



# City-wide Risk Assessment and tools

A toolkit to design and operationalise participatory urban community resilience programmes

**November 2025**

Part 1 Urban Community Resilience

**Part 2 City Wide Risk Assessment**

Part 3 Coalition Building

Part 4 Co-designing Solutions

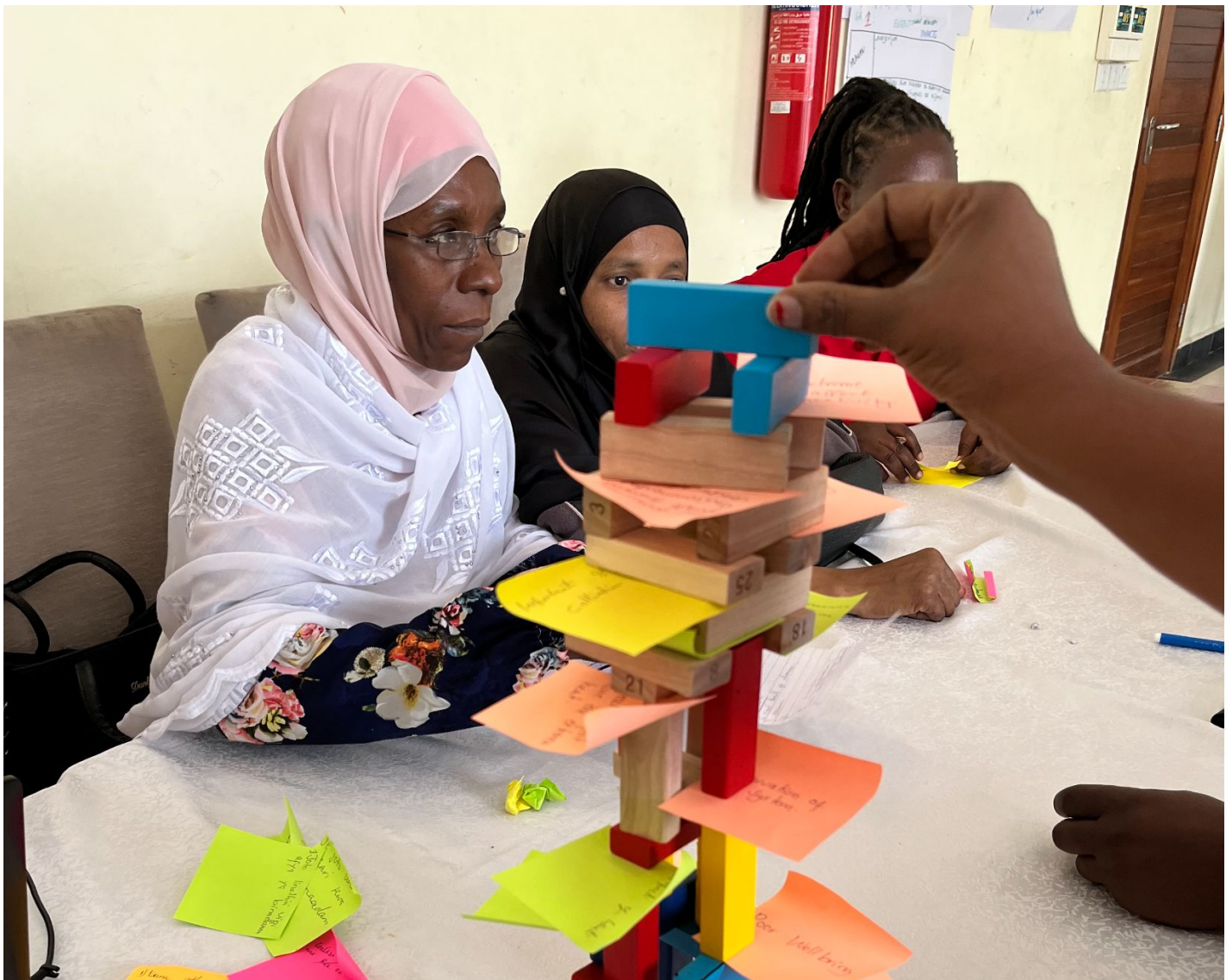


# City-wide Risk Assessment and Tools

The IFRC and our member National Societies are helping urban communities worldwide be more prepared for, and resilient to, increasing and changing hazards particularly in coastal cities of the developing countries.

