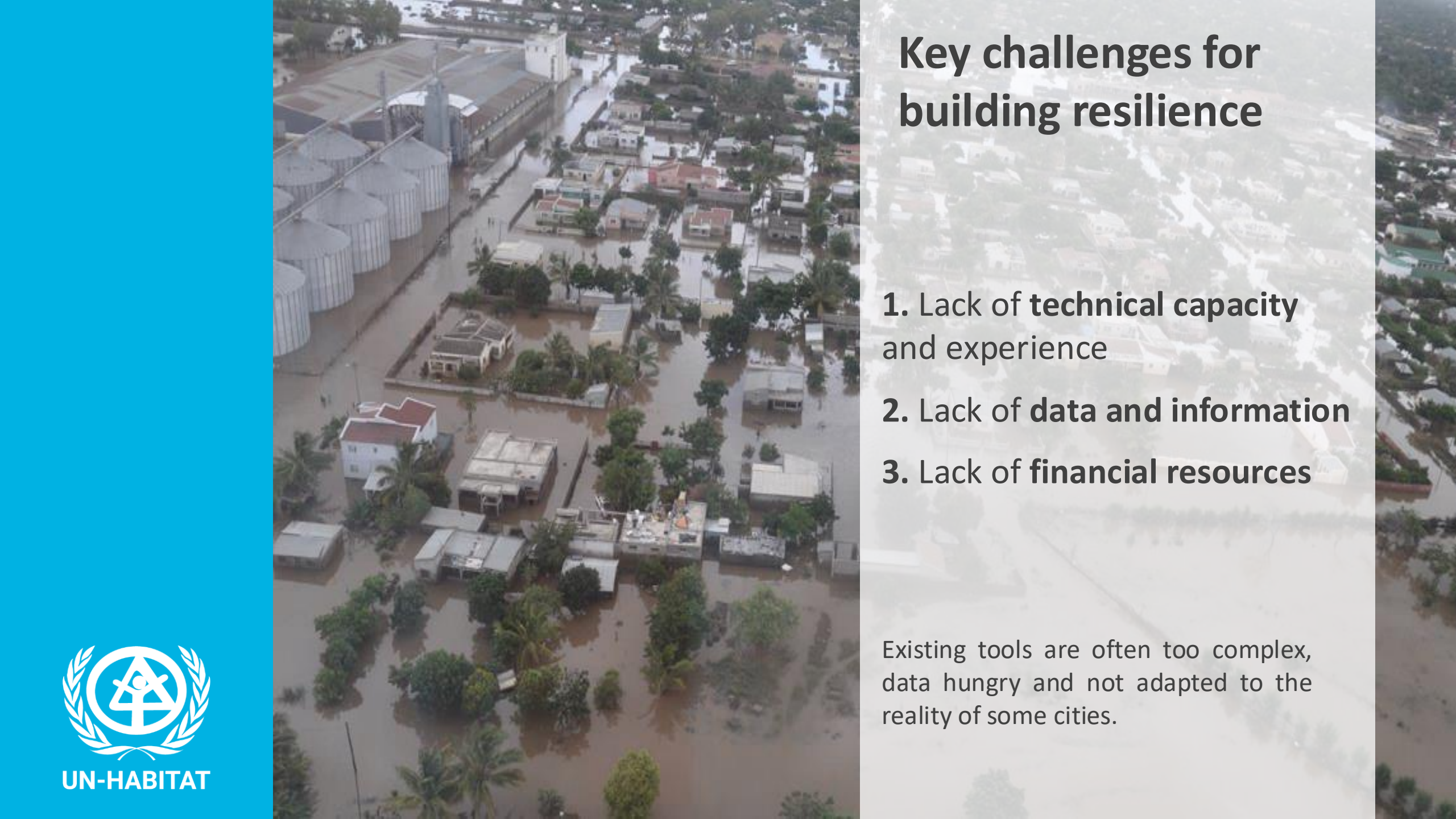


## URBAN RESILIENCE

*“The ability of any urban system, with its inhabitants to maintain continuity through all shocks and stresses, while positively adapting and transforming toward sustainability”.*



# Key challenges for building resilience

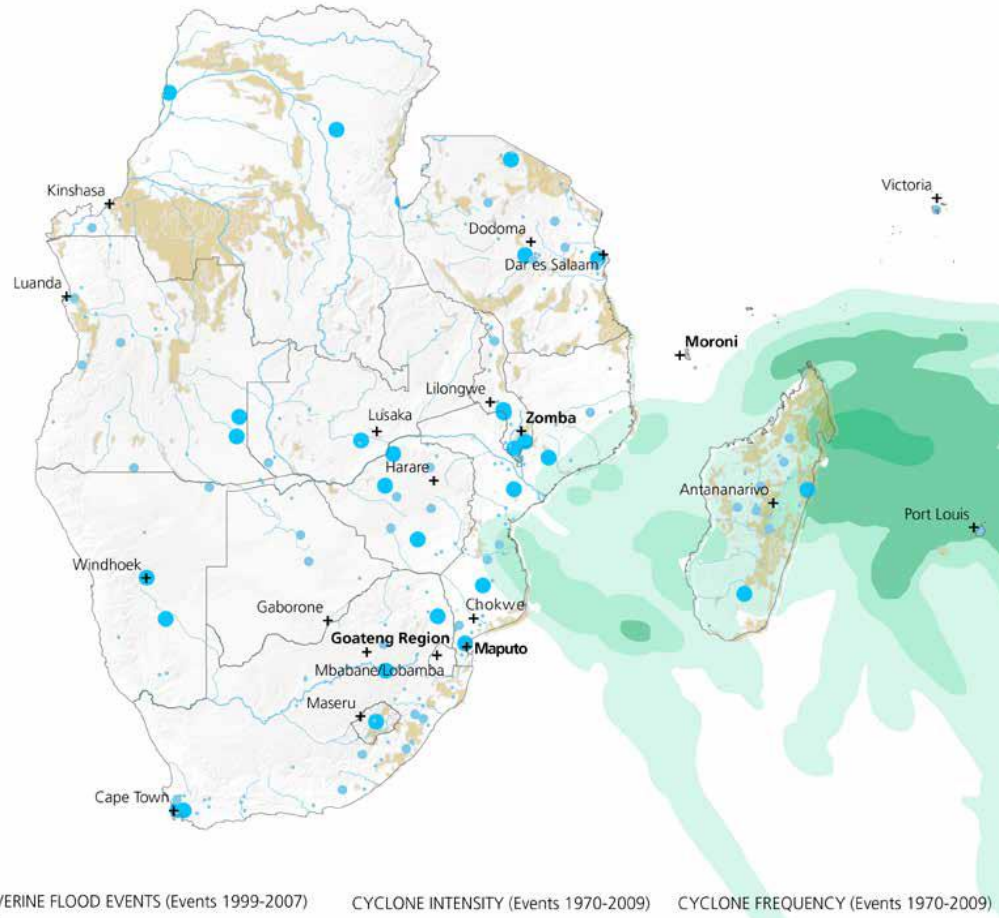
1. Lack of **technical capacity** and experience
2. Lack of **data and information**
3. Lack of **financial resources**

Existing tools are often too complex, data hungry and not adapted to the reality of some cities.



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# Natural hazards do not respect national boundaries



RIVERINE FLOOD EVENTS (Events 1999-2007)



CYCLONE INTENSITY (Events 1970-2009)



CYCLONE FREQUENCY (Events 1970-2009)



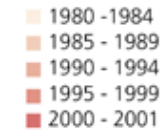
LANDSLIDES INDUCED BY PRECIPITATION



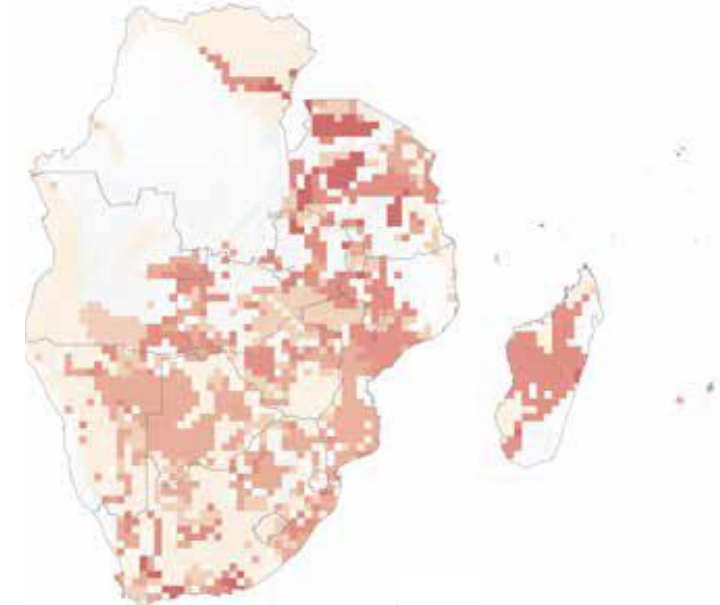
Data source: UNEP/UNDRR. Global Risk Platform. 2013.



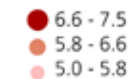
**DROUGHT**  
Events 1980-2001



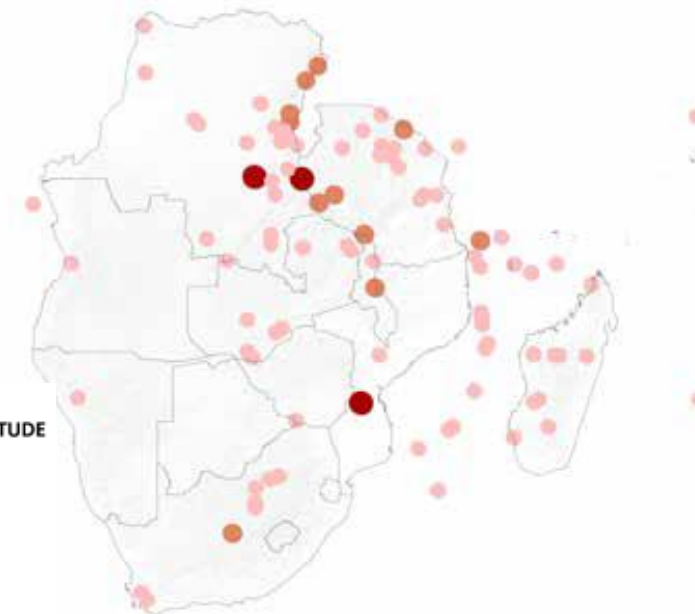
□ SADC Countries



**EARTHQUAKES MAGNITUDE**  
Events 1970-2015



□ SADC Countries



# The DiMSUR initiative

## In 2010...

...four countries with common vulnerabilities in southern Africa, with the facilitation of UN-Habitat, decided to join forces initiating the process to establish the sub-regional **Technical Centre for Disaster Risk Management, Sustainability and Urban Resilience (DiMSUR)**



# The DiMSUR initiative



## Mandate

to provide technical assistance and knowledge for:

- **Disaster Risk Reduction**
- **Climate Change Adaptation**
- **Urban Resilience**

in Southern Africa and the South-West Indian Ocean.

