



RISING TO THE CHALLENGES OF FOOD INSECURITY

INITIATIVES BY LOCAL AND REGIONAL GOVERNMENTS



CREDITS

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Let's Food is a non-profit organisation that supports territories in building sustainable and resilient food systems through territorial cooperation and exchange of best practices at the local, national and international level.



The World Organisation of United Cities and Local Governments is the largest organisation of local and regional governments in the world. As a global network of cities and local, regional, and metropolitan governments and their associations, UCLG is committed to representing, defending, and amplifying the voices of local and regional governments to leave no-one and no place behind.

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In this study, UCLG offers an analysis of 10 local and regional governments' innovative policies to fight food insecurity around the world. Additionally, recommandations to local, regional and national governments alongside international institutions are issued.



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EDITORIAL

ADDRESSING FOOD INSECURITY: UCLG'S UNWAVERING COMMITMENT



Healthy and nutritious food are a fundamental human right, a cornerstone of our well-being and prosperity. Local and regional governments and local service provision should play an important role in ensuring access to sufficient, sustainable nutrition. In the complex landscape of the 21st century, we confront global challenges such as deepening inequalities, inflation, overconsumption and unjust use of our global commons, ongoing conflicts, and climate crises that directly impact food systems and reveal their limitations.

Food insecurity represents a systemic challenge in our contemporary societies, where territorial and socioeconomic inequalities continue to expand, exacerbated by the scarcity of resources and the intensification of extreme climatic events. The demand for emergency food assistance is growing daily, highlighting the urgent need to both enhance preparedness for emergencies as well as to fundamentally reshape the existing system to proactively prevent such crises.

To address these pressing issues, we must fervently support and nurture local, sustainable food systems rooted in proximity, fostering more robust and virtuous food supply chains and strengthening local public service provision.

To confront these challenges, local and regional governments have been actively involved in addressing agricultural and food-related matters. The UN Secretary General's Our Common Agenda also calls on the need to transform our food systems to ensure sustainability, the nutrition of our communities, and fairness. The Sustainable Development Goals (SDGs) depend on contributions from all actors and extend beyond nation-states, giving rise to innovative policies, community initiatives, and strategic partnerships driven by local and regional governments.

This is why they have been active in international policy processes related to food such as the UN Food Systems Summit and the United Nations Committee on World Food Security (CFS), with an aim to transform multilevel governance around food systems. Moreover, from local public service provision such as public meals, waste management and health systems, urban planning and zoning to areas such as education, the effect that local and regional governments have on our food systems cannot be understated.



Through this publication, we provide food for thought on the unfolding of the UCLG Pact for the Future, the organisation's shared political strategy aimed at creating a more equitable, sustainable, caring and resilient world for the people and for the planet.

Through this study, United Cities and Local Governments, in partnership with the Food and Agriculture Organisation (FAO) and the World Sustainable Urban Food Centre of Valencia (CEMAS), continue to display unwavering dedication to tackling this multifaceted issue. We are also thankful for the support of the French Ministry of Foreign Affairs, which has made this endeavour possible.

The initiatives featured illustrate how local and regional governments collaborate with a diverse range of stakeholders, to support those that need access to nutrition. It offers innovative ideas, best practices, and policy recommendations to assist local and regional governments in shaping effective policies to combat food insecurity.

Local and regional governments understand the commons as collective goods for humanity. This is why we believe that the way they are managed needs to be transformed. Our food needs to be managed as a public service centred on the wellbeing of people, their economic and alimentary needs, while being respectful of the environment.

As we look to the future, it is essential for all actors to redouble their efforts in establishing local, sustainable food systems that provide equitable access to nutrition, bolster community resilience, and champion social justice and well-being. The study that follows highlights the important role of local and regional governments in combating food insecurity and ensuring access to nutrition as a means to transforming our food systems, and as an integral part of our Pact for the Future of Humanity.

Emilia Saiz, Secretary-General - UCLG





In 2015, the second Sustainable Development Goal formulated by the United Nations General Assembly was to eliminate hunger in the world by 2030. Seven years later (2022) and almost halfway through the timetable formulated by the UN, the World Bank and the G7 presidency created a Global Alliance for Food Security to respond to the unprecedented global food crisis that was looming (COVID-19 health crisis, war in Ukraine, disruption of supply chains, etc.). One year on, in 2023, it is almost certain that the second Sustainable Development Goal will not be achieved by 2030. States around the world are lagging behind on their commitments and food insecurity continues to rise. In 2022, around 9.2% of the world's population faced hunger, compared with 7.9% in 2019. Moderate or severe food insecurity affected 29.6% of the world's population, i.e. 2.4 billion people, 11.3% of whom were severely food insecure - i.e. they did not have "physical, social and economic access to sufficient, safe and nutritious food to meet their dietary needs and food preferences" (1; 2). On the other hand, worldwide obesity has nearly tripled since 1975, with more than 1.9 billion adults considered overweight in 2016, among which 650 million were obese (3).

As consumption habits evolve quickly in the Global South and worldwide, with a rising consumption of meat, processed and highly-processed foods; junk food and supermarkets are becoming more prominent in cities as well as in some rural areas. They are also cultural and social symbols of higher incomes and social status, especially among the growing middle-classes - numerous countries around the world experience the triple burden of malnutrition and facing concomitantly undernutrition, overweight and micronutrients deficiencies (4). Additionally, although poverty levels were declining pre-2020, a significant share of the population still lived around the poverty line and was therefore vulnerable to shocks. The COVID-19 pandemic directly impacted the poorest households, which often reduced their food-related spendings to overcome the economic hardship of the pandemic, undermining their nutrition and health (less consumption of nutrient-rich foods, replaced by less healthy calorie-rich foods). Many individuals fell back into a cycle of poverty and vulnerability in 2020 and this fuelled further food insecurity and malnutrition during and after the pandemic, especially in urban and peri-urban areas (5).

