



GLOBAL
CENTER ON
ADAPTATION

Urban Climate Resilience Masterclass

Module 3

Locally Led Adaptation for Urban Resilience

Photo by Aleksandar Pasaric, Pexels

UCRMC Course Overview

Welcome to the Urban Climate Resilience Masterclass! You are about to start **Module 3**.



Module 1

Introduction to
Climate
Change and
Urban
Resilience



Module 2

Understanding
Climate Risks
in Your City



Module 3

Locally Led
Adaptation for
Urban
Resilience



Module 4

Ensuring
Climate
Resilience of
Urban
Infrastructure



Module 5

Step-by-Step
Guidelines for
Delivering
Climate
Resilient
Infrastructure



Module 6

Financing
Climate
Resilient Urban
Infrastructure

Acknowledgements

The Urban Climate Resilience Masterclass (UCRMC) Modules were developed by the Global Centre on Adaptation (GCA), in partnership with the International Institute for Environment and Development (IIED) and the Nuvoni Centre for Innovation Research, under the Africa Adaptation Acceleration Program (AAAP), with the generous support of Denmark.



GLOBAL
CENTER ON
ADAPTATION



MINISTRY OF
FOREIGN AFFAIRS
OF DENMARK
Danida

GCA gratefully acknowledges the technical assistance provided by World Bank through the Quality Infrastructure Investment Partnership (QII), in close collaboration with the Government of Kenya and the Kenya School of Government (KSG), in support of the development of the UCRMC Modules.

The content and structure of the UCRMC Modules were further informed by the Resilient Urban Infrastructure Guidelines and the Guidance Note on Mainstreaming Resilience into Urban Planning, developed through the Japan–World Bank Program for Mainstreaming Disaster Risk Management in Developing Countries. This program is financed by the Government of Japan and benefits from the technical expertise of the World Bank Tokyo Disaster Risk Management Hub and the Global Facility for Disaster Reduction and Recovery (GFDRR).



JAPAN GOV
THE GOVERNMENT OF JAPAN



GFDRR
Global Facility for Disaster Reduction and Recovery



Administered by
THE WORLD BANK
IBRD • IDA | WORLD BANK GROUP

Acknowledgements

We also extend our sincere appreciation to the institutions that constituted the Sounding Board and provided critical guidance and expert feedback throughout the review process:

State Department of Housing and Urban Development (SDHUD) / Second Kenya Urban Support Program (KUSP2) | Council of Governors | Kenya School of Government – Mombasa | Kenyatta University – Department of Spatial & Environmental Planning | The Architectural Association of Kenya (AAK) | Environment Institute of Kenya (EIK) | Institution of Engineers of Kenya (IEK) | The Kenya Institute of Planners (KIP)



The Institution of Engineers of Kenya



These contributions were instrumental in ensuring the relevance and quality of the UCRMC Modules.

Agenda

- 01 Why This Topic Matters
- 02 Learning Objectives
- 03 Concepts & Definitions
- 04 Locally Led Adaptation for Urban Resilience
- 05 Introducing the LLA Principles
- 06 LLA Actors
- 07 Interactive Exercise
- 08 Summary



Dhaka; Photo by Md Samiuzzaman Sakib_99, Pexels

Housekeeping

Listen



Listen carefully, follow along and make your own notes.

Ask



Ask the trainers questions or clarifications at any time.

Share



Your own experience is valuable and we encourage you to share it.

Discuss



Share and discuss with others during exercises, breaks and reflections.

01 | Why This Topic Matters



Why This Topic Matters



Building on Module 1's foundational knowledge related to climate change impacts, climate risk and vulnerability, this module highlights the importance of local actors in planning and delivering urban resilience initiatives and infrastructure.



This module introduces participants to the concept of 'locally led adaptation' and outlines how participants working in city government departments can help deliver LLA.



It will introduce participants to what LLA looks like in practice – with a focus on how they can support urban resilience through their own daily jobs.



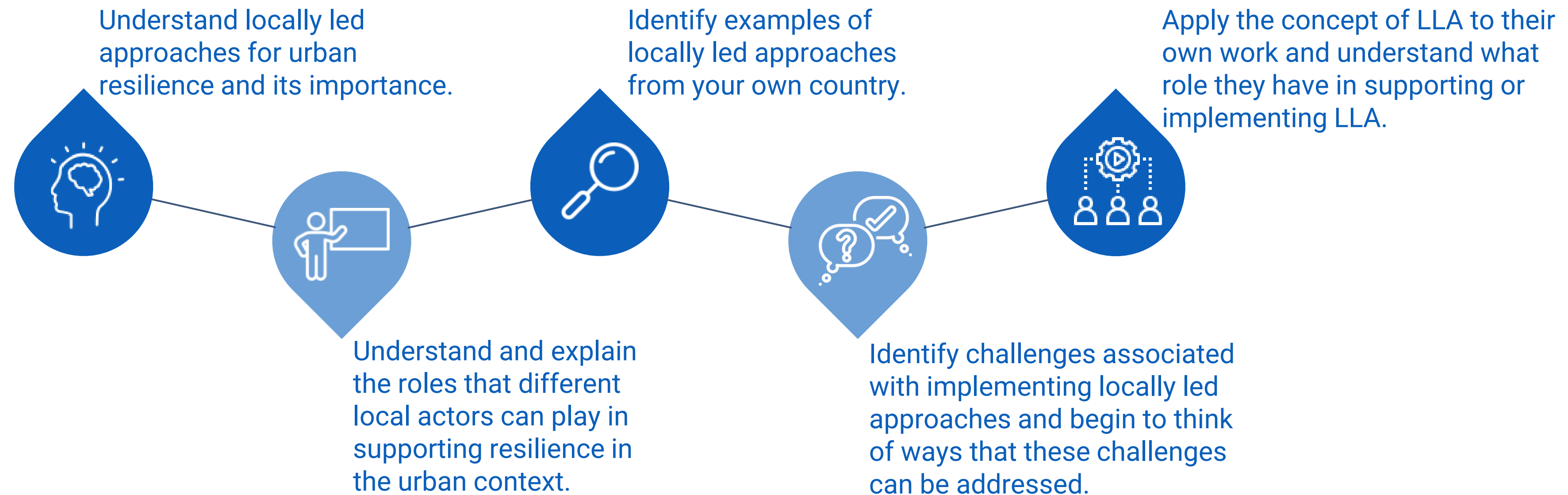
It will also introduce participants to the different actors they can collaborate with beyond their own institutions, and it will highlight some key challenges in delivering LLA in cities.

02 | Learning Objectives



Learning Objectives

By the end of Module 3 participants will be able to:



03 | Concepts & Definitions



Dhaka; Photo by Nachoipd, Pixabay

Concepts & Definitions



Locally Led Adaptation (LLA) is an approach to climate change adaptation and resilience-building efforts that puts power and agency in the hands of local people and their institutions so that they can take a lead on addressing climate change. LLA gives cities, communities and other local institutions the decision-making power on how to adapt to climate change.



Local institutions can include municipal governments, regional governments, civil society, private sector businesses, cooperatives, federations, microfinance institutions, households and individuals.



Bangladesh; Photo by International Monetary Fund

04 | Locally Led Adaptation for Urban Resilience



Photo by Peeterv, Getty Images (licensed via Canva)

Why is urban resilience important?



Cities are home to the majority of people in the world. By 2050 two thirds of the global population will live in cities.



Cities are drivers of the global economy, contributing 80% to global GDP.



Climate hazards are increasing in frequency and intensity which will negatively impact cities and has the potential to increase vulnerability and marginalization.



Cities are a focal point for investment in infrastructure and services. As climate hazards increase, cities will need to make this urban infrastructure more resilient.



Photo by Gustavomelloso, Getty Images (licensed via Canva)

Recap: Climate resilient infrastructure

Cities need to climate proof existing and future infrastructure & services so that they are resilient to climate change.



Why is urban resilience important?



Cities also face challenges related to poverty, vulnerability and lack of inclusion – e.g. for women & girls, and for vulnerable & marginalized groups such as the elderly, youth, disabled people, displaced people, etc.



Poorer and more excluded women and men often work in the informal sector and tend to live in parts of cities that are more prone to climate hazards. They often have less access to information and emergency services during disasters.



Solutions that build urban resilience therefore need to promote equity and inclusion to support marginalized and vulnerable groups affected by climate hazards.



Recap: Equity & Inclusion

Climate impacts often fall heaviest on marginalized and excluded groups. Cities are home to a wide range of citizens, many of whom can be excluded from accessing the basic necessities of life that can improve their resilience to climate shocks.

Some of the structural inequalities that make people vulnerable to climate change include:



What are local approaches to urban resilience?



Climate change impacts are localized to specific places, so context-specific solutions are needed to build resilience.



Local actors are vital for building resilience. They often have the most relevant understanding on how to minimize their vulnerability and respond to climate shocks.



City officials and planners will play a very important role in making cities livable, prosperous and safe in the decades ahead. We need you to help make the future of cities more resilient!