**Read more  
about IFRC  
urban  
resolution [here](#)**

Working effectively in urban contexts requires an intentional focus on how National Societies and their partners can get better at understanding and navigating the complexities of urban environments, leveraging their strengths.



IFRC has developed and tested a process in cooperation with the Red Cross and Red Crescent National Societies of Bangladesh, Indonesia, Honduras, Tanzania and Vanuatu in more than 12 cities over the period 2015-2025. The learning from this experience which is depicted in the graphic below aims to inspire the National Societies, cities and communities to design their own journey.

**This tool is Part 2 of of the Urban Community Resilience Toolkit which includes following parts**

1. Understanding what the Urban resilience programming process entails [add link](#)).
2. Engaging with existing city actors and stakeholders with varied mandate, skills and knowledge. [\(add link\)](#).
3. **Carrying out city -wide risk assessment (CWRA) to identify and prioritize risks at city scale and identify target communities**  
Engaging with target communities and applying community-based tools and approaches (EVCA). [\(add link\)](#).
4. Co-designing solutions to address the priority risks identified through the above processes [\(add link\)](#).



## Carry out city-wide risk assessment (CWRA)

When you have a set of interested stakeholders to join the coalition, you can start planning for the city-wide risk assessment process.

The main deliverables of the CWRA process are:

- I. CWRA multi-stakeholder workshop(s) to identify priority risks and to create buy-in and align the resilience pathways with your coalition members.
- II. The CWRA report which incorporates secondary and primary data collection to identify target communities and inform the solution design phase.

The CWRA process should incorporate collecting and analysing secondary data -with support from the academic institutions and experts in your city- and in some cases results of the EVCA that you might have already completed. If you have already done community level risk and vulnerability assessments, you can incorporate these into the CWRA process.

However, you should remember that CWRA process should be carried out with the city coalition members. You should seek to achieve a consensus among the coalition members on which hazards/threats and communities (geographical or non-geographical- to target.

The full assessment process will probably take two to four months. At the end, you will not have done everything or know everything, but you will know enough to pick entry points to build the resilience of vulnerable communities in your city.

Explore sample  
CWRA reports  
[here](#).

### I. CWRA multi-stakeholder city coalition workshop (s)

Depending on the complexity of the challenges faced by the city as well as the scale of your ambitions for the impact you want to create, you may need to have multiple workshops. The workshop set up and activities given here are designed to be fully participatory. Plan ahead to involve coalition members, academia or any other relevant experts in designing and delivering the sessions.

The coalition does not have to be fully committed to complete the workshop; rather it is aimed to help you in the process of forming the city coalition. As you implement the tools, the places where you have gaps in your information and knowledge will help identify who else needs to be in the coalition and what stakeholders and experts need to be a part of the resilience-building process. If you add additional coalition members part-way through your work, remember that the resilience measurement process does not need to be restarted; you can simply review with them what you have done so far and then keep going.

A facilitator may be required to implement this toolkit to make the process move more smoothly. The facilitator does not need to be a professional facilitator hired externally; rather, she/he can be someone from your organization or one of the coalition organizations familiar with the concepts presented in this toolkit.

You could also use the process to nurture facilitation skills in your organization and coalition by assigning different members of the coalition to facilitate different parts of the toolkit.

Before the workshop, the task force should do the basic information collection to enable stimulating and relevant discussions during the workshop. As an example, if your city has already done risk mapping, bring those risk maps into the Mapping Shocks and Stresses session and use them as a starting point.

