

THE VALUE OF URBAN NATURAL ASSETS WHEN PLANNING FOR RESILIENT AFRICAN CITIES: CONSIDERATIONS AND DECISION-MAKING PROCESSES

Profiling key lessons learnt through ICLEI's Urban Natural Assets for Africa (UNA) programme



URBAN NATURAL ASSETS FOR AFRICA HANDBOOK SERIES

HANDBOOK 3

Innovative approaches to planning in an African context:
Urban tinkering in Malawi



HIGHLIGHTS FROM THIS HANDBOOK

- Within the unique African context, the current reliance on historical top-down urban planning methodologies, largely inherited from colonial powers, can't adequately address the complex challenges facing local governments.
- Innovative approaches to planning and service delivery that are tailored to the specific needs of African cities and that engage and involve community members are, therefore, necessary for sustainable development.
- Through UNA programme activities, various alternative African-specific planning approaches have been identified and are currently being applied. One such approach is 'urban tinkering', which was successfully implemented in Lilongwe, Malawi to address the challenge of waste disposal.

WHO SHOULD CONSULT THIS HANDBOOK?



Funder and donor institutions



Organisations working on sustainability and development issues in Africa



City officials (planning, environment, engineers, developers and related disciplines)



City officials (economists, finance and procurement departments)



Academic researchers (and related organisations)

The relevance and significance of this handbook series

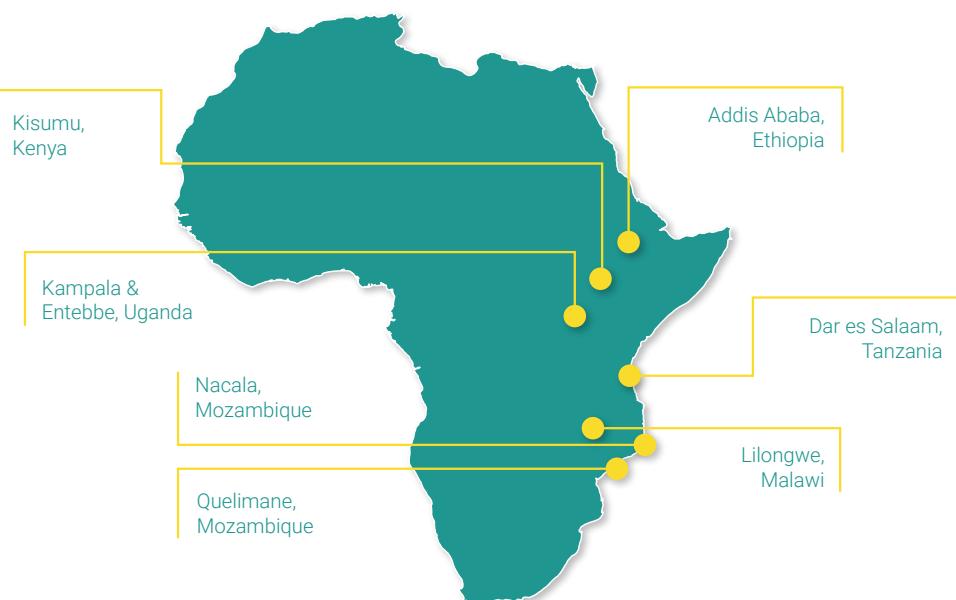
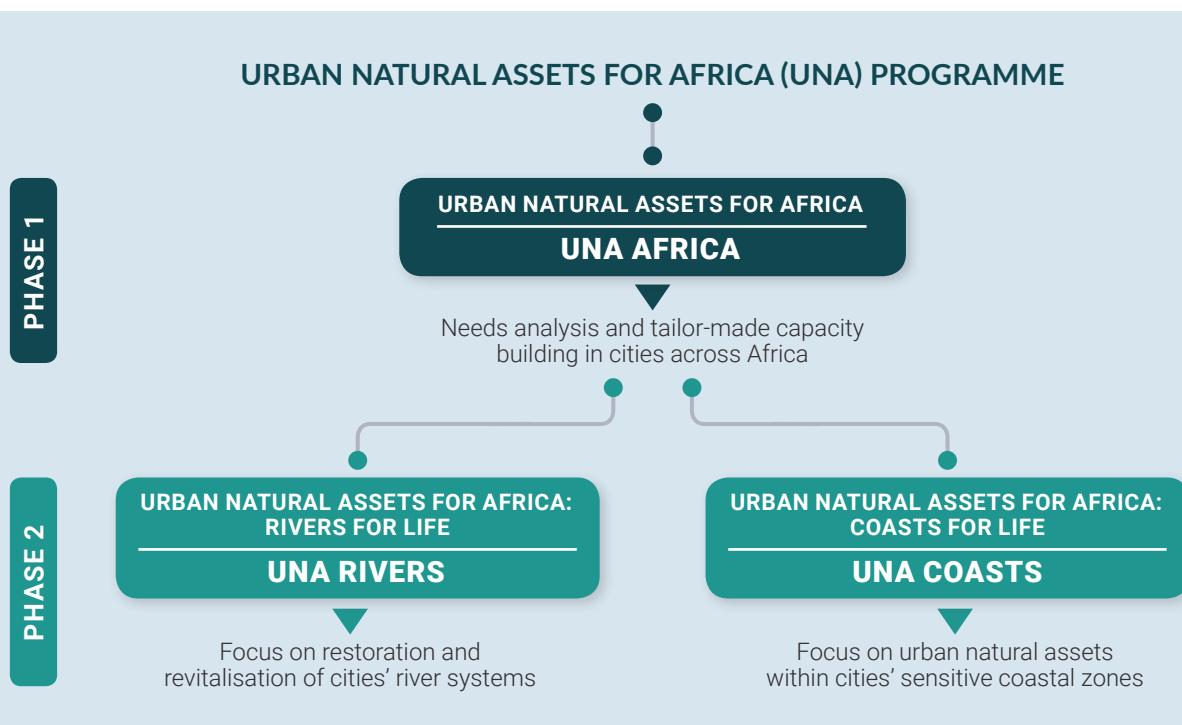
The ICLEI Cities Biodiversity Center (CBC), a global centre hosted by ICLEI Africa, developed this handbook series to showcase key considerations for integrating urban natural assets into city planning in sub-Saharan Africa. All lessons profiled were gathered through the implementation of the UNA programme.