## Status

non-profit, autonomous, regional organization, international in status and non-political in management, staffing and operations.

## Founding members

- **Madagascar**
- **Malawi**
- **Mozambique**
- **Union of Comoros**

## Headquarters

**Maputo**, Mozambique with sub-units in each Member State.

## Vision

Be an effective catalyst and major partner for disaster risk management and climate change adaptation in southern Africa contributing to building a more resilient region based on safe and prosperous cities and towns.

## Strategic priorities for the first 10 years

Enhancing the identification and understanding of risks at local level

Strengthening national and local capacities to manage disaster risk and build resilience

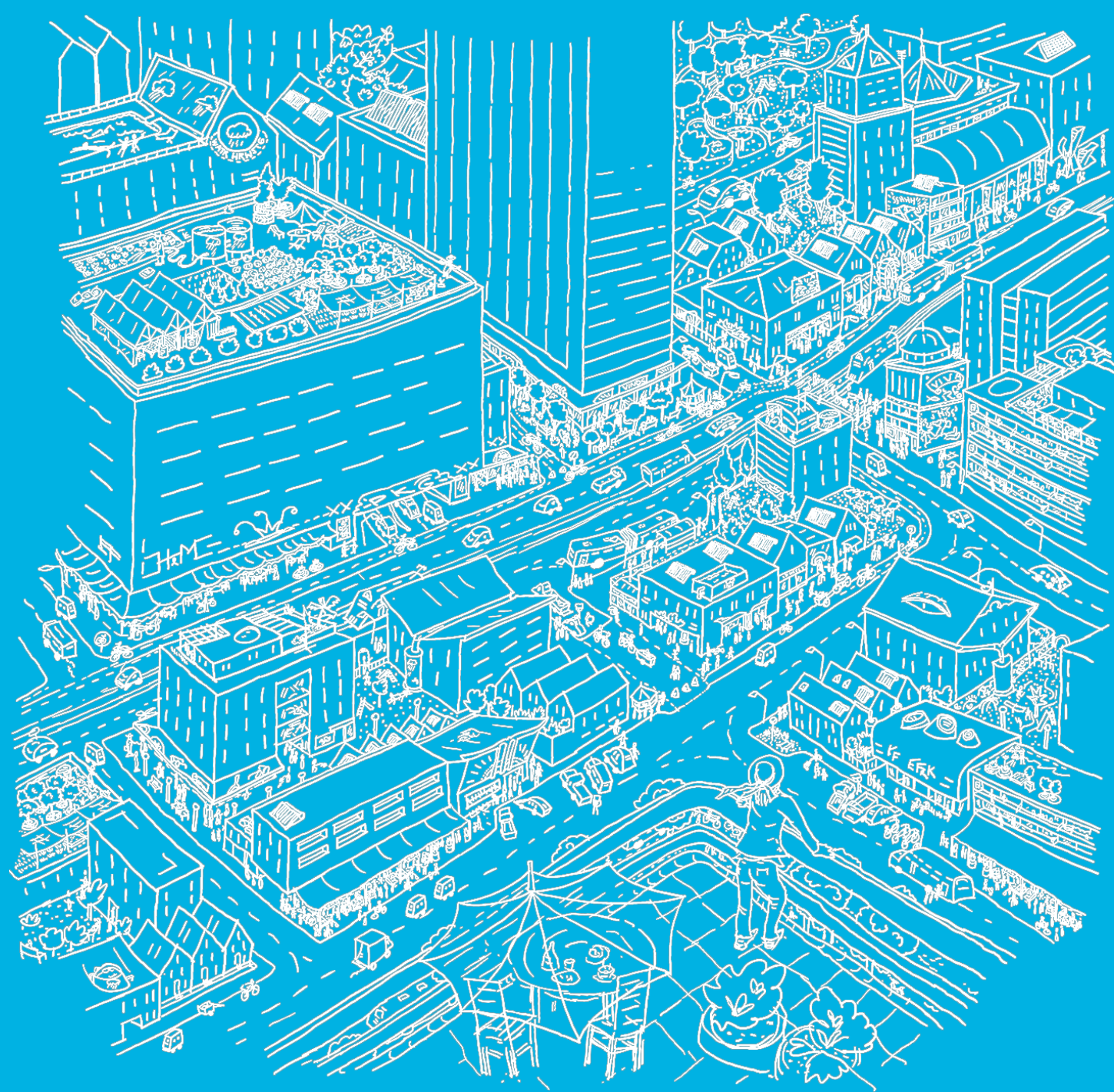
Building safer and more resilient cities through the provision of qualified technical assistance

Establishing networks & partnerships for better knowledge management and dissemination

Promoting a culture of safety and resilience through awareness raising, disaster preparedness & building back better

Reinforcing the institutional, managerial and technical capacity of DiMSUR

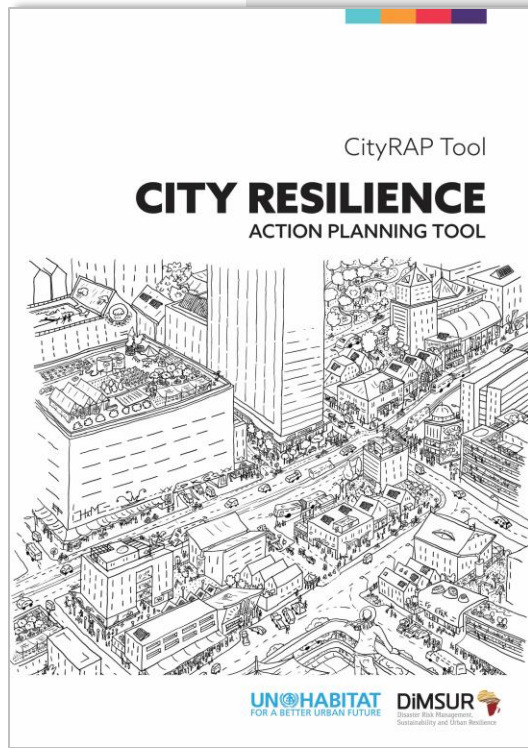
# What is CityRAP?







# CityRAP: what is it?

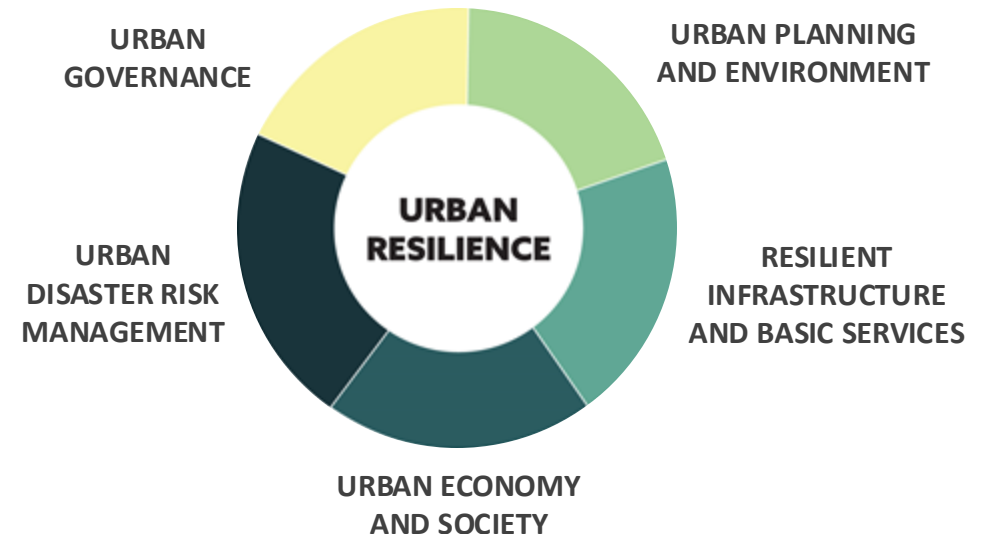


The **City Resilience Action Planning (CityRAP)** tool is a four-phase **participatory resilience planning process** that enables municipal officials and community members in small to intermediate-sized cities, or municipal districts within bigger cities (~250.000 people) in developing countries to work together to make their city safe and resilient.

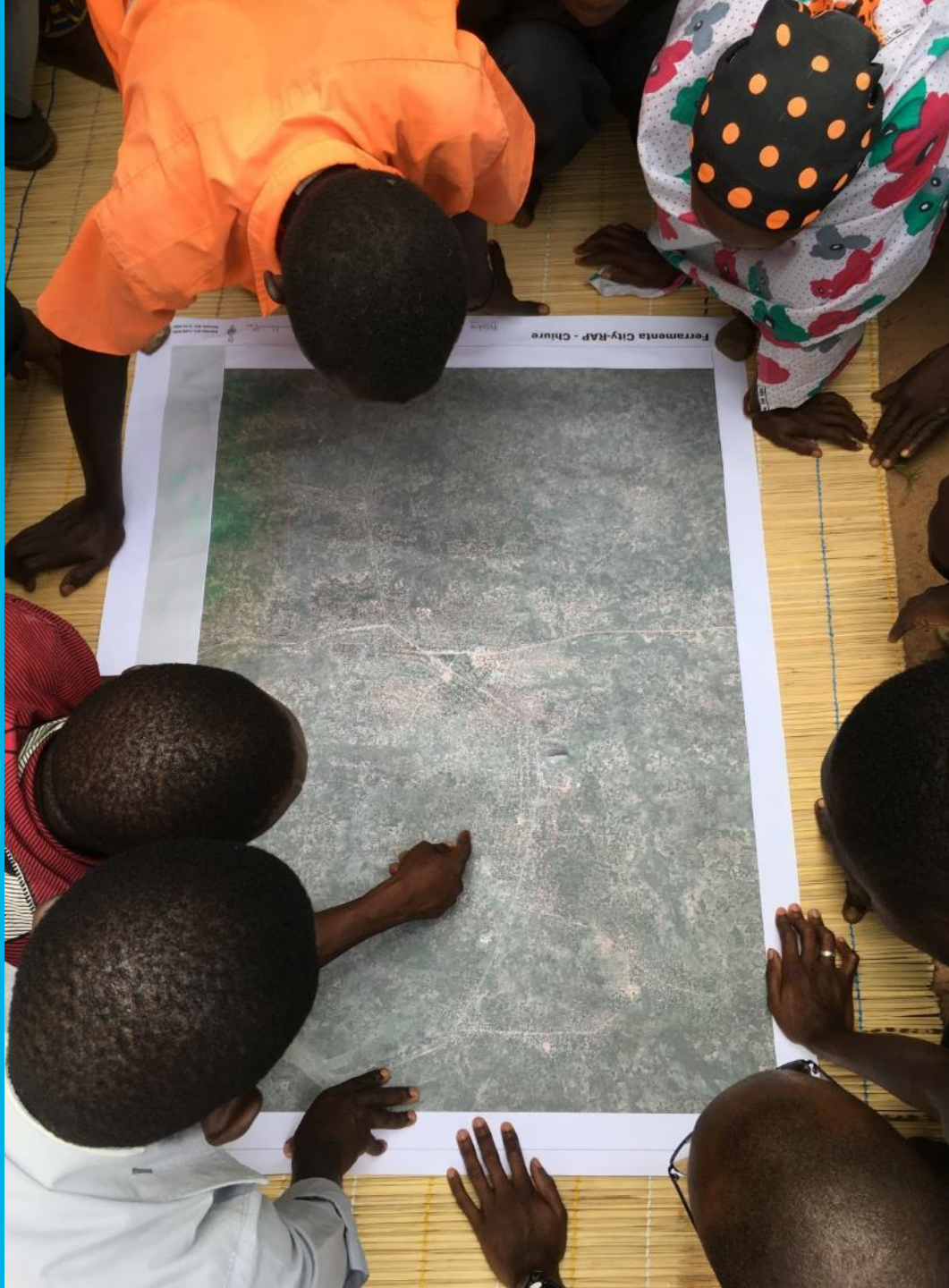
Its final product is a ***Resilience Framework for Action (RFA)*** for the city.

