ICLEI
Local Governments for Sustainability

Circulars

City Practitioners Handbook: Circular Food Systems

Overview of city-level food system assessment methods

This document is part of the supporting resources of the City Practitioners Handbook: Food Systems. It provides city actors with an overview of city-level food system assessment methods which can be used on their own or in combination with each other, depending on the city´s objectives and available resources.

Method	Description	Type of data collected	Use if you want to	Link
Looking at the whole city-region food system: FAO´s City-region food system assessment (CRFS)	The CRFS includes both value chain and contextualizing components (food security and nutrition, livelihoods and economic development, environment and natural resources, and social equity and inclusion) within a geographical region that includes a more or less concentrated urban center and its surrounding peri-urban and rural hinterland. The CRFS approach seeks to strengthen rural-urban linkages through assessment of the sustainability and resilience of the food system, and subsequent action planning.	• Health, food security and nutritional outlook; • Natural resource outlook of urban, peri-urban and rural farms • Value chains of key commodities; • Vulnerability and exposure to climate hazards; • Governance and policy framework of the food system	• Understand the structure and functioning of the city region food system (including bottlenecks and vulnerabilities, and their underlying causes) • Use this as a basis for identifying policy and programme opportunities to increase sustainability and resilience and improve economic, social and environmental conditions in both urban and nearby rural areas.	Access the tool: RUAF & FAO´s City-region food system assessment Learn more about its practical applications in Lusaka, Kitwe (Zambia) and Colombo (Sri Lanka) Quito (Ecuador) Medellin (Colombia) Utrecht (The Netherlands) Toronto (Canada) Antananarivo (Madagascar) Kigali (Rwanda)
Rapid urban food systems assessment tool (RUFSAT)	The rapid urban food systems assessment tool assesses social, economic, political and environmental elements, interactions and impacts of the food system	• In-depth consumer survey from food security, nutrition & health perspectives • Food Value Chain Analysis for major commodity groups	• Gain a thorough understanding of existing food system dynamics, stakeholder involvement and spatial understanding of food flows in a time-efficient manner	This tool was developed by FAO under the NADHALI project and has been tested in Nairobi (Kenya), Dhaka (Bangladesh) and Lima (Peru)

		• Geographic information system mapping of the food system		
Following the food flows: Material flow analysis focused on food	Material flow analysis (MFA) is a systematic assessment of the flows and stocks of materials within a system defined in space and time.	• Food material data (e.g. crops, grains, food imports) • Waste data	• Be able to visualize the food flows in your city from a geographic perspective • Identify where the food is consumed and the majority of waste is produced	Online Material Flow Analysis Tool developed by Metabolism of Cities. The Circle City Scan Tool is a shared open access platform developed by Circle Economy in partnership with ICLEI, Metabolic and the Ellen MacArthur Foundation. It provides a basic framework to implement circular strategies based on city-specific material data.
Focusing on people: Socio-economic assessment	This type of assessment focuses on the collective physical, economic, policy and sociocultural surroundings, opportunities and conditions that influence people's food choices and nutritional status.	• Consumers/residents distance to markets; • Transportation networks; • Food insecurity data	• Get a better understanding of local food-related vulnerabilities • Ensure your circular food system interventions will benefit vulnerable populations and promote food access	Socio-economic assessments can be conducted using geographic information systems tools (see for instance Baltimore's (US) Food Environment Maps) or through research such as Oakland´s food system assessment and Bristol´s Who Feeds Bristol report.
Integrated food policy and governance: Facilitating cross-department collaboration	Numerous city departments influence city food systems, from urban planning to food services and environmental protection. Mapping them at an early stage will help determine the city's room to maneuver.	• City departments with food-related mandates in their portfolio	• Focus on areas that the city´s administration can influence directly • Engage all relevant city departments	Such assessment will be particular to each city. Refer to Baltimore's (US) scheme for interagency collaboration on food systems for an example of what it can look like in practice.

Collaborative Framework for Food Systems Transformation	The Chapter 3 of the Collaborative Framework provides a structure and guiding questions for food systems assessment, at national or city levels. Page 12 provides an overview of all elements that belong to a food system.	• Policy and regulations informing food systems • Infrastructures shaping food systems • Socio-cultural and demographics aspects • Food security and nutrition aspects	• Focus on understanding of main sustainability impacts of your food system • Understand the governance aspects and mandates of institutions linked to your city´s food system	Download the Collaborative Framework for Food Systems Transformation on the One Planet Network website.
Mapping local food assets	The mapping consist of a list of food assets that can be used to contribute to more circular food systems	• Number of farmers markets, community gardens, urban farms, food hubs, food composting sites… • Public canteens	• Map opportunities for action in a timesaving manner	Regional Food Map Utrecht (Netherlands) Toronto´s (Canada) stakeholder mapping Circular Glasgow Circular Innovations mapping for Food
Ellen MacArthur Foundation's City Self-Assessment Tool	The city self-assessment tool makes measuring progress towards a circular economy for food easier, informing users what data and information they need to begin to evaluate local food systems and what level of progress the data reflects	• Food strategy, targets, and resources • Waste collection information • Awareness campaigns and communication efforts	• Understand where to focus action to transform your city's food system in a timesaving manner	Access the questionnaire here