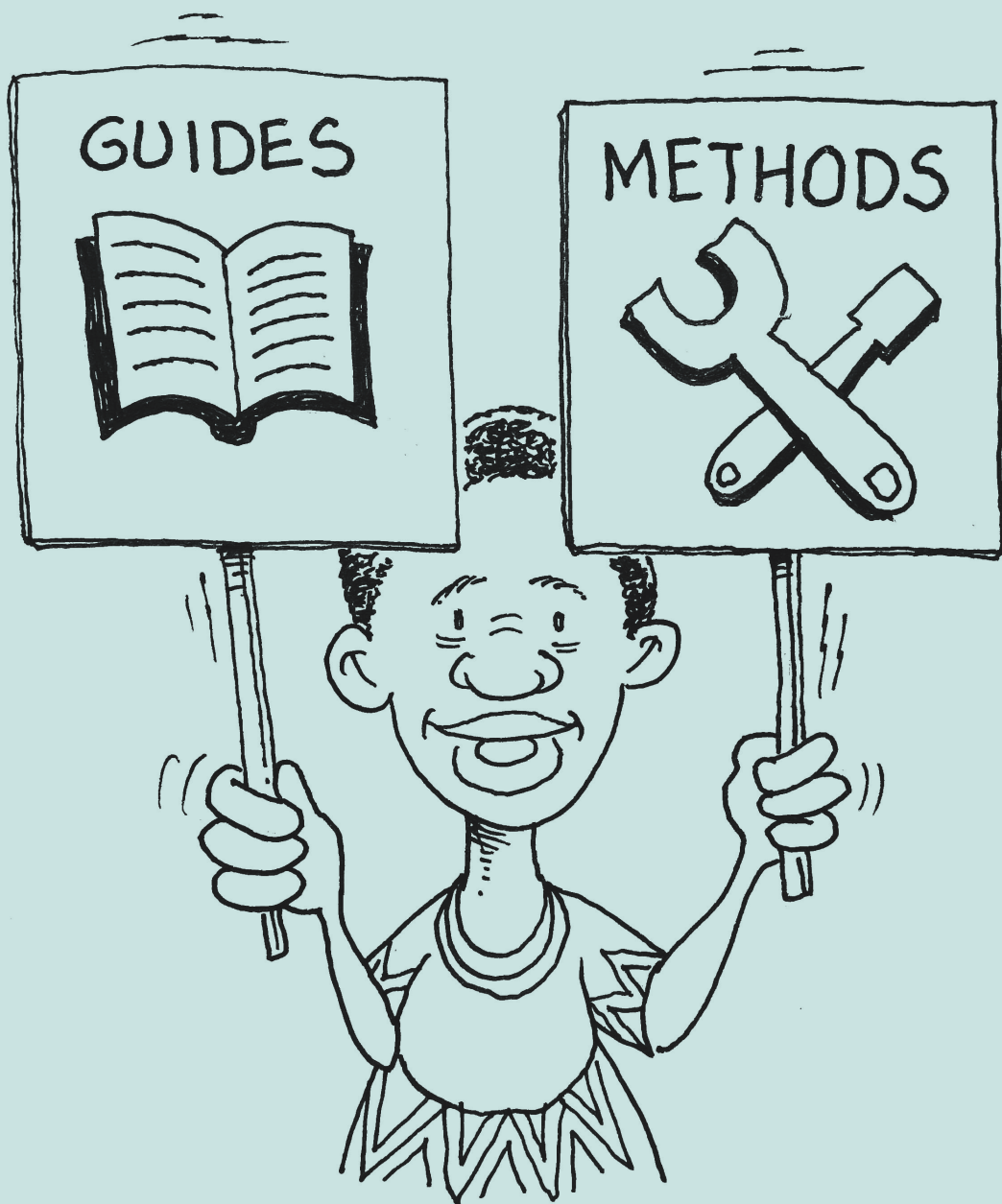
Key Resources on Building Climate Resilience in Urban Informal Settlements

- The **Guides and Methods**  in this Guide
- **Building Resilience to Climate Change in Informal Settlements**
- **Addressing the Most Vulnerable First – Pro-poor Climate Action in Informal Settlements**

