

# GREATER KAMPALA INTEGRATED FLOOD RESILIENCE PARTNERSHIP

Blue-green infrastructure and inclusive solutions for flood mitigation in Greater Kampala

Flash floods are a recurring water security threat in Kampala Capital City and its neighbouring Greater Kampala Metropolitan Area (GKMA) municipalities. The rapid urbanization of Greater Kampala has led to an increase of impervious surfaces in ecologically sensitive areas which are relevant for flood control. Kampala's drainage systems have outlived their design capacity and are often blocked by solid and plastic waste, as well as silt, emerging from adjacent communities. These problems are exacerbated by limited collective action across sectors (public, private, civil society and community) in operating and maintaining the drainage systems, and on awareness measures regarding storm water management. Destructive flash floods moreover pose severe socio-economic challenges to both businesses and residents of Greater Kampala. About 10% of Kampala's jobs are at risk alone due to their location in flood risk zones.

**Blue Green Infrastructure (BGI)** are interconnected networks of natural and designed landscape components which include water bodies and green open spaces to deliver a wide range of ecosystem services.

### SOLUTIONS FOR EFFECTIVE FLOOD MITIGATION

To mitigate and adapt to its current flooding challenges, Greater Kampala requires integrated flood risk management solutions, consisting of a combination of catchment management and engineering solutions. Particularly investments into blue-green infrastructure, an approach utilising the benefits of urban green spaces and naturalised water-flows, are necessary. Examples include green roofs, retention ponds, bioswales, rain gardens & rainwater harvesting systems. Government, private sector and communities need to work collaboratively to develop blue-green infrastructure solutions which are scalable and fit the respective context within GKMA.

# A STEWARDSHIP APPROACH TO ADDRESS URBAN FLOODS

Natural resources stewardship means that all users of natural resources take responsibility for the shared resources nobody owns but everybody relies on. Forming partnerships, public sector, private companies and civil society work together on eye-level to ensure the sustainable management of natural resources.

Only if innovative infrastructure solutions are jointly developed by authorities, businesses, and communities, they will be operated and maintained efficiently in the long run.



Community sensitization on flood resilience in an informal settlement in Kinawataka sub-catchment. © GIZ/Willy Ebong

| in Kinawataka sub-catchment. © GIZ/Willy Ebong             |   |        |
|--|---|--------|
| Duration   | January 2021 - ongoing  | SUS    |
| Partners   | Government institutions:  Ministry of Water and Environment (MWE)  Kampala Capital City Authority (KCCA)  Private sector:  Uganda Manufacturers Association (UMA)  Britannia Allied Industries Limited Civil Society Organisation:  ACTogther Uganda                          | 8<br>8 |
| Objective  | Promote investment in blue-green infra-<br>structure solutions in up to two micro-<br>catchments in GKMA for improved urban<br>flood resilience and enhanced socio-eco-<br>nomic development.   | 13     |
| Partner<br>contri-<br>butions<br>(financial or<br>in-kind) | <ul> <li>in-kind contributions and personnel secondment to the partnership, including provision of venues and technical staff to coordinate partnership</li> <li>provision of two garbage collection trucks by KCCA</li> <li>funding of pilot rainwater harvesting</li> </ul> | 15     |

system by Britannia (UGX 50 million)



The partnership's goal is to jointly develop and promote innovative, inclusive infrastructure solutions for improved urban resilience towards flooding in GKMA. Partners aim at piloting blue-green infrastructure and innovative solutions with minimal engineering operations to clear solid and plastic waste in storm water drainage channels. An important objective of the partnership is to enhance community and private sector engagement in flood control and stormwater management.



Community clean-up of drainage channels in cooperation with KCCA: The relationship between the City Authority and communities has improved through the partnership. © GIZ/Willy Ebong

## **IMPACTS**

- Improved joint understanding of the extent and magnitude of the flooding problem in the two subcatchments and identification of specific flooding hotspots within Greater Kampala Metropolitan Area
- Joint development of two Flood Risk Management Strategies including costed concepts for measures at hotspot locations. Implementation of the strategies is ongoing with initial activities involving construction of rainwater harvesting systems and associated blue-green stormwater drainage infrastructure at five pilot sites in Kampala.
- Improved public awareness for littering as one cause of flooding and active participation of communities in clean-up of drainage channels, which reduces the risk of flooding. Six community cleanup exercises conducted in collaboration with KCCA.

- Six local community 'flood champions' trained in each sub-catchment to promote community mobilization, awareness raising, and coordination of flood resilience interventions in their communities.
- Strengthened private sector commitment towards financing of flood control infrastructure and further mitigation measures. Britannia has committed to invest up to UGX 50 million in a rainwater harvesting system and blue-green infrastructure on their premises to serve as a demo site for other private sector companies to emulate.
- Improved technical and analytical capacity for planning and integration of flood mitigation solutions through trainings for 25 technical staff of public authorities in the application of flood modelling tools for integration of blue-green infrastructure in urban planning.

"I wish to salute this partnership for taking bold steps to mobilize all stakeholders to collectively address this great challenge that afflicts our city and that cannot be left to the city authorities alone to solve." Paul Mugambe, Mayor, KCCA Nakawa Division

## **ABOUT NATURES**

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NatuReS is currently active in Ethiopia, Uganda, South Africa, Tanzania and Zambia. It has so far contributed to creating or safeguarding more than 72.000 jobs and investments worth more than EUR 232 million through 14 currently active partnerships.

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