## Tips for facilitation

1. Make sure the participants are relaxed and feel free to share their insights, interact and have fun. We want to bring out the best ideas from everyone, so trust has to be built right from the beginning.
2. Make adjustments in the agenda and the group exercises to fit into local context, level of knowledge of participants.
3. Avoid presentations and “lecturing”. As much as possible make each session interactive. If needed ask the local organisation to make a presentation on technical subjects because they will know best about their context.
4. If possible, arrange a “workspace” with 2-3 tables for participants do their regular work, check emails etc. if they absolutely have to. Let them know about this opportunity and kindly ask them refrain from using their phones of laptops during the sessions. This will help avoiding distractions.
5. If you use remote presentation or participation, make sure the audio in the room is set up properly so that everyone can hear and speak.
6. Design the group session to build on each other and lead to a result (resilience actions).
7. Prepare flipcharts with the graphs shown in the activity sheets written on them ahead of each group work.
8. Always take pictures of the product of the group works and activities. If possible, video would be good to capture the dynamics of the workshop.
9. Prepare and share a workshop report with the participants.





## Sessions for the CWRA workshop (s)

It is recommended to plan for a three-day CWRA workshop. If needed, you can organize it on weekends, in the evenings on multiple days if your coalition members are not able to attend in three consecutive days. The important part is to complete the tasks as much as possible in a participatory way to ensure ownership and commitment to take action by the coalition members.

You can find a sample agenda and detailed descriptions of recommended sessions and group exercises for the CWRA process workshops in the following section. Choose the sessions that fits into your context, adjust the duration and add breaks as needed. Some of the sessions can be repeated in different workshops and as needed, for instance if the composition of the coalition changes or there is a delay in the process.

Choose ice breakers/games/activities that are appropriate for the context.

Explore other innovative engagement activities [here](#)

## CWRA to identify target communities

The city-wide risk assessment process should be reinforced through collecting and analyzing secondary data related to top shocks and priorities identified during the CWRA workshops together with the coalition members. If the National Society has the in-house technical expertise, this can be done internally. However, in many cases, the National Societies obtain external technical assistance in the form of hiring consultants or in-kind contributions from academia or other organizations.



The purpose of the CWRA report is two-fold:

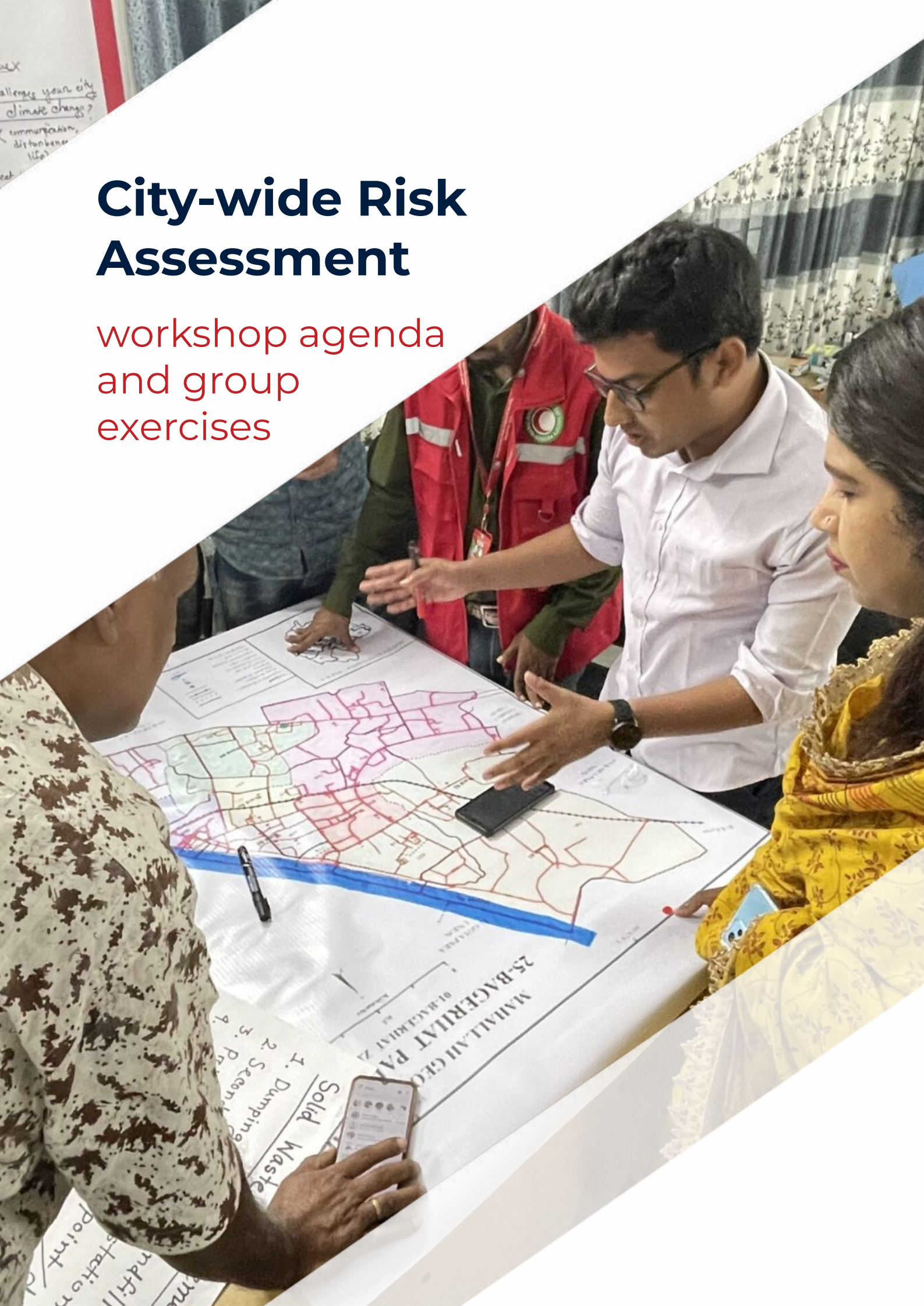
1. Compile and analyze secondary data and information on the city regarding the city systems, hazards, demographics and climate policy landscape.
2. Synthesize the findings of above and the outputs of the CWRA workshops to identify the target communities and/or neighborhoods.