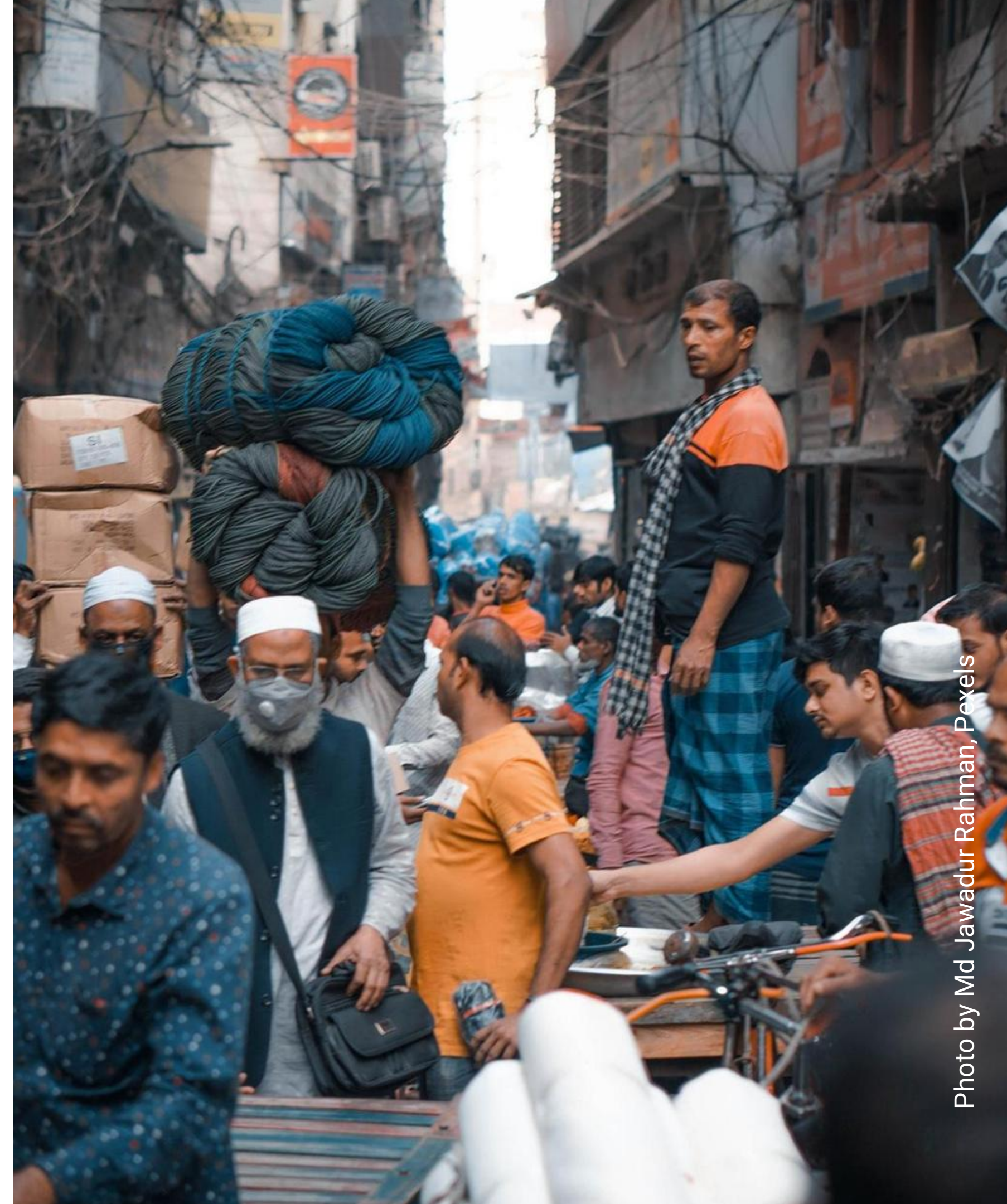


Photo by Md Jawadur Rahman, Pexels

What are local approaches to urban resilience?



In the past, most efforts to address climate change have focused on international or national stakeholders making decisions that affect local people – without significant input from local people or institutions.



Locally Led Adaptation (LLA) is an approach that aims to put power and agency in the hands of local people and their institutions so that they can take a lead on addressing climate change.



LLA empowers local stakeholders to take the lead in adapting to climate change and gives communities on the frontline of climate impacts a voice in decisions that directly affect their lives and livelihoods.



Bangladesh; Photo by GCA

05 | Introducing the LLA Principles



Introducing the LLA Principles



GLOBAL
CENTER ON
ADAPTATION

The Global Center on Adaptation is spearheading a global initiative to encourage governments, funders, civil society and others to contribute their political will, their economic resources, their partnerships and their time to help put local actors at the center of efforts to address climate change and promote resilience.



The GCA and a network of over 120 partners – including local partners from all over the globe – have developed a series of 8 LLA Principles to guide international efforts so that they promote local solutions for adaptation and resilience and build the capacity of local actors and institutions.



The 8 LLA Principles aim to strengthen the ability for local actors who are most affected by climate change to be able to build resilience in their cities and communities.

The 8 Principles for Locally Led Adaptation



The 8 Principles for Locally Led Adaptation



Principle 1

Devolve decision making to the lowest appropriate level



Principle 2

Address structural inequalities faced by excluded groups



Principle 3

Provide patient and predictable funding that can be accessed easily



Principle 4

Invest in local capabilities to strengthen institutions



Principle 5

Build a robust understanding of climate risk



Principle 6

Flexible programming and learning



Principle 7

Ensure transparency and accountability



Principle 8

Collaborative action and investment

LLA Principle 1: Devolve Decision-Making

Principle 1

Devolve decision making to the lowest appropriate level.

- Adaptation decisions in cities should be led by local actors – including by infrastructure planners and urban planners like you.
- There are a wide range of other local LLA stakeholders that include NGOs and civil society groups, neighborhood associations, organizations representing vulnerable and excluded groups, private businesses, cooperatives, households and individuals.
- Build partnerships and working relationships with these other LLA actors in your city. Adopt an approach that allows for open dialogue, consultation and co-creation of LLA solutions with other local LLA stakeholders when developing and implementing urban infrastructure projects.



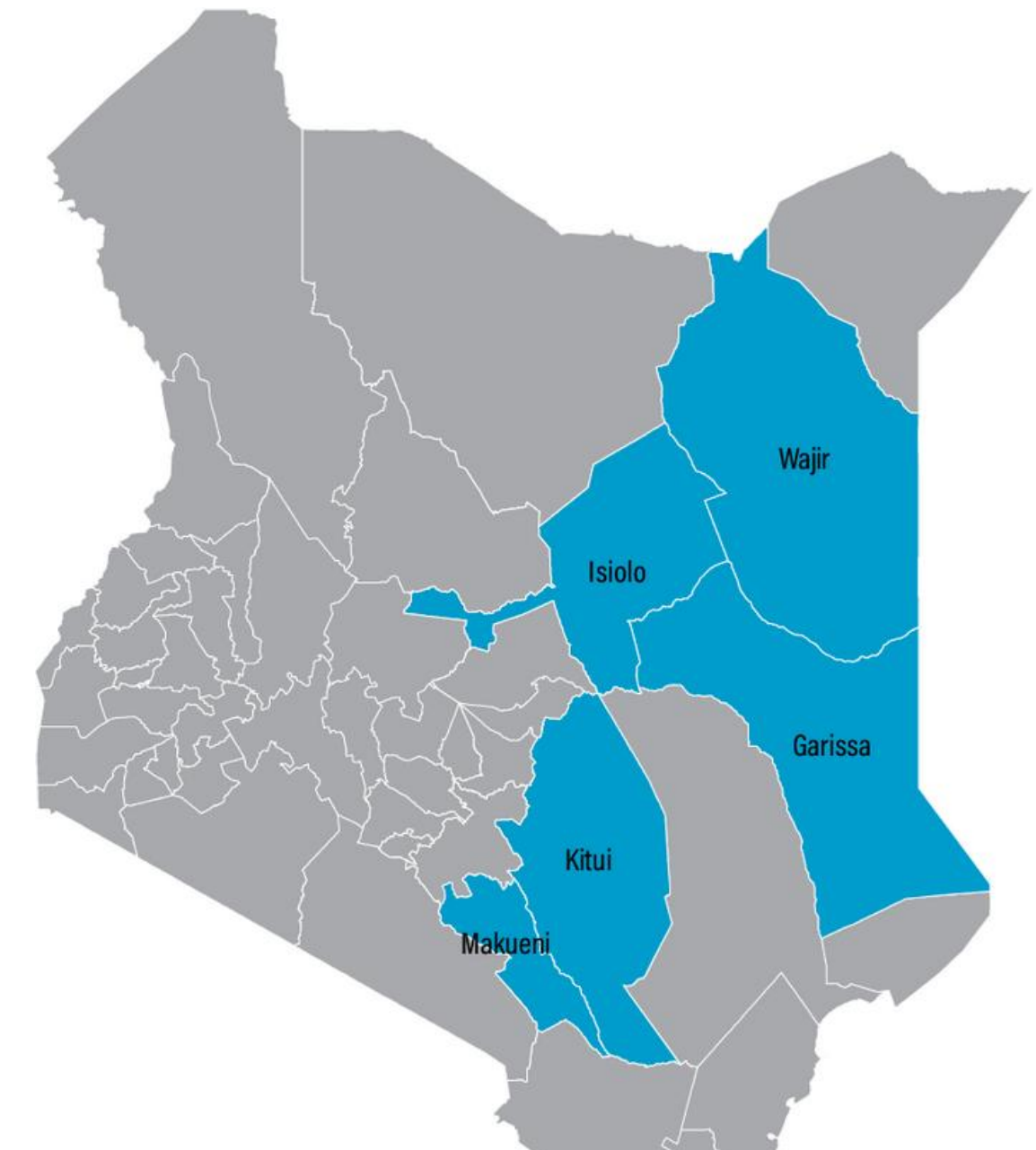
LLA Principle 1: Devolve Decision-Making

Case Study | County Climate Change Funds | Kenya

The County Climate Change Fund (CCCF) is a pioneering mechanism to facilitate the flow of climate finance to county governments and simultaneously empower local communities, through strengthening public participation in the management and use of those funds, to build their resilience to a changing climate.