A resilience framework with **five inter-related pillars** is designed specifically for CityRAP as a **theoretical structure for data collection** at the city level.

This framework – which provides a solid structure for the first phases of the implementation – eventually fades out during the process.



# CityRAP methodology



- The CityRAP methodology is **flexible and easily adaptable** to different contexts and needs.
- It uses **participatory approaches** and **consensus-building techniques** to involve all concerned stakeholders and to leverage **local knowledge** with the aim of identifying the entry points to start building the city's resilience in a progressive manner leveraging **prioritization methods** and with **minimal external support**.
- The **municipality is the leader** of the process from day one thanks to a team of Municipal Focal Points who are trained throughout the process.

# CityRAP key actors



## Team of experts

2/3 people - usually from UN-Habitat - kick-off the process supporting it on-site just for specific activities while acting steadily as a remote resource.



## Municipal Focal Points

3/6 municipal staff members to be appointed in the preparatory phase. They lead the process from phase two to phase four.



## Other urban stakeholders

In each phase representatives from different urban sectors and from the community are invited to take part to the process.



**200-300 people** directly participate

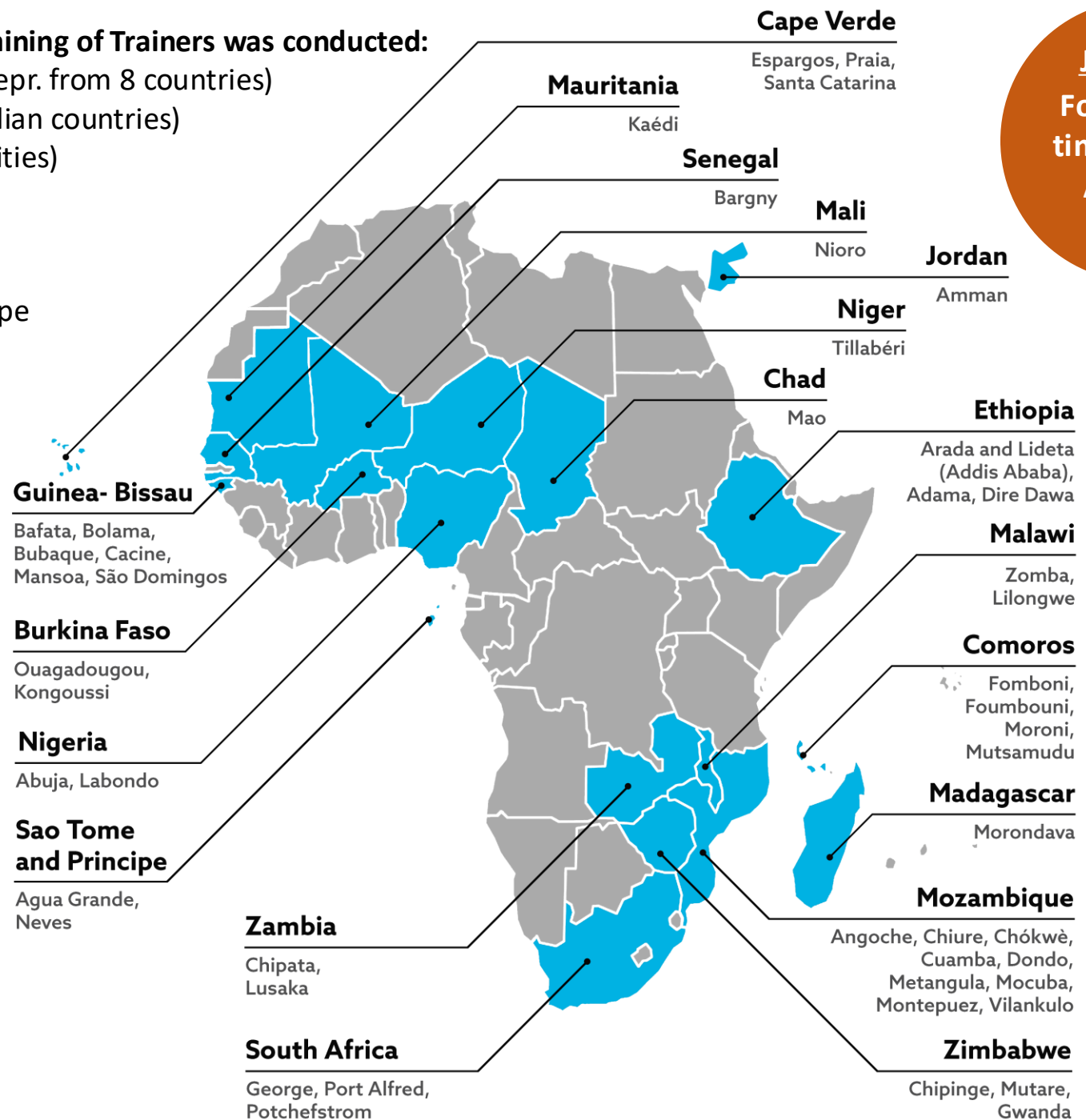
Local government, public institutions, community representatives, CSOs and NGOs, media, private sector, academia.

# CityRAP: where so far?

## Countries in which a Training of Trainers was conducted:

- Burkina Faso (with repr. from 8 countries)
- Nigéria (with 7 Sahelian countries)
- South-Africa (for 3 cities)
- Cap Verde
- Ethiopia
- Guinea-Bissau
- Sao Tomé and Príncipe