Notes and Sources

1. Earle, L., Aubrey, D., Nuñez Ferrera, I., & Loose, S. (2020). When Internal Displacement Meets Urbanisation: Making Cities Work for Internally Displaced People. *Refugee Survey Quarterly*, 39(4), 494–506.
2. Lall, S. V., Henderson, J. V., & Venables, A. J. (2017). *Africa's Cities: Opening Doors to the World*. World Bank.
3. Resilience is defined by the IPCC as the ability of a system and its component parts to anticipate, absorb, accommodate, or recover from the effects of a hazardous event in a timely and efficient manner, including through ensuring the preservation, restoration, or improvement of its essential basic structures and functions
4. Urban climate-change-related risks include “rising sea levels and storm surges, heat stress, extreme precipitation, inland and coastal flooding, landslides, drought, increased aridity, water scarcity, and air pollution with widespread negative impacts on people (and their health, livelihoods, and assets) and on local and national economies and ecosystems.” (Revi et al., 2014, p. 538)
5. 2.8-5.6°C or 5-10°F (Scott, A. A., Misiani, H., Okoth, J., Jordan, A., Gohlke, J., Ouma, G., Arrighi, J., Zaitchik, B. F., Jjemba, E., Verjee, S., & Waugh, D. W. (2017). Temperature and heat in informal settlements in Nairobi. *PLoS One*, 12(11), e0187300.)
6. Dodman, D., Archer, D., & Mayr, M. (2018). **Addressing the Most Vulnerable First – Pro-poor Climate Action in Informal Settlements**. UN Human Settlements Programme (UN-Habitat).
7. Satterthwaite, D., Archer, D., Colenbrander, S., Dodman, D., Hardoy, J., Mitlin, D., & Patel, S. (2020). Building Resilience to Climate Change in Informal Settlements. *One Earth*, 2(2), 143–156.
8. Revi, A., Satterthwaite, D. E., Aragón-Durand, F., Corfee-Morlot, J., Kiunsi, R. B. R., Pelling, M., Roberts, D. C., & Solecki, W. (2014). *Urban Areas*. In: *Climate Change 2014 – Impacts, Adaptation and Vulnerability: Part A: Global and Sectoral Aspects: Volume 1, Global and Sectoral Aspects: Working Group II Contribution to the IPCC Fifth Assessment Report*. Cambridge University Press.
9. Satterthwaite, D., Archer, D., Colenbrander, S., Dodman, D., Hardoy, J., Mitlin, D., & Patel, S. (2020). Building Resilience to Climate Change in Informal Settlements. *One Earth*, 2(2), 143–156.
10. Satterthwaite, D., Archer, D., Colenbrander, S., Dodman, D., Hardoy, J., Mitlin, D., & Patel, S. (2020). Building Resilience to Climate Change in Informal Settlements. *One Earth*, 2(2), 143–156.
11. Satterthwaite, D., Archer, D., Colenbrander, S., Dodman, D., Hardoy, J., Mitlin, D., & Patel, S. (2020). Building Resilience to Climate Change in Informal Settlements. *One Earth*, 2(2), 143–156.
12. Satterthwaite, D., Archer, D., Colenbrander, S., Dodman, D., Hardoy, J., Mitlin, D., & Patel, S. (2020). Building Resilience to Climate Change in Informal Settlements. *One Earth*, 2(2), 143–156.
13. UN-Habitat. (2020). **Breaking Cycles of Risk Accumulation in African Cities**. United Nations Human Settlements Programme (UN-Habitat).
14. UN-Habitat. (2020). **Breaking Cycles of Risk Accumulation in African Cities**. United Nations Human Settlements Programme (UN-Habitat).
15. Revi, A., Satterthwaite, D. E., Aragón-Durand, F., Corfee-Morlot, J., Kiunsi, R. B. R., Pelling, M., Roberts, D. C., & Solecki, W. (2014). *Urban Areas*. In: *Climate Change 2014 – Impacts, Adaptation and Vulnerability: Part A: Global and Sectoral Aspects: Volume 1, Global and Sectoral Aspects: Working Group II Contribution to the IPCC Fifth Assessment Report*. Cambridge University Press.
16. Satterthwaite, D., Archer, D., Colenbrander, S., Dodman, D., Hardoy, J., Mitlin, D., & Patel, S. (2020). Building Resilience to Climate Change in Informal Settlements. *One Earth*, 2(2), 143–156.
17. Satterthwaite, D., Archer, D., Colenbrander, S., Dodman, D., Hardoy, J., Mitlin, D., & Patel, S. (2020). Building Resilience to Climate Change in Informal Settlements. *One Earth*, 2(2), 143–156.
18. Satterthwaite, D., Archer, D., Colenbrander, S., Dodman, D., Hardoy, J., Mitlin, D., & Patel, S. (2020). Building Resilience to Climate Change in Informal Settlements. *One Earth*, 2(2), 143–156.