It consists of climate legislation enacted by county governments and a County-controlled fund that finances climate projects identified and prioritized by local communities. These local projects, such as water and sanitation initiative, are selected by local communities, with representatives from marginalized groups, especially women, indigenous people and youth.

Initially piloted in Isiolo, Garissa, Kitui, Makueni and Wajir Counties, the CCCF model is being rolled out across Kenya as a main priority of the National Climate Change Action Plan, 2018-2022.



LLA Principle 2: Address Structural Inequalities

Principle 2

Address structural inequalities faced by women, youth, children, people with disabilities and displaced people, Indigenous Peoples and marginalised ethnic groups.

- Engage with organizations that represent vulnerable groups to understand their current level of access to social services and core infrastructure in your city.
- Develop a strong understanding of how climate risks affect different vulnerable groups in your city, for example through a climate risk assessment (CRA). Consider using participatory methods that allow vulnerable groups and their organisations direct input into describing their exposure and vulnerability to climate hazards.
- When making investments in climate resilient infrastructure, specifically outline how these investments will benefit women, vulnerable and marginalized groups – including those who live in informal settlements and work in the informal sector.



LLA Principle 2: Address Structural Inequalities

Case Study | Mukuru Special Planning Area Project | Nairobi, Kenya

Mukuru is one of Nairobi's largest informal settlements with over 100,000 families. It faces frequent challenges including climate hazard and exposure to precarious health and safety issues.

To remedy the situation, the Nairobi City County declared Mukuru as a Special Planning Area (SPA) in 2017, ceasing development activity for two years until a Mukuru Integrated Development Plan is produced.

The plan preparation was undertaken through collaboration of various stakeholders including civil society organizations, universities and the Nairobi City county government. A draft of the plan was finalized but has yet to be approved, although some parts of the plan were implemented in 2020.

The process was organized into different thematic consortia groups that worked closely with the local community to deliver a model of climate-resilient slum redevelopment that is authentically locally led by marginalized communities.



Mukuru; Photo by Hannah Kerber

LLA Principle 2: Address Structural Inequalities

Case Study | Mukuru Special Planning Area Project | Nairobi, Kenya

The project in Mukuru demonstrates how devolved decision-making can be operationalized to ensure that marginalized communities have a voice in the development of sustainable solutions for enhancing resilience in a transparent and accountable manner.

The process in Mukuru succeeded in engaging and uniting residents in co-developing a plan for improvement of their settlement. However, a lack of political good will ultimately inhibited the approval of the Plan, which meant it was not fully adopted. This limits its subsequent use as a benchmark to rally for the SPA as a vehicle for change in informal settlements.

An important lesson from Mukuru is that slum upgrading and climate resilience cannot be handled as separate entities as these areas bear the greatest impact of climate change with most of them essentially located in vulnerable locations near the river of Nairobi.



Mukuru; Photo by Hannah Kerber

LLA Principle 3: Patient & Predictable Funding

Principle 3

Provide patient and predictable funding that can be accessed more easily.

- Understand the availability of finance for resilient urban infrastructure investment from the most predictable sources of climate finance – this is often national and domestic budgets.
- Explore approaches to integrate your climate resilient urban infrastructure investments within longer-term planning and financing approaches – for instance sectoral plans, urban Master Plans and climate strategies.
- Seek strategic partnerships with national level actors to develop longer-term (7-10 year) financing strategies with international donors and climate funds which are willing to provide long-term funding.



LLA Principle 3: Patient & Predictable Funding

Case Study | Financing Locally-led Adaptation Local Adaptation (FLLoCA) | Kenya

FLLoCA is a World Bank-funded program that supports the delivery of locally-led climate action by strengthening the capacity of county and national governments to manage climate risk.

FLLoCA will pool funding from donors and deliver over US\$150 million to strengthen and scale up devolved county funding across Kenya between 2021 and 2026. Some of the counties in which FLLoCA has begun to be rolled out are in Kisumu, Nandi, Vihiga and Laikipia.

This funding will allow county governments to strengthen local resilience to the impact of climate change, natural hazards, and other shocks/stressors. It will help them build local capacity to plan, budget, implement and monitor resilience investments.

This commitment shows that there are opportunities for international donors to scale up investment in LLA, and highlights the value in providing patient, long-term support to build the capacity of local institutions to manage and deliver their own adaptation finance.



Mount Kenya region; Photo by Neil Palmer (CIAT)

LLA Principle 4: Invest in capabilities

Principle 4

Invest in local capabilities to leave an institutional legacy.

- You should seek support to develop the knowledge & skills of your team and department over time.
- This could include knowledge and skills related to understanding climate risk, technical and engineering knowledge for specific infrastructure types or projects, project management, financing infrastructure, building collaborative networks, promoting equity & inclusion, monitoring & evaluation investments.
- Seek partnerships that can promote capacity building and institutional strengthening
- Find ways to retain and share this capacity within your team and department so it is not lost when staff are transferred, leave, or retire.



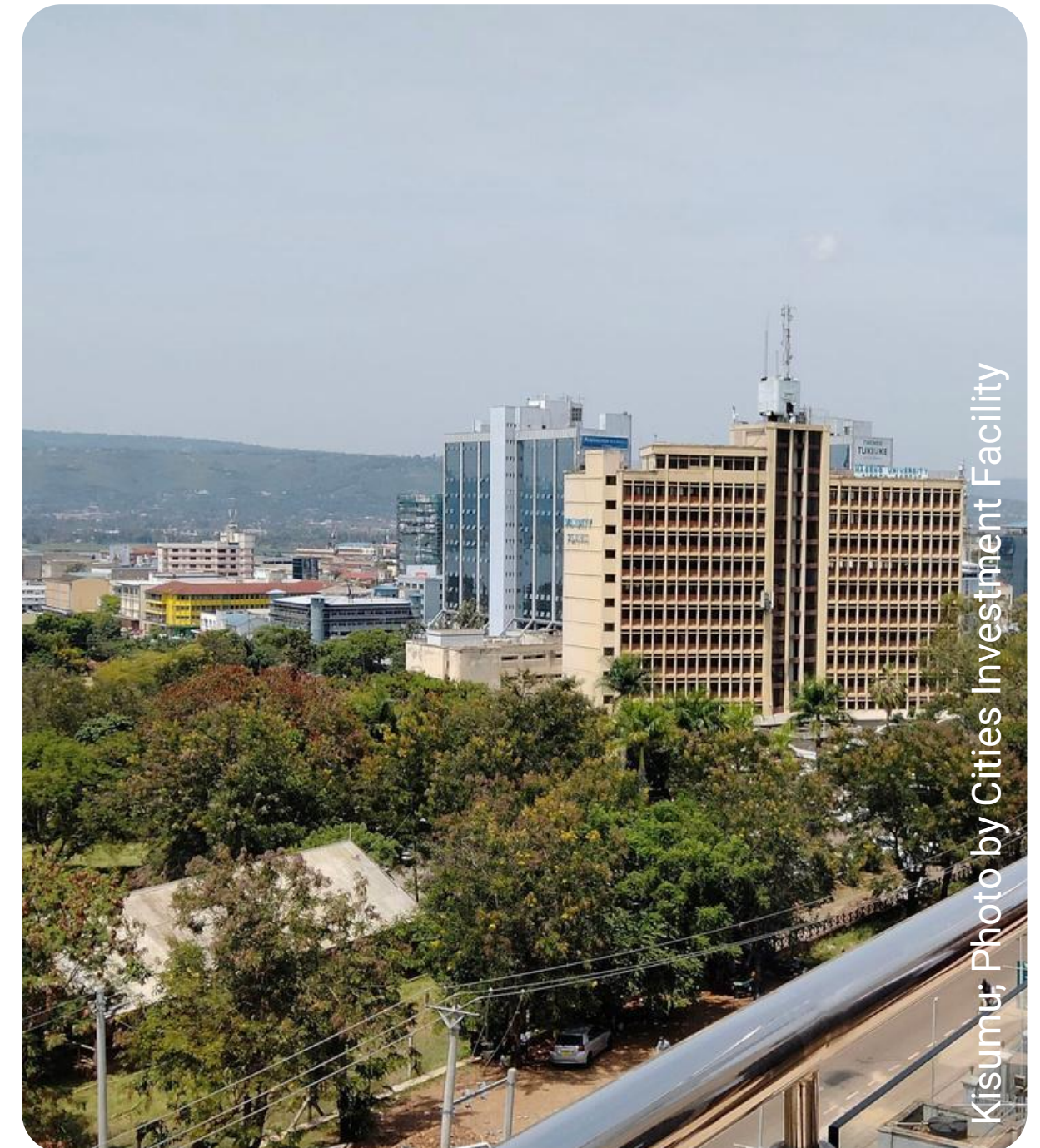
LLA Principle 4: Invest in Capabilities

Case Study | Local Climate Adaptation Fund | Kisumu County, Kenya

The Government of Kenya received financial support from the World Bank, DANIDA and SIDA towards the Financing Locally-Led Climate Action (FLLoCA) Program. The Program development objective is to deliver locally led climate resilience actions and strengthen county and national governments' capacity to manage climate risks. FLLoCA is being rolled out in 16 counties and Kisumu County is one of the beneficiaries.

Kisumu County has focused on building and strengthening local institutions to support adaptation efforts. Through capacity-building workshops and mentorship programs, local organizations are equipped with the skills and resources to understand climate risks, facilitate adaptation initiatives, and manage funds effectively. As a result, these institutions serve as hubs for distributing grants and loans to other local actors for adaptation actions. Kisumu has opened the tender projects for water, waste management and irrigation projects for funding.