To counter this international dynamic and offset inaction at the national level, many local and regional governments have been working on agricultural and food issues since the 1990s (6). At the local level, new modes of action, policies and inter-territorial cooperation are crystalizing within international institutions such as United Cities and Local Governments (UCLG). UCLG's Pact for the Future of Humanity - adopted at the Daejeon World Congress in 2022 - highlights the role of local and regional governments as agents of change and frontrunners in the transformation of the food system, taking ownership of the issues on the global agenda and collectively implementing concrete actions to help bring about a sustainable transformation of societies (7).

Food insecurity is a structural and systemic problem intrinsic to contemporary societies, where inequalities of all kinds are growing and will continue to grow in the face of increasing scarcity of resources and the multiplication of intense climatic phenomena. Emergency food aid is no longer a one-off affair: needs are daily and increasing all the time, especially for the most vulnerable populations (children, the elderly, women, rural populations, etc.). Indeed, in nearly two-thirds of the world's countries, women face more food insecurity than men as gender inequalities and negative gender norms affect women's access to resources and services, such as land, knowledge, and food (8).

Malnutrition in women impacts pregnancy outcomes and children's health - maternal undernutrition is estimated to account for 20% of childhood stunting - perpetuating food insecurity and vulnerability across generations (9). Today, the model that consists of supporting associations to recover hyper-processed food products destined to be thrown away, from supermarkets, to distribute them to the most vulnerable people, is out of breath. It does nothing to solve the structural problems of poverty and inequality, or those of overproduction and food waste. It helps to keep beneficiaries in multidimensional insecurity (10). We need to rethink the fight against food insecurity, identify systemic "bottlenecks" and find integrated solutions and potential levers for change (11). To do this, it is important to consider food insecurity from a variety of perspectives. Access to quality food can be determined by: price (economic access), the geographical distribution of sales outlets (physical access), or education and culture (cognitive access) - i.e., knowledge of so-called quality food products, or the social and/or cultural marking associated with the consumption of certain products (fast food perceived as Western food reserved for an higher social status, for example) (12).

Food insecurity is also tightly linked to the concept of food sovereignty, coined by La Vía Campesina as a food system in which the people who produce, distribute, and consume food also control the mechanisms and policies of food production and distribution. Standing in contrast to the present corporate food regime, food sovereignty is crucial to the way food security is conceived in Africa, South America and Asia: emphasising local food economies, family farm-based sustainable agriculture and centring culturally appropriate practices (13). Yet, since the COVID-19 pandemic, the concept of food sovereignty has also been used more broadly around the world by local and regional governments to redefine their agricultural policies to ensure food security and tackle the excessive vulnerability of long supply chains. Additionally, it is key to acknowledge how food security is intertwined with numerous other challenges such as rural-urban migrations, climate change, water scarcity, land tenure and availability, inflations in global markets, unemployment, conflicts and geopolitics. Food insecurity will be increasingly heightened by climate change in the future as food prices are expected to rise and crop yields may decrease. Low-income households will be the most at risk of hunger, as the IPCC projections expect an additional 183 million people at risk of hunger compared to a scenario without climate change (14). Similarly, as resources become scarce (water, arable land, etc.), conflicts will likely arise, leading to further supply shocks, displaced and vulnerable populations and rising food prices, all causing more food insecurity.

As food insecurity is complex and directly linked to a particular geographical, economic, social, cultural and political context, the actions put in place to respond to it can be diverse. They range across a spectrum of interventions of varying degrees of depth and complexity, but all work towards the right to food, i.e. the right to have regular, permanent and unrestricted access to quantitatively and qualitatively adequate and sufficient food corresponding to the cultural traditions of the consumer (UN, 1996). In this study, several approaches and public policies to combat food insecurity will be presented through ten case studies based on initiatives led by local and regional governments. The city of Amman (Jordan), the urban community of Antananarivo (Madagascar), the region of Catalonia (Spain), the city of Chefchaouen (Morocco), the city of Durban (South Africa), the metropolis of Montpellier (France), the department of Rufisque (Senegal), the city of São Paulo (Brazil), the region of Siem Reap (Cambodia) and the city of Vancouver (Canada) are activating different levers and involving various stakeholders to guarantee food security. Their actions are highlighted in the following study as good practices that local and regional authorities around the world can and should draw from, to transform and relocalise their food systems.





Community-led solutions and participatory tools to enhance urban food security

Jordan's landscape is characterised by a growing aridity and extremely limited water resources, creating an inhospitable setting for agriculture. Over the past few years, the nation has grappled with the spread of agricultural desertification, which is to be worsened considering half of the cultivated land in the Near East and North Africa region is classified as highly vulnerable to climate change. By 2050, yields are estimated to fall by 10 to 20% locally (15). Additionally, successive crises have triggered a widespread increase in food prices, in terms of production costs and spending for consumption alike. Growing indebted, numerous farmers have been forced to sell their land to pursue more lucrative activity in cities, whilst the price of food products has risen by 4.8% since 2020 with fresh produce being generally more expensive than processed products or readymade meals (16). Rural-to-urban migrations have fuelled the growth of food insecurity and poverty in cities, and undermined the country's food sovereignty; 98% of the food consumed in Jordan is currently imported.



- Amman city, Jordan
- Population: 4,061,150 inhabitants, i.e. 45% of the Jordanian population
- Share of residents living below the poverty line: 15.7 % (17)
- Number of food insecure residents: 160 000 (2014) (18)
- Unemployment rate: 19 % in Jordan (<u>17</u>)
- Share of food in the household budget: 28.2% in Amman, 32.5% in Jordan (19)
- Share of the country's water consumption dedicated to agriculture: 65% to 72% (18)

In Jordan high dependence on food imports, food price inflation, increasing poverty and the vulnerability of local agricultural production all reflect growing food insecurity issues. Urban agriculture has therefore emerged as an alternative, becoming widespread in Amman. Indeed, it has been an integral part of the city's municipal agenda since 2007 through an urban agriculture and food security programme, established through the cultivation of public land. Due to its "Office for Urban Agriculture" and its Multilateral Forum, - a collaboration between public and private entities, NGOs and citizens to jointly plan urban agriculture in the city (20) - the municipality has developed partnerships with several international organisations to encourage inhabitants to produce food for their own consumption. This strategy relies on multi-stakeholder cooperation and is supported by several ministries such as the Ministry of Agriculture and the Ministry of the Environment (20). As a result, there are more than 300 gardens on building roofs as well as 4,000 cultivated gardens in schools and private homes. A land bank facilitates connections between landowners and producers, while new land use regulations mandate the allocation of 15% of land for green spaces or crops (21).