65+ cities  
in Africa  
reached



Jan 2021  
For the first  
time outside  
Africa in  
Amman



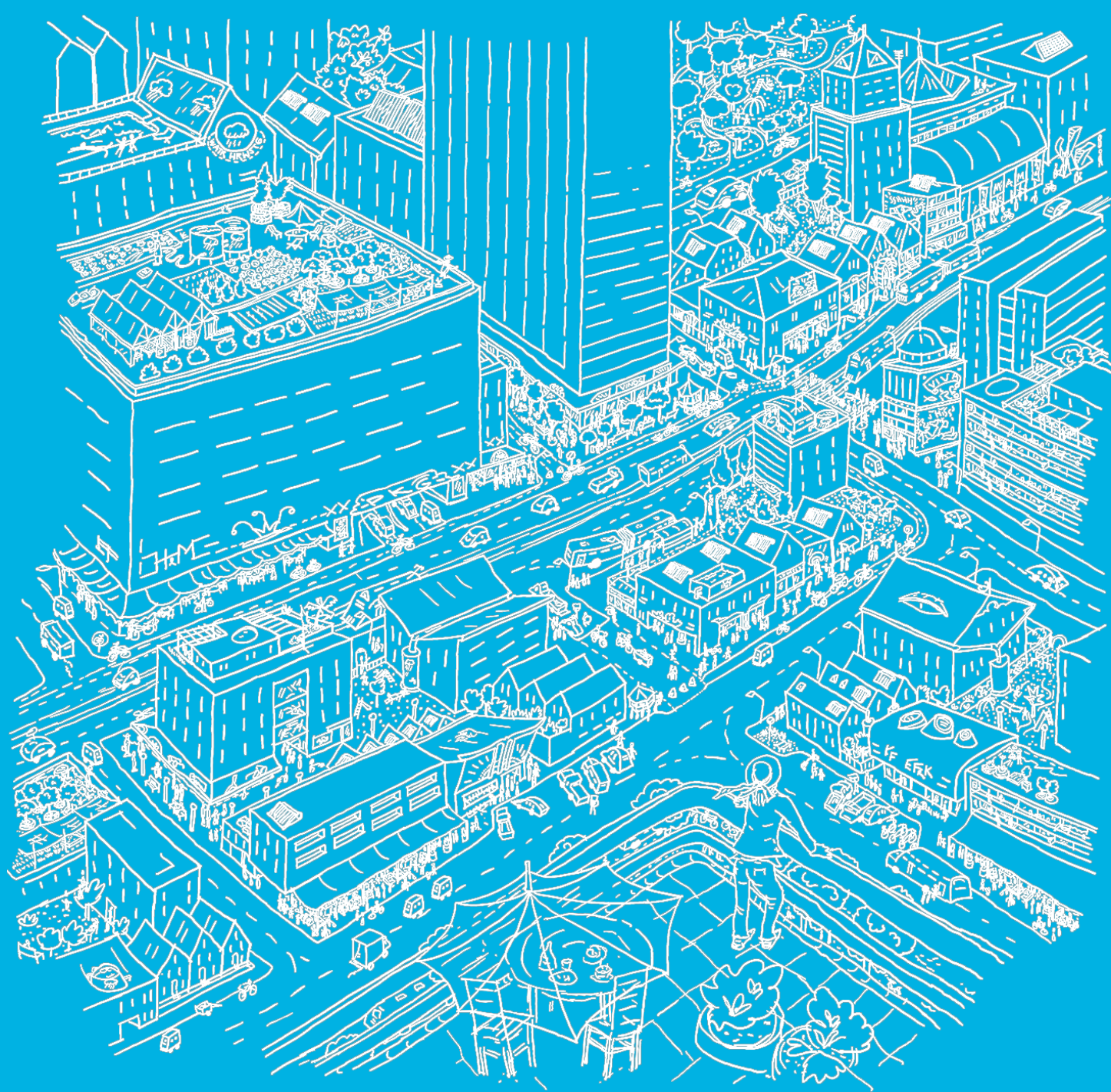
**CityRAP:  
A short  
movie**

**Now... Enjoy a short  
movie on the  
CityRAP tool !**  
**[Link here](#)**



**UN-HABITAT**

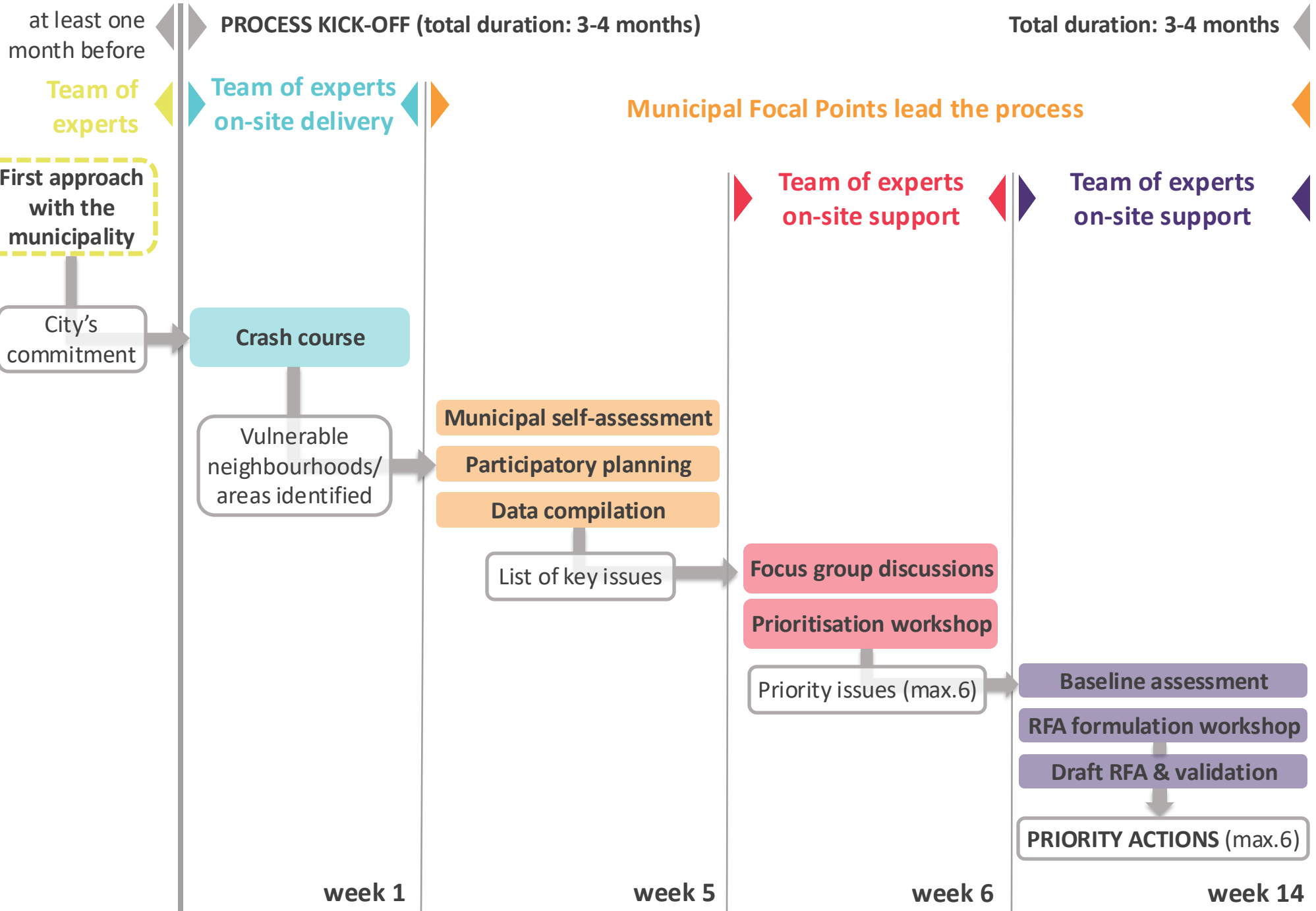
How does CityRAP work?











Preparatory phase

Phase 1

Phase 2

Phase 3

Phase 4



***The target municipality or local government is fully informed and committed to the process, with a clear understanding that the City RFA is ultimately meant to serve the city to enhance its resilience.***

Preparatory  
phase

Phase 1

Phase 2

Phase 3

Phase 4



## Main activities

- **Preparatory meeting** with the Mayor and city management
- **Selection** of Municipal Focal Points
- Completion of the **preliminary questionnaire**
- Completion of the preliminary **stakeholder analysis**



## Responsible actors

- **Team of experts:** travel to the municipality
- **Municipal Focal Points:** selected and committed



## Duration

At least one month  
before Phase 1

Preparatory phase

Phase 1

Phase 2

Phase 3

Phase 4

*Introducing municipal staff and local stakeholders to key concepts of risk and resilience and to the tool's methodology.*



Preparatory  
phase

Phase 1

Phase 2

Phase 3

Phase 4

## Objective

To reach a **common basic understanding** of urban risk and resilience concepts, focusing on demystifying their complexity

## Main activities

1. Participants are introduced to the **CityRAP methodology** and to **key concepts** related to urban risk and resilience
2. **Participatory risk mapping** of the city
3. **Municipal Focal Points are trained** to carry out Phase Two

## Main actors involved

- **Team of experts:** travel to the municipality
- **Municipal Focal Points:** support and trained
- **Other urban stakeholders:** all relevant urban stakeholders participate to the crash course

## Duration

**4-day** Crash Course +  
**1 day** training of MFPs

## Crash course: KEY CONCEPTS of urban risk and resilience

Preparatory phase

Phase 1

Phase 2

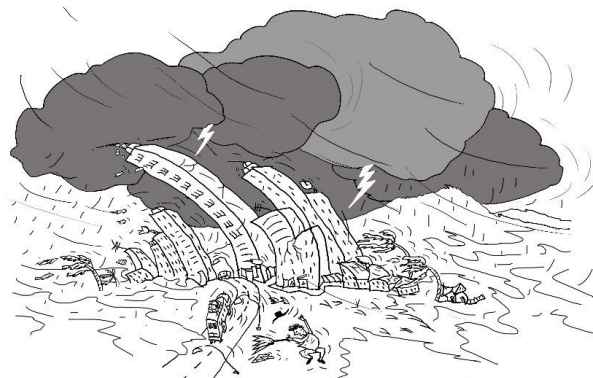
Phase 3

Phase 4

Use of a language easy to understand, although scientifically rigorous, to demystify complexity



“The ability of any urban system, with its inhabitants...



...to maintain continuity through all shocks and stresses, ...



...while positively adapting and transforming...



...toward sustainability”.

### The Change

Educational video to raise awareness on adaptation to climate change and sustainable human settlements.



Preparatory phase

Phase 1

Phase 2

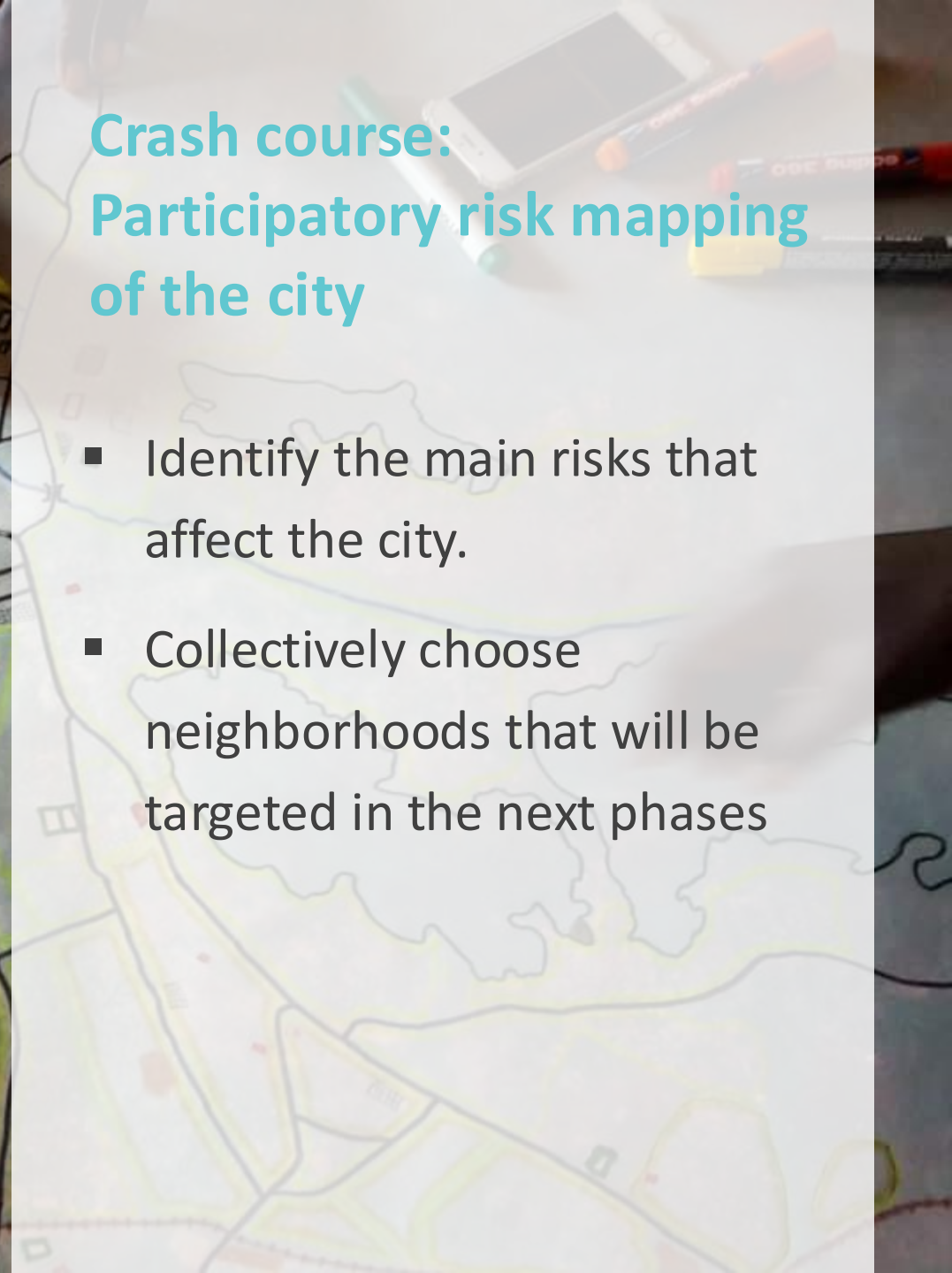
Phase 3

Phase 4



## Crash course: Participatory risk mapping of the city

- Identify the main risks that affect the city.
- Collectively choose neighborhoods that will be targeted in the next phases





