CITY REGION FOOD SYSTEM TOOLKIT

Assessing and planning resilient and sustainable city region food systems

Example : In-depth interview guide

Brief description	This is an example of a guide to lead in-depth interviews with key informants from the CRFS
Expected outcome	In-depth understanding of nodes, stakeholders, assets and infrastructures, areas, and commodities that are at risk of impact from (individual and multiple) hazards.
Expected output	In-depth characterization of the food system for the in-depth assessment report
Scale of application	Project level
Expertise required	Research and analysis
Examples of application	Antananarivo, Madagascar
Year of development	2022
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Relevant CRFS Handbook modules; related tools, examples and activities	In-depth assessment module

Description

The boxes below present guiding questions for conducting the collection of available data through individual in-depth interviews with the CRFS actors. The guiding questions will serve to deepen the characterization of the CRFS, paying particular attention to climate risks and the proliferation of infectious diseases such as COVID-19 (including hazards, vulnerabilities, and exposure) and to assess the resilience of actors.

Box 1: Guiding questions for the characterization of the CRFS, the identification of climate risks (intermediate hazards and impacts, exposure, vulnerabilities) and existing resilience capacities.

CRFS climate resilience: main questions

1. What are the main climate shocks and stresses (hazards) affecting the urban and peri urban region (and its food system)?
2. Are there defined thresholds of intensity for specific climate risks that trigger certain disaster risk reduction measures at the urban level?
3. What are the main impacts of hazards?

4. What are the main vulnerabilities of the CRFS (socio-economic, ecological, lack of institutional capacities?)
5. Which food system actors and infrastructures in the CRFS are located within the geographical radius of the identified climate shocks and stresses?
6. Who are the most exposed? Which relevant stakeholder groups would be most affected by the identified food system vulnerabilities?
7. What are the strengths and vulnerabilities of the current CRFS?
8. To what extent are the different parts of the CRFS resilient to shocks and long-term projected scenarios?
9. What are the priority areas that need to be addressed to have a more sustainable and resilient urban food system for the future?

Ressources naturelles

General questions :

1. How do main agricultural systems affect biodiversity?
2. Are natural resources in the urban and peri urban region managed sustainably?
3. What are the main issues regarding natural resources for production in the urban and peri urban region?
4. How can natural resource management be improved to strengthen the CRFS resilience?

Characterization:

1. About water resources: What factors are affecting water quality? How serious are they (1-10)? Is the situation getting worse/improving? Can you tell since when?
2. About soil: What factors are affecting soil quality? How serious are they (1-10)? Is the situation getting worse/improving? Can you tell since when?
3. About biodiversity: What factors are affecting the state of biodiversity? How serious are they (1-10)? Is the situation getting worse/improving? Can you tell since when?

Évaluation des risques climatiques :

1. What are the main climate-related vulnerabilities of natural resources?
2. What resilience measures are already being implemented in the management of natural resources?

Input supply and food production

General questions:

1. To what extent does food produced in the urban area contribute to the overall food consumption of its population?

Characterization:

1. What and how much food is produced in the urban area?
2. Where do the inputs and resources for food production in the urban area come from?

Climate Risk Assessment:

1. What are the main climate-related impacts (historical disasters) experienced over the last decade?
2. What are the main climate shocks and stresses affecting food production inputs and supplies in the urban region? Please prioritize according to frequency and level of impacts.
3. Which commodities are most affected?
4. Which areas and main actors of food production are located within the geographical radius of the identified climate shocks and stresses? Who are the most exposed?
5. What are the main vulnerabilities of food production in the urban region?
6. Where are the impacts of possible climate shocks and stresses considered to be the strongest?
7. Which stakeholders and production-related infrastructure (grey and green infrastructure, production systems) are most vulnerable? Why? How?

Food storage, processing, and manufacturing

General questions:

1. Are food processors and manufacturers able to provide affordable, sufficient, nutritious, safe and sustainable food?

Characterization:

2. What are the categories of value-added products manufactured in the urban area?
3. What kinds of businesses produce the food consumed in the urban area? (Small, medium, large; cooperative, public, private, etc.)

Climate Risk Assessment:

1. What are the main climate-related impacts (historical disasters) on food storage, processing and manufacturing over the past decade?
2. What are the main climate shocks and stresses affecting food storage, processing and manufacturing in the urban region? Please prioritize according to frequency and level of impacts.
3. Which areas are most and least affected?
4. Where does the urban region's electricity come from and how is this area affected by climate change risks?
5. Which areas, infrastructure and key players in food storage, processing and manufacturing are located within the geographic radius of these priority climate shocks and stresses? Who are the most exposed?
6. What are the main vulnerabilities of food storage, processing and manufacturing in the urban region that lead to stronger impacts of possible climate shocks and stresses?
7. Which stakeholders and infrastructure related to food storage, processing and manufacturing (grey and green infrastructure) are most vulnerable? Why? How?

Wholesale and distribution of food products

General questions:

1. Are wholesalers and distributors able to provide affordable, sufficient, nutritious, safe and sustainable food?

Specific research questions:

2. Who provides food to businesses/markets that sell food to consumers?
3. What are the main distribution channels for the main products marketed in the urban area?