A template scope of work for CWRA report is [here](#).



# City-wide Risk Assessment

workshop agenda  
and group  
exercises





# Recommended sessions and group exercises for the CWRA Workshops

Choose the sessions that fits into your context, adjust the duration and add breaks as needed. Some of the sessions can be repeated in different workshops and as needed for instance if the composition of the coalition changes or there is a delay in the process.

Choose ice breakers/games/activities that are appropriate for the context. Make sure that the results will encourage participants from different organizations to sit on the same table ensuring good mix.

## Agenda

Time	Session	Format	Description and notes
	Setting the scene		Ensure the room has tables to enable group work. Find creative ways <b>to form the groups with a good mixture of participants from different organizations and backgrounds.</b>
10'	Workshop purpose agenda	Facilitator	Write daily agenda on a flipchart each day and go over it in the morning and at the end to see if the agenda is completed.
30'	Building the foundation: Key Concepts	Presentation Interactive	The objective is to go over the basics of urban risk and climate change and key concepts e.g. adaptation, mitigation, heat urban, city facts etc. If needed invite external experts to cover this session.  RECOMMENDED: You can design the session as TRUE or FALSE by introducing set of statements and asking the participants if they think it is true or false. Ask one person from the groups who answered true or false to explain why they answered that way. It creates a group dynamic right from the start.
20'	How well we know our city?	Interactive	This will need pre-workshop preparation. See the description for group exercise #1 <a href="#">(link below)</a> .
40'	What is happening in our city?	Interactive	This activity is to identify the positive and negative trends the participants observe in the last 20 years in the city. See the description for group exercise #2 <a href="#">(link below)</a> .
15'	Systems thinking/resilience	Presentation	This session is to introduce the basics of system thinking and concept of resilience in urban settings. The facilitator can ask about the word for "resilience" in local language and have a discussion about what it means.