This initiative demonstrates LLA Principle 4 by showing how local capacities are strengthened in the process and knowledge transfer guaranteed.



Kisumu; Photo by Cities Investment Facility

LLA Principle 5: Understand Climate Risk

Principle 5

Build a robust understanding of climate risk and uncertainty.

- Seek to understanding current and future climate risks in your city.
- Commission a climate risk assessment or review existing CRAs (if they exist) to understand climate hazards, risk and vulnerability in your city.
- Remember that climate risk is experienced differently in different neighbourhoods and by different groups of people. Consult with vulnerable groups on how climate risk affects them, and how it can worsen inequality and deepen vulnerability in your city.
- When planning to make infrastructure investments, consult with vulnerable and marginalized groups to help decide on which investment would be best to support these groups manage climate risks.



LLA Principle 5: Understand Climate Risk

Case Study | Community Adaptation to Flood Risk | Kibera, Kenya

Kibera, located in Nairobi, is Kenya's largest informal settlement. It is highly vulnerable to climate hazards, especially flooding which can damage structures and negatively impact local livelihoods.

Kibera residents in collaboration with Kounkuey Design Initiative and university partners co-designed and co-implemented a series of "community-responsive adaptation" interventions at high-exposure sites. Community-level approaches are often more about "coping" with flood risk than adapting to it or mitigating it. These interventions were implemented over several public sites in Kibera informal settlement and were designed to build social cohesion and resilience to local flooding.

The community played a key role in understanding and co-designing solutions that work for their specific context as they have a good understanding of the risks that they face. Each public space within the project combined "hard" solutions (flood protection, drainage, rainwater harvesting), "soft" solutions (flood preparedness, early-warning, waste management), and income-generating and social initiatives.



LLA Principle 6: Flexible Programming & Learning

Principle 6

Flexible programming and learning.

- Develop monitoring systems (M&E) to see the impact of your investments.
- Adapt your strategy and make updates over time as required based on the data and feedback you receive from your M&E processes.
- Understand that investment needs will likely change over time, as cities change and climate effects bring new and different challenges. The right solution for now might require a different solution in a few years.
- Find ways to share knowledge, data and results across departments, teams and agencies in your city – so that others can learn from your valuable experience.
- Ensure there is a budget and plan for operations & maintenance of infrastructure assets in your city.



LLA Principle 6: Flexible Programming & Learning

Case Study | Hunger Safety Net Programme | Kenya

Kenya's social protection programmes provide cash transfers to households. These programmes include the Hunger Safety Net Programme (HSNP) and the Cash Transfer for Orphans and Vulnerable Children (CT-OVC), exemplify flexible programming.

These programs provide cash transfers to vulnerable populations, allowing them to meet their immediate needs while also having the flexibility to adapt to changing circumstances.

The programmes demonstrate LLA Principle 6, as they incorporate learning mechanisms to continuously assess their effectiveness and make adjustments accordingly.

For example, the HSNP conduct regular evaluations and feedback sessions with beneficiaries to understand their evolving needs and improve program delivery.



LLA Principle 7: Transparency & Accountability

Principle 7

Ensure transparency and accountability.

- Explore ways to engage with local residents and solicit their feedback on urban infrastructure planning - including ways to understand their infrastructure needs, climate risks, and accessibility challenges related to vulnerability and exclusion.
- Build collaborative networks and processes to engage with different stakeholder groups – especially those that represent vulnerable and excluded groups.
- Explore ways to communicate about your work to citizens in your city to provide accountability on your work, improve awareness and foster social trust.
- Develop reporting systems for financers of infrastructure investments to provide transparency and accountability on how you spent the funds.



LLA Principle 7: Transparency & Accountability

Case Study | Climate Adaptation Committee | Laikipia County, Kenya

Laikipia County has established a Climate Adaptation Committee comprising representatives from government agencies, civil society organizations, and local communities. It oversees climate adaptation projects and ensures transparency and accountability in decision-making processes.

All meetings and decisions of the Climate Adaptation Committee are documented and made accessible to the public. This transparency fosters trust among stakeholders and allows for meaningful engagement of local communities in adaptation efforts.

Additionally, the Climate Adaptation Committee conducts regular audits of climate adaptation funds and projects to ensure that resources are used efficiently and effectively to address the needs of vulnerable populations in Laikipia County.



LLA Principle 8: Collaborative Action & Investment

Principle 8

Collaborative action and investment.

- Explore approaches to integrate climate resilient urban infrastructure investments within longer-term, holistic planning and financing approaches – for instance sectoral plans, urban Master Plans, capital investment plans, and climate strategies.
- Build partnerships and working relationships with other actors in your city working towards adaptation – this could include other government departments, civil society groups, neighborhood associations, private businesses, representatives of vulnerable groups, households and individuals.
- Build partnerships with funders at different levels where relevant and appropriate to your context. This could include national and municipal sources of finance – and perhaps international or private sources of finance (if your city is able to access international funds and borrow from the private sector).



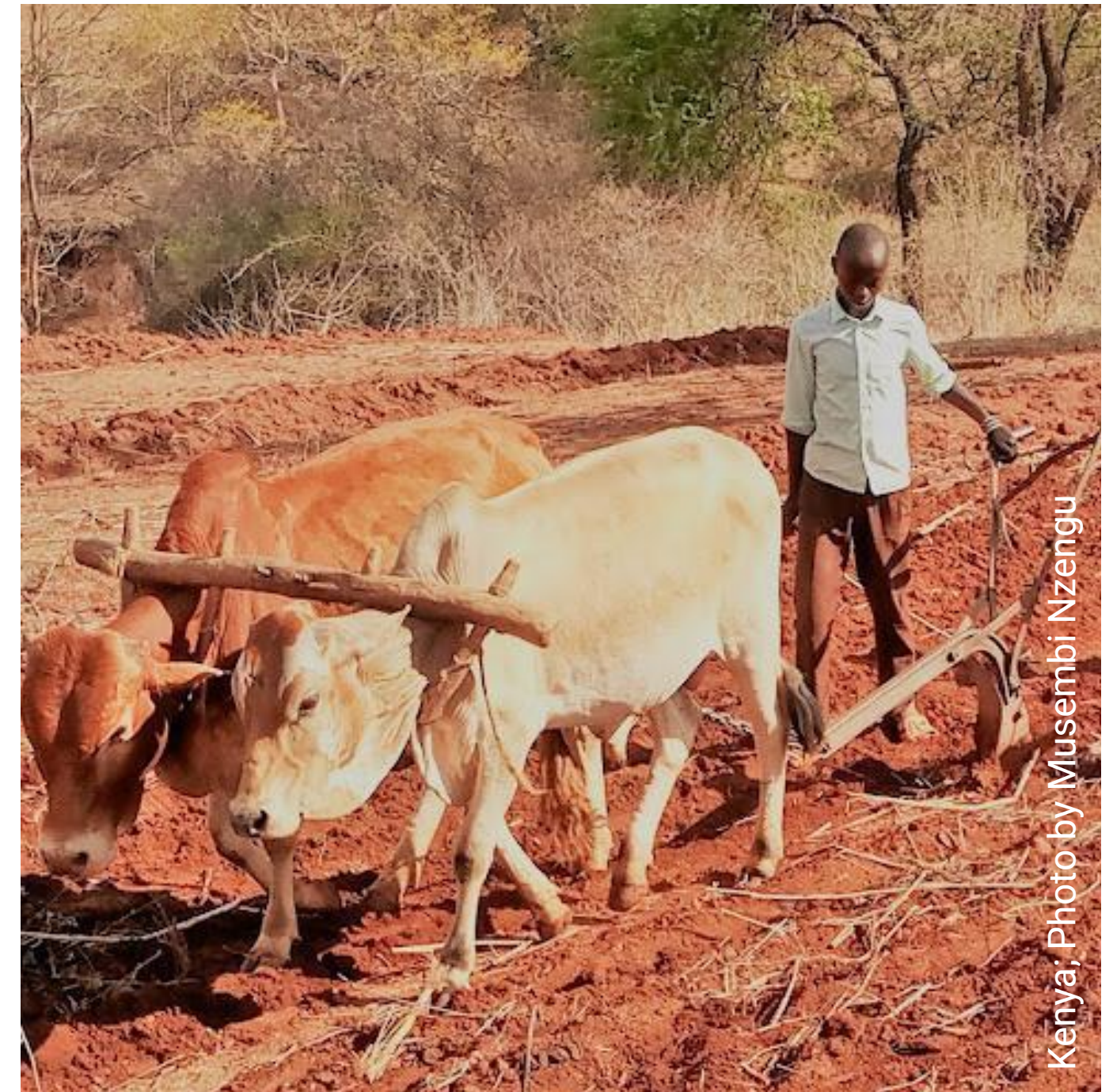
LLA Principle 8: Collaborative Action & Investment

Case Study | Water Security Partnership | Kitui County, Kenya

Kitui County in Kenya faces recurrent droughts and water scarcity, exacerbated by climate change. To address these challenges, the county government has initiated a Water Security Partnership involving various stakeholders such as government agencies, NGOs, community-based organizations, and private sector actors. This initiative underscores the power of partnerships in addressing community needs, thereby demonstrating LLA Principle 8.

One notable project is the Mwanja-Maongoa Sand Dam and Sumpwell Water Supply in Thonoi Village of Waita Ward. It is funded by the European Union and implemented by the National Drought Management Authority (NDMA) in collaboration with the Kitui County Government.

