

2.2.0

SERIES 2
Understanding
Vulnerability & Risk



CLARIFYING YOUR VULNERABILITY FRAMEWORK

Contents of Set

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Clarifying the vulnerability framework that will guide your research effort is the critical first step to conducting vulnerability and risk assessments. The framework provides a starting point for determining the units of analysis—specific populations, sectors or geographic areas—that you will initially study. At the same time, it can help you identify important links between the initial units of analysis and other units of analysis that will need to be investigated at a later point. Once you have developed your vulnerability framework, it will become easier for you to decide which methods for conducting the assessment are appropriate, to identify who will conduct the vulnerability assessment, and to establish a timeframe and budget for the work.

IN THIS SET YOU WILL:

- ✓ Answer a series of questions that will help you focus and frame your vulnerability assessment

Overview

There is no single standard approach to conducting vulnerability and climate risk assessments. Rather, there are a range of frameworks, tools and methods that draw on knowledge from a variety of fields—climate change adaptation, disaster risk reduction, sustainable development, and food security—that can be adapted and used for urban vulnerability and climate risk assessments. In particular, climate vulnerability and risk assessments in urban areas are still relatively recent, especially in developing countries. The vulnerability framework you will develop in this set, and the approaches outlined in the following five sets, will have to be tailored by your city working group to meet your resilience process needs. This is because to be locally useful, a vulnerability assessment must be tailored to your local conditions, must leverage locally available data and existing studies, must address local at-risk populations and sectors, and must address local enabling or restricting institutions (rules, regulations, social and cultural norms and expectations, and government policies).

A BASIC VULNERABILITY FRAMEWORK IDENTIFIES:

- Why the vulnerability assessment is being undertaken;
- What information the finished assessment should produce or include, and how that information will subsequently be used;
- Units of analysis—people, neighborhoods or districts, city systems, services or functions, specific sectors such as the water sector, etc.;
- Timescale of analysis—how far into the past you want to go to establish trends in population, urbanization, economic development, migration, climate, AND at what point or points in the future you will assess future conditions, like 2030 and/or 2050;
- Geographic scope of study—current city administrative limits, city center plus surrounding peri-urban areas, a specific sub-district;
- Who will do the vulnerability and risk assessments. Members of the city working group should assist in conducting the vulnerability and risk assessments, but you may need additional expertise or help from a university, research institution, or NGO. The

stakeholder review (Set 1.2) and policy review (Set 1.5) can help you identify who can assist with your vulnerability and risk assessments;

- An initial review of who has or might have various types of data needed, including historical climate data;
- Financial resources and time available for conducting the vulnerability and climate risk assessments; and
- A draft workplan outlining how many, what type, and when Shared Learning Dialogue or other types of meetings will be held so that all important stakeholders (Sets 1.2 and 1.3) can review the city working group's progress and results, and make sure the analysis is still on track.

2.2.1

SERIES 2

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Activity 2.2.1

Developing a Draft Vulnerability Framework

In this activity, you will begin outlining the basic elements of your vulnerability assessment **if you have already determined what those elements should be**. If you have not already identified some of the units of analysis, such as the timeframes of concern or the most vulnerable populations, please skip these questions for now. The rest of the sets in Series 2 will explore these components of your vulnerability assessment in more detail. This initial activity is simply to begin focussing you on the questions that will need to be answered before you begin your formal vulnerability and risk assessment.

IN THIS ACTIVITY YOU WILL:

- ✓ Begin to frame your city's vulnerability assessment by exploring three separate areas relevant to the assessment.
- ✓ Answer a series of questions that will help you focus and frame your vulnerability assessment

ACTIVITY 2.2.1: DEVELOPING A DRAFT VULNERABILITY FRAMEWORK

INSTRUCTIONS

For this activity, you will divide into small groups. If you need more room than is available in the table below to answer each question, do not hesitate to write your answers on additional sheets of paper, on a white board, or on a flip chart.

1. The first step in framing your vulnerability assessment is to decide why you are undertaking the assessment. Answer the questions listed under Step 1.
2. The second step is identifying the geographic area and the units of analysis—which groups of people, city services, sectors, or functions, and over what time periods—you will study to determine who or what in your city currently suffers harm (is vulnerable) and how that vulnerability and climate risk might change in the future under different climate scenarios. Answer the questions listed under Step 2.
3. Finally, the scope of your vulnerability and risk assessment and the methodology you select for analysis will be strongly influenced by the resources you have available for the work. Answer the questions in the space provided under Step 3.

STEP 1: WHY YOU ARE UNDERTAKING A VULNERABILITY ASSESSMENT

What do you want to learn from your vulnerability assessment?

How are you planning to use the results of the completed assessment?

Who will use the results of the assessment?

For successful use of the results, what format do the results need to be in?

STEP 2: WHO AND WHAT, WHERE, AND WHEN

What geographic area do you plan to study? If maps are available, mark the boundaries of the study area. If maps are not available, sketch the area of planned study.

Will you study everything within your marked area in equal detail, or will you focus on a particular set of sub-areas?

Why do you plan on studying these areas?

Who or what is currently most vulnerable within your study area? Indicate on maps or hand drawn sketches of the city areas that are particularly vulnerable, and note groups and systems that are particularly susceptible to harm.

What particular groups of people are vulnerable to current climate hazards? For example, is there a community whose sole source of income is rice farming and this community's income is very vulnerable to drought at certain times of the year?

What areas of the city are currently most exposed to what climate hazards? Mark on the maps where flooding, landslides, drought, etc. occur.

What city systems, services or functions are particularly fragile? For example, are there poorly functioning drainage systems that, when there is rain, put particular neighborhoods or groups at risk of flooding?

What time periods will your vulnerability and risk assessments cover? Consider both current vulnerability & risk, and future vulnerability & climate risk.

Will you establish historical trends in population, urbanization, economic development, migration and climate based on 10 years of data? 25 years? The availability of data may influence possible timescales of analysis. However, just because you have data extending back 200 years does not mean that full period is relevant to current challenges. Again, pick a timeframe that is relevant to the questions you are trying to address. Though future climate projections are often available through 2100, 2100 is generally too far out to be meaningful to current planning challenges.

How far into the future do the city development plans cover? 10 years? 20 years?

Is your city currently planning on developing any lands or building any major infrastructure? These types of things have lifetimes of 60+ years, will change your city's current and future vulnerability and climate risk, and need to be considered.

STEP 3: RESOURCES AVAILABLE FOR THE ASSESSMENT

What financial resources do you have to devote to your vulnerability and risk assessment?

How long do you have to conduct the vulnerability and risk assessment? When do you need results to begin the next steps of your resilience process?

What individuals on the city working group and/or outside experts can undertake the data collection, select the appropriate vulnerability and risk assessment techniques, and analyze the data? What are their capacities and areas of expertise?

How far into the future will your scenarios of future vulnerability and climate risk cover—2030 to 2050? The policy review you completed in Set 1.5 may influence the future time periods you wish to include.