Although urban agriculture is not sufficient to guarantee the food security in Amman, it can partially meet the needs for fresh produce in some households and is a particularly interesting use of interstitial spaces in the city which favours food governance and the inclusion of marginalised social groups, as all while creating jobs and improving livelihoods at the local scale.



Greening the camps to empower marginalised communities

In 2017, the Belgian collective 'Greening the camps' created an experimental garden on the roof of the cultural centre "Jadal for knowledge and culture" in Amman. This centre, first built to exchange ideas, socialise, forge links and share experiences, allowed the collective to experiment with building facilities in interstitial spaces. It was a preliminary step to the launch of a broader project: creating community farms on the roofs of refugee camps. In 2018, in collaboration with the local NGO "One Love", Greening the camps developed a production site in Amman's Jerash camp - a Palestinian refugee camp that houses over 45,000 individuals. Together with interested families, they co-created green spaces within the camp, as areas for leisure, biodiversity and educational activities. Besides encouraging healthy diets and making good use of interstitial spaces (unused rooftops) for food production - thereby enhancing the residents' access to sufficient safe and nutritious food, Greening the camps is an inclusive community-led initiative that addresses social needs, fosters community cohesion, empowers marginalised local residents, and enhances livelihoods by creating jobs. It provides numerous services and opportunities such as psychological, social and legal support, especially for young people and families, and dispenses vocational training (22).



INITIATIVE 2

"Amman is listening": facilitating access to basic services

In collaboration with the Bloomberg Foundation, the municipality of Amman has created "reachability maps" to pinpoint deficiencies in crucial services, enhance preparedness for forthcoming crises, and allocate resources for infrastructure development. They gather all the amenities available in each district (public infrastructures, retailing spaces, etc.) and highlight short supply chain options, local products, green spaces and pedestrian mobilities. As a result, Amman's most vulnerable communities can have better access to safe and nutritious food. This project - part of the "Amman is listening initiative" - aims to respond to the accessibility problems identified by the municipality during the COVID-19 pandemic, when the most vulnerable communities did not have access to proper food and healthcare services in the city.

Since the creation of its "reachability maps", the municipality of Amman has introduced an interactive open-data platform for residents to raise concerns and provide real-time input to improve the delivery of vital city services. This participatory process involves marginalised communities in the creation of solutions and tools that help improve food security around the city (23).



Urban agriculture to combat poverty and malnutrition

Madagascar is one of the five countries in the world most affected by chronic malnutrition*, and one of the ten most vulnerable to climate change (cyclones, floods, storms, droughts, sandstorms, etc.) (25). In recent years, malnutrition has become a growing concern in Antananarivo due to a strong rural exodus and an exponential and uncontrolled increase in the urban population. As poor rural communities in peri-urban areas migrate to Antananarivo in search of a better life, extreme poverty and food insecurity are also spreading from rural to urban areas (26).



- Antananarivo Urban Community
- Analamanga region, Madagascar
- Population: 3.5 million inhabitants
- Farmland: 14,000 ha irrigated, i.e. almost 45% of the city's surface area (27)
- Access to drinking water: 26% of households in the Analamanga region
- Chronic malnutrition: almost 50% of Malagasy children under the age of 5
- Cost of child malnutrition: 14.5% of Madagascar's GDP (28)
- Poverty: 77.6% of the Malagasy population (29)

The metropolis of Antananarivo is particularly green. More than half of the capital's land area is dedicated to agriculture, in particular rice cultivation (the staple of the Malagasy diet) and vegetable production, and 20% of the city's households are involved in food production, both on the outskirts and in the heart of the city. Agriculture is therefore a key economic sector for the metropolis and an essential source of employment and income in a country where poverty affects 77.6% of the population (27, 29). Urban agriculture and self-production are part of the local culture. According to the Légende project, coordinated by CIRAD, products from urban agriculture are mainly consumed locally and account for a significant proportion of urban household consumption (27). For example, 90% of poultry products and almost all vegetables consumed in Antananarivo are produced locally. Every year, 53,000 tonnes of rice - 20% of the city's consumption - are also harvested locally (27, 30). Nevertheless, Antananarivo still faces problems with access to quality food, leading to food insecurity for the most vulnerable. This situation could be exacerbated in the future by the intense climatic phenomena that are multiplying in Madagascar.

To improve the resilience of the local food system and prepare the city for potential shocks, the municipality of Antananarivo has been implementing a set of policies promoting urban agriculture since 2011.

To take this commitment a step further, in 2017 the municipality of Antananarivo also joined the Milan Urban Food Policy Pact (MUFPP). In the same year, the city hosted the conference "Feeding the Cities: Urban Agriculture, a Solution to Strengthen the Resilience of African Cities" and received the Milan Pact Award for its actions in a "difficult environment" (significant poverty, strong impacts of climate disruption, etc.), in particular its management of market waste, its development of agroforestry and its role as a pilot city, since 2018 as part of the MUFPP Monitoring Framework Pilot Project (31, 32, 33). This project, run by the FAO in partnership with the municipality, aims to identify the players and projects working on food-related issues in the area and to design food policies that involve all the stakeholders in the food system in a shared and sustainable governance dynamic (34).

^{*}Malnutrition is characterised by an imbalance between nutrient intake and the body's needs. Chronic malnutrition is assessed by evaluating a child's height/age ratio and is intrinsically linked to structural poverty." (24).