## Agenda

Time	Session	Format	Description and notes
20'	Working together	Presentation	To introduce the concept and benefits of coalition, the expectations. Prepare <a href="#">slides from the Coalition Building guide (link)</a> .  RECOMMENDED: You can design the session as TRUE or FALSE by introducing set of statements and asking the participants if they think it is true or false. Ask one person from the groups who answered true or false to explain why they answered that way.
20'	Resilience vision for my city	Interactive	The aim is to come up with a collective resilience vision and pathways for the city. See the description for group exercise #3 <a href="#">(link below)</a> .
20'	Barriers to resilience	Interactive	To facilitate a discussion around the physical and social barriers to realize the agreed resilience vision and pathways. See the description for group exercise #4 <a href="#">(link below)</a> .
30'	Mapping city systems	Interactive	To have each group produce a map of city systems using different materials.  This activity requires bringing into the room various materials, e.g. ropes, blocks, toys etc. to be used to create three dimensional maps.  See the description for group exercise #5 <a href="#">(link below)</a> .  REMIND them "not to use digital maps".
50'	Mapping priority shocks and stresses	Interactive	Using pre-drawn charts, each will identify shocks and stresses that affects the city. See the description for group exercise #6 <a href="#">(link below)</a> .
3 hrs	Learning to see city systems	Field Visit	Depending on your time constraints, identify one or more locations in the city where there is a lot of activity and systems to observe. See the description for group exercise #7 <a href="#">(link below)</a> .  This activity requires prior preparation and, in some cases, necessitates consent of the community e.g. when visiting informal settlements or marginalized communities.  Allow 10 minutes for briefing the participation before the field visit and 20 minutes for debriefing after returning to the venue.
30'	Impacts of the top 3 shocks and stresses on systems and people	Interactive	To identify the top 3 shocks and stresses, the facilitator will consolidate all the entries from the group exercise for "Mapping priority shocks and stresses" into one chart, ask participants to discuss and vote for the most important ones they think the project should address.  Ask each group to comment on one of the other group's work (What they liked/agree/didn't agree/think differently). See the description for group exercise #8 <a href="#">(link below)</a> .
20'	Stakeholder mapping	Interactive	This session is to map who is doing what in the city, who are the key actors that might be working on the areas that are relevant to the discussions so far. See the description for group exercise #9 <a href="#">(link below)</a> .



## Agenda

Time	Session	Format	Description and notes
45'	Managing the Coalition role-play game	Interactive	This is a game aims to share perspectives on managing coalitions and the benefits and limitations of coalitions. See the description for group exercise #10 <a href="#">(link below)</a> .
30'	Resilience actions to take across scales	Interactive	To map actions currently being taken to address the top three shocks and stresses identified in the city. See the description for group exercise #11 <a href="#">(link below)</a> .
20'	Signing up for main project activities	Interactive	Put the titles of main project activities such as heat Action Planning, City risk assessment etc. and ask everyone put their names, titles, and potential contribution on each activity. MAKE SURE to add these to the tracking sheet.
20'	Naming the coalition	Interactive	Ask each group to come up with a name for their coalition. After their reveal their choice, facilitate a lively discussions on what they like/ not like and consolidate into one name that everyone agrees for the coalition.
10'	Co-leads and Task force leads	Interactive	Ask participants to volunteer for co-leading the coalition and leading some of the activities.
<b>ADDITIONAL</b>			
1-2 hrs.	Resilience building examples in the city	Presentations	Invite experts from different fields, academia and organizations (local or national, remote or in person) to present their work. You can also ask some of the participants on the spot to present. It can be just talk without slides.
	Ice breakers and fun activities	Interactive	Include as many ice breakers and fun activities as the time allows to enable participants get to know each other and create a team. <a href="#">Explore creative engagement activities</a>
	Learning towers	Interactive	This is to enable participants to reflect on what they are learning. you can give participants colorful blocks or some kind of toys that they can stockpile to create learning towers for every new thing they learned. It can be done throughout the workshop.
	Participant led sessions		Can be repeated throughout the workshop as needed.
	Heat Action Planning		

# Description of the Group Exercises for the CWRA Workshops



## Group Exercise 1: How well do we know our city?

### PURPOSE

To help participants visualize their city and warm up to collective thinking.