About This Guide



This Guide provides resources for locally led, inclusive, multisectoral upgrading for climate resilience in urban informal settlements. Designed as a guide not a toolkit, it pays particular attention to context and its variation across cities and countries – the principles, guides and methods in this document must be translated to each unique context. It can help replicate the approaches and roles taken by institutions and people for comprehensive, transformative upgrading – based largely on the experience from the Mukuru Special Planning Area (SPA) in Nairobi, Kenya – but not the specific plans themselves. While the focus is on Africa, the lessons can be applied elsewhere as well.

Building on the scale of ambition provided by the groundbreaking Mukuru approach to upgrading and resilience, this Guide aims to support national and local champions and local governments; communities; civil society and academia; and funders in undertaking inclusive, multisectoral and inclusive upgrading to both build climate resilience in informal settlements and link locally led action with broader processes of urban and climate governance. The Mukuru SPA is the most exciting, innovative process happening in urban development in Africa today, providing a pragmatic vision towards action that addresses fundamental problems in African cities.

The Guide purposefully excludes an analysis of where this approach might be replicated – it is not a blueprint but should instead serve to convene discussions, provide questions and fuel your imagination to innovate the right approach for your context. Many countries likely have legal provisions that can be leveraged to support locally led upgrading to build public infrastructure.

Several tools and methodologies for measuring or profiling urban resilience exist and have proven useful for filling data gaps and providing the basis for consultations with local governments and other stakeholders. However, they do not acknowledge the crucial role of locally led (i.e. community- and local-government-led) upgrading to reduce climate risks in informal settlements. They offer limited support for generating the data needed for upgrading and limited influence to informal settlement residents.¹ In contrast, the approaches, strategies and methods in this Guide put communities at the center of every step of the upgrading process by highlighting their essential roles in advocacy, local politics, research, coalition building, partnerships, planning, decision-making, implementation of locally-appropriate and enduring public investments, and operations and maintenance for upgrading processes.

Research for this Guide was carried out between March and October 2022 and included interviews and focus groups with residents of Mukuru Kwa Njenga, Kwa Reuben and Viwandani, members of the Kenyan urban poor federation Muungano wa Wanavijiji, local government staff, and civil society and academic partners; a survey for Mukuru residents with 183 responses; ongoing conversations with the staff of the Akiba Mashinani Trust (AMT) and Slum Dwellers International-Kenya (SDI-K) as well as their Indian affiliates; and reviews of existing documentation², reports³ and articles.⁴

The Guide is designed as a living repository to evolve in tandem with the work of the Global Center on Adaptation (GCA), the African Development Bank (AfDB) and their joint initiative, the Africa Infrastructure Resilience Accelerator of the Africa Adaptation Acceleration Program (AAP). It will both inform and be informed by practice on the ground. Future versions will incorporate lessons learned during ongoing efforts across Africa and beyond.

Main Sections

Overview

Summaries of key case studies in locally led, inclusive and multisectoral upgrading of urban informal settlements (such as the Mukuru SPA) and brief discussions of key concepts for the urgently needed local-to-international action to upgrade informal settlements for climate resilience.

Guides and Methods

Guides

Guides discuss key practices in-depth. These concepts are highly sensitive to local context – each guide, therefore, includes practical considerations for translating concepts to your context as well as relevant case studies (Mukuru being the primary one).

Methods

Methods are detailed methodologies that can be more directly replicated across cities and countries and aid the undertaking of concepts discussed in Guides. They also include examples of relevant data collection tools.