School gardens to address children's essential needs

In Antananarivo, children from impoverished neighbourhoods often rely on school meals to ensure their food security; school canteens play a key role in partially addressing their essential needs. In Madagascar, the Ministry of National Education's program has placed them at the centre of a series of initiatives aimed at combating scholar food insecurity (29).

In 2015, the Urban Community of Antananarivo (CUA) initiated the "School Gardens in Antananarivo" project as part of its urban agriculture programme launched in 2011. This project aims to provide quality, healthy, and local food to children throughout the city. To achieve this, the municipality encouraged the creation of small vegetable gardens in disadvantaged neighbourhoods and connected them with school canteens. The project had two main objectives:

- "Improve children's food and nutritional security and their academic performance through dietary diversification."
- "Promote urban agriculture practices among students (through training centres) so that they can transmit the possibility of creating a home garden to their parents" (35).

By 2018, the micro-school garden program had expanded to 24 neighbourhoods, involving 15,000 students in 30 primary schools, and had led to the establishment of 21 youth training centres (<u>35</u>). In 2021-2022, the goal is to cover all primary schools in the city, reaching 50,000 children (<u>36</u>).

As a result, students from poor households benefited from dietary diversification two to three times a week, and many families became aware of the benefits of urban agriculture and self-production. At the same time, urban micro-vegetable gardens generated employment and income in disadvantaged areas through the sale of products, promoting the consumption of healthy, fresh, and local foods through self-production (35).

It is worth noting that heavy land pressure due to rapid urbanisation has made land difficult to access in Antananarivo (especially arable land) and may slow down the project in the future, as well as the development of urban agriculture.



INITIATIVE 2

The ASA program, agroforestry to feed Antananarivo

The Agroforestry Program for Antananarivo (ASA Program) was launched in 2014 to contribute sustainably to the fight against poverty and food insecurity in Madagascar and help preserve the local environment.

By supporting the development of five sectors (vegetable gardening - fruit tree farming - poultry farming; fish farming; wood energy and reforestation; dairy; and land tenure security), the project's objective is to improve producers' incomes while ensuring local populations have access to fresh food and wood energy products. Financial and technical assistance is provided to local farmers to encourage the sale of quality and nutritional products to peri-urban and urban populations, often suffering from nutritional deficiencies. The PROFAPAN (north of Antananarivo) and PROTANA (south of Antananarivo) projects have contributed to reducing food insecurity within the supply chain of vegetable gardening-fruit tree farming-poultry farming in peri-urban areas of Antananarivo through various actions:

- Technical and economic support to 4,500 producers;
- Structuring and capacity building of 450 producer organisations;
- Support for product marketing (business plans, investment, and management);
- Improvement of post-harvest management, reducing losses by 20% (construction of local storage and processing units);
- Assistance to producers in accessing central markets in the capital city (<u>37</u>).

The ASA program also addresses the issue of rural-urban migration - where numerous Malagasy move towards Antananarivo looking for opportunities but instead face unemployment, poverty and food insecurity - by creating attractive jobs and economic opportunities on the outskirts of the city.



Regional policies and institutions to promote local heritage as key to food security

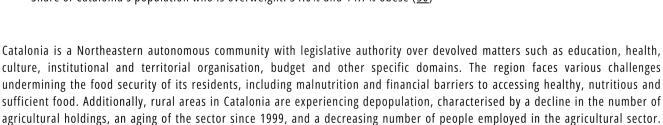
Spain is among the OECD nations that have experienced some of the most adverse economic effects due to the impacts of the COVID-19 pandemic $(\underline{1}, \underline{2})$. The hasty opening of the country to tourism after the first lockdown of 2020 led to an exponential recrudescence of cases, a deadly second wave and a strict lockdown that lasted far longer than in most other countries and undermined the economy $(\underline{40})$. Since 2020, the demand for food aid has increased by 30% (compared to 2019). Unemployment rates reached 13.9% in 2020 and 26.1% of people were considered at risk of poverty or social exclusion $(\underline{41}, \underline{42})$. The economic struggles faced by an important share of the population reflected in alterations to everyday food practices. Amid (and following) the pandemic, the food access and consumption patterns of socially disadvantaged individuals in Spain underwent a shift towards greater constraints in terms of variety, quality, and frequency $(\underline{43}, \underline{44})$.

Simultaneously, agriculture - which represented 2.7% of the Spanish GDP in 2017 - has suffered significantly from severe climate events in recent years, particularly droughts, and is grappling with water scarcity (75% of the country is in process of desertification); further strengthening risks of food insecurity at the local and national scales (45, 46, 47).



- Autonomous community of Catalonia, Spain
- Population: 7,522,596 inhabitants, 16% of the country's population (48)
- Decrease in the number of agricultural holdings: 20.48% between 1999 and 2013 (49)
- Evolution in farmers over 65 years old: + 23.11% between 1999 and 2013 (49)
- Rate of self-sufficiency: 40.4% (49)
- Expected increase in temperature (compared to 1971-2000): + 1.4° C by 2050 (49)
- Share of Catalonia's population who is overweight: 34.6% and 14.7% obese (50)

The region also faces heightened vulnerability to climate change (49, 46, 50, 51, 52).



To address these issues and ensure food security, the Generalitat of Catalonia, Catalonia's government, has implemented policies and established institutions in recent years. These initiatives place a particular emphasis on local heritage, aiming to redefine the relationship between rural, maritime, and urban areas. The overarching goals include attracting and retaining population in rural areas through the development of a vibrant territorial economy and a robust labour market, as well as revitalising local agricultural production while promoting local food consumption.