### INSTRUCTIONS

1. Gather old pictures of the different neighborhoods, landmarks, natural resources, major events etc. that define the city or famous people or leaders. Put them all on the walls.
2. Form groups of 3-4 participants.
3. Ask each group to look at the materials, discuss among themselves and write down what and where these are.
4. The group that has the most correct answers will score.







## Group Exercise 2: What is happening in our city?

### PURPOSE

To identify positive and negative trends they observe in their city/communities by resilience characteristics.

### INSTRUCTIONS

1. Form groups of 4-6 participants or use the table groups.
2. Prepare flipchart papers for each group as below.
3. Put the characteristics of resilient urban communities in the first column and give a brief explanation of them.
4. Ask each participant to think about the changes happening in the city in the past 15-20 years and write their personal observations on post-its (10 minutes) under each characteristic.
5. Ask each group to discuss among themselves and consolidate their findings for each characteristic (5 minutes).
6. Ask one volunteer group to present their findings. Ask remaining groups to vote on the trends if they have the same, add theirs if different from what is presented or argue against.





## Group Exercise 2: Continued

### INSTRUCTIONS

7. The facilitator will wrap up the session summarizing the top 3 positive and negative trends based on the voting.
8. Verify with the group and put the results on the wall.

Characteristics of Resilient Urban communities	Positive trends	Negative trends
Healthy and knowledgeable, can meet its basic needs		Deaths/injuries from road accidents are increasing
Connected and socially cohesive	Internet connection increasing	
Has accessible and safe infrastructure and Services.		Public health system deteriorating
Has economic opportunities and financial resources.		
Can protect and manage its natural resources well.		
Has functioning governance structures at the city, regional and national levels.		



## Group Exercise 3: This is the resilience vision for my city

### PURPOSE

To reach a consensus on a resilience vision for the city and identify resilience paths.

### INSTRUCTIONS

1. Keep the same groups. Ask each participants close their eyes and imagine their cities in 10-15 years and write them down.
2. Ask each group to agree on:
  - a. a common vision (My city is .....)
  - b. 2-4 resilience paths (or courses of change) they would like to see in their city using the top 3 positive and negative trends agreed (for example if one of the negative trends is the city is increasingly flooded and another trend is that population is rapidly increasing, one course of change would be improved urban planning and infrastructure.
3. Ask one volunteer group to present their findings. Ask remaining groups to vote on the results if they have the same, add theirs if different than what is presented.

