



Food and Agriculture  
Organization of the  
United Nations



# City region food systems programme

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Reinforcing rural-urban linkages  
for climate resilient food systems

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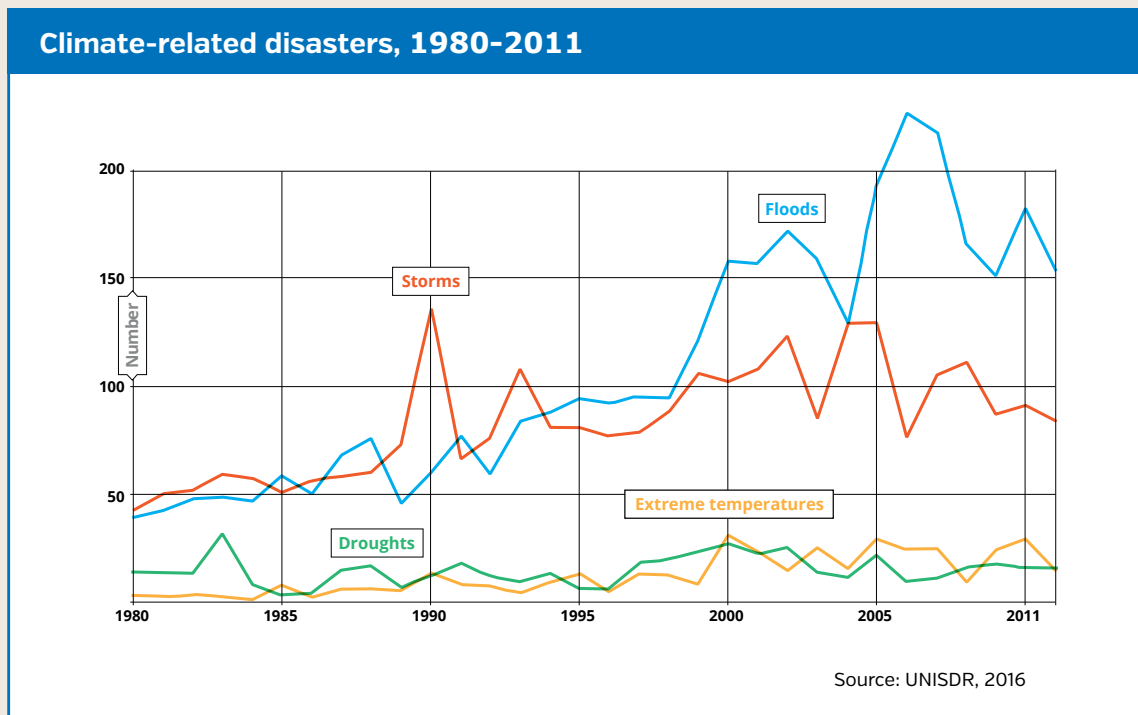
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Nanjing food market, China

## :: Why act now

Today, about **55 percent** of the world's population lives in **urban areas**, a proportion that is expected to increase to **68 percent by 2050**. The majority of this growth will be in Africa and Southeast Asia. The rapid urbanization and the estimated nine billion-world population by 2050 creates enormous challenges to conventional food production and food and nutrition security<sup>1</sup>.

Climate change is posing additional challenges too, affecting cities and their surrounding areas. The number of reported natural hazards (such as droughts, floods, storms, etc.) has almost doubled in the last two decades<sup>2</sup>. An increase in **climate change related risks** is affecting processes and stakeholders along the entire food system. Increasing food prices resulting from disruptions in production and transport directly impact consumers, especially low-income groups in city regions that are highly dependent on purchased food.



Although, cities are hot spots for climate change, they are increasingly affected by climate shocks and stresses<sup>3</sup>. The food and agriculture sector acts both as a driver of climate change and as a terrific opportunity for mitigation and adaptation. However, there is a need to better understand and generate evidence on the impacts of climate change related shocks and stresses on food systems and the most vulnerable populations in city region contexts, and how it can be made more adaptive and resilient to such impacts.

On the positive side, the fastest growing urban centers, especially in Africa and Asia, will be small and medium size cities, creating significant opportunities for sustainable urban development, resilient food systems planning and employment opportunities for farmers within the rural-urban spectrum. Urban areas influence many aspects of food systems and can change the way the systems work through their climate action strategies.

The key role that cities and local food actors play in addressing all these interlinked food systems challenges through interconnected action has been recognized by national players and the international community. Vertical collaborations among national and local governments, in partnership with the private sector and the civil society, is of paramount importance to effectively respond to the people's demands for climate action, nutritious and accessible food to all and social equity in line with the objectives of the 2030 Agenda, the **Paris Agreement** and the **Sendai Framework** for disaster risk reduction.