This project brings together the local leaders, county water engineers, the NDMA officials, Kitui county community and the donor agencies, underscoring the importance of collaborative partnerships and investments.



Recap: the LLA Principles

Principle 1: Adaptation decisions in cities should be led by local actors – including by infrastructure planners like you.

Principle 5: You should seek to understand current and future climate risks in your city.

Principle 2: Your climate-resilient infrastructure investments should take into consideration equity & inclusion, so these investments address structural inequalities faced by excluded groups.

Principle 6: Develop M&E systems and processes to see the impact of your investments and change them over time if needed. Find ways to share data, learning and results across city departments.

Principle 3: You should seek predictable financial support for your infrastructure investments.

Principle 7: Ensure transparency and accountability to both your funders and to citizens to build trust.

Principle 4: You should seek support to develop the knowledge & skills of your team and department over time. Find ways to retain and share this capacity so it is not lost when staff are transferred, leave, or retire.

Principle 8: You should look to integrate your investments into longer-term planning & financing strategies within your city such as sectoral plans, capital investment plans, urban master plans & climate strategies.

Review Exercise

Consider your local actors.

Are any of them involved in actions or activities that fit the LLA principles?

Discuss with the person next to you, or raise your hand to share an example with the room.

Principle 1: Adaptation decisions in cities should be led by local actors – including by infrastructure planners like you.

Principle 2: Your climate-resilient infrastructure investments should take into consideration equity & inclusion, so these investments address structural inequalities faced by excluded groups.

Principle 3: You should seek predictable financial support for your infrastructure investments.

Principle 4: You should seek support to develop the knowledge & skills of your team and department over time. Find ways to retain and share this capacity so it is not lost when staff are transferred, leave, or retire.

Principle 5: You should seek to understand current and future climate risks in your city.

Principle 6: Develop M&E systems and processes to see the impact of your investments and change them over time if needed. Find ways to share data, learning and results across city departments.

Principle 7: Ensure transparency and accountability to both your funders and to citizens to build trust.

Principle 8: You should look to integrate your investments into longer-term planning & financing strategies within your city such as sectoral plans, capital investment plans, urban master plans & climate strategies.

06 | LLA Actors



Dhaka; Photo by Abdul Awal, Getty Images (licensed via Canva)

Who are the local actors involved in delivering LLA?



In this course, we use the term **local** actors to include the **people and communities** on the frontline of climate change and the **local institutions** representing and supporting them to facilitate their adaptation.



This can include institutions from the **public sector, private sector and civil society**.



Who are the local actors involved in delivering LLA?



State & Regional Governments

Enact laws and policies for regional development, make investments in infrastructure & services, and are often responsible for responding to climate shocks and hazards.



Municipal Governments

Provide infrastructure and services directly to citizens, and enact laws and policies related to local development, environmental quality, and use of resources. Their investments can support resilience of citizens and regulations can promote more systematic approaches to building resilience across the urban landscape.



NGOs and CSOs

Grassroots organizations are often key local actors that advocate for improvements in their communities related to development, representation, agency, power, rights to land and resources and essential services – especially for excluded groups.

Who are the local actors involved in delivering LLA?



Cooperatives & Federations

Make investment in local livelihoods, advocate for improved development outcomes for their members, and ensure access to basic services and finance – all of which can be used to support resilience.



Private Sector

Businesses, corporations, and microfinance institutions make investments in the local economy; provide goods, services, and jobs that can build resilience; and can develop climate resilient business models.



Households, Individuals & community leaders

Make investments in their own livelihoods and infrastructure that can help them be resilient to climate shocks. They also participate in grassroots organisations that can be key actors delivering LLA initiatives to build local resilience.

Community leaders make important decisions related to local development, serve as power brokers, advocate for their communities, and act as custodians for traditional knowledge.

LLA actors in Kenya

National Governments:

The National Treasury: Accesses finance from international and national sources and deliver finance to sub-national governments (e.g. through sectoral budgets, through infrastructure projects, and as block grants to counties)..

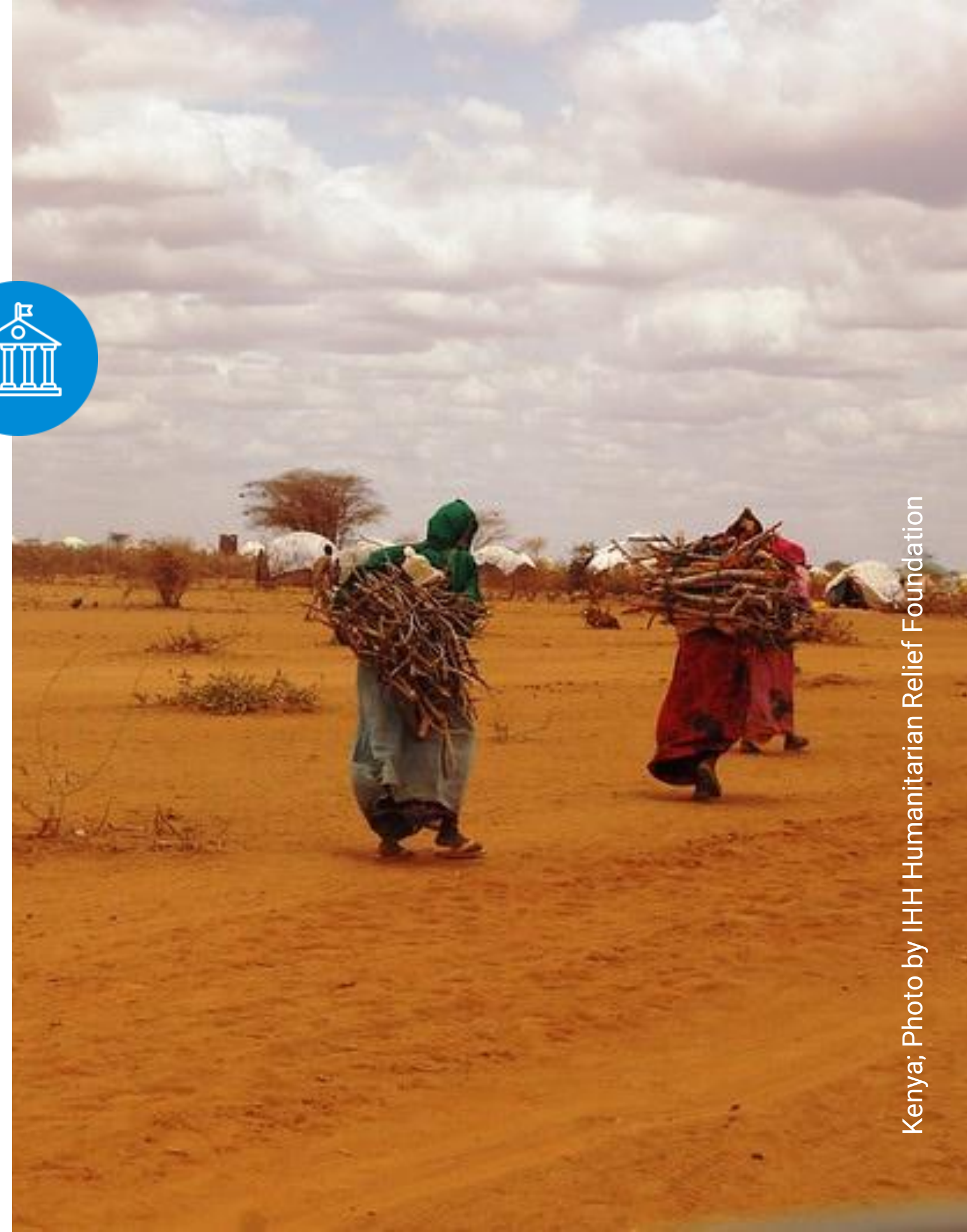
Ministry of Environment & Climate Change: Develops policies and strategies on climate change adaptation in Kenya.

Ministry of Water, Sanitation, and Irrigation: Manages water resources and infrastructure, which are crucial for adaptation.

Ministry of Housing and Urban Development: In charge of key policies affecting urbanization and urban infrastructure.

Ministry of Agriculture and Livestock Development: Works on enhancing agricultural productivity and resilience.

Ministry of Devolution and ASALs (Arid and Semi-Arid Lands): Supports decentralized governance and the implementation of adaptation projects at the local level.



Kenya; Photo by IHH Humanitarian Relief Foundation

LLA actors in Kenya

County Governments:

- **Develop and implement relevant county policies, legislation and local adaptation plans:** Counties are required to formulate policies & legislation enabling effective LLA, and integrate climate adaptation into county development planning, particularly through CIDPs. These plans should address local climate risks and outline strategies to mitigate these risks.
- **Resource Mobilization:** Counties are responsible for mobilizing resources, both financial and technical, to support adaptation initiatives. This includes leveraging national funds, such as the Climate Change Fund, as well as exploring partnerships with NGOs and international organizations.
- **Capacity Building:** County governments expected to build the capacity of local institutions and communities to understand and respond to climate risks. This includes providing education and training on climate adaptation and facilitating access to climate-resilient technologies.
- **Monitoring and Evaluation:** Counties are expected to establish mechanisms to track the progress of adaptation initiatives and assess their impact on local communities.



Kibera slum, Nairobi; Photo by Ninara, Flickr

LLA actors in Kenya

NGOs & Civil Society Organisations:

- Advocate for adaptation planning in their communities related to development
- Implement adaptation projects at the local level (e.g. ecosystem restoration, water management, agricultural diversification, and infrastructure development).
- Assess the impact of adaptation measures and identifying areas for improvement.
- Provide training, education, and skills development programs tailored to local contexts.