Preparatory  
phase

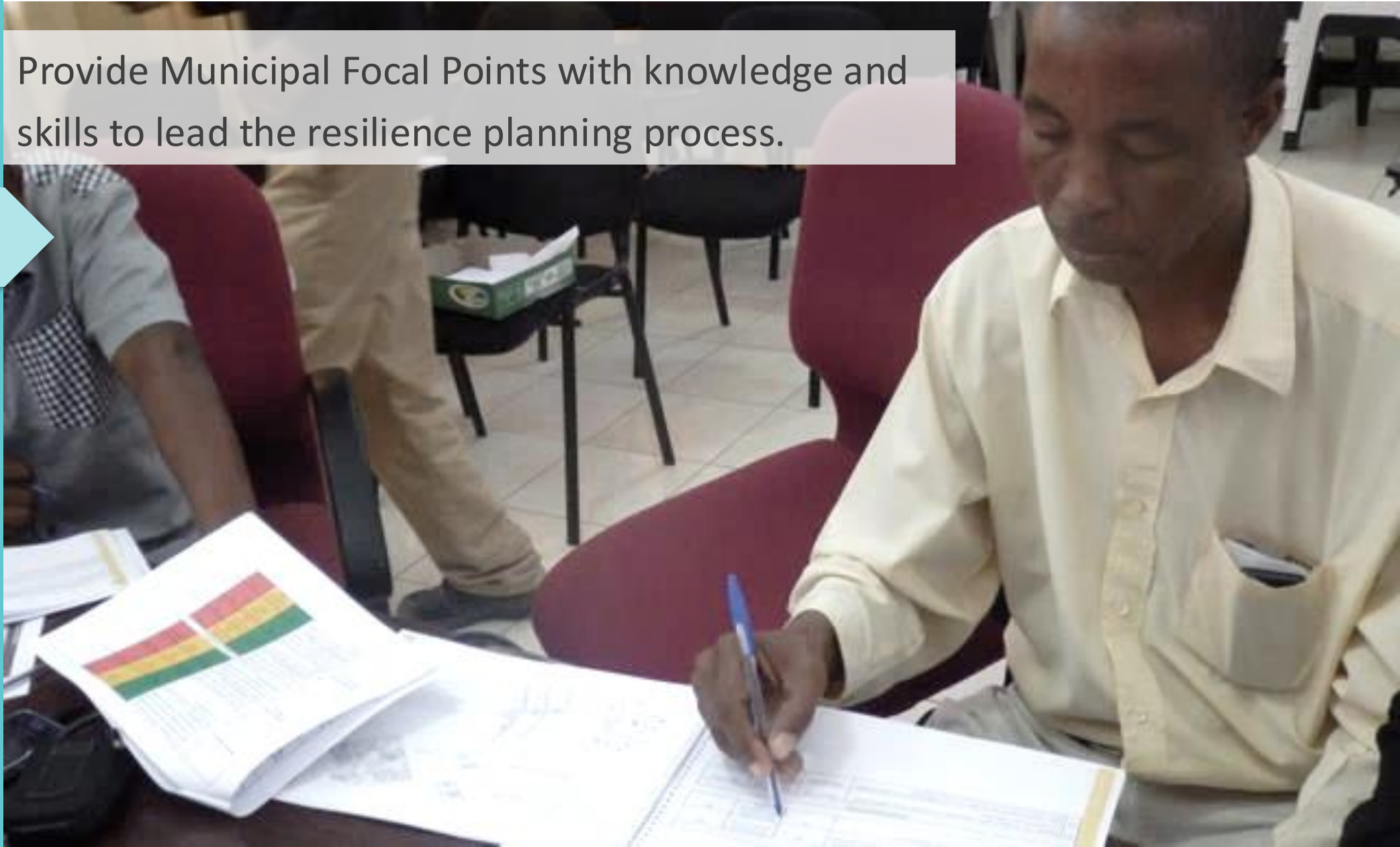
Phase 1

Phase 2

Phase 3

Phase 4

Provide Municipal Focal Points with knowledge and skills to lead the resilience planning process.



Preparatory  
phase

Phase 1

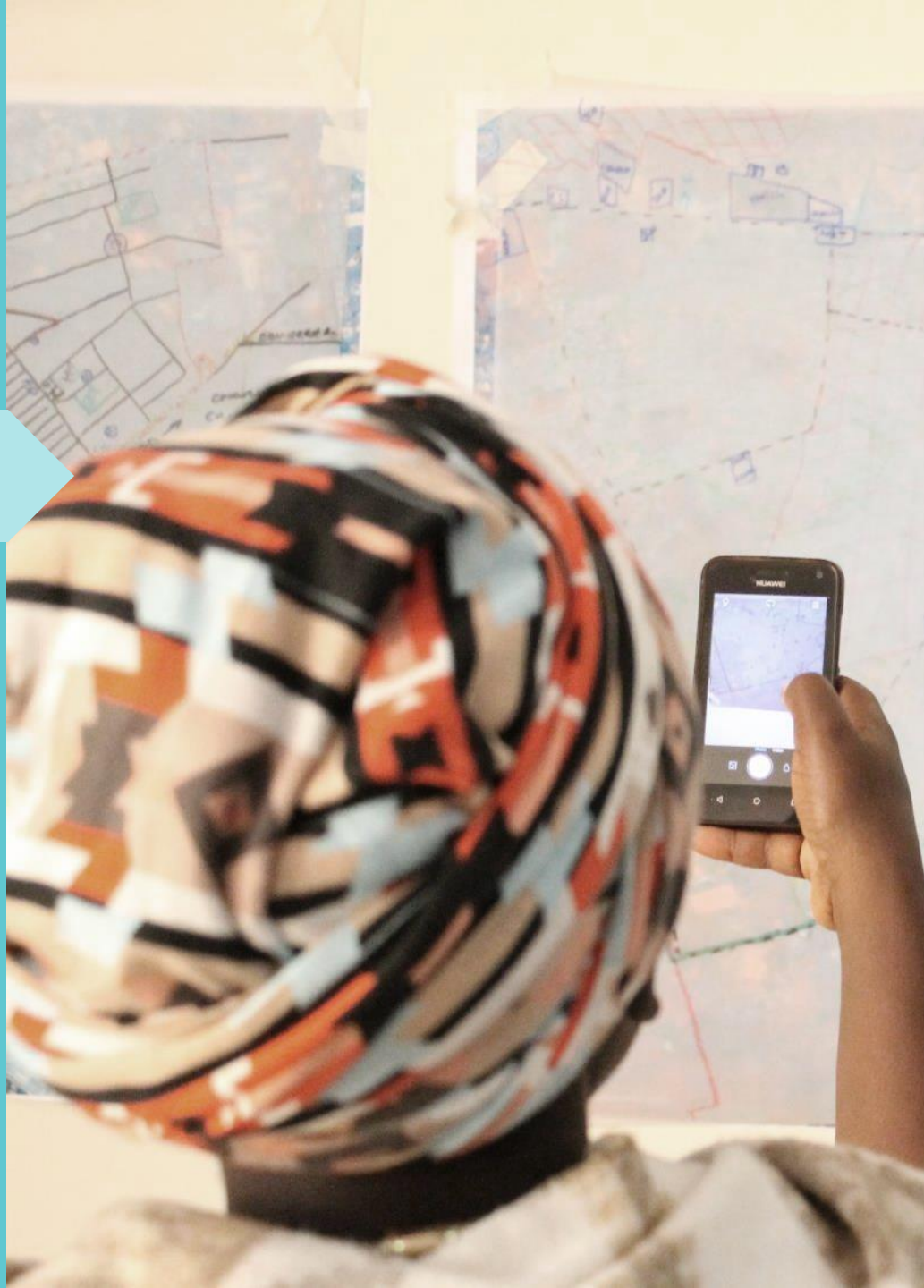
Phase 2

Phase 3

Phase 4



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## At the end of Phase 1

- Participants understand key concepts related to **urban risk and resilience**.
- The **participatory planning simulation** identifies the vulnerable neighbourhoods to be targeted in Phase 2, and prepares Focal Points to apply the same methodology at community level.
- Municipal Focal Points are trained to carry out Phase 2.

Preparatory  
phase

Phase 1

Phase 2

Phase 3

Phase 4

*Collecting data from municipal departments and at community level in vulnerable neighbourhoods.*



Preparatory  
phase

Phase 1

Phase 2

Phase 3

Phase 4



## Objective

To collect and organise data on:

- the status of the city's resilience as perceived by the different municipal departments
- the priorities of communities for strengthening the resilience of their neighbourhoods

## Main activities

1. **Municipal self-assessment**
2. **Participatory planning at the neighbourhood level**
3. **Data compilation and organisation**

## Main actors involved

- **Municipal Focal Points:** lead the process
- **Other urban stakeholders:** municipal staff and community representatives

## Duration

**3-4 weeks**

Preparatory  
phase

Phase 1

Phase 2

Phase 3

Phase 4



- Assess the state of the city's resilience through the knowledge, opinions and perceptions of municipal staff.
- Raise awareness about urban resilience.

## SNEAK PEEK

## Self-assessment questionnaire

Preparatory phase

Phase 1

Phase 2

Phase 3

Phase 4



- 75 questions divided by pillar/ theme
- 4 possible answers
- Color coding: green 4 pts., red 1 pt.
- Consensus on one answer

Name of the interviewed municipal department		Possible answers for each question. Circle one answer that has been agreed upon by the municipal staff				In case of disagreements between the consulted department staff on a specific answer, comments should be detailed here	
MUNICIPAL SECTOR: OFFICE OF THE MAYOR		<b>PILLAR 1: URBAN GOVERNANCE</b>					
THEME	N°	QUESTIONS	ANSWERS				COMMENTS
			4	3	2	1	
ORGANISATIONAL CAPACITY	1	Does your municipal department have enough staff to carry out its daily responsibility?	Yes, the staff have the required skills to carry out their daily responsibilities	The majority of the staff have the required skills	Less than half of the staff have the required skills	The department has only few skilled staff	
	2	Does your municipal department have staff with understanding or knowledge of issues related to climate change and/or risk management?	Yes, the staff do understand and have knowledge of issues related to climate change and/or risk management	Yes, the department has some staff with that kind of understanding or knowledge	Yes, the department has at least one staff with that kind of understanding or knowledge	No, nobody in our department has the staff has this kind of understanding or knowledge	

Preparatory  
phase

Phase 1

Phase 2

Phase 3

Phase 4

## Participatory planning at neighbourhood level

- Prioritisation of risk reduction and resilience building actions at neighbourhood level.
- List of potential and feasible solutions/measures.
- Use of satellite images of the specific neighbourhood to ensure participation of the communities.



## Data compilation and organization

Preparatory phase

Phase 1

Phase 2

Phase 3

Phase 4

- Filling the **Results Matrix**.
- Summarizing the comments from the municipal self-assessment.
- Harmonizing the priority issues identified at the community level.