The Catalan Food Council, a representative body to design innovative food policies

Thanks to its competence framework in agriculture, livestock and fishing matters, the Generalitat of Catalonia established the Catalan Food Council in 2017, also known as the Food Parliament of Catalonia (53). The Council's primary objective is to promote participation and facilitate debates on agri-food-related topics and lay the foundations of a new regional food strategy that emphasises local food production and sustainable environmental management. The Catalan Food Council gathers six representatives from food-related governmental departments; eleven representatives from other departments of the Generalitat, i.e. health, tourism, trade, education, etc.; and ten representatives involved in the different components of the food system (e.g. agricultural cooperatives, food industry, distribution, restaurants and catering sectors, social and solidarity economy, consumer organisations and cooperatives, etc.). The Catalan Food Council serves as a transversal and widely representative body where debates are held and working groups are created to design innovative food policies for Catalonia (54).

The Catalan Food Council consists of four commissions: one for sustainability and the circular bioeconomy, another for "territorial roots and food self-esteem"; a third for justice, equity and cohesion of the food system; and a fourth for healthy and reliable food (53, 54).



INITIATIVE 2

The Strategic Food Plan for Catalonia (2021-2026), putting local culture and heritage at the heart of the fight for sustainable food systems

After more than a year of collective work and debate (359 experts, 452 citizens and 217 entities were involved in the participatory process), the Council approved in 2020 the Strategic Food Plan for Catalonia 2021-2026 (PEAC). The aim of this plan is to articulate a food structure and system that is territorially-rooted, based on diversity, competitive, and that produces accessible, healthy and quality food. To do so, it focuses on four dimensions, each supported by a commission within the Council that aims at creating a food system which is characterised by being: (1) sustainable, transformative and based on the circular bioeconomy; (2) independent and rooted in the territory; (3) fair, equitable and favouring social cohesion; (4) healthy and trustworthy. In each dimension, the PEAC formulates objectives and milestones; some of which are centred on enhancing the value of rural areas and revitalising connections between local food production and consumption by emphasising Catalonia's heritage. For instance, the PEAC strives to draw in residents and promote the formation of agrifood businesses in rural areas by fostering a vibrant business environment and a favourable job market, as well as enhancing the working conditions of agricultural workers. Additionally, the initiative aims to bolster Catalonia's positioning and strengthening towards improved food self-sufficiency, by acknowledging food culture and gastronomy, appraising the richness of Catalan food products, and fostering awareness among citizens about the influence of their consumption on the local landscape. In this way, the Generalitat hopes to reinforce an equitable distribution of the profits and benefits of added value along the food chain and guarantee physical and economic access to sufficient, safe, healthy, sustainable and quality food for all (55). The PEAC establishes the foundations of the National Pact for the Food of Catalonia and will guide future public policies in the field.



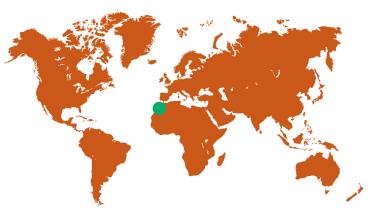
Agrotourism and the creation of agricultural jobs for youth and women to increase income and combat food insecurity

Chefchaouen is the capital of the province of the same name and one of the main cities in the Tanger-Tétouan-Al Hoceïma region in Northern Morocco. The city is located in a predominantly rural province where urbanised land represents only 12.5% of the total territory. The poverty rate in the province of Chefchaouen (4.7% in 2014) is higher than the regional poverty rate (2.7%), with significant differences between urban and rural areas. Indeed, the rural population has a much higher poverty rate than the urban population (5.2% compared to 0.7%) because the majority of rural residents depend on subsistence agriculture, which does not provide access to diversified nutritive intakes and leaves individuals to depend on volatile prices of food produce. This vulnerability is exacerbated by the recent increase in food prices due to inflation in global markets, which corresponds to a 16.8% increase between January 2022 and January 2023 (56).





- Province of Chefchaouen, Morocco
- Population: 42,786 inhabitants
- Unemployment rate in the province: 4.8% (2.6% in rural areas, 23.9% in urban areas)
- Poverty rate: 4.7% in the province, 0.8% in the city of Chefchaouen
- Agricultural lands: 25% of the province
- Share of the workforce in the agricultural sector: 85% (province)



To combat food insecurity in peri-urban and rural areas around Chefchaouen, the municipality has collaborated with various organisations to promote local food production and transformation. It actively strives to enhance the attractiveness of the region and tourist activities. Organisations such as ATED (Talassemtane Association for Environment and Development), ADL (Local Development Association), and AFHTA (Foundation for Humankind, Terroir, and Alternatives) support and strengthen agricultural cooperatives for food product transformation and distribution (57, 58, 59). They also promote women's professional activities in rural areas and provide farmers with training in agroecology and hospitality to increase and diversify their sources of income (e.g., agro-tourism).

Simultaneously, the Municipality of Chefchaouen has launched a campaign to promote these initiatives through advertising, fairs, and events, largely funded by Spanish decentralised cooperation, notably the region of Andalusia. The municipality also encourages agrotourism, with over 120,000 tourists visiting the city of Chefchaouen annually. Furthermore, producers have been offered dedicated space and areas to sell their products in addition to benefitting from significant visibility in municipal markets, restaurants, and the municipal tourism office. This collaboration promotes the local production of healthy, fresh, and high-quality foods; the creation of jobs, especially for women and youth, in rural and urban areas; and the development of high-value-added activities across the entire region through tourism.



A women's cooperative to revitalise rural communities

The "Cooperative of Women for Mushroom Production and Distribution" is the first mushroom cooperative established in the province of Chefchaouen. Located in Dardara, a rural area on the outskirts of Chefchaouen, the cooperative employs women from the surrounding rural areas (such as the Bouhachem Natural Park and the Intercontinental Mediterranean Biosphere Reserve) to produce and market various varieties of fresh or processed mushrooms.

This initiative is crucial for the economic development of the region as it provides financial support to women and their families and serves as a source of empowerment and autonomy. In the province, 55% of women aged 10 and above are illiterate (compared to 26.4% for men), and access to vocational training is extremely limited. This restricts the ability of local residents, especially women, to obtain permanent and lucrative employment (60). However, women's employment is beneficial for local development as it creates added value and increases household incomes in the area while putting an end to the cycles of poverty and inequalities that are passed down through generations (9). In this regard, the "Cooperative of Women for Mushroom Production and Distribution" combats food insecurity by employing women, revitalising rural communities, and producing fresh and local food).

