

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 10

Creating change through on-the-ground implementation:

Protecting urban natural assets in sub-Saharan Africa



HIGHLIGHTS FROM THIS HANDBOOK

- A challenge for several African cities is making the leap from project planning and policy-making to implementation. Yet, practical on-the-ground interventions that have positive impacts on citizens' lives do the best job of encouraging behaviour change and embedding community ownership, while demonstrating what's possible in tangible terms.
- Implementation is typically only successful if there's buy-in and trust from the community, and if the tactics employed are inclusive. All implementation efforts also need to be sustainable, replicable and scalable. However, it's important to be aware that because executing a project can be a time- and resource-intensive process, up-scaling and out-scaling are never simple tasks.
- In Malawi and Ethiopia, plans for the protection and restoration of urban natural assets have been successfully translated into concrete action, and a number of UNA project activities have taken place at target sites. These include capacity-building and knowledge-sharing sessions, practical training, composting and greening initiatives, river clean-up exercises, bin distribution, the development of urban parks and the creation of educational signage.

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)



National government officials (planning, environment, engineers, developers, economists, and finance and procurement disciplines)

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.

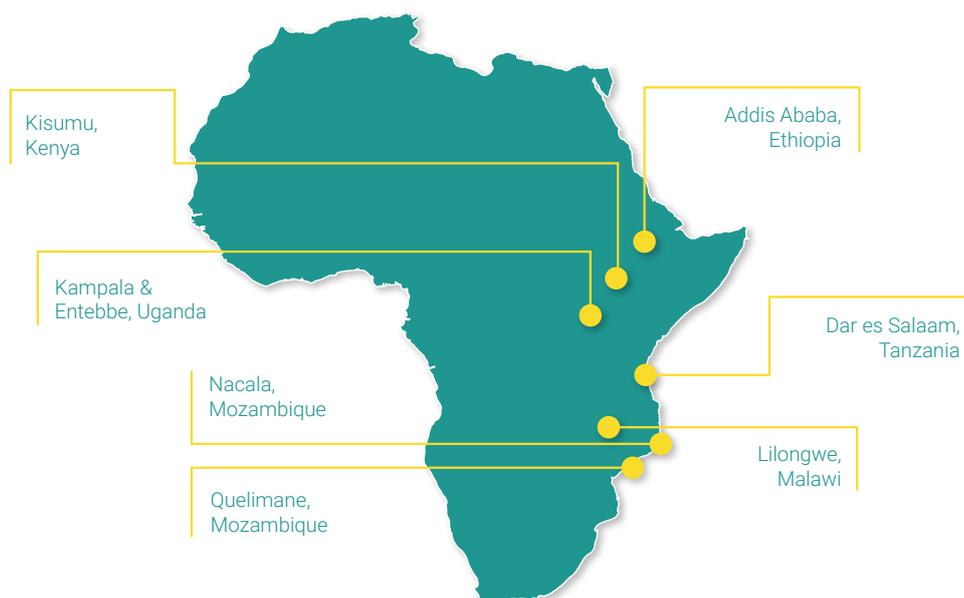
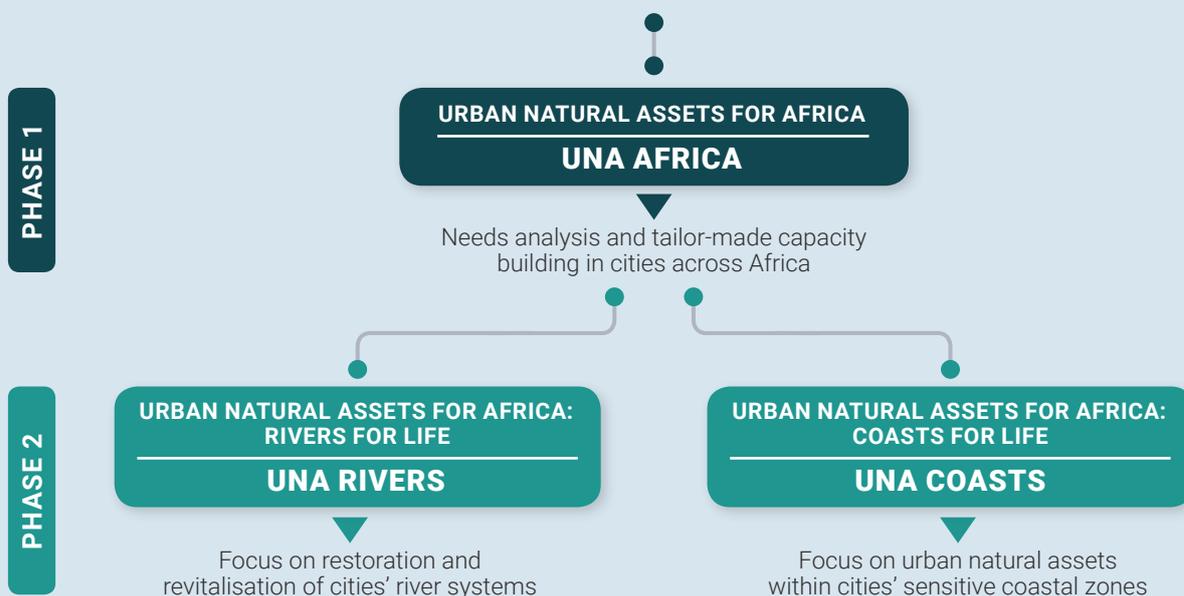
By sharing approaches that have been successfully tailored to African cities, these handbooks seek to support the development of future urban sustainability projects that are both more effective and better suited to the local context. Learnings also shed light on how ICLEI Africa is working with local 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.