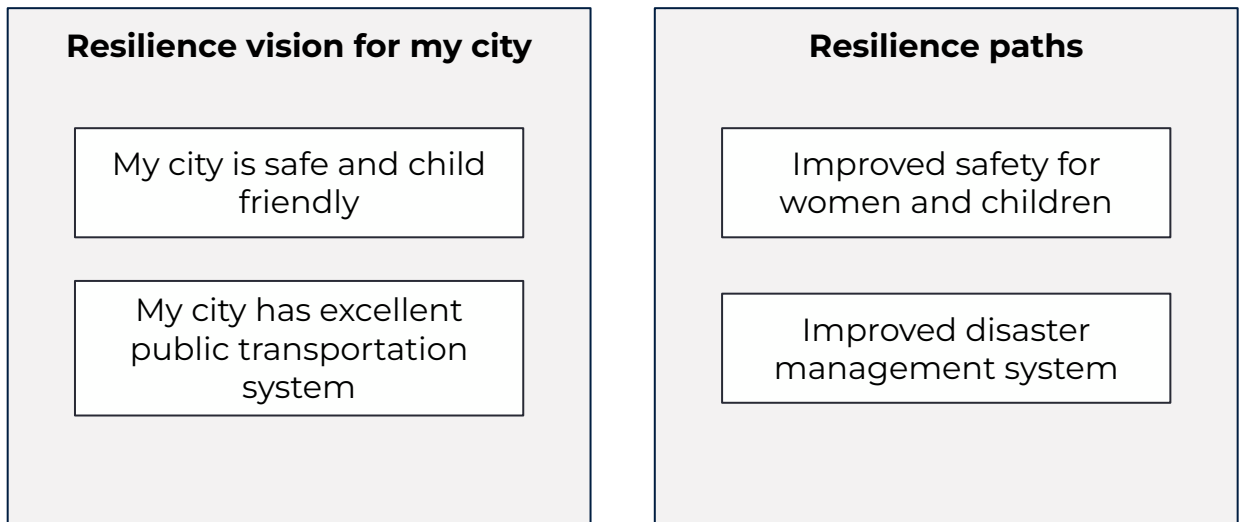




## Group Exercise 3: Continued

### INSTRUCTIONS

- Facilitator will wrap up the session consolidating the vision and resilience paths.
- Verify with the group and put the results on the wall.



## Group Exercise 4: What are the barriers to resilience and where?

### PURPOSE

To identify the most pressing physical and social barriers to realize the agreed resilience vision and pathways.

### PREPARATION

Prepare a map of city printed for each group.

### INSTRUCTIONS

- Form 2-4 groups for each resilience paths.
- Ask each group to discuss and write on post it notes what kind of barriers exist to build resilience and put them on the map as **below** (10 minutes).





## Group Exercise 4: Continued

### INSTRUCTIONS

3. Ask each group to present their findings.
4. Consolidate results on one single map.
5. Facilitator will wrap up the session circling the areas where the barriers are higher.
6. Facilitator should pay attention to barriers that are common to the whole city (such as lack of DM system) and specific to non-geographical communities and flag them if they come up.
7. Verify with the group and put the results on the wall.

#### Top barriers to resilience:

Common: flooding, earthquake  
Area 1: Flooding  
Area 2: unemployment  
Non-geographical communities:



## Group Exercise 5: Mapping city systems

### PURPOSE

To identify positive and negative trends they observe in their city/communities by resilience characteristics.

### PREPARATION

This activity requires bringing into the room various materials ropes, blocks, toys etc. to be used to create three dimensional maps. Also make sure to have print outs of system thinking slides for each table ready.

### INSTRUCTIONS

1. Put different materials, a flipchart paper and print outs of system thinking slides on each table.
2. Ask each group to draw a map of the city (without looking at digital maps).
3. Ask each group to create a three-dimensional map of systems that exist in the city and to show how they are connected, using the materials.
4. Come back together as a large group and discuss the questions below.
  - a. What are the similarities and differences between each group's maps? Did all groups draw the same area? For example, some groups may show just the city within its legal boundaries while other groups may include peri-urban areas, water catchments, or other areas that are critical to city functioning but technically outside the city boundaries.
  - b. What didn't you know about? How could you find out? Discuss as a group whether there is critical information you are missing. How can you find that information?





## Group Exercise 6: Mapping priority shocks and stresses

### PURPOSE

to visit an urban area and identify the critical urban systems that are visible and invisible (food, energy, water, communication, transportation, shelter).

### INSTRUCTIONS

1. Have discussion on what is a shock and a stress and the differences.
2. Ask participants to give examples for shocks and stresses. You can also show the Slide.
3. Prepare and give each group flipchart paper with the below graphics.
4. Each small group identifies shocks that affect the city as a whole or communities within the city. Write each shock on a separate post-it note.
5. For each shock or stress, discuss where it should go on the chart. Does it occur frequently or infrequently? Does it have high impact or low impact?
6. Put all the charts on the wall and ask groups to comment on the other groups charts. Create a discussion.
7. Give participants 3 voting stickers and ask everyone to vote on the shocks and stresses based on their priority.
8. Keep the charts on the wall for future sessions.

	High impact
Low frequency	High frequency
	Low impact



## Group Exercise 7: Learning to see systems

### PURPOSE

To identify the major shocks and stresses in their city and select the top shocks and stresses they wish to focus on for their resilience assessment.

### PREPARATION

This activity requires prior preparation and, in some cases, necessitates consent of the community e.g. when visiting informal settlements or marginalized communities.

Depending on your time constraints, identify one or more locations in the city where there is a lot of activity and systems to observe. These locations do not need to be nor identified as the target area or most vulnerable area. The aim is to help participants pay attention and take record systems, whether it is missing/working well/or problematic.