There is now a real demand to design resilient and sustainable city region food policies with strong rural-urban linkages, and implement activities with local stakeholders, including and emphasizing small-scale farmers, to scale up sustainable practices and improve the food system in a holistic manner. The **Milan Urban Food Policy Pact (MUFPP)**, where nearly 200 cities [as of August 2019] from developing and developed countries committed to build more sustainable and resilient urban food systems represents this growing interests. <http://www.milanurbanfoodpact.org>

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## Did you know?



By 2030, 325 million poor will be living in the 49 countries most prone to natural hazards<sup>4</sup>.

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People exposed to natural hazards in the poorest nations are more than seven times more likely to die than in the richest nations<sup>5</sup>.

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By 2030, up to 77 million urban residents could fall back into poverty in a scenario of high climate impacts and inequitable economic growth<sup>6</sup>.

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The global food system emits 21-37% of the Earth's greenhouse gases, with pre- and post-production activities included<sup>7</sup>.

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Today, cities accounts for about 2/3 of primary energy demand and 70% of global carbon dioxide emissions of which food (including food loss and waste) is among the top five largest contributors<sup>8</sup>.

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There are 2.5 billion people living in over 1 600 cities, will experience declining agricultural outputs posing a tremendous challenge for residents and local authorities<sup>9</sup>.

# :: What we do

This programme works with countries and local authorities to build resilient city region food systems (CRFS) by strengthening rural-urban linkages, provides assistance to local governments and food actors in understanding bottlenecks and opportunities for improving the resilience of food systems and livelihoods in a given territory. It can help to achieve the SDG2, 11, 13, etc.

## Our pillars

### ❑ Multi-sectoral approach

**A food system approach that goes beyond value chains.**

A food system perspective includes the food chain from producer to consumer as well as environmental, economic, institutional and social relate-aspects. All of these elements are affected by climate shocks and stresses.

### ❑ Territoriality

**Context-specific solutions across the urban-rural spectru**

**“Looking beyond city limits”.**

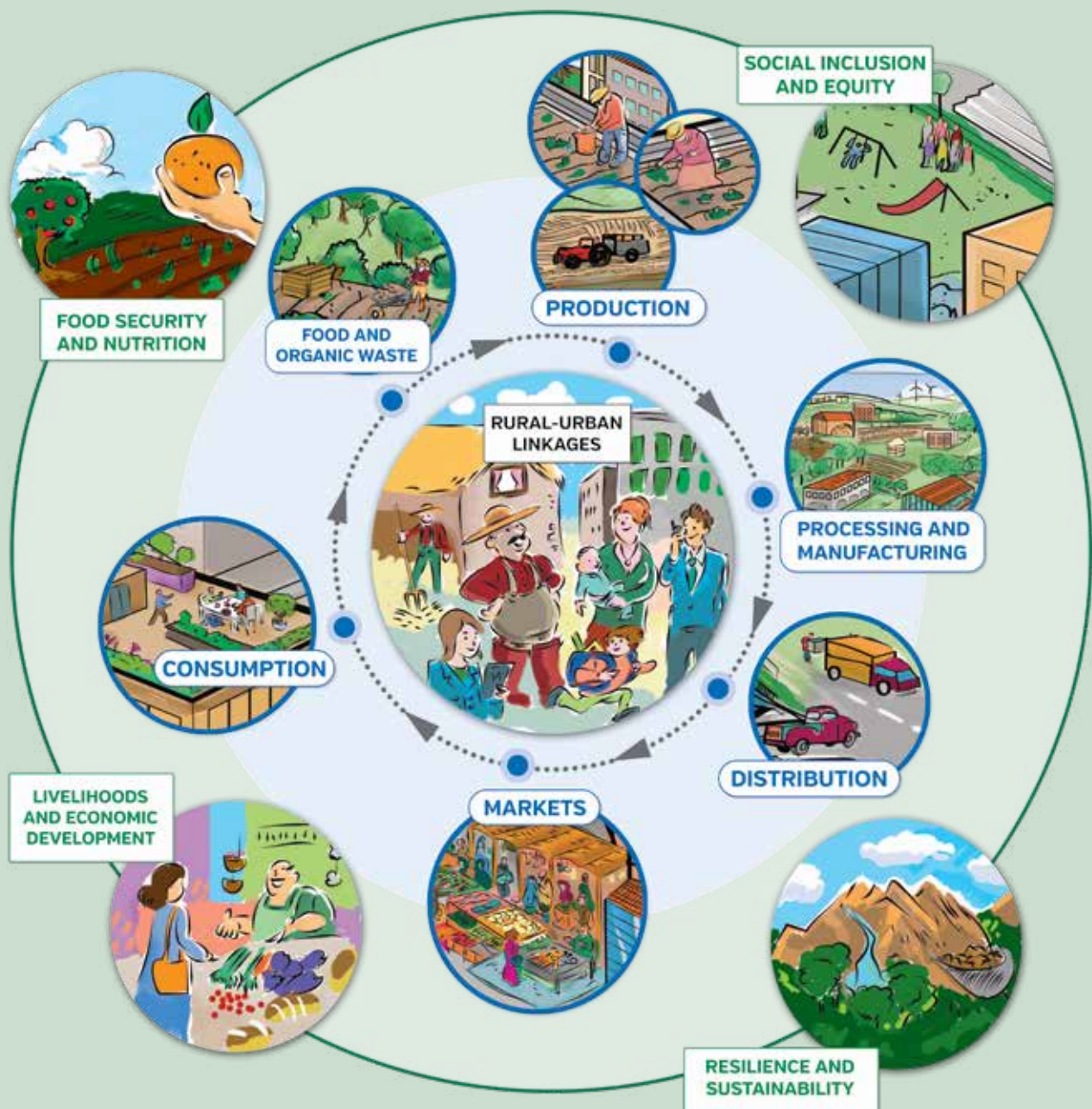
We refer to the concept of city region” as: “a larger urban center or several small urban centers and their surrounding areas, including peri-urban and rural hinterland”. The term ‘city region’ refers not only to megacities and the immediate proximate rural and agricultural areas surrounding them, but also to small and medium-sized towns that can serve to link the more remote small-scale producers and their agricultural value chains to urban center and markets in developing countries. Although contexts differ across cities and regions, urban-rural partnerships and inter-municipal cooperation always extend beyond traditional administrative boundaries. In our approach, we focus on food systems as the functional tie that binds a territory together.