URBAN NATURAL ASSETS FOR AFRICA (UNA) PROGRAMME



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



CREATING CHANGE THROUGH ON-THE-GROUND IMPLEMENTATION:

PROTECTING URBAN NATURAL ASSETS IN SUB-SAHARAN AFRICA



THE VALUE OF ON-THE-GROUND ACTION

As discussed in previous handbooks, a fundamental shift in urban planning and decision-making is required in order to more effectively protect and revitalise natural assets in African cities. However, alongside such top-level transformation, there is an urgent need for on-the-ground action, too.

The evidence suggests that practical interventions that have positive impacts on citizens' lives and living conditions do the best job of encouraging behaviour change and inspiring community members to take ownership of (and responsibility for) nature¹. Often, residents need to see change unfolding in front of them – to personally experience the benefits it brings – in order to truly understand the value of it. Small-scale implementation projects are also invaluable in that they prove that sustainable development is feasible – they show local officials, city planners and NGOs what's possible in tangible terms, thereby inspiring and encouraging further action.

THE GAP BETWEEN PROJECT PLANNING AND IMPLEMENTATION

While the value of on-the-ground change is widely recognised, the UNA team has found that many African cities find it challenging to make the leap from project planning and policy-making to implementation. City councils typically have many plans, strategies and frameworks in place, but these aren't always translated into concrete action. We have realised that this is one area in which local governments often require extra support. Municipal officials frequently express a desire to improve their working models and enhance service delivery through the implementation of targeted interventions. The UNA programme, therefore, makes it a priority to not just assist with the execution of practical nature-related projects (see Case Studies 10A and 10B), but to also help ensure that the conditions are right for *successful* implementation.

REQUIREMENTS FOR EFFECTIVE IMPLEMENTATION

It's important to note that effective implementation requires more than simply taking an idea and putting it into action. It's critical to ensure that projects have the desired effects and **can be maintained and replicated**. Implementation is a time-consuming, resource-intensive process, so municipalities need to have access to the right **skills, capital and support** if interventions are to be successful and impactful in the long run.