Allow 10 minutes for briefing the participation before the field visit and 20 minutes for debriefing after returning to the venue

### INSTRUCTIONS

1. Ask participant to identify critical urban systems that are visible and invisible (food, energy, water, communication, transportation, shelter)
2. Ask them to take photos and notes.
3. Upon return, lead a discussion of critical urban systems that can be seen, can't be seen, and/or are missing, how shocks/stresses might impact those systems, and what failure of those systems might do to other systems (cascading failures).
4. If possible, consider gathering photos and showing some of the selected ones during the debriefing session.

### DISCUSSION QUESTIONS

- What systems do you see?  
Which systems do you NOT see?
- What weakness and potential failure did you see (in case of shock and stress)? Who would be most affected?







## Group Exercise 8: Impacts of shocks and stresses on systems and people.

### PURPOSE

To understand impacts of the shocks/stresses on city systems.

### INSTRUCTIONS

1. Prepare flipchart papers for each group as below. Using the voting results in the previous session (Exercise 6) add top shocks/stresses they identified in the first column.
2. Using all the charts and maps the group has produced, ask them to first individually write down on post its and then discuss and consolidate in the following table.
3. As one group to present in the plenary and ask other groups if they have different perspectives.
4. Keep all the charts on the wall.

Top shocks/ stresses	What systems are most disrupted by this shock/ stress?	Who is most affected when this system is disrupted? In what ways are they affected?	Who is already working on this/ who has power to influence this system?
<b>1</b>			
<b>2</b>			
<b>3</b>			



## Group Exercise 9: Stakeholder Mapping

### PURPOSE

To map who is working on the top priority issues, their mandate and collaboration opportunities.

### INSTRUCTIONS

1. Prepare flipchart papers for each group as below. Ask each group to use the input from the previous session and choose top three most important stakeholders to collaborate.
2. Ask each group to fill the chart as shown.
3. As each group to present in the plenary and have a discussion.



## Group Exercise 9: Continued

Most important stakeholder	How can they help you? What are the collaboration opportunities?	Potential coalition member? Yes or No
<b>1</b>		
<b>2</b>		
<b>3</b>		



## Group Exercise 10: Managing Coalition Game

### PURPOSE

To share perspectives on managing coalitions and the benefits and limitations of coalitions.

### INSTRUCTIONS

1. Organize participants into three groups (different than their real role in life). The list of participants and the group they are assigned to should be finalized before the exercise starts. It is not necessary to assign actual roles to individuals, only divide the participants according to the three groups. Individuals within groups can choose their own roles.
2. Print out these groups and roles ahead of time, one group per sheet. Give these to each group when the game begins so they know their roles.

#### Group 1: Residents of "Neighborhood"

Volunteers from local religious groups or scouts; local football club members; local members of an early warning team; president of the neighborhood water committee; school teacher; etc.

#### Group 2: "Municipal Platform"

Local business owner; district representatives; Red Cross representative; journalist from district news channel; etc.

#### Group 3: "National CC platform"

National Director of the Civil Protection system; Secretary General of the National Red Cross Society; International NGO/Aid); representative of the Chamber of Commerce; representative of corresponding ministries; representative of INGO active in the country; etc.

3. Choose an issue appropriate to the discussions of shocks and stresses. Examples include:
  - Propose a new program to help citizens flood-proof their homes
  - Discuss the city bid to replace the small-scale recyclers/rag pickers with a municipal incinerator.



## Group Exercise 11: Resilience actions across scales

### INSTRUCTIONS

1. If participants have difficulty identifying interventions at any level, they should discuss how they could find out who would have information about what is happening. Write these questions and possible answers on a different colored sticky note or piece of paper and add them to the chart for the relevant shock or stress and at the appropriate scale.
2. Discuss as a group whether follow-up work is needed. If so, identify who will do it and when they will report back to the group.

Gr. #.	SHOCK/STRESS:		
Vulnerable group/area	Individual/household/Community	District/City/Province	National/Regional





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