Ngchoni, Kenya; Photo by Angela Sevin, Flickr

LLA actors in Kenya

Private Sector:

- Designs and deliver climate resilient infrastructure (e.g. in public-private partnerships).
- Creates innovative businesses that promote climate resilience, create jobs, deliver goods and services, and boost the local economy.
- Provides capital for cities to invest in green infrastructure (e.g. through green bonds).



Kibera slum, Nairobi; Photo by Ninara, Flickr

LLA actors in Kenya

Households, individuals, indigenous communities and community leaders:

- Provide valuable traditional knowledge and insights into local climate patterns, natural resource management, and sustainable practices.
- Facilitate community engagement and raise awareness about climate change impacts and adaptation measures.
- Actively participate in the planning, execution, practical implementation and monitoring of adaptation projects.
- Participate in community-based organisations, youth groups, women's groups, resident associations, faith-based organisations, etc. which can be important in implementing locally adaptation initiatives.



Kibera slum, Nairobi; Photo by Ninara, Flickr

LLA policy frameworks in Kenya



National Climate Change Response Strategy (2010): This is a strategy developed to make Kenya climate change resilient and to strengthen and focus nationwide actions towards climate change adaptation and GHG emission mitigation.



Constitution of Kenya (2010): Kenya's Constitution provides a decentralization framework that gives Kenya's 47 county governments decision-making and financing responsibility over public infrastructure and service delivery.



Climate Change Act Cap 387A (2016): The purpose of the Act is to develop, manage, implement, and regulate mechanisms that enhance climate change resilience and low-carbon development.



National Climate Change Action Plan (2023-2027): mandates Kenya to integrate climate change mitigation and adaptation into development planning, promote public engagement, mobilize resources, strengthen institutional frameworks, and support research and innovation. It emphasizes monitoring, reporting, and building resilience for vulnerable communities and ecosystems.

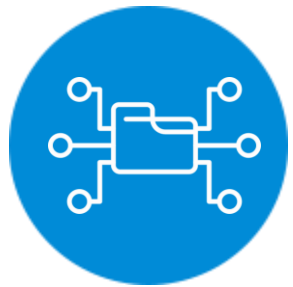


Marsabit, Northern Kenya; Photo by Neil Palmer, CIAT, Flickr

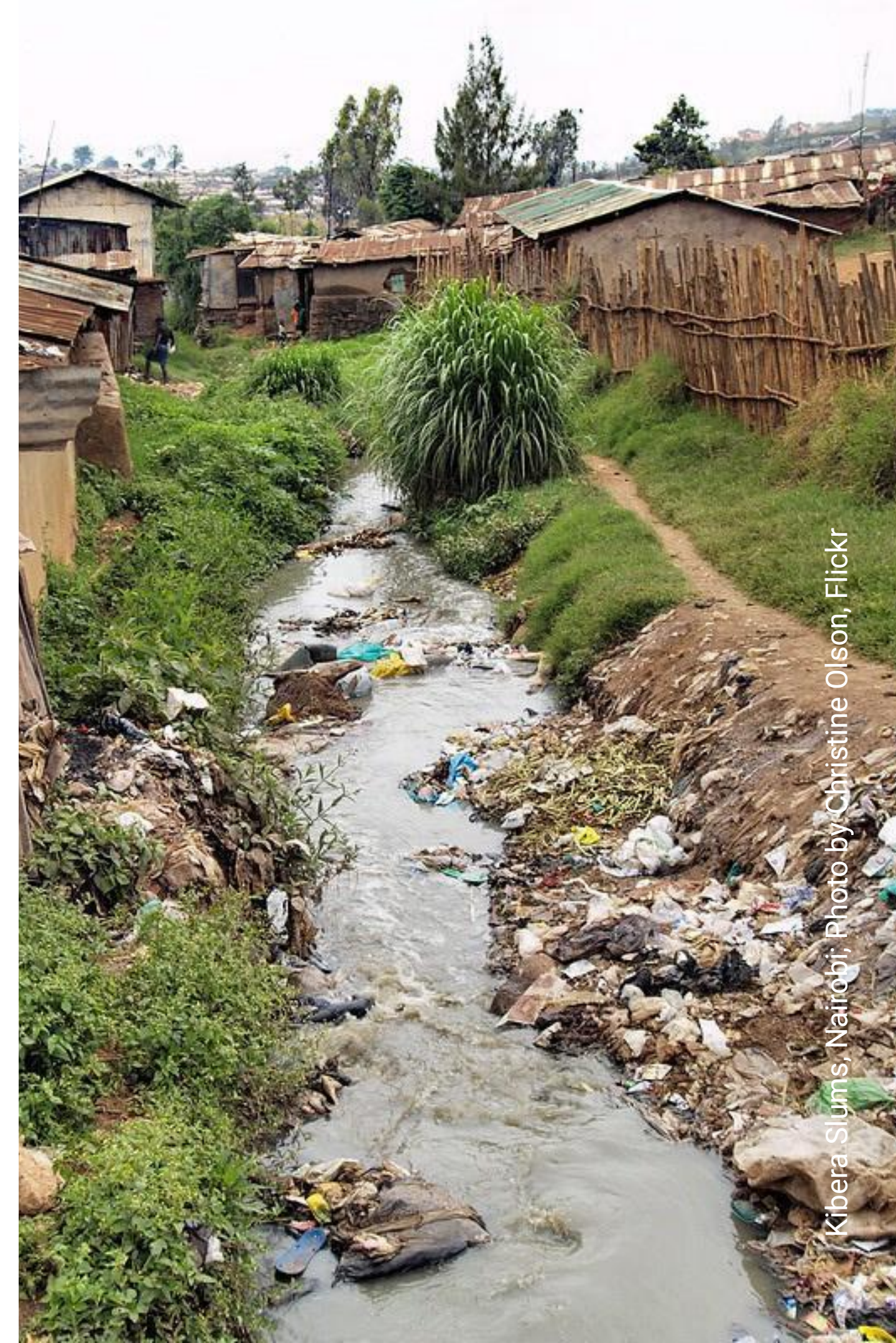
LLA policy frameworks in Kenya



County Climate Change Funds legislation and regulations (e.g. in Isiolo, Makueni and Kisumu): Kenya's 47 counties are responsible for developing climate change plans and legislation. Many have also set up County Climate Change Funds CCCF to help counties mobilize finance from a variety of sources to implement priority climate change interventions.



Financing Locally Led Climate Action (FLLoCA) initiative: The program focuses on capitalizing the National and County Climate Change Funds; building county level capacity for planning, budgeting, reporting and implementation of local climate actions in partnership with communities.



Kibera Slums, Nairobi; Photo by Christine Olson, Flickr

Review Exercise

Who are the local actors involved in delivering LLA in your city?

- Build on the short list you made in the previous exercise: list of all the people and communities on the frontline of climate change in your city.
- Add any local institutions that support them from your city.
- Discuss your list with the person next to you.

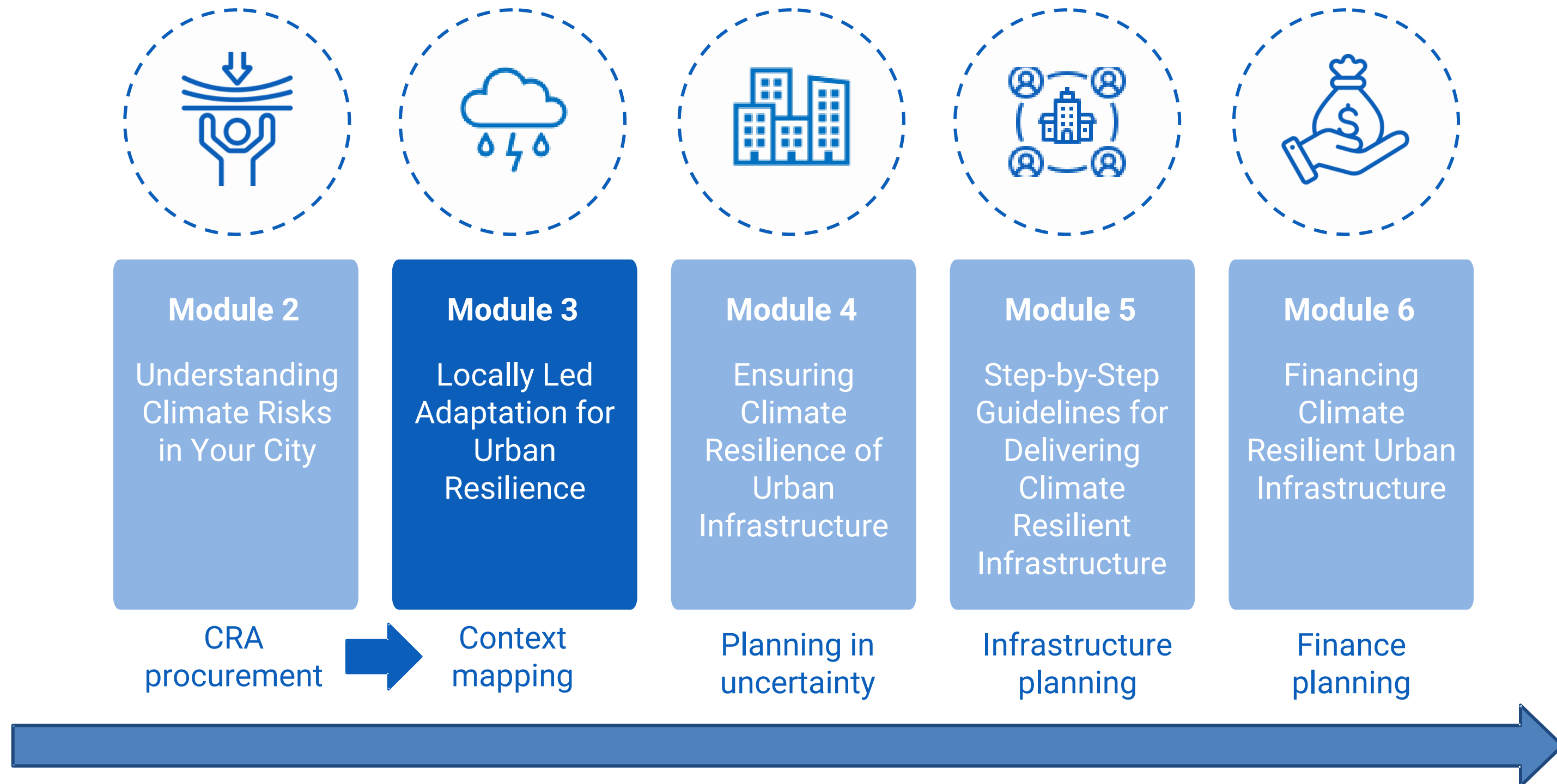


07 | Interactive Exercise



Dhaka; Photo by Abdul Awal, Getty Images (licensed via Canva)