Teams need to be especially cautious when implementing pilot projects. Such small-scale experiments are useful learning exercises, and can be used to gather the data required to motivate for additional funding. However, it should never be assumed that it'll be easy to up-scale or duplicate a pilot at a later stage. As mentioned, executing a project takes time and requires significant financing and support, so up- and out-scaling is never a simple process. Care needs to be taken to ensure that all actors involved in the pilot project would be able to offer assistance again if the initiative is expanded. All lessons learnt during the implementation process also need to be documented and reflected on for the improvement of future projects (see Handbook 8).

Another condition that's essential for effective project implementation is **public participation**. Interventions are typically only successful if there's **buy-in and trust from the community**, and if all tactics employed are inclusive². That is, projects that don't have citizens' support and that don't respond to their on-the-ground needs are likely to fail. It is, therefore, imperative that those overseeing activities take the time to listen to community members' concerns and actively involve the public in all the stages of planning and implementation (see Handbook 6). This is, in part, why a **good process** is so key (see Handbook 9). For improved sustainability and scalability of projects, the UNA team has also learnt that interventions should not only be aimed at nature conservation; they also need to **improve citizens' quality of life** and, ideally, **support livelihood creation** by providing opportunities for income generation.

Finally, as noted above, successful implementation relies heavily on actors' ability to **access finance**. Financial flows are improved when there are good working relationships between national and local government officials, and hence, **strong multi-level governance** is a required condition for the successful execution of projects (see Handbook 11).

In summary, when translating plans into action, it's important to ensure that development projects are:

- Feasible
- Scalable
- Sustainable
- Designed to improve human well-being and support livelihood creation
- Replicable
- Inclusive
- Designed to encourage public buy-in
- Properly financed and supported

LEARNING FROM PAST IMPLEMENTATION PROJECTS

When reflecting on past projects for the purpose of up-scaling or replication, it's important to look back on not just what was done, but how it was done (the process) and why it was done that way. We can learn a lot from the implementation approach that was taken and from the reasoning behind certain choices. This understanding should inform how future initiatives are run and, in all likelihood, will help to improve outcomes. Past failures are also important learning opportunities (as important as past successes) – lessons drawn from setbacks should be applied to modify and enhance future up- and out-scaling initiatives.

CASE STUDIES

FROM UNA RIVERS:

PROTECTING URBAN NATURAL ASSETS IN SUB-SAHARAN AFRICA



CASE STUDY 10A

TAKING ACTION TO REVITALISE LILONGWE RIVER IN MALAWI

Under the UNA Rivers project, a master plan for the restoration of a pilot site alongside the Lilongwe River has been successfully translated into concrete action. Community members were actively involved in the development of the landscape plan, which aims to a) revitalise river ecology, b) strengthen community and civic pride, c) improve public health and d) create economic value.

All stakeholders (including the relevant community members) came together to draw up an implementation strategy and to engage in a prioritisation exercise to discuss the order in which the different components of the plan should be actioned. A budget was assigned to each component and implementation partners were identified.

Since the plan was developed, the following has taken place at the target site:

- 5000 community members have attended workshops and capacity-building exercises to learn more about effective waste management.
- 22 volunteers (mainly women) have been taught how to turn organic waste into compost (see Case Study in Handbook 3).
- Students from 10 schools have participated in waste clean-up events and other project activities.
- Over 15 tonnes of compost have been generated.
- Over five tonnes of waste have been collected during river clean-up exercises.
- A system for the improved flow of waste has been initiated.
- Bins have been purchased and distributed throughout the site.
- A well-demarcated composting area has been established.
- Educational signage has been erected.
- A building has been constructed to house tools and provide shade for volunteer composters.



Landscape plan for revitalization of the Lilongwe River



Compost made using organic waste collected from the river



Bins provided to the community to help establish an improved waste collection system



Women making compost at the site in Lilongwe

LILONGWE WASTE PROCESS

01 SELECT AREA IN THE MARKET TO HAVE 2 BINS (1 YELLOW & 1 GREEN BIN)



Select sites (each section) in the Lizulu market. Each site should have 2 bins:

1 GREEN BIN and **1 YELLOW BIN**

- The **GREEN BIN** is for discarding food waste that is compostable (e.g. *over-ripe tomatoes, banana peels etc.*)
- The **YELLOW BIN** is for discarding any general (non-organic) waste (e.g. *plastic bottles and packets*)
- Add a label to the organic bin so its easy to identify for users.