### ❑ Multi-level governance for resilience. Inclusive governance of food actors that connects national and local governments.

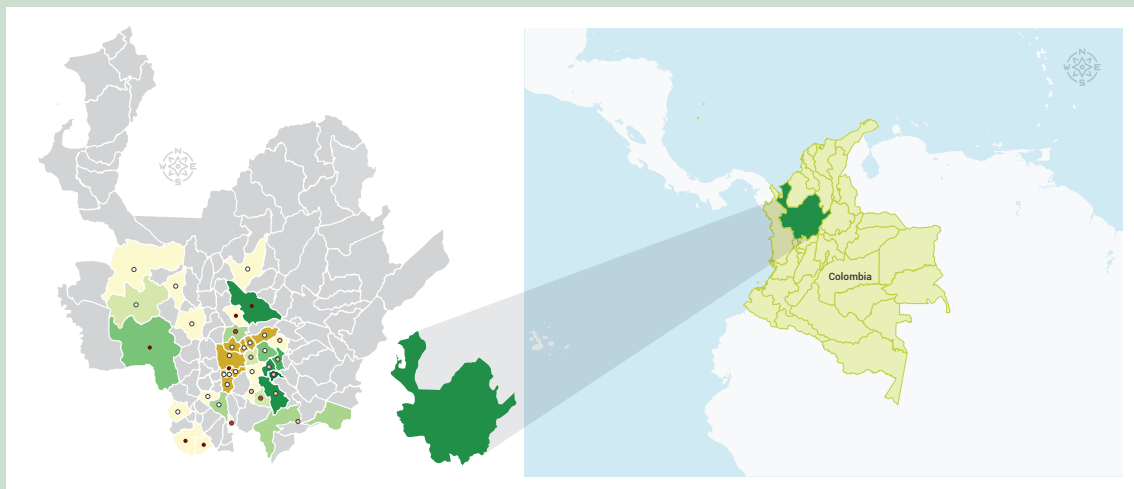
**Within the urban-rural continuum, governance for resilience is the capacity of individuals, communities, institutions, businesses and the food system to survive, adapt, and thrive no matter what kind of chronic stresses and acute shocks are experienced.**

Given its multidimensional link with environment, public health and the economy, to achieve food and nutrition security, it requires joint collaboration among government, civil society and private sector, and it needs integrated multi-level governance involving national, regional, municipal, as well as rural.