Start Your Journey

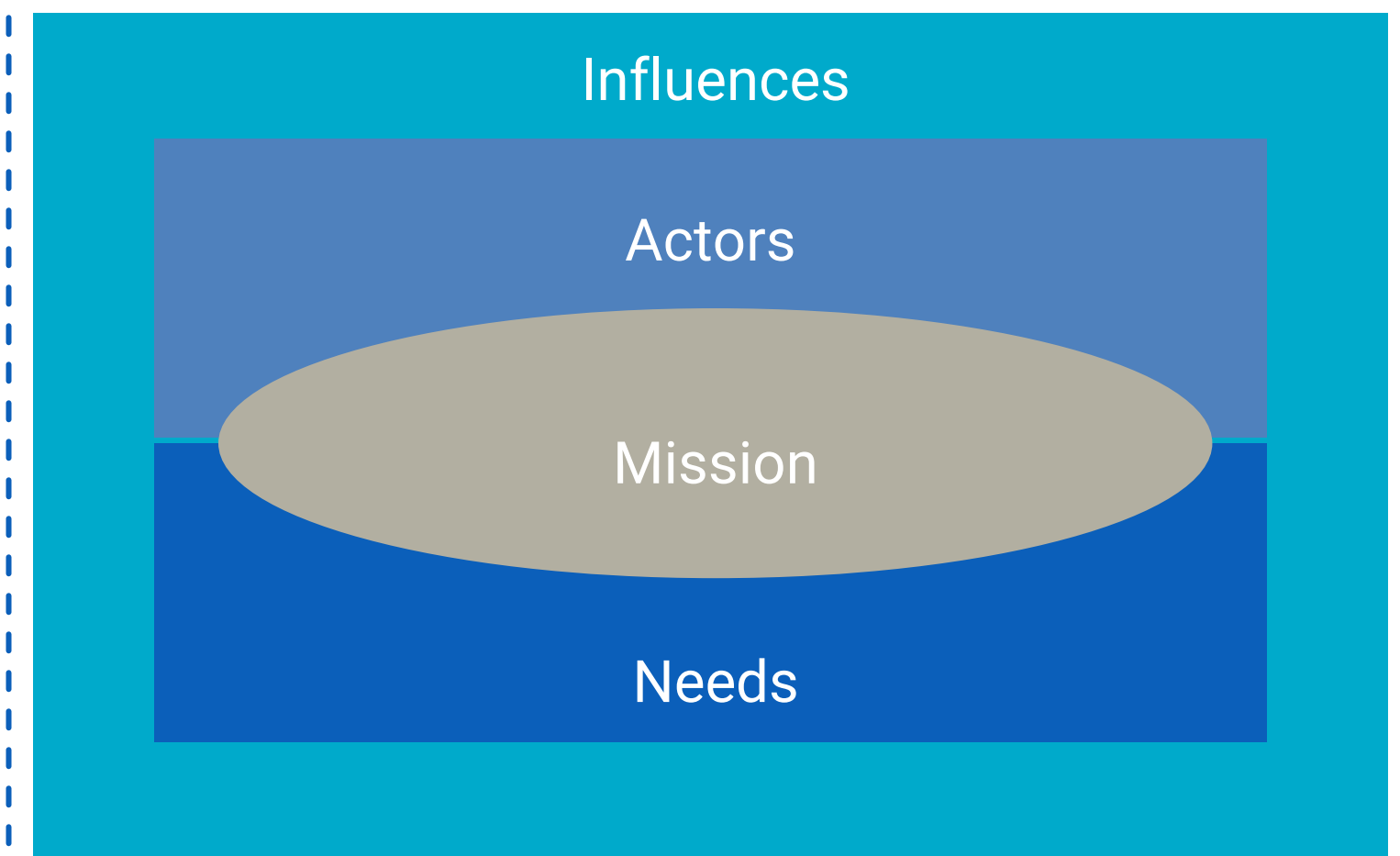


The interactive exercises across these 5 modules build on one another to link the content and support your understanding of the process to create adaptive and resilient infrastructure.

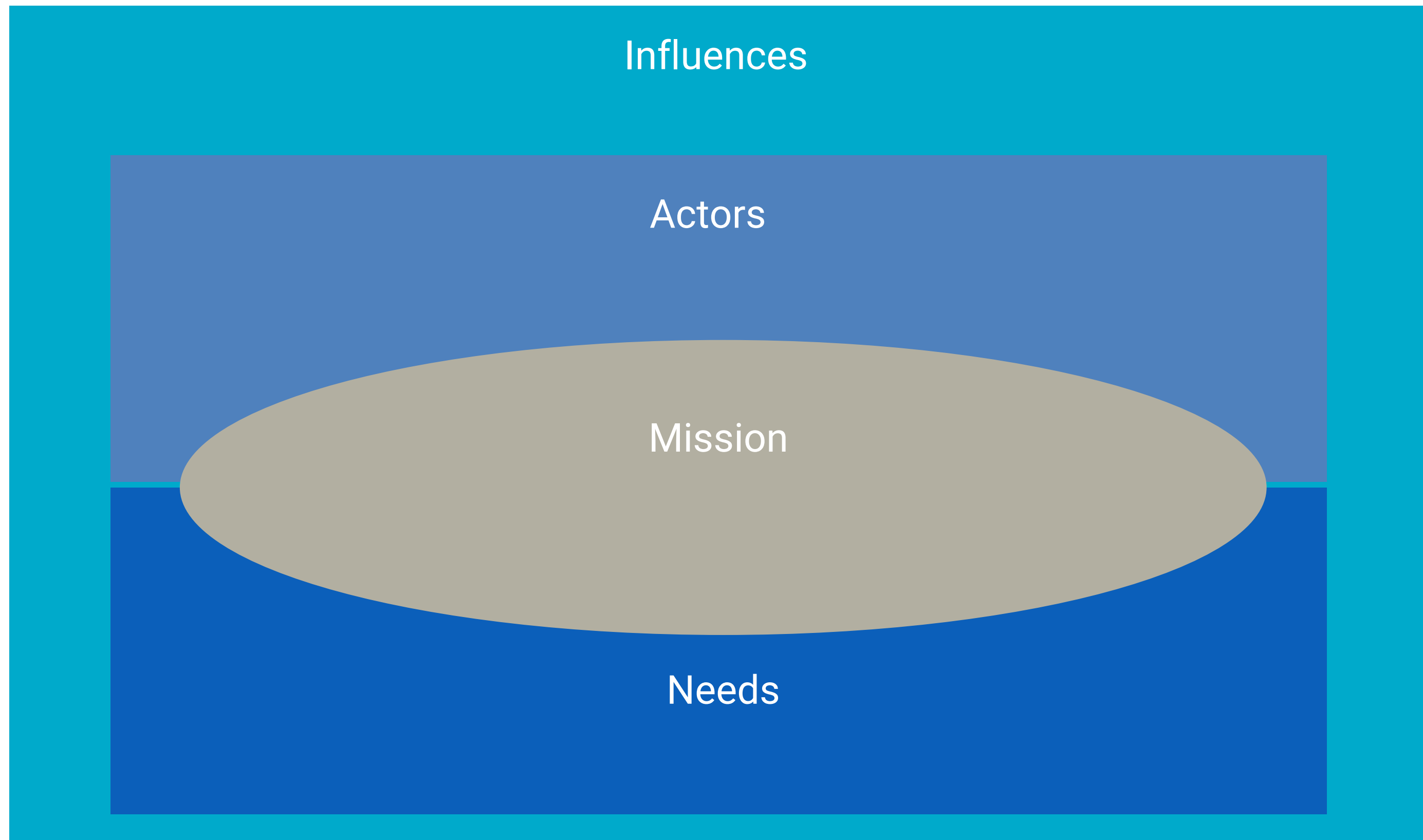
Context Mapping Canvas

The context mapping canvas is a tool to describe your mission, and the environment in which that mission will be undertaken:

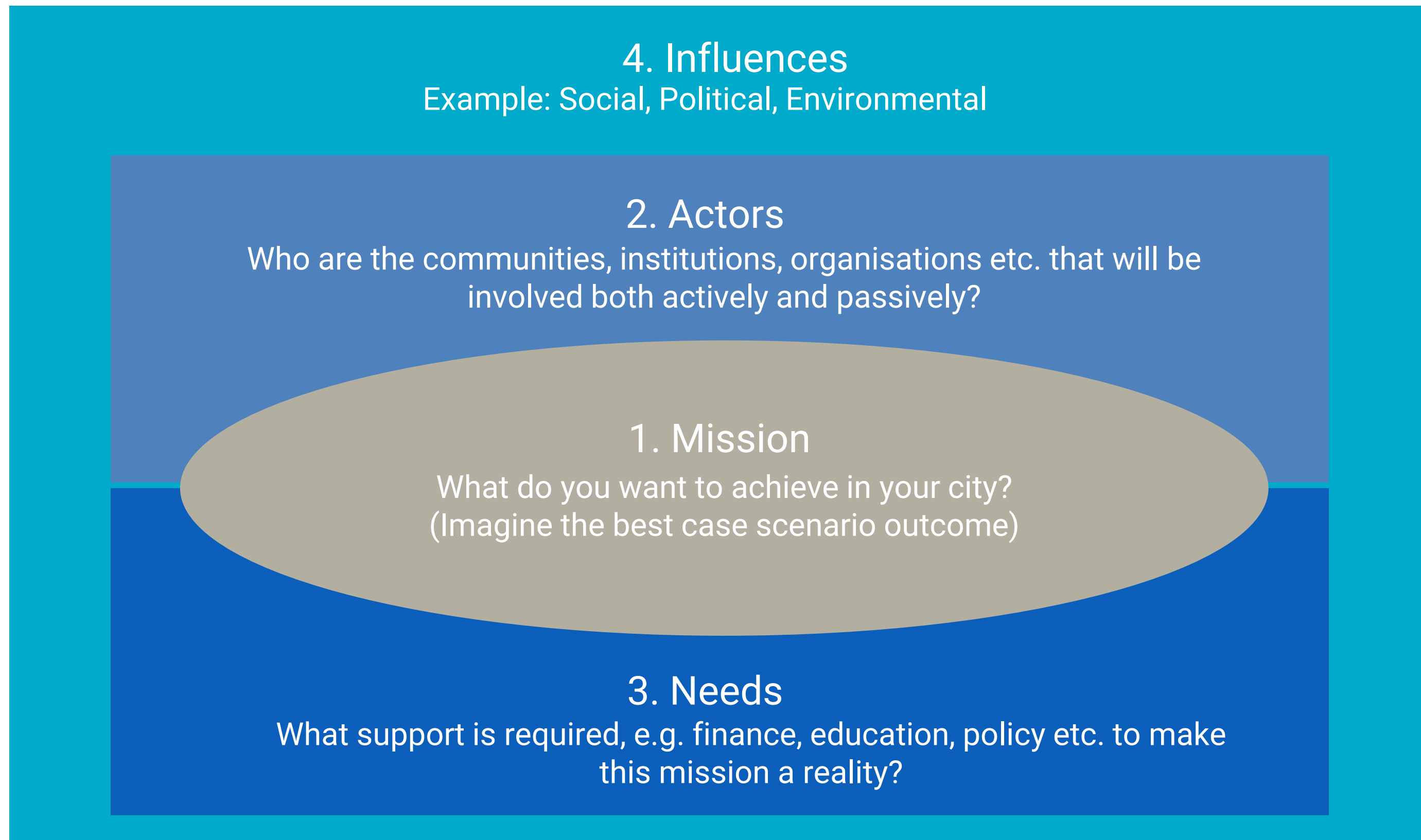
1. Mission: What you want to do in your city? Be aspirational.
1. Actors: Who will be involved? Think broadly of organisations directly involved, and the communities and individuals directly and passively involved.
1. Needs: What will be required to enable this mission? It might be labour, training, finance, land, or other resources.
1. Influences: What will affect the mission? Think about the environment, climate hazards and risks, social structures, policies, and other influencing factors.



Context Mapping Canvas



Context Mapping Canvas



Discussion

Share your context map

- Take it in turns on your table to share your context map.
- Ask questions and open up discussion.
- You may be asked to share highlights from your table to the wider room.



Influences

Actions

Steps required to reach the mission

Actors

Mission

Needs

1. _____

2. _____

3. _____

4. _____

5. _____

6. _____

7. _____

8. _____

08 | Summary



Displacement of households in an informal settlement in Nairobi;
Photo by Luis Tato

What can you do to deliver LLA in your city?



Understand climate risks in your city by commissioning or using a Climate Risk Assessment (CRA).



Understand how to make infrastructure more resilient to the impacts of climate change, and understand the types of infrastructure you can invest in that make citizens more resilient to climate impacts in the years ahead.



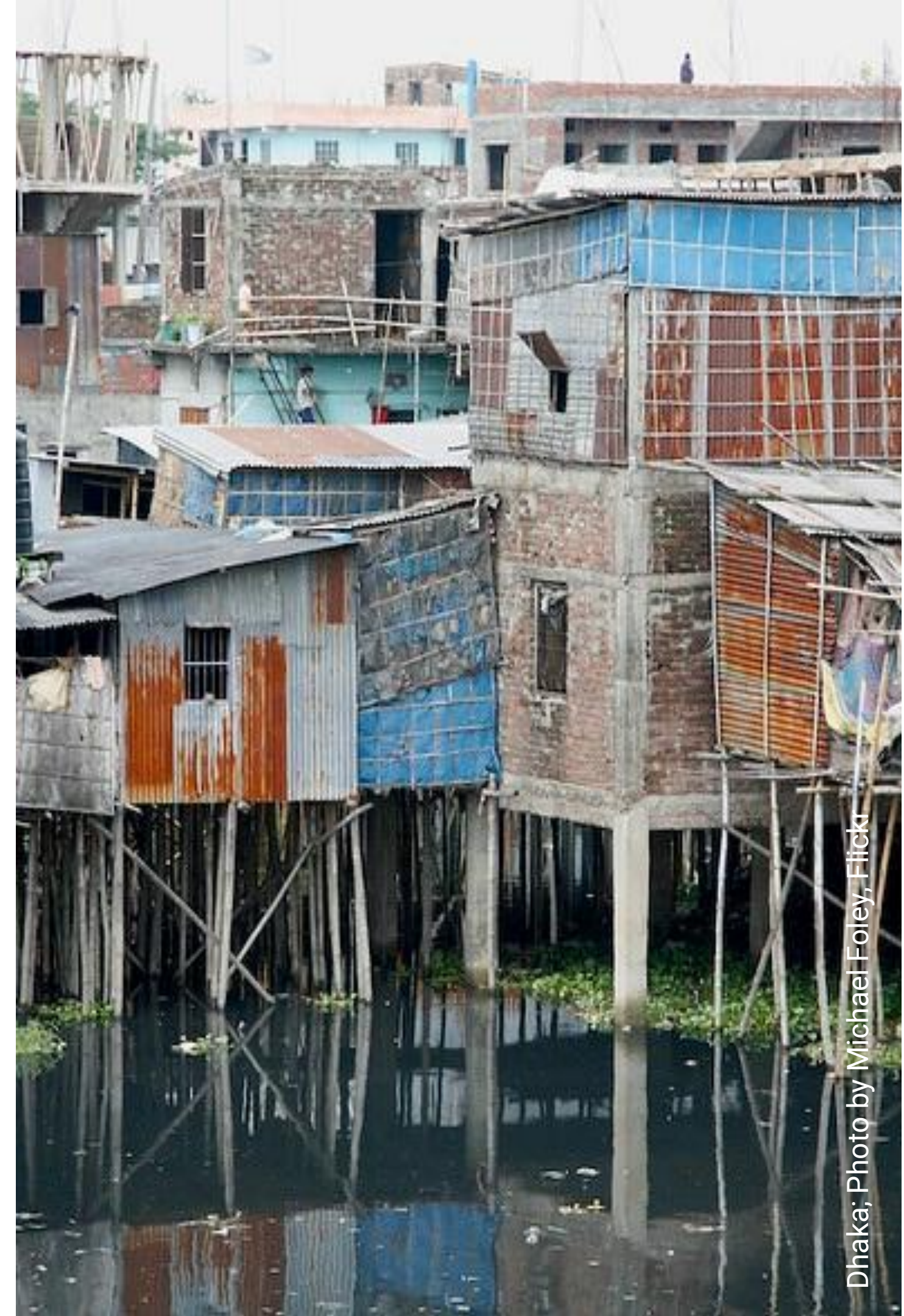
Make investments in new climate resilient urban infrastructure or upgrade existing infrastructure so it is climate resilient by following a step-by-step approach.



Access finance from national and municipal budgets in order to make these climate resilient urban infrastructure investments.

Always include a focus on how to reduce inequality and promote inclusion.

Learn More at the GCA LLA Hub



Dhaka; Photo by Michael Foley, Flickr

Summary & Next Steps

Congratulations on completing Module 2: Locally Led Adaptation for Urban Resilience!



Module 1

Introduction to
Climate
Change and
Urban
Resilience



Module 2

Understanding
Climate Risks
in Your City



Module 3

Locally Led
Adaptation for
Urban
Resilience



Module 4

Ensuring
Climate
Resilience of
Urban
Infrastructure



Module 5

Step-by-Step
Guidelines for
Delivering
Climate
Resilient
Infrastructure



Module 6

Financing
Climate
Resilient Urban
Infrastructure

The next module in the UCRMC is **Module 4: Ensuring Climate Resilience of Urban Infrastructure.**



GLOBAL
CENTER ON
ADAPTATION