Furthermore, projects of this kind enhance the attractiveness and economic development of rural areas on the outskirts of Chefchaouen through job creation and wealth generation, helping to combat rural depopulation alongside the challenges of rural-urban migration, especially among young people (61, 62).



INITIATIVE 2

The "Mediterranean Diet": a showcase for local production

Since 2010, Chefchaouen has been recognised as an emblematic community of the "Mediterranean Diet" (UNESCO's Intangible Cultural Heritage). This concept encompasses all the knowledge, traditions, sociocultural background, agronomic and culinary practices of Mediterranean countries, as well as their landscapes, natural resources, biodiversity and, more broadly, the fields of health, well-being, hospitality, and creativity. It encourages each emblematic community to preserve everything that makes it unique (63).

In this context, the Municipality of Chefchaouen has launched various initiatives to promote its food and cultural heritage by highlighting local products and providing sales spaces for farmers in the region. It has created a territorial brand (Chefchaouen Territorial Quality Brand) for local food products, provided financial and technical support to local cooperatives to strengthen their capacities, established the annual "Mediterranean Diet Day" fair, and conducted awareness campaigns on the importance of nutrition, local and healthy foods (64). All these projects have been showcased in advertising campaigns and presented as opportunities for the development of local ecotourism and as examples of Chefchaouen's rich land. Moreover, a Museum of Mediterranean Food Cultures is set to be created in Chefchaouen to showcase local culture and food heritage. It will include tasting spaces, awareness workshops, and a garden (65).



Agroecological policies as a lever to combat food insecurity

Socio-economic polarisation in South Africa is among the highest in the world, attributed to inherited social problems and very high unemployment rates. Although some progress has been made through reforming social policies since the end of apartheid in 1994, the country remains scarred by a history of systemic racial discrimination and socioeconomic disparities, leading to moderate and severe food insecurity.

In Durban, food insecurity appears to be a direct consequence of inequalities in access to food (lack of affordability of basic food items, let alone quality food). Although 55% of the eThekwini municipality* territory is rural, most of the population is concentrated in urban areas where food with low nutrient density is prominent, easily accessible, affordable and socially and culturally-promoted (e.g. supermarkets, street food...). Healthier food options are expensive and rare in poor neighbourhoods (66, 12). Additionally, high unemployment - which is particularly prominent among young people in Durban - has been found to worsen the impacts of income inequality on food security (67).



- Province of Kwazulu-Natal (KZN), the "Garden Province"
- Metropolitan Municipality of eThekwini, South Africa
- Population: 3.2 million inhabitants (68)
- Density: 2,600 inhabitants/km2
- Unemployment rate: 35.6% among young people aged 15 to 24
- Population living below the poverty threshold: 38% (with less than \$3.20/day), 19.3% in extreme poverty in South Africa
- Gini Index: 0,63 in 2018 in South Africa, the highest level of economic inequality in the world
- Green spaces: 60% of the territory (12)



Durban is the largest city in the Kwazulu-Natal (KZN) province and the third largest in South Africa. It was nominated as the greenest city in the world in 2019 and is now well-known for its peculiar agricultural and rural nature. Indeed, Durban is tightly linked to the broader territory of the KZN province, which produces 30% of the country's agriculture and is organised around rural communities that produce cash crops, maize, poultry and meat for local consumption. Local markets exist and food is exported from The Harbour.

However, despite its productive nature, Durban faces severe food insecurity. In 2013, 62.6% of the KZN province population was considered food insecure in 2013, the second-highest number of food-insecure people in a South African province. Food insecurity is particularly high in Durban's slums which are widespread over the city. Overall, according to the FAO, hunger and malnourishment rates have nearly doubled between 2008 and 2020 in South Africa, and have worsened since due to the COVID-19 pandemic. Whilst 1.8 million people were considered to be lacking food in 2008, the figure increased to 3.8 million in 2020.

To fight food insecurity, Durban metropolis has implemented a comprehensive and extensive agricultural and food policy that aims at ensuring access to healthy, nutritious, and quality food for all. The municipality has placed particular emphasis on using a systemic approach to food insecurity (e.g. enhancing urban agriculture, sustainable farming practices, food literacy, reducing food waste, and tackling farmer poverty), rather than focusing merely on the economic aspect of the issue. To do so, it has developed an agroecological policy (production) alongside an agribusiness policy (processing and distribution) which attempts to encourage the installation of new farmers on the territory to create employment, to process, distribute and promote healthy and high-quality food through the development of agroecological practices** and to ensure food security. To this day, Durban's agroecological policy is one of the most comprehensive and thorough policies of its kind (12).



Municipal AgriHubs, a platform to support small-scale farmers

The municipality has developed seven AgriHubs on its territory, which, in 2020, helped support 426 newly-created local small-scale farms.

The main goal of the project is to facilitate access to basic services and tools for the farmers (e.g. seeds, permaculture training, tractors, and compost) so as to lower their cost of production. Indeed, because of inefficiencies in the production system, local small-scale farmers cannot compete with the prices of the bigger commercial farmers, so nutritious, local and quality food is more expensive and less accessible for Durban's inhabitants, triggering food insecurity (69).

The AgriHubs, also known as agroecological platforms, were established on the outskirts of Durban to encourage the creation of farms close to the city. They serve as multifunctional spaces that educate the farmers and the local population about agroecology through "school-to-farm" training. Additionally, they concentrate food production in a few locations which allows the agri-value chains to be better structured and more synchronised. The municipality uses the AgriHubs' production to supply 589 school canteens (about 400,000 children) and food banks, further improving food security. The AgriHubs combat unemployment and the poverty found among farmers, train the local population to more sustainable practices, and bring nutritious food to children and other vulnerable groups. This initiative has had positive spinoffs on the nutritional status of farmers and the local community (70).