02 INFORM SECTION HEADS IN SELECTED AREA'S ABOUT WASTE TYPE FOR THE 2 BINS



Explain to each section head what type of waste is to be discarded into each of the 2 bins:

- The **GREEN BIN** is to be used for discarding any food waste that is compostable (e.g. *over-ripe tomatoes, banana peels etc.*)
- The **YELLOW BIN** is to be used for discarding general (non-organic) waste (e.g. *plastic bottles and packets*).

03 SELECT 1 WASTE CHAMPION FOR EACH SELECTED AREA



Select 1 waste champion for each area with the 2 bins. The waste champion is to be in charge of picking up the bins and discarding the waste in the bins at dump sites.

Responsibilities of waste champion:

- Once the food waste bin is full, collect the bin and take it to the compost site.
- Once at compost site, dispose the food waste into correct area at the compost site.
- Once all the food waste has been dumped at the compost site, clean the bin and return it to the site at the market.
- Clean bin and return bin to selected site at market.

04 TOGETHER WITH SECTION HEAD AND WASTE CHAMPION, DETERMINE A SUITABLE DROP-OFF LOCATION FOR THE GENERAL WASTE BIN



The food waste bin will be taken to the com-post site, however, the waste discarded in the general waste bins currently don't have a lo-cation for contents to be dumped. Therefore, together with section head and the Waste Champion, determine and arrange a suitable location for waste championsto drop-off the rubbish in the general waste bins.

05 TOGETHER WITH SECTION HEAD AND WASTE CHAMPION, DETERMINE A SUITABLE DAY AND/OR TIME FOR BIN COLLECTION



Together with section head and Waste Cham-pion, determine and arrange a suitable day or time for waste champions to collect the bins. (eg. *When the bin is full?, every day? Every Tues-day and Thursday?*)

06 Explain waste collection and drop-off process to Waste Champions & section heads.



01 AREA 1: "FOOD WASTE DROP OFF" – WHERE WASTE CHAMPIONS DROP OFF THE FOOD WASTE



01 COLLECT WASTE FROM MARKET SITE AS NEEDED AND DISCUSSED WITH CITY COUNCIL AND COMMUNITY



When Waste Champions comes to the compost site with the food waste bins from the market, they will need to know where to dump the waste. Therefore, you will need to mark an area with a sign "food waste drop off" by the compost site. This will be where Waste Champions placed the food waste.

This food waste will then be sorted by the ladies at the site.

02 AREA 2: "SORTING AREA" – WHERE COMPOST LADIES SORT AND STORE THEIR PLASTIC WASTE



Once Waste Champions have placed the food waste at the food waste drop off, the ladies at the compost site will need an area for sorting the compost. Therefore, you will need to mark an area with a sign "sorting area" by the compost site, where the ladies will be able to sort the compost and store any non-organic waste (eg. plastic they find during the sorting process).

03 AREA 3: "COMPOST" – FOR READY MADE COMPOST TO BE PLACED AND COVERED WITH PLASTIC SHEETS



Once the ladies have sorted the food waste in area 2, they will need a separate area to place the compost. Therefore, you will need to mark another area at the compost site with a sign "compost". This area will specifically be for the final product – the compost. The ladies will cover the heaps of compost in this area with plastic sheets.

04 EXPLAIN THE 3 AREAS MENTIONED ABOVE TO THE LADIES AT THE COMPOST SITE AND ENSURE THAT THEY UNDERSTAND THE PROCESS



At the compost site, select 3 subareas to be marked for different composting activities

COMPOST SITE DEMARICATION

WASTE PROCESS FOR WASTE CHAMPION'S

5 selected sites (each section) in the market will have 2 bins: **1 GREEN BIN** and **1 YELLOW BIN**.