Navigating Guides and Methods

Guides and Methods → are organized by theme (e.g. Roles; Community Co-planning; etc) and modularized by topic so that you can more easily pick and choose what is most relevant for your upgrading initiative. They include the following sections:

Section	About	Guide	Method
Who	Target audience(s)	✓	✓
What	High-level description of topics covered	✓	✓
Why	Relevance and objectives for undertaking activities	✓	✓
Where	Location, context and legal considerations	✓	✓
When	Timeline considerations; political and other timing considerations	✓	✓
How	Practical considerations for undertaking activities	✓	✓
Considerations	Questions for translating concepts to your unique context	✓	✓
Challenges	Challenges you may face in undertaking activities	✓	✓
Examples from the field	Case studies that provide real world examples (in particular from the Mukuru SPA)	✓	✓
Materials	Any materials required	–	✓
Example materials	Any relevant templates (with example answers)	–	✓
Related components	Links to related Guides, Methods and Videos	✓	✓
Sources	Sources used to develop guide/method	✓	✓
Additional resources	Any other relevant resources	✓	✓

Audience

The “**Who**” of **Guides and Methods** →. Each guide/method and video has target audiences to help you navigate to the ones that are most relevant to you. Because all the guides, methods and videos are broadly of interest to all of the audience “personas”, the **Who** is divided into two tiers:

- Most useful for: The primary audience – all sections of the guide/method are important for you, in particular the **How, Considerations, Challenges, Examples from the Field, Materials** and **Example Materials** sections.
- Also useful for: While not the primary audience, the guide/method will provide you with information on important concepts also applicable to your work. For guides/methods, you should focus on the high-level sections like **What, Why, Where** and **When** over the other, more detailed how-to sections.

Persona

Definition

Local Champions	Proponents of locally led action in government, civil society and other local organizations
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Community

Residents	Community leaders, activists, mobilisers, youth leaders and other residents in informal settlements
CBOs	Community-based, local grassroots organizations
Urban Poor Federations	National grassroots networks for social movements of the urban poor (e.g. Muungano wa Wanavijiji, National Slum Dwellers Federation and Mahila Milan, Federation of the Urban Poor)

Civil Society

Federation-support NGOs	National NGOs that are allied with urban poor social movements (e.g. Slum/Shack Dwellers International-Kenya, Akiba Mashinani Trust, SPARC India, etc)
NGOs	National and international NGOs
Academia	Universities, think tanks and action research networks

Government

Local Governments	Staff in local government departments (e.g. urban planners, engineers)
Political Leaders	National and subnational elected officials and political appointees

International Institutions

Funders	International and regional multilateral and bilateral development banks and other international finance institutions as well as NGOs
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Sources

1. Satterthwaite, D., Archer, D., Colenbrander, S., Dodman, D., Hardoy, J., Mitlin, D., & Patel, S. (2020). Building Resilience to Climate Change in Informal Settlements. *One Earth*, 2(2), 143–156.
2. Horn, P., Kimani, J., Makau, J., & Njoroge, P. (2020). *Scaling participation in informal settlement upgrading: A documentation of community mobilisation and consultation processes in the Mukuru Special Planning Area, Nairobi, Kenya*.
3. Muungano Alliance & Center for Global Healthy Cities. (2022). *Mukuru Special Planning Area: Integrated Development Plan Report*. University of California, Berkeley: Center for Global Healthy Cities & Muungano Alliance; Muungano wa Wanavijiji/Akiba Mashinani Trust. (2020). *Unlocking the Poverty Penalty and Upscaling the Respect for Rights in Kenya's Informal Settlements*. International Development Research Centre.
4. Dodman, D., Archer, D., & Mayr, M. (2018). *Addressing the Most Vulnerable First – Pro-poor Climate Action in Informal Settlements*. UN Human Settlements Programme (UN-Habitat); Satterthwaite, D., Archer, D., Colenbrander, S., Dodman, D., Hardoy, J., Mitlin, D., & Patel, S. (2020). Building Resilience to Climate Change in Informal Settlements. *One Earth*, 2(2), 143–156; Sverdlik, A., Makau, J., Kimani, J., Mumbi, C., Njoroge, P., Otibine, E., Nyambuga, K., Wairutu, J., & Waithaka, J. (2020). *Achieving Scale, Social Inclusion, and Multifaceted Shelter Solutions: Lessons from the Special Planning Area (SPA) in Mukuru, Nairobi*. International Institute of Environment and Development (IIED).