PILLAR 1: URBAN GOVERNANCE														
THEME	N° QUESTIONS	ANSWERS				MUNICIPAL DEPARTMENTS							TOTAL	
		4	3	2	1	URBAN PLANNING	HUMAN RESOURCES	FINANCE	BASIC SERVICES	NATURAL RESOURCES	ECONOMY	CIVIL DEFENCE		
GOVERNANCE STRUCTURE	7	Do you believe that the current municipal structure allows each department to effectively carry out its work?	Yes, the current structure is good and allows each department to effectively carry out its work	The current structure requires some improvements for effective delivery	The current structure is not good enough for that purpose	No, the current structure is weak and needs major improvements	1	1	1	1	3	2	3	12
	8	How well is the municipality cooperating and coordinating with externals such as government, private sector, civil society, etc.?	The municipality has established strong cooperation and coordination mechanisms with a number of external partners and institutions	The cooperation and coordination of the municipality with externals is overall good but could be further improved	The municipality's cooperation and coordination with externals is not good enough	The municipality has poor cooperation and coordination mechanisms with externals	2	3	4	4	4	2	4	23
	9	Do you think that coordination and cooperation among the different municipal departments is efficient?	Yes, mechanisms are in place to ensure efficient coordination and cooperation among the different municipal departments	The coordination and cooperation among the departments is overall good but could be further improved	Coordination and cooperation mechanisms among the departments is not good enough	The municipality has poor coordination and cooperation mechanisms among its departments	1	3	4	2	4	1	4	19
Average for Governance Structure													18	



Preparatory  
phase

Phase 1

Phase 2

Phase 3

Phase 4



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## At the end of Phase 2

- All the **municipal departments** are engaged and assessed.
- **Communities** are actively involved in the process.
- The collected **information is harmonised** and ready for the analysis in Phase 3.

Preparatory phase

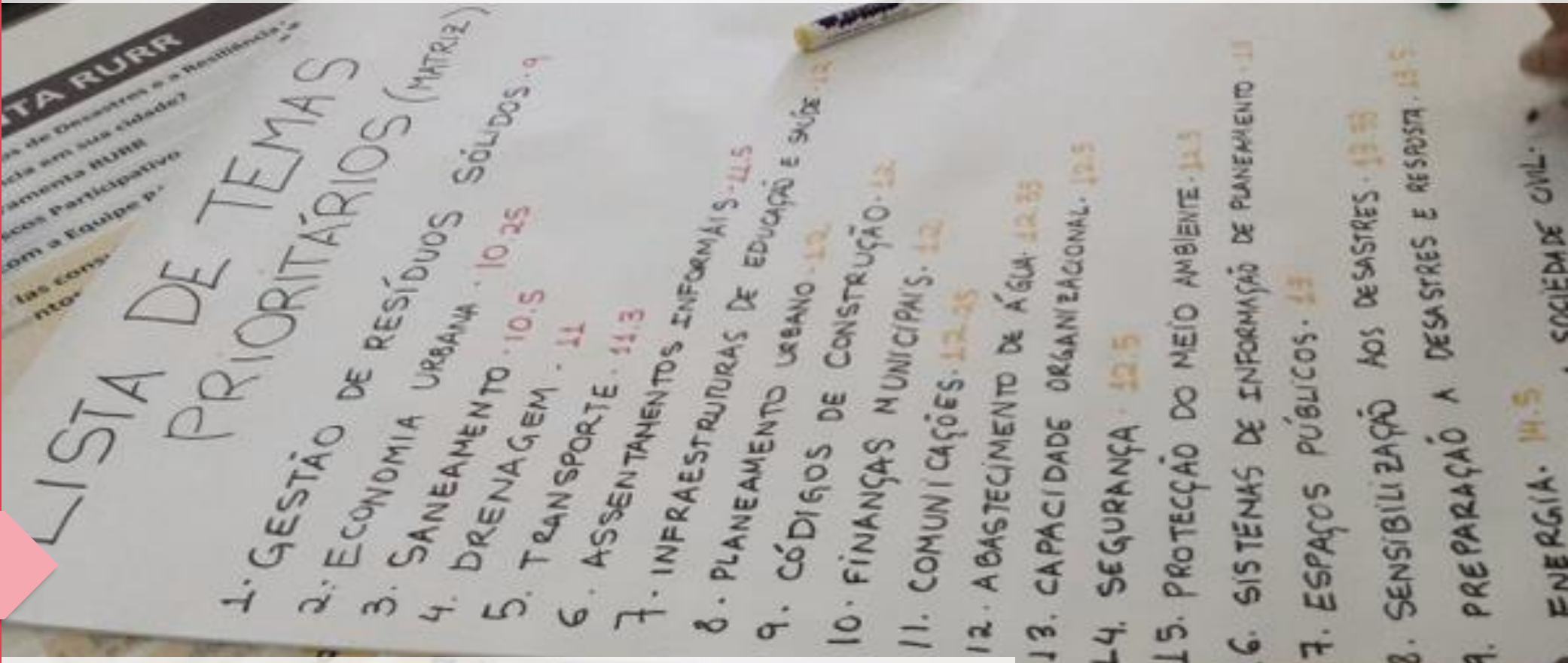
Phase 1

Phase 2

Phase 3

Phase 4

*Analysis of the collected data prioritising the issues that constitute entry-points to progressively building the city's resilience.*



Preparatory  
phase

Phase 1

Phase 2

Phase 3

Phase 4

## Objective

- **Analyse and discuss the data** collected during Phase Two
- **Identify and select the priority issues** to build the city's resilience

## Main activities

1. **Focus group discussions** for each resilience pillar with key and sectorial stakeholders.
2. **Prioritization workshop** to discuss and decide upon priorities to build urban resilience.
3. **Training session** with Municipal Focal Points for Phase Four.

## Main actors involved

- **Municipal Focal Points:** lead and trained
- **Team of experts:** travel to the municipality
- **Other urban stakeholders:** participate to the focus group discussions (max. 15) and the prioritization workshop (all)

## Duration

**5 days**

Preparatory  
phase

Phase 1

Phase 2

Phase 3

Phase 4



## Focus group discussion for each resilience pillar

- Thematic focus groups for each pillar of resilience analyse the data collected previously and discuss the main shortcomings and priorities.
- Representatives from municipality, community, NGOs, CSOs and other relevant stakeholders

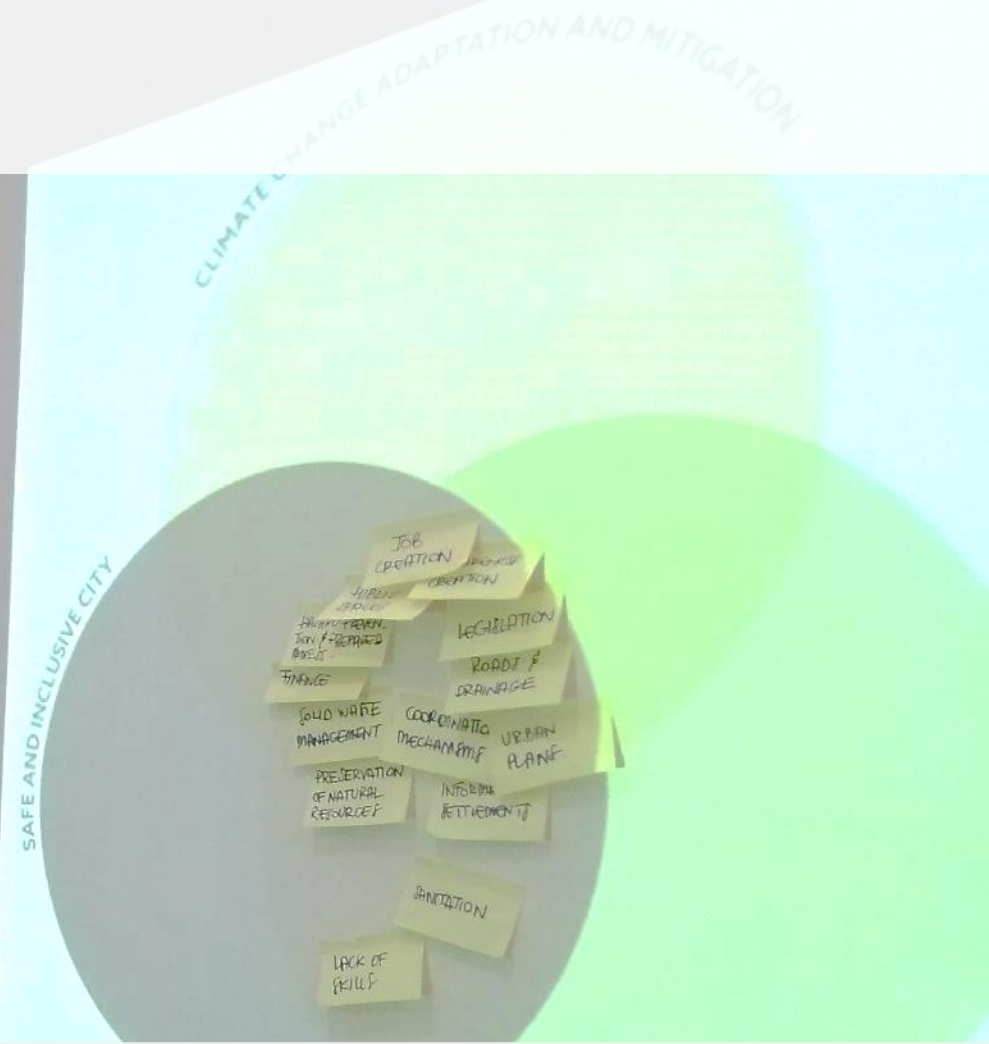
Preparatory phase

Phase 1

Phase 2

Phase 3

Phase 4



Key local stakeholders convene to discuss and decide upon priorities to build urban resilience based on the results of municipal self-assessment, community consultations and focus group discussions.