A city region food system (CRFS) is defined as “all the actors, processes and relationships that are involved in food production, processing, distribution and consumption in a given city region that includes a more or less concentrated urban center and its surrounding peri-urban and rural hinterland”.



## Box 1: The city region food system of Medellín, Colombia<sup>10</sup>



The city region of Medellín has been defined locally as a group of 31 municipalities in the province of Antioquia, that according to different criteria play a key role in the food provisioning of the city of Medellín and the surrounding Aburrá Valley. These criteria are: i) food provisioning: municipalities contributing more than 1% to food flows reaching wholesale markets in Aburrá Valley; ii) food production: municipalities contributing more than 1% of the total provincial food production; iii) proximity: municipalities in the Aburrá Valley with any agricultural production; iv) areas of agricultural expansion, v) municipalities with an important political role in territorial governance.

## In practice

In particular, the CRFS approach:



establishes inclusive governance platforms to secure local ownership, food actors' engagement and overall long-term sustainability;

develops climate vulnerability risk profiles of the city region food system, including the identification of key vulnerable sub-sectors and actors and estimates of potential economic losses;



develops strategies to improve the resilience of the local food system and plan interventions;

improves capacities of city officials and core vulnerable stakeholders on climate resilient good practices, especially of urban and peri-urban producers.



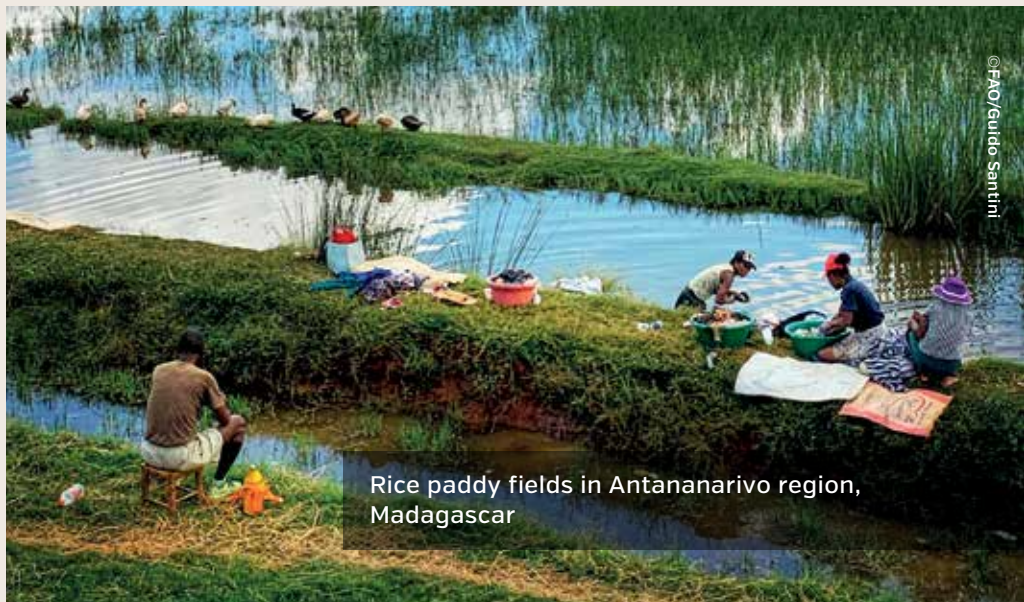
## :: Where we work

This map shows the group of cities that have been part of the CRFS programme.

- **2015-2018** The cities of Lusaka and Kitwe [Zambia], Colombo [Sri Lanka], Medellín [Colombia], Quito [Ecuador], Toronto [Canada] and Utrecht [the Netherlands] took part to the first phase of the CRFS programme.
- **2019-2021** The cities of Kigali [Rwanda], Antananarivo [Madagascar], Colombo [Sri Lanka], Quito [Ecuador] and Tamale [Ghana] are part of the second phase of the Programme, which has a stronger focus on climate-resilience. Melbourne [Australia] is also participating in the programme as an independent partner.



The boundaries and names shown and the designations used on this map do not imply the expression of any opinion whatsoever on the part of FAO concerning the legal status of any country, territory, city or area or of its authorities, or concerning the delimitation of its frontiers and boundaries. Dashed lines on maps represent approximate border lines for which there may not yet be full agreement.