- The **GREEN BIN** can be used for any food waste that is compostable (e.g. over-ripe tomatoes, banana peels etc.)
- The **YELLOW BIN** can be used for general non-organic waste (e.g. plastic bottles and packets).

03 DUMP IN DEMARCATED AREA "FOOD WASTE DROP OFF" & RETURN BIN TO MARKET SITE

Once at compost site, dispose the food waste into area "food waste drop off".

Once all the food waste has been dumped at the demarcated area, clean the bin and return it to the selected site at the Lizulu Market.



02 TAKE THE FOOD WASTE BIN TO THE COMPOST SITE & DUMP INTO THE AREA MARKED "FOOD WASTE DROP OFF"



Once the collection day/time has been discussed, collect the food waste bin as needed and agreed upon and take it to the designated compost site.

04 TAKE THE GENERAL WASTE TO THE CHOSEN LOCATION



The general waste discarded in the general waste bins currently don't have a location for contents to be dumped. Therefore, a drop-off site for the general waste needs to be determined and explained to the Waste Champion.

CASE STUDY 10B REGENERATING A RIVERSIDE PLOT IN ADDIS ABABA, ETHIOPIA

Community members and other stakeholders used a version of the well-known computer game Minecraft to map out a plan for the regeneration of a riverside site (known as Ras Mekonnen) in Addis Ababa (see Case Study 6A in Handbook 6). The goal was to design a green open space that would contribute to the restoration of the riverbank while serving as a recreational hub for citizens.

Core elements of the plan have since been implemented at the site. To date, the following has been achieved:

- Waste has been cleared from the adjacent river.
- 400 community members have been taught more about the value of nature through awareness-raising initiatives.
- A running and cycling lane has been installed to promote eco-mobility in the city.
- Benches have been installed at various locations in the park.
- Bins have been provided.
- Educational signage that emphasises the importance of nature-based solutions has been erected.
- The entire site has been greened through the planting of indigenous vegetation.



Addis Ababa, Ethiopia. Landscaping and greening transformed the Ras Mekonnen site, which is now a multi-functional, ecological corridor in the heart of the city.

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1. Brooks, J., Waylen, K.A. and Mulder, M.B., 2013. Assessing community-based conservation projects: a systematic review and multilevel analysis of attitudinal, behavioral, ecological, and economic outcomes. *Environmental Evidence*, 2 (1), p.2.
2. Brooks, J.S., Waylen, K.A. and Mulder, M.B., 2012. How national context, project design, and local community characteristics influence success in community-based conservation projects. *Proceedings of the National Academy of Sciences*, 109 (52), pp.21265-21270.



Lilongwe, Malawi. The Lilongwe River carries a large amount of waste, 72% of which is organic and therefore has potential to become compost and generate livelihoods through compost making.

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Project Coordinator:

ICLEI Africa / ICLEI Cities Biodiversity Center (ICLEI CBC)

Authors:

Jessica Kavonic, Professional Officer: ICLEI Africa & ICLEI CBC; *Dr Kate Strachan*, Professional Officer: ICLEI Africa & ICLEI CBC; *Claudia Schröder*, Communications Officer: ICLEI Africa & ICLEI CBC; and *Dayle Kavonic*: Independent Copywriter and Editor

Contributors:

Vanessa Tshite, Intern: ICLEI Africa; *Kirsty Griffin*, Professional Officer: ICLEI Africa; *Tarryn Quayle*, Professional Officer: ICLEI Africa; *Michelle Preen*, Senior Manager, ICLEI Africa; *Dr Meggan Spires*, Senior Manager: ICLEI Africa; and *Dr Julie Goodness*, Postdoctoral researcher, SwedBio.

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ABOUT ICLEI AND THE CITIES BIODIVERSITY CENTER



ICLEI – Local Governments for Sustainability

ICLEI 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)

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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