Preparatory phase

Phase 1

Phase 2

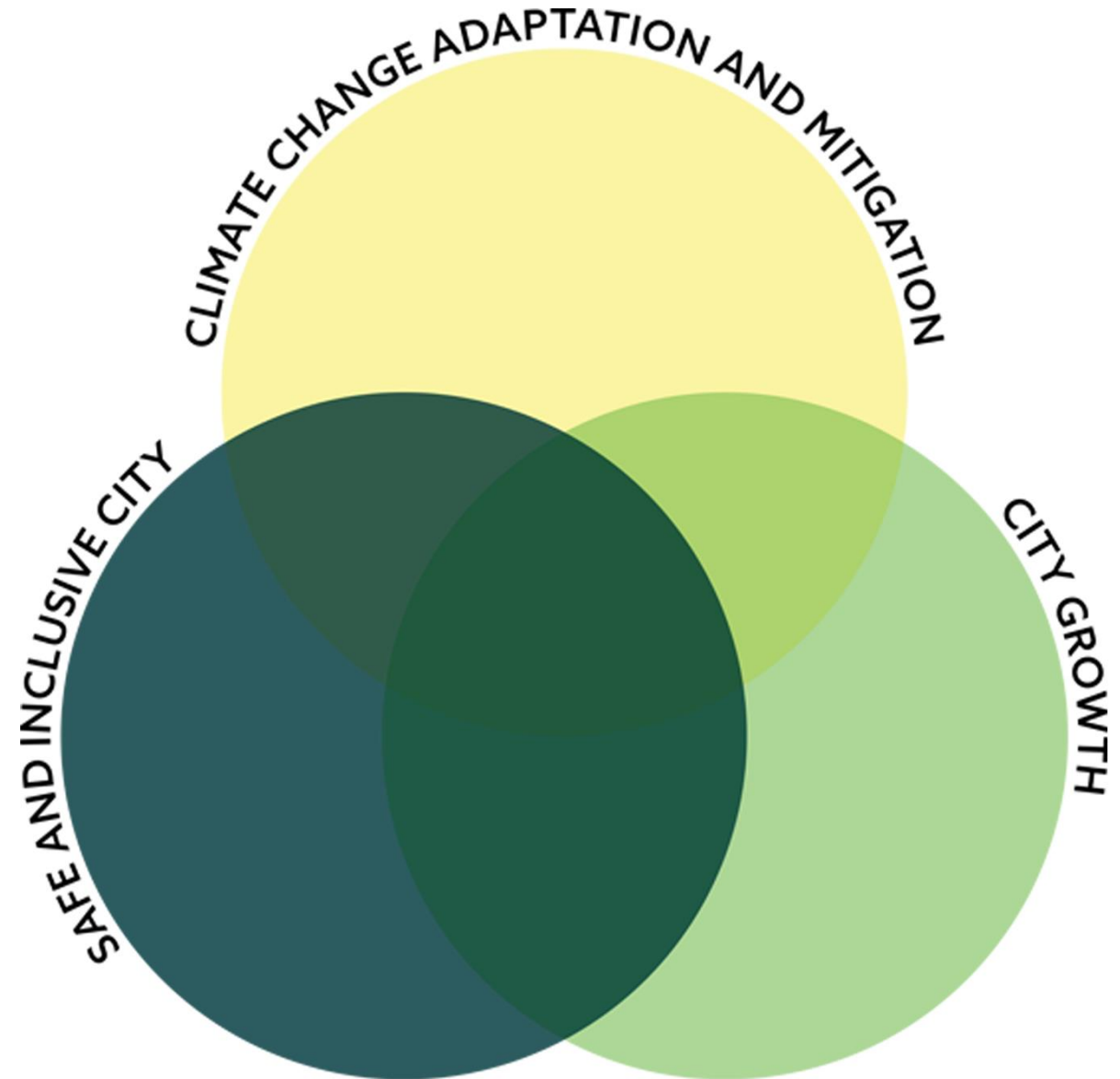
Phase 3

Phase 4

## The resilience diagramme

**Filtering** the common priorities identified during the focus group discussions through three **cross-cutting issues of urban resilience**.

From now on, the process could also be channeled through just one of these three lenses, resulting in a more specific final document.



**SNEAK  
PEEK**

## PRIORITY ISSUES and structure of the City RFA

Preparatory phase

Phase 1

Phase 2

Phase 3

Phase 4

Priority Issues to be addressed by the RFA

### COMPONENTS OF THE RFA

POLICIES & LEGISLATION

URBAN PLANS

INSTITUTIONAL SET-UP

FINANCE

INTERVENTIONS

DRAINAGE

INFORMAL SETTLEMENTS

SOLID WASTE MANAGEMENT

JOB CREATION

PUBLIC SPACES

**To be filled in  
Phase Four**

## The funnelling process to prioritise and plan

The resilience framework with five inter-related pillars is specific to CityRAP does not intend to be fully comprehensive or to replace other existing frameworks in literature. It defines a theoretical structure to collect data at city level related to resilience and eventually fades out throughout the process.

Preparatory phase

Phase 1

Phase 2

Phase 3

Phase 4

1

**Crash course:** Get to know the 5 pillars of urban resilience

2

**Data collection:** Municipal self-assessment around the 5 pillars

3

**Focus Group Discussions:** One for each resilience pillar



4

The resilience pillars structure is absent in phase 4



Preparatory  
phase

Phase 1

Phase 2

Phase 3

Phase 4



## At the end of Phase 3

- The most pressing issues are **prioritised in a consensual manner** to define where to start in progressively building the city's resilience and why.
- Maximum **six priority issues** are selected as entry points.
- Municipal Focal Points are trained to carry out Phase Four.

Preparatory phase

Phase 1

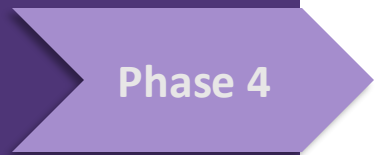
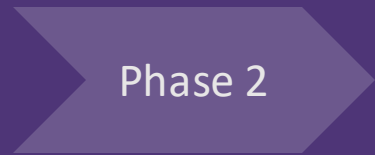
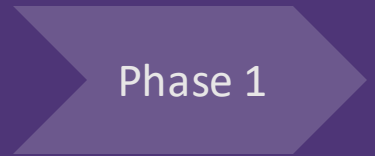
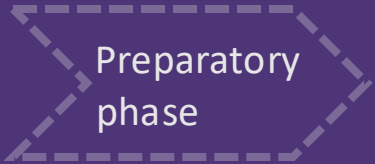
Phase 2

Phase 3

Phase 4



*Final steps towards the drafting of the City Resilience Framework for Action (RFA)*



## Objective

Development of the **City Resilience Framework for Action (RFA)**

## Main activities

1. **Baseline assessment** of the identified priority issues and definition of priority actions
2. **RFA formulation workshop** to validate priority actions and define activities for their implementation
3. **Drafting and validation** of the city RFA

## Main actors involved

- **Municipal Focal Points:** lead and trained
- **Team of experts:** remote and on-site support (travel to the municipality for the RFA formulation workshop)
- **Other urban stakeholders:** all relevant urban stakeholders participate to the RFA formulation workshop

## Duration

**7-8 weeks**

## Filling the structure of the City RFA

MFPs collect information, and consult experts and local stakeholders, to assess the **state of the priority issues** in relation to each RFA component and together assign a score from 1 to 3 using a table developed for the purpose.

Preparatory phase

Phase 1

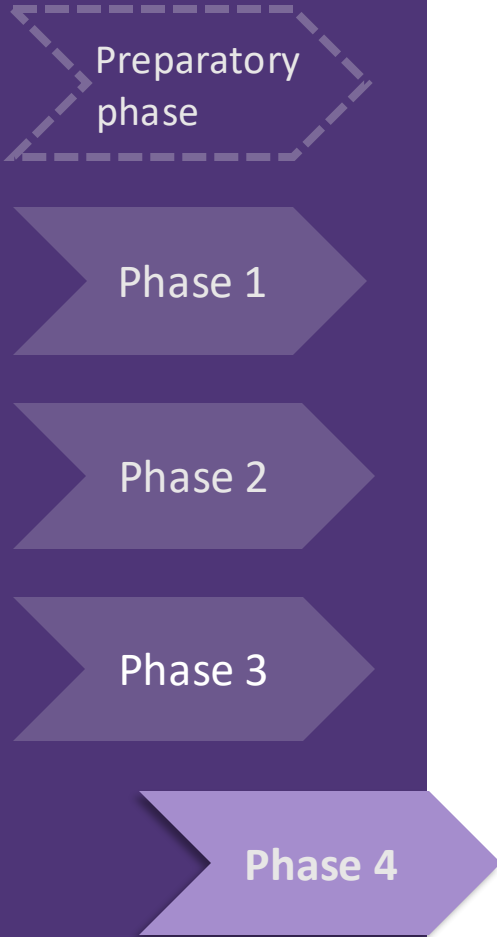
Phase 2

Phase 3

Phase 4

PRIORITY ISSUES	RFA COMPONENTS				
	POLICIES AND LEGISLATION	URBAN PLANS	INSTITUTIONAL SET-UP	FINANCE	INTERVENTIONS
ROADS AND DRAINAGE	1	1	2	1	1
SOLID WASTE	2	1	2	1	2
HEALTH AND EDUCATION FACILITIES	3	3	2	2	2
EARLY WARNING AND DISASTER RESPONSE	2	1	1	1	2
PROTECTION OF NATURAL RESOURCES	2	1	2	1	1
WATER AND SANITATION	2	1	2	3	2

## Selection of the PRIORITY ACTIONS



PRIORITY ISSUES	RFA COMPONENTS					
	POLICIES AND LEGISLATION	URBAN PLANS	INSTITUTIONAL SET-UP	FINANCE	INTERVENTIONS	
ROADS AND DRAINAGE	1	1	2	1	1	PRIORITY ACTION 3
SOLID WASTE	2	1	2	1	2	
HEALTH AND EDUCATION FACILITIES	3	3	2	2	2	
EARLY WARNING SYSTEMS	2	1	1	1	2	PRIORITY ACTION 4
PROTECTION OF NATURAL RESOURCES	2	1	2	1	1	PRIORITY ACTION 5
WATER AND SANITATION	2	1	2	3	2	

▼ PRIORITY ACTION 1 (under URBAN PLANS)  
▼ PRIORITY ACTION 2 (under FINANCE)

- The baseline assessment table can be read both horizontally, following the priority issues, and vertically, following the RFA components.
- Based on the scores, **maximum six priority actions** are selected.

