



Kounkuey Design Initiative (KDI)

Nairobi, Kenya;  
Dar es Salaam, Tanzania

## Realising Urban Nature-Based Solutions (R-U-NBS): Nairobi and Dar es Salaam

Realising urban nature-based solutions in the Nairobi & Dar es Salaam project aims to bring together civil society, residents, academia and local government in Nairobi and Dar es Salaam, to yield important new evidence on how Nature-Based Solutions (NBS) can contribute to disaster risk reduction and provide replicable, scalable pathways to sustainable urban development in the rapidly growing cities of sub-Saharan Africa.



Top left: Infiltration system using soda crates installed at the eleventh public space in KDI's Kibera Public Space Network.

Top right: A bamboo shade structure and laundry pad form part of the floodable and flood-mitigating public space and the tenth Kibera Public Space Project.

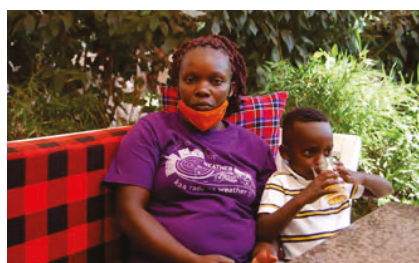
Bottom: Newly planted rain garden over an underground detention tank (left) and permeable paving (right) at St John's School. The tank void was constructed with a perforated pipe structure – an innovation that utilises easily available local materials and skills.

In 2019 and 2020, KDI led a “learning by doing” initiative supported by SwedBio to design, build and evaluate multiple NBS techniques for water management across five sites in informal urban settlements in Nairobi and Dar es Salaam. The work produced has been the first step in creating much-needed new and practical evidence that NBS can be implemented in informal settlements.

The project aims to demonstrate how NBS interventions on a neighbourhood scale connect, inform and assimilate into more widely scaled plans and solutions, including supporting municipal, national, and international goals for disaster risk management. We think that well-built, managed and evaluated NBS are among the most compelling pieces of evidence for a wider uptake, and we propose to continue to build, test, and evaluate new NBS solutions in the most vulnerable neighbourhoods of both cities.

This project proposes the need to strengthen and expand the reach of this work into the neighbourhood, settlement and watershed scales through these components:

1. Within two untested informal settlements in Nairobi, and two settlements in Dar es Salaam
  - a. Build upon and expand the evidence and momentum with “facts from the ground” through implementing NBS.
  - b. Building an actionable NBS planning vision through the co-development of plans for “rivers and people”.
2. Influence and advocate regionally for the uptake at the municipal and national levels in Kenya and Tanzania, but also to expand knowledge-sharing into wider East Africa.



“Now that the river bank is stabilized with planted bamboo and gabions we do not panic when it starts raining because we know the water will not flood our homes.”

Esther, project beneficiary and member of a community volunteer group



Above: The intersection of rivers, urban nature, and diverse neighbourhoods in highland and coastal cities such as Nairobi and Dar-es-Salaam. Graphic developed by Sarah Rege as part of a KDI-project on nature-based solutions for water management in 2019 and 2020.

KDI is pleased to have been funded by SwedBio in 2021 and 2022 to take forward this exciting work. Please check out the website [r-u-nbs.info](https://r-u-nbs.info) for more information and updates as the project develops. We are working in partnership with the Center for Community Initiatives (CCI) based in Dar es Salaam, Tanzania.