By sharing approaches that have been successfully tailored to African cities, these handbooks seek to support the development of future urban sustainability projects that are both more effective and better suited to the local context. Learnings also shed light on how ICLEI Africa is working with local authorities to ensure alignment with international policies and agendas (like the Paris Agreement). It's imperative that we share Africa's insights and lessons now so these can feed into discussions as the Parties to the Convention on Biological Diversity (CBD) work on developing a new post-2020 global biodiversity strategy.

THE UNA PROGRAMME AND FLAGSHIP PROJECTS



Initiated in 2014, the UNA programme is designed to assist local governments in Africa build climate resilience through addressing the daily challenges they experience around protecting and revitalising their urban natural assets. To date, three flagship projects have been developed under the UNA umbrella. All broadly aim to integrate nature-based solutions into land-use planning for increased climate resilience and enhanced human well-being.



All projects are funded by the Swedish International Development Cooperation Agency (Sida) through SwedBio at the Stockholm Resilience Centre, Stockholm University.



INNOVATIVE APPROACHES TO PLANNING IN AN AFRICAN CONTEXT: URBAN TINKERING IN MALAWI



THE HISTORICAL IMPACT OF THE GLOBAL NORTH ON CITY PLANNING IN AFRICA

Urban planning in African cities tends to be based on principles and methods adopted from the Global North. This is because many of the continent's urban centres inherited their planning practices and laws from colonial powers¹. While some revisions have been made over time, African cities' colonial legacy, as it relates to both policies and physical infrastructure, has perpetuated a particular approach when it comes to urban design, with a strong focus on lengthy, top-down desktop planning.

THE NEED FOR CONTEXT-SPECIFIC APPROACHES TO PLANNING

It's important to note, however, that the African context differs significantly from the European context. Rapid population growth, significantly higher rates of urbanisation and unique government capacities and politico-economic structures present a number of complex challenges that are specific to African cities. As a result, inherited planning approaches simply can't adequately resolve issues and meet all the needs of citizens. While current practices may work in theory, in reality, informal developments tend to unfold before formal plans have been finalised and implemented, and so large parts of cities remain unplanned².

As officials struggle with complicated service delivery and development challenges, it understandably becomes even more difficult – if not impossible – to prioritise planning that also protects and revitalises nature.

In order for African cities to adequately manage urbanisation while also protecting nature and bringing it back into urban areas, a new way of thinking about city design and development is required (see Handbook 2). More specifically, there is a need for innovative alternative planning approaches that are:

- **Tailored to the local context:** It's imperative that urban planning responds to the specific needs and realities of African cities. Rather than relying on universal methodologies, there's a need for African-specific ways of thinking and acting.
- **Inclusive and bottom-up focused:** Higher levels of community engagement right from the outset of projects is critical for long-term success in African urban planning (see Handbook 6). This requires a shift in planning culture that encourages city officials to view themselves as facilitators of knowledge-sharing and co-production processes, rather than as top-down

implementers of desktop land-use plans. It also requires that citizens take initiative and see themselves as active participants in change, not just as passive recipients of project activities. When the beneficiaries of change are actively involved in planning and implementing solutions, and can see the value of interventions first-hand, they are much more likely to advocate for new approaches to be adopted as the norm³.