Preparatory  
phase

Phase 1

Phase 2

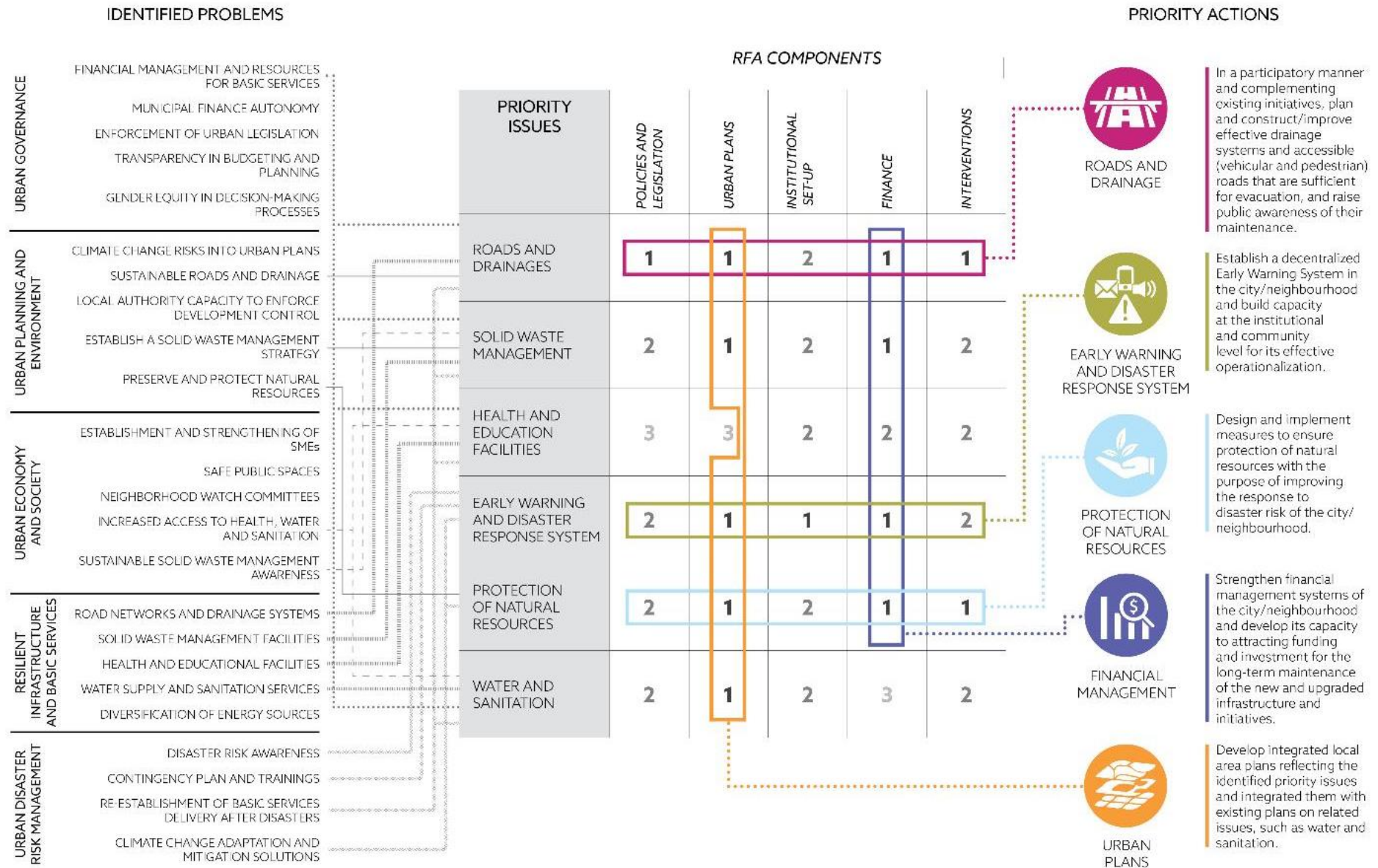
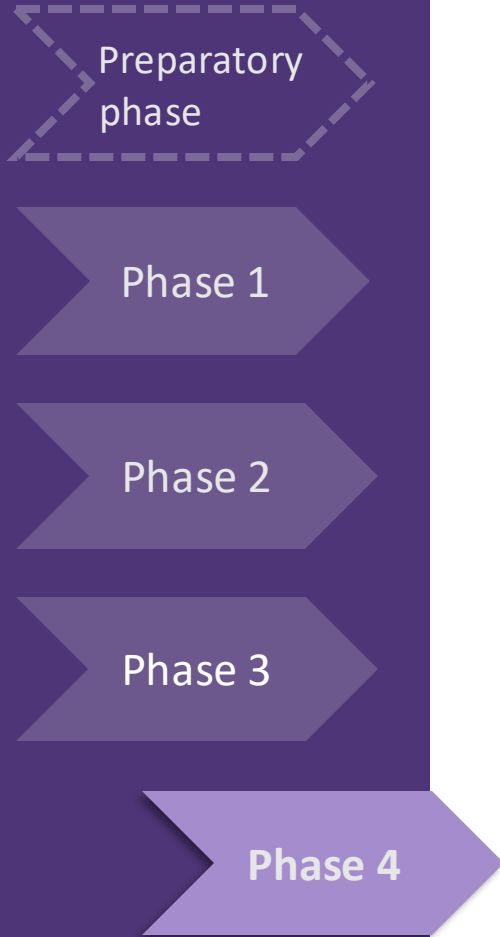
Phase 3

Phase 4



## RFA formulation workshop

- **Priority actions** are reviewed and validated in plenary.
- These are broken down into **activities** assigning one **responsible office/entity** to each through group activities.
- **Milestones** are identified to structure the RFA in the short (0-2 years), medium (3-5) and long (6-10) term.



## How does a City RFA look like?

The City Resilience Framework for Action (RFA) targets the city officials, local and central government, potential donors. Generally, it comprises:

- **Introduction/Background**
- **Rapid city risk profile**, using the preliminary questionnaire and the updated city risk map
- **The CityRAP Tool process**, which includes details of the different implementation stages
- **Overview of the city RFA** (including priority actions and activities)
- **Priority actions sheets** (listing activities and responsible entities)
- **Concept notes** of bankable projects
- **Monitoring and evaluation** framework
- **Conclusions** and way forward

Preparatory phase

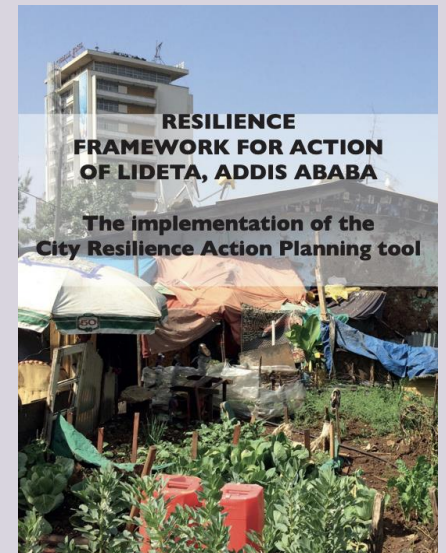
Phase 1

Phase 2

Phase 3

Phase 4

Let's browse an example:



[Lideta RFA](#)



Preparatory  
phase

Phase 1

Phase 2

Phase 3

Phase 4

## Monitoring and evaluation framework

- An external/independent body/consultant should be responsible for monitoring the progress made in implementing the City RFA **every two years.**
- The **RFA is updated** based on the recommendations derived from the 2-years evaluation report.

Preparatory  
phase

Phase 1

Phase 2

Phase 3

Phase 4



- Half-day workshop to submit the City RFA to relevant authorities, potential donors, key partners and media.
- The validated and edited City RFA should be formally endorsed by the municipal authorities according to their own procedures.
- Roadmap for dissemination, financing and implementation.

Preparatory  
phase

Phase 1

Phase 2

Phase 3

Phase 4



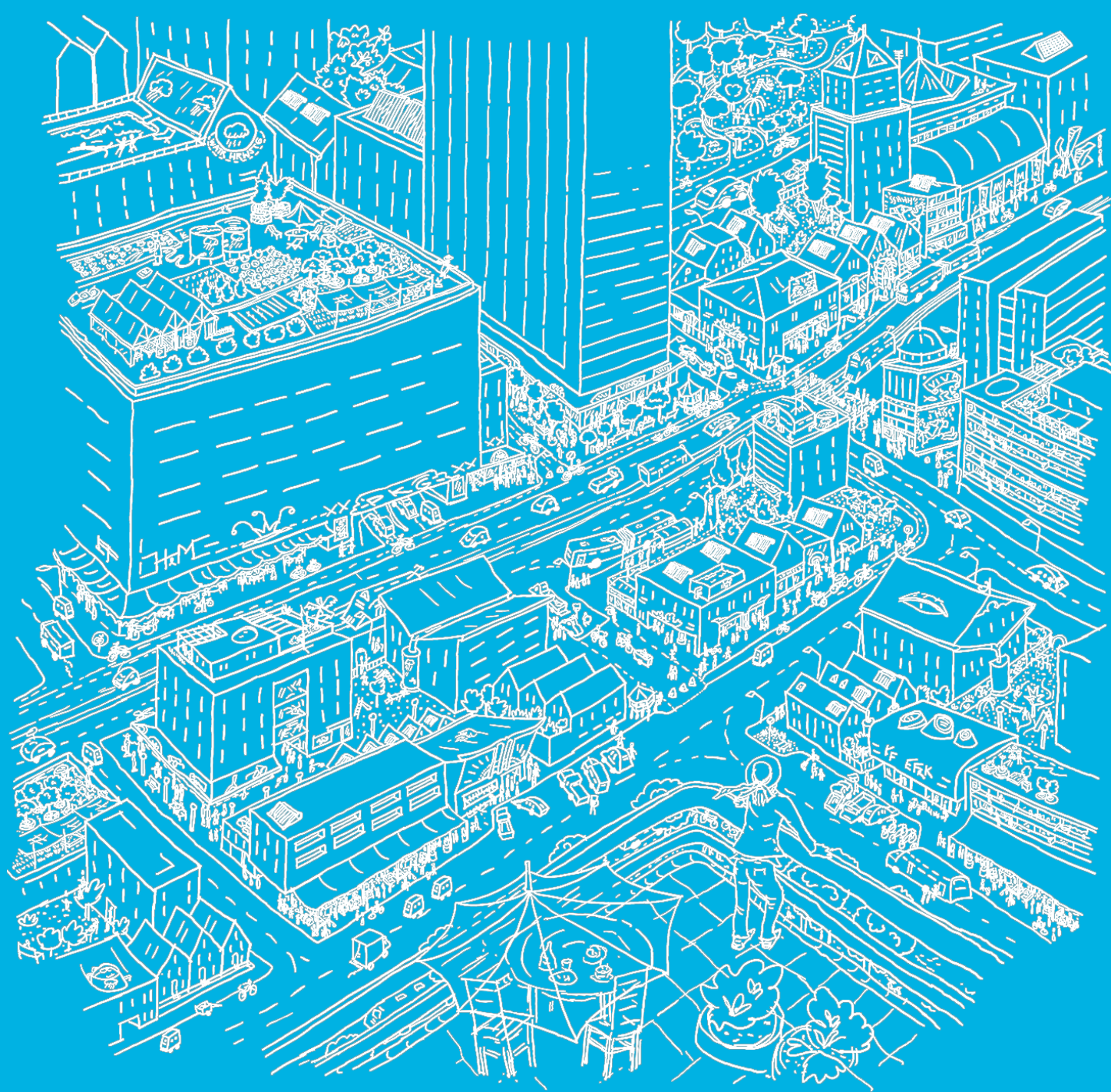
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## At the end of Phase 4

- Maximum six **priority actions** are selected and validated.
- The **final city RFA document** is completed, validated, endorsed and disseminated.

Where did we start?





# Key challenges for building resilience: **CityRAP** response

## 1. Lack of **technical capacity** and experience

- Transfer **skills and tools** to municipal technicians (trainings, on-the-job exercises and group activities)

## 2. Lack of **data and information**

- Leverage **local knowledge** and information to kickstart processes
- Identify **key gaps** for future action through the RFA

## 3. Lack of **financial resources**

- RFA can be a powerful tool for **mobilising and channelling resources**



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# A success story: The “Building Urban Climate Resilience in South-Eastern Africa” project



Click the link for the video [here...](#)



**Thanks for your attention**  
**QUESTIONS?**



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