Évaluation des risques climatiques :

4. What are the main climate-related impacts (historical disasters) on wholesale trade and food distribution in the CRFS over the last decade?
5. What are the main climate shocks and stresses affecting the wholesale and distribution of food in the urban region? Please prioritize according to frequency and level of impact.
6. What are the most and least affected elements?
7. Which areas, infrastructure and key players in food wholesaling and distribution are located within the geographical radius of these priority climate shocks and stresses? Who are the most exposed?
8. What are the main vulnerabilities of food wholesaling and distribution in the urban region that lead to stronger impacts of possible climate shocks and stresses?
9. Which stakeholders and infrastructure related to food wholesaling and distribution are most vulnerable? Why? How?

Food marketing, restaurants and retail

General questions:

1. Does every citizen of the urban area have access to sufficient, affordable, nutritious and safe food outlets?

Specific research questions:

1. Where do citizens buy their food?
2. Do they have regular access to affordable food? Please differentiate between citizens of different socio-economic conditions and urban and rural areas in the CRFS.
3. Can people access food produced within the urban area? If so, where?

Climate Risk Assessment:

1. What are the main climate-related impacts (historical disasters) on food marketing, foodservice and retail in the CRFS over the past decade?
2. What are the main climate shocks and stresses affecting food marketing, catering and retail in the urban area? Please prioritize according to frequency and level of impact.
3. Which elements are most and least affected?

4. Which areas, infrastructure and key players in food marketing, catering and retail are located within the geographical radius of these priority climate shocks and stresses? Who are the most exposed?
5. What are the main vulnerabilities of food marketing, catering and retail in urban areas that lead to stronger impacts of potential climate shocks and stresses?
6. Which stakeholders and infrastructure are the most vulnerable food marketing, catering and retail infrastructures? Why? How?

Food consumption

General questions:

1. What is the level of food insecurity and malnutrition in the urban area? What are the main food-related food-nutrition or health concerns?
2. Do people in the urban area eat sufficient, nutritious and safe food?
3. Where does the food consumed in the urban area come from?

Specific research questions:

1. What do the inhabitants of the urban area eat?
2. What is the composition of their actual diets and food basket? Please differentiate between citizens of different socio-economic conditions and urban and rural areas.
3. Consomment-ils des aliments produits dans la région urbaine ? Si oui, où ?

Climate Risk Assessment:

1. What are the main climate-related impacts (historical disasters) on food consumption in the CRFS, encountered over the last decade? (For example, regarding access to food).
2. Which stakeholders are most affected by the impacts of climate shocks and stresses? In what ways?
3. What are the main climate shocks and stresses affecting food consumption in the urban region? Please prioritize according to frequency and level of impact. What are the most affected, least affected?
4. Which consumers fall within the geographical radius of these priority climate shocks and stresses? Who are the most exposed?
5. Who are the most vulnerable consumers in the CRFS, who are most affected by the impacts of climate shocks and stresses?
6. What challenges might people face at the household level in the event of a climate shock or a stress?
7. What are the main vulnerabilities of food consumers in the urban area that lead to stronger impacts of possible climate shocks and stresses?

Food and organic waste management

General questions:

1. What is the relevance and what are the impacts of food loss and waste on all food supply and value chains in the CRFS?
2. Are food losses and waste being actively reduced?
3. Are there systems for the recovery of organic waste (household or liquid waste)?

Specific research questions:

1. Where and how much food and organic waste is generated along the food chain and how is it managed?
2. How can food losses and waste and organic waste be reduced and better managed along the food chain (from production to consumption)?

Climate Risk Assessment:

1. What are the main climate-related impacts (historical disasters) on the management of food and organic waste in the CRFS, encountered over the last decade? (For example, regarding infrastructure related to food waste management, food waste creating problems with the sewage system, etc).
2. Which stakeholders are most affected by the impacts of climate shocks and stresses? In what ways?
3. What are the main climate shocks and stresses affecting food and organic waste management in the CRFS? Please prioritize according to frequency and level of impact.
4. Which elements are most and least affected?
5. Which food and organic waste management facilities or landfill sites are located within the geographical radius of these priority climate shocks and stresses? Who are the most exposed?
6. What are the most vulnerable food and organic waste management infrastructures in the CRFS, which are most affected by the impacts of climate shocks and stresses?
7. What challenges might people face at the household level in the event of climate shocks or stress?

Institutional capacity and planning policies for climate resilience

General questions:

1. What are the strengths and vulnerabilities of the institutional context and policy planning in favor for climate resilience?
2. What policies have influence on the CRFS and its resilience to climate shocks and stresses?
3. Are there national, provincial and municipal policies or plans focused on disaster risk reduction and climate change adaptation?

Specific research questions:

1. Are there any active functional emergency response mechanisms in the urban region in the case of a disaster?
2. Are there contingency plans for possible climate risks?

3. Does the government (national, provincial, municipal) invest in preparedness for possible climate risks and in protecting grey infrastructure against risks in the urban region?
4. Are there institutional funds or budget allocations for the implementation of the different interventions?
5. Is there a response mechanism focused on the food system changes due to eventual disasters?
6. Are there institutionalized and functional early warning systems in place for specific risks?
7. Are there insurance mechanisms in place in the urban area to cover damages/losses caused by climate shocks or constraints?
8. Are the poorest and most vulnerable in the urban region protected by social safety nets?
9. Does the government (national, provincial, municipal) implement measures (good practices) to reduce climate-related vulnerabilities of stakeholders in the food system and/or related infrastructure?
10. What roles and powers do city-region and urban decision-makers, and key stakeholders have in increasing the resilience of the CRFS to climate shocks and stresses?
11. How can these roles be improved/made more equitable or inclusive?