INITIATIVE 2

Public/private partnerships to ensure decent incomes and healthy food

The Agroecology and Agri-Food Business services of the eThekwini municipality also cooperate with small-scale companies and producers from the private sector to accelerate the transition towards a sustainable local food system, and counter the influence of large corporations at the local scale. Indeed, in South Africa, around 30,000 producers supply 95% of the country's food markets, whilst more than 300,000 others account for the remaining 5% (12). The former dominate the national agricultural sector, owning large farms, ranging from 2,000 to 10,000 hectares, and are mostly owned by the white community since their control of the land stems from the apartheid. Promoting small-scale family farming therefore addresses a variety of challenges. It questions the power status quo that emerged post-apartheid, reinforces equality and land accessibility for black communities, and contributes to the fight against food insecurity. The eThekwini municipality has therefore notably invested in Fair Food Company, a social enterprise that supports small-scale producers by helping them access diverse markets, and training them in sustainable agroecological farming practices. Since 2013, the company has been establishing a supply chain for the edamame bean, which is particularly beneficial for soil enrichment. This has allowed the creation of numerous jobs, in the different sectors of the food chain, from production to transformation and distribution. Fair Food Company supports about 1,600 producers from the Kwazulu-Natal province and fights food insecurity, owing to the financial support of the municipality, by diminishing unemployment, creating stable incomes and encouraging sustainable production and consumption (71).

^{*} The eThekwini municipality is a metropolitan municipality that includes the city of Durban and surrounding towns.

^{**} Agroecological practices encompass various approaches that attempt to maximise biodiversity and stimulate interactions between different plants and species, as part of holistic strategies to build long-term fertility, healthy agroecosystems and secure livelihoods (IPES-Food).



Quality Food for All

The metropolis of Montpellier Méditerranée is a southern French territory where 45% of the land is dedicated to agriculture (compared to 24% in the Greater Lyon area, for example) (72, 73). The city boasts a strong agricultural heritage, particularly through its wine traditions and its location in the heart of one of the world's largest wine-producing regions, as well as its significant production of cereals and olives (74, 75). However, demographic pressure (projected growth of +1% per year by 2040) and the consequences of climate change negatively impact the potential for local agricultural production, the resilience of the territory, and the ability for everyone to access healthy and high-quality food (76).





- Metropolis of Montpellier
- Department of Hérault, Occitanie Region, France
- Population: 450,000 inhabitants
- Agricultural Lands: 14,000 irrigated hectares, nearly 45% of the city's surface area (72)
- Poverty: 26% of the population below the poverty threshold in 2020 (77)
- Unemployment: 13.5% of the population aged 15 and over
- Share of agricultural farms without successors: 84% (78)



Montpellier is a pioneering city in France when it comes to food-related topics (university hub, committed policies, etc.). In 2015, an agro-ecological and food policy (called "P2A") for the Montpellier Méditerranée Metropolis (3M) was adopted, driven by new municipal teams, based on five main objectives that combine "eating well" and "producing well" (78):

- 1. Ensure universal access to fresh, local, and nutritious food.
- 2. Stimulate the economy and employment in the agricultural and food sectors.
- 3. Protect the region's heritage and natural resources.
- 4. Reduce greenhouse gas emissions and enhance the territory's resilience to climate change.
- 5. Promote social harmony and unity.

To achieve these goals, several actions have been implemented by the metropolis: mobilising agricultural land on metropolitan land, minimising the environmental impact of school canteens, developing shared and family gardens, engaging citizens in food-related activities, promoting local and traditional products, and supporting the development of initiatives that encourage local sourcing (79).

It is worth noting that the implementation of municipal policies for the development of quality food takes place in a context of significant social and economic inequalities in Montpellier, marked by high poverty and unemployment rates. The city and the metropolis, in partnership with the local ecosystem, aim to strengthen local initiatives to ensure access to quality local food for everyone.



"Ma cantine autrement": a public lever for sustainable food systems

"Ma cantine autrement" (*My Canteen Differently*) is a cornerstone project of Montpellier's food policy, using school canteens as a lever to combat food insecurity throughout the entire food system.

Over 12,000 meals are prepared every day for schools in the area. "Ma cantine autrement" aims to incorporate local and organic products into the menus, raise awareness among children about the importance of sustainable eating, train staff responsible for meal distribution, combat food waste, optimise the management of the kitchen unit's production, and transition to 100% recyclable and compostable materials (80).

In 2020, a school meal cost €2 for 70% of families, with social pricing ranging from €1.75 to €4.65, compared to €3.65 in 2014. Moreover, the quantity of organic and sustainable products used to prepare the meals increased from 2% to 20% and from 10% to 50% respectively between 2014 and 2020. The city also developed eco-citizen alternative menus to introduce plant-based proteins to children and reduce their sugar and saturated fats intake. By 2026, the goal is to achieve 100% organic and/or local products in school canteens across the metropolis and reduce food waste to less than 100 grams per child and per meal - a figure that has already decreased from 157 (32% of the food distributed) to 115 grams (24% of the food distributed) between 2016 and 2019 (80).

While today it is considered to be a successful policy, this project was initially slowed down by an unfavourable political environment. Between 2016 and 2020, local officials did not receive expected and dedicated funding and had to approach external actors to benefit from grants or reduce the scope of their actions. Additionally, local producers and processing companies were reluctant at first to take part in public-private partnerships (bureaucracy, lack of reliability, etc.). After considerable work from local officials in terms of time, efforts and motivation, the project took off, involving an increasing number of stakeholders and benefiting from additional funding as its success became apparent.



INITIATIVE 2

Fulfilling the human right to food with the "Caisse alimentaire commune"

In 2020, several associations in France got together for the access to food for all, with the main objective of creating a national policy to combat food insecurity and promote sustainable and quality food. Starting in 2017, the "Food Social Security System" ("Sécurité Sociale de l'Alimentation"), which was developed by the French NGO "Engineers Without Borders", aims to guarantee access to quality food for all through a universal income that can be spent on endorsed products (79). In Montpellier, a project for a "Common food fund" ("Caisse Alimentaire Commune"), derived from this model, was conceptualised between July 2021 and December 2022 by a citizen committee composed of 47 people, among which 50% were in precarious situations and 80% women (selection was done through sampling to ensure representation of the metropolitan population and project reproducibility). Following the principles of participatory democracy, they co-developed the Montpellier Common Food Fund over 15 months, meeting once or twice a month (81).