- **Swift and adaptive:** For urban planning to be effective, it's important that approaches can quickly adapt to what's happening on the ground, based on new learnings and insights. Room for experimentation and agility is key.

The UNA programme prioritises the interrogation of alternative approaches to city planning that are all of the above: flexible, community-driven and better suited to the African context. In this way, the programme aims to support the improved integration of nature into decision-making. Some of the innovative planning approaches that UNA is currently testing and exposing cities to include Area-Based Upgrading, Urban Tinkering, Re-Blocking, Scenario Planning and Massive Small thinking (see Figure 1 for descriptions of each approach).

AREA-BASED UPGRADING

This is a process of community-based planning where an existing (mostly unplanned) settlement is redesigned and/or upgraded through a range of interventions. These interventions are identified and implemented in partnership with the community, dealing with issues specific to one area.

Value of this approach

Often this planning approach is started by the community in response to an issue or need they have identified, leading to greater ownership of the planning process and associated implementation. This bottom-up process allows for local knowledge and innovations to be incorporated.

"Do you know that, in Sub-Saharan Africa, cities, towns and villages are growing at unprecedented rates, leading to large parts of most cities being unplanned, in some cases up to 80%?"

"I guess this means that African cities require context specific planning approaches in order to best deliver services, support local economic development and improve quality of life?"

"Yes exactly. This is not an easy task and often requires city planners to adopt approaches that are different to those they might have learnt at university and been practising for years. Some of these alternative approaches could be..."

URBAN TINKERING

Adjusting and moulding of existing landscapes through small scale "urban experiments" that can result in dramatic shifts in the way the landscape works as a system. This method provides innovative solutions to the problems of sustainable development, particularly in the context of rapidly changing conditions.

Value of this approach

Innovation: Prioritises small-scale implementation and "experiments" that can lead to large-scale innovative solutions.
Learning: Allows for the incorporation of new information as the project develops.

Scalable: Urban tinkering can be applied to large (transport network) and small (a dwelling) systems.

Multi-functional and inter-disciplinary: Seeks out solutions that bring the social, economic and ecological dimensions of urban life together.



URBAN NATURAL
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AFRICA

ALTERNATIVE PLANNING APPROACHES

for cities in Sub-Saharan Africa

SCENARIO PLANNING

Scenario planning is a structured way for cities to think about and visualise how different plausible futures of the city might unfold and how the city will change over time in light of those futures.

Value of this approach

Uncovers better information about future conditions (through the development of various possible scenarios) to help cities and regions make better decisions.
Assists in identifying needs or issues and exploring options for refining plans.

RE-BLOCKING

This approach is a community-led process of redesigning the current layout of very dense informal settlements by grouping shacks into clusters and re-organising the ground plan in such a manner as to optimally utilise space to promote the health, safety and well-being of households, with a particular focus on promoting accelerated service delivery to informal settlements.

Value of this approach

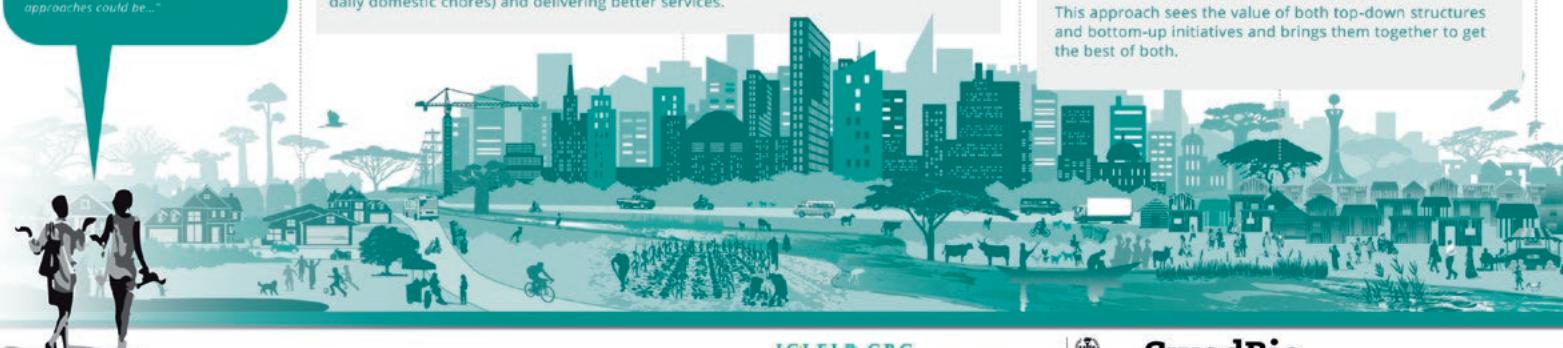
Works with the affected community as an integral part of the process.
Helps to designate and maximise space in unplanned settlements for services, infrastructure (green or grey) and communal/shared open areas.
Increases social cohesion whereby the scarce spaces in informal settlements are consolidated and productivity is maximised for communal purposes (safety and security, daily domestic chores) and delivering better services.