Rice paddy fields in Antananarivo region, Madagascar



## :: What we've done

Through a formal engagement of all relevant stakeholders across the entire duration of the process, the CRFS assessment and planning process generally produced the following outcomes:

- ❑ **A mapping and characterization of the food system at city region scale.** This includes defining: who feeds the city region, where the food is processed, how it is marketed, what people eat and what their food security and nutrition status is, how food waste is managed and the government and institutional actors involved in the food system.
- ❑ An **analysis of the current food system performance** against different sustainability dimensions, to identify food system vulnerabilities and weaknesses. Also, identified opportunities for strengthening the CRFS.
- ❑ Proposals for concrete **policy and planning interventions** in the CRFS and identification of stakeholder roles, (new) institutional frameworks and action plans.
- ❑ The creation of new or revitalization of existing structure/networks of governance and policy development, such as urban food policy councils/groups and the elaboration of institutional food programmes, by-laws and policies.

<http://www.fao.org/in-action/food-for-cities-programme/pilotcities/wherewework/en/>

<https://www.ruaf.org/city-region-food-system-partner-cities>

**Below are selected key policy outcomes that resulted from the assessment and stakeholder engagement work done in the pilot cities.**

Zambia is a landlocked country located in south-central Africa. 41% of its population lives in urban areas (urbanization rate in Africa: 38%), mostly gathered in two regions: **Lusaka**, the capital city (1.7 million people) and surrounding districts, and the Copperbelt Province, including the city of **Kitwe** (46.9 thousand people). With the repetition of droughts and rapid urbanization patterns, both regions face diverse challenges to ensure food security and nutrition for all, while providing decent livelihoods to farmers and making efficient use of natural resources.

In both cities, a multi-stakeholder group was formed including several representatives from the food system. Since very few data were available, an important focus was undertaken to collect primary data. Data were collected around the main priorities identified by multi-stakeholders groups to enable solid locally owned strategies and advocacy towards the key local institutions.

From a policy perspective, the project has played a key role in promoting cooperation on joint planning between the two cities and their surrounding districts. **Joint planning for food systems** is currently being discussed in the **Urban and Regional Planning Act**. This would provide a policy and institutional framework to anchor the implementation process in the region.

Furthermore, in the framework of the decentralisation process in Zambia, the findings and recommendation of the CRFS assessment and planning process, are acting as key a baseline tool to contribute to the ongoing formulation of the **National Urbanization Policy (NUP)**.

The **Metropolitan District of Quito** (DMQ), the capital city of Ecuador, is currently home to about 2.5 million people, representing 87% of the population of the Pichincha province in which it is located. The Pichincha province covers an area of 5 307 km<sup>2</sup>, of which 78.3% is rural and 21.7% in the urban area. The CRFS assessment has shown the vulnerability and limited resilience in the face of high food insecurity, increasing food prices and vulnerability to climatic, seismic, volcanic and earthmoving events.

In Quito, the CRFS assessment and planning process culminated in the design of the **Pacto Agro-Alimentario de Quito**, a systemic and inclusive territorial food strategy. Following a participatory stakeholder consultation process, engaging the participation of a broad number of local, provincial and national government departments and representatives from producer organizations, the civil society and the private sector, a common vision, goals and outcomes for the food strategy were identified.

The strategy is organized around five themes:

1. Management of food resources for the future
2. Food security, sovereignty and nutrition
3. Urban-rural linkages and an inclusive food economy
4. Reducing food loss on the farms and food waste on the consumers' side.
5. Food governance

For each key pillar and outcome, targets and baseline indicators have been identified and a multi-stakeholder action plan has been defined. <http://pactoagroalimentarioquito.com>

**Colombo Municipal Council** (CMC), the capital of Sri Lanka, has a population of 752 993 people. The larger urban area has a population of over 2.3 million, while the metropolitan area has a population of more than 5.6 million residents. To meet the needs of this growing population, food is sourced from many parts of the country. Inefficiencies in the wholesale market system, high level of food waste, vulnerability to climate change, food price volatility and issues related to food safety as pesticide use is not well controlled, have emerged as key challenges for the Colombo CRFS.

When the CRFS process was launched, the CMC did not yet have a clear policy commitment and objective to design a more integrated food system agenda at local and regional level (Western Province). As tangible policy outcome with the potential for more coherent regional food systems approach, the CMC agreed to introduce **local-level by-laws to promote and regulate reduction, reuse and recycling (RRR) of food waste**.

At the regional level, the Sri Lankan government set up a dedicated ministry to implement **Megapolis**, a large-scale, multibillion-dollar urban development initiative in Western Province, where Colombo is located. Thanks to the CRFS assessment and planning process, food has become key in broad multi-sectoral planning across urban-rural areas. Once the plans are acted upon, it will reinforce the sustainability of local food systems, generate employment, improve urban and peri-urban farming, and develop shorter value chains, while safeguarding the territory's natural environment.

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