

PROJECT EXEMPLAR

Kenya Urban Support Program Phase II



GLOBAL
CENTER ON
ADAPTATION

KEY PROJECT INFORMATION

Country / Region

Kenya

Sector

Urban

Investment Value

US \$486M

Implementation Period

2023-2028

Key Partners

World Bank, Kenya School of Government (KSG), State Department of Housing and Urban Development (SDHUD)

Beneficiaries

3.5 million people

THE ADAPTATION STORY

Background and needs

Kenya is rapidly urbanizing, with 31% of the population living in urban areas (2019), a number that is projected to reach 50% by 2050. While urbanization supports economic growth and improved living standards, it also increases the exposure of people, assets and livelihoods to climate hazards, especially to flooding and droughts. Enhancing climate resilience of urban areas in Kenya will depend on strengthening the ability of urban institutions to develop and implement climate resilient urban planning and infrastructure.

To help support Kenya's capacity for climate adaptive planning, the Global Center on Adaptation (GCA) is collaborating with the World Bank (WB) to support the Second Phase of the Kenya Urban Support Program (KUSP2). This program aims to strengthen the capacities of urban institutions to (i) improve the delivery and resilience of urban infrastructure and services; (ii) enhance the private sector engagement in urban planning; and (iii) support the transition of refugee camps into integrated host community and refugee settlements.



What was GCA's Role?

GCA worked with the World Bank to develop and deliver a suite of tools and training programs to strengthen long-term institutional capacities that embed climate resilience in urban investments across Kenya's 79 municipalities.

By partnering with the Kenya School of Government (KSG) as the host training institution to roll out the Urban Climate Resilience Masterclass and other complementary trainings, GCA ensures institutional ownership of knowledge products and training for public officials nationwide. These trainings shape how climate risk and NbS considerations are integrated into KUSP2 municipal investments.

Results and Impact

To date, GCA has (i) developed an Urban Climate Resilience Masterclass (UCRMC) that will be incorporated in the curriculum of Kenya School of Government (KSG), to equip government officials with tools to integrate climate risk into urban infrastructure and service delivery; (ii) supported the establishment of a national trainer pool to facilitate KSG's roll out of the UCRMC to county and municipal officials nationwide. GCA monitored and provided feedback for two pilot deliveries of the masterclass to ensure quality; (iii) promoted scale-up of nature-based solutions (NbS) through the NbS Compendium for Urban Resilience in Kenya, launched in June 2025. The Compendium offers municipalities design-ready guidance, targeted recommendations, and tools for integrating scalable NbS into urban planning; and (iv) enhanced capacity of urban officials on climate-risk informed planning by capacitating 150 urban officials representing 68 cities to carry out an in-house rapid climate risk assessment to produce Urban Climate Risk Profiles.

All together, this work has helped build the capacity of secondary and tertiary municipalities in Kenya to plan climate-resilient urban investments. The real impact of this work can be seen in terms of large-scale participation in our trainings, testimonials from participants and – most importantly – documents from the participants, which show a high level of sophistication.

Climate hazards, impacts and prioritized adaptation measures

KEY CLIMATE HAZARDS	IMPACTS ON INFRASTRUCTURE, SERVICES AND USERS	PRIORITISED ADAPTATION MEASURES
Pluvial flooding	*Overwhelms local drainage, resulting in property damage *Disrupts urban transit networks and access to services and livelihoods *Health risk related to waterborne disease as well as direct flood risk	NbS measures like bioswales and permeable pavements alongside climate-risk planning to manage stormwater runoff and local flooding.
Coastal flooding	*Damage to ports and adjacent infrastructure in cities like Mombasa. *Saltwater intrusion into freshwater aquifers and sanitation systems. *Threatens tourism livelihoods; population displacement	Structural interventions like sea walls combined with NbS such as mangrove restoration to provide natural buffers against storm surges.
Riverine flooding	*Threats to infrastructure (bridges, roads, adjacent buildings) and agriculture *Disruptions to urban mobility and essential supply chains. *Direct damage to Leads to catastrophic loss of life and massive destruction of residential assets.	River defenses, combined with non-structural interventions like early warning systems, as well as landuse planning for developments outside of high-risk zones
Extreme heat	* Intensifies "heat island" effects; may cause damage to road surfaces. * Strains energy grids, increased energy cooling demands and equipment overheating. *Direct impacts on public health; reduces labour productivity and may impact income and livelihoods.	Urban-wide early warning systems, communication and education campaigns, Nature-based Solutions through urban forestry and vegetation.
Drought	*Damage to agriculture. *Can result in water rationing *Threats to food supply, agricultural-based livelihoods; can lead to hardship for vulnerable urban populations, including public health impacts related to limited water supply for WASH.	Encouragement of drought resilient agriculture, water-saving measures and non-structural governance to improve water management

KEY LESSONS

What we have learnt

The implementation of the Urban Climate Resilience Masterclass (UCRMC) highlighted that institutionalizing training through local bodies like the Kenya School of Government (KSG) is vital for long-term ownership. We discovered that while technical backgrounds vary across the 79 municipalities, identifying a "common middle ground" allows for a curriculum that resonates with both secondary and tertiary city officials.

In-person sessions proved invaluable for fostering collaboration, and "real impact" was sustained through virtual follow-up meetings that reinforced lessons and provided ongoing technical support. For all training and knowledge products, grounding the curriculum in concrete participant experiences—sharing what worked and what failed in their specific cities—transformed abstract climate science into practical, localized best practices. GCA's close partnership with the World Bank and government ministries ensured that these training efforts were directly aligned with the performance-based grants of KUSP2, creating a clear incentive for officials to apply their new skills in urban planning and infrastructure delivery.

Replicability

The Training-of-Trainers (ToT) approach used by the GCA offers a highly replicable blueprint for scaling climate adaptation across diverse regions. By establishing a national pool of 30 experts to roll out the UCRMC, the program demonstrates how a small group of specialists can systematically "capacitate" hundreds of officials. This model is particularly effective for secondary and tertiary cities, which often lack the budgets for private consultants and rely heavily on internal expertise.

Key to this replicability is the development of practical knowledge products, like the NbS Compendium, which provide design-ready guidance that can be adapted to other national contexts. Future iterations should prioritize a strong local partner—similar to the KSG—to manage logistics and ensure the content remains grounded in the local regulatory and environmental landscape. This framework is not only applicable for subsequent themes in Kenya but serves as a global template for mainstreaming climate-risk-informed planning in rapidly urbanizing nations.

Actionable insights for MDBs

THEME	PRIORITISED ADAPTATION MEASURES
Emphasizing training and capacity building for urban planning	MDBs should prioritize institutionalizing training through local public service colleges to ensure long-term ownership and sustainability. Programs can successfully bridge technical gaps in secondary cities by identifying a "common middle ground" curriculum that balances science with local realities. To maximize impact, MDBs should utilize a Training-of-Trainers (ToT) model and combine in-person collaboration with virtual follow-up support, while aligning these capacity-building efforts with performance-based grant incentives.
A focus on Nature-Based Solutions	To mainstream climate adaptation, MDBs can develop practical, "design-ready" knowledge products like NbS Compendiums that are grounded in the local regulatory context. These tools should be targeted at government stakeholders from small and middle-sized cities, in addition to large city / county governments. MDBs should integrate NbS into urban planning by empowering local officials to conduct in-house risk assessments, ensuring that nature-based interventions are both technically sound and financially accessible for municipal investment pipelines.