MASSIVE SMALL

This approach focuses on getting the enabling conditions for sustainable urban development correct (i.e. integrating bottom-up and top-down processes). This is with the purpose of allowing communities and people to shape their environments according to their needs, with appropriate government support.

Value of this approach

This approach sees the value of both top-down structures and bottom-up initiatives and brings them together to get the best of both.



For more information see the [Alternative Planning Approaches for cities in Sub-Saharan Africa](#) handbook.

FIGURE 1: Alternative planning approaches for cities in sub-Saharan Africa

CASE STUDY

FROM UNA RIVERS:

URBAN TINKERING IN MALAWI



As discussed in Figure 1, Urban Tinkering is one alternative approach to planning that has the potential to more adequately address the unique challenges facing local governments in African cities. This systems thinking-based methodology works with what's already on the ground and makes small adjustments to existing urban elements and structures to make the environment as a whole more resilient to shocks and changes. The approach is supported by a number of key principles, including inclusivity, greater levels of flexibility and the belief that nothing is useless (see Figure 2).



FIGURE 2: The principles of urban tinkering

To test the value of this technique in the African context, an Urban Tinkering pilot project was implemented at the two markets that are located on either side of the Lilongwe River in Malawi's capital city. These markets are connected via a series of informal bridges and are both bustling economic hubs and major sources of pollution. Much of the waste produced here tends to end up in the river, which threatens the natural environment. In order to clean up the river and bring nature back, the issue of waste management and disposal, therefore, urgently needed to be addressed at these locations. All parties agreed that it was important to develop a solution that would be sustainable, would add value to the community and would **work with existing conditions and relationships and build on opportunities presented by the sites themselves.**

As a significant proportion (70%) of the waste left over at the markets is organic, community members and city officials, supported by the UNA Rivers project team, identified an opportunity to **transform scraps into compost**. This would not only limit the amount of waste that entered the Lilongwe River and support the revitalisation of this key natural asset, but also equip participating citizens with skills that they could use to generate income (compost could be sold to nurseries, restaurants and farmers).

Twelve local women were trained in making compost from organic waste, and to support this initiative, a campaign was launched at both of the markets. Capacity-building slogans like "Waste is not waste until it is wasted" and "Waste is not only a physical problem, but also a mental one" were developed, bins were distributed at the sites (so that the community as a whole could get involved in waste collection; see Handbook 6) and processes were put in place to improve the flow of waste, both compostable and non-compostable, to disposal/composting locations.

By providing a few simple services and inviting community members to actively participate in planning and waste management, the Lilongwe City Council set the scene for lasting change. On-the-ground assistance from locals helps significantly with government capacity constraints and goes a long way towards reducing the amount of organic waste that finds its way into the river system.

This simple, but sustainable methodology can easily be implemented elsewhere to deal with the significant waste challenge linked to urban rivers in many African cities. The Urban Tinkering approach can also be applied to all other aspects of city planning, not just to efforts around urban natural assets.



Lilongwe, Malawi. Local women are improving their livelihoods using compost they make from organic waste collected in the river. They use this on their farming lots to produce higher quality tomatoes that can generate more revenue (top). The remainder of the organic compost is sold to private companies such as local nurseries (bottom).



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ABOUT ICLEI AND THE CITIES BIODIVERSITY CENTER



ICLEI – Local Governments for Sustainability is a global network of more than 1,750 local and regional governments committed to sustainable urban development. Active in 100+ countries, ICLEI influences sustainability policy and drives local action for low emission, nature-based, equitable, resilient and circular development. ICLEI's members and team of experts work together through peer exchange, partnerships and capacity building to create systematic change for urban sustainability. ICLEI Africa serves the organisation's African members, working with cities and regions in more than 25 countries across the continent.



ICLEI's Cities Biodiversity Center (CBC), which is located in Cape Town, South Africa, recognises the crucial role that cities and subnational governments play in the pursuit of a sustainable future, through efficiently integrating urban development and biodiversity management at the local level.

Through its programmes, ICLEI CBC seeks local solutions to the complex issues surrounding natural capital and the degradation of ecosystem services in a rapidly urbanising world. ICLEI CBC offers cities across the globe a broad portfolio of supportive services through a dedicated team of passionate, skilled and dynamic biodiversity and urban development experts.

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