In January 2023, a Common Food Fund was set up for over 300 residents of the metropolitan area for a one-year trial period. Participants receive 100 MonA (local food currency equivalent to \leq 100) per month to spend on selected food products, based on a mandatory monthly contribution for all (minimum of \leq 1). To date, around ten shops and producers are members of the system (81).

The project benefits from public and private funding in addition to membership fees and currently brings together 25 organisations: Montpellier Metropolis, organisations and foundations (such as the NGO "VRAC et Cocinas" and the UNESCO Chair on World Food Systems), local food distribution outlets such as the cooperative supermarket La Cagette and the Montpellier public wholesale market, and other groups such as the local currency La Graine (82, 83).



Education to combat food insecurity

Over the past forty years, Senegal's food system has undergone radical changes (urbanisation, changing cultural norms, development of a middle class, etc.) that have revealed tensions and vulnerabilities. Food imports, the exponential consumption of processed industrial products and declining purchasing power are compromising the sustainability of food systems (84). In Rufisque and the surrounding department, where the majority of the region's agricultural land is concentrated, low purchasing power is the primary cause of food insecurity (84). This increases local malnutrition and tends to negatively impact on the population's food security.



- Department of Rufisque
- Dakar region, Sénégal
- Population: approximately 550,000 inhabitants (84)
- Departmental agricultural land: 3/3 of the Dakar region (84)
- Change in the amount of farmland: 30% between 1999 and 2015



In Rufisque, agricultural land for food production is becoming scarce as a result of increased and uncontrolled urbanisation (85). At the same time, a large proportion of the population does not have access to quality food: two-thirds of the population spends more than half their income on food; 64% of households say they have difficulty accessing food; and 22% of households eat only two meals a day. These indicators of food insecurity have worsened significantly over the last ten years due to the rising price of local produce.

A diagnosis of the area's food system was carried out by the Rufisque Departmental Council, with the help of local NGO CICODEV and coordinated by the GRDR Migration-Citoyenneté-Développement association between 2016 and 2017. It led to the creation of a Territorial Food Project ("Projet alimentaire territorial" - PAT) in 2018 (86, 87). This plan is an innovative example of food governance - the first of its kind in Senegal. The idea of a PAT originated in France, where a national law encourages the creation of territorial food projects, financed by the State, to find local solutions to local agricultural and food related issues*. The elaboration of a PAT in Rufisque was encouraged as part of international cooperation with the metropolis of Montpellier Méditerranée (France) in 2017, in which the CIRAD (French agricultural research and cooperation organisation) was also involved, tasked with the monitoring and assessment of changes in agricultural land from 2021 onwards. The CIRAD has been involved locally since 2013.

The PAT designed in Rufisque is divided into three strategic areas. One of these aims is to promote healthy and sustainable food, and a number of activities have been put in place to achieve this:

- Schoolchildren have access to quality food in canteens;
- Children in targeted schools have been made aware of the importance of healthy, sustainable food;
- The population of the department has been provided with clear information on what constitutes healthy and sustainable food consumption.

One of the flagship projects proposed is the establishment of a central kitchen in Rufisque for ten school canteens, as well as the creation of a governance and management strategy for school canteens and the development of nutritional and environmental education in schools. Like Montpellier, Rufisque believes in the key role of school canteens in promoting food and nutritional security for children and in supporting sustainable, local food-producing agriculture (88).

^{*} Law on the future of agriculture, 2014.



The SADMAR project: school canteens to support local production and create jobs

The SADMAR (2016-2019) and AMOPAR ("Appui à la mise en oeuvre du Plan Alimentaire de Rufisque", 2019-2022) projects are supported by the Rufisque Departmental Council to achieve one of the objectives of the Territorial Food Project launched in 2018: improve people's access to healthy and local food. It involves linking up producer organisations and school management committees to supply Rufisque's school canteens with local produce. In this way, children in poor neighbourhoods can benefit from sustainable, healthy, high-quality, local food and achieve greater food security. At this stage, 2,500 children are already benefiting from the programme (89).

The programme also helps to reduce food costs for households whose children eat at school by around 61 XOF/day/pupil and 80 XOF/day/pupil for the most vulnerable households*, giving them the opportunity to better meet their household needs or spend more to access quality products (90). Local producers and suppliers also benefit from this project, as school canteens are a guarantee of consumption, a considerable source of income, as well as social recognition for their contribution to feeding local children. In addition, the SADMAR initiative has structured the local agricultural sector by founding and promoting three sectors: bouye, jujube and sweet potato, which have created jobs and value in all sectors of the Rufisque food system. Promoting short supply chains and sustainable agriculture at the local level is another way of combating food insecurity (89).



INITIATIVE 2

Food education in schools to combat food insecurity

Taking the Rufisque Territorial Food Project a step further, the SADMAR project is promoting food education in the fight against food insecurity. Micro-gardening workshops and courses on food and nutrition are offered to encourage the development of new consumer habits (89).

This strategy relies on educating children at school, but also, by extension, their families, particularly women. Given their essential role in food, nutrition and education in Senegalese society, it is vital that they become aware of the impact of food on children's health and development (89).

^{*} Respectively €0.09/day/pupil for the most affluent households and €0.12 for the most vulnerable households.



Public participation and specialised institutions against food insecurity

São Paulo is the largest city in Latin America, with nearly 12 million inhabitants (20 million in the surrounding metropolitan area). The city has experienced significant urbanisation in recent years and is characterised by a wide territorial expansion, as well as sharp socio-spatial segregation. Indeed, around a third of São Paulo's urban population live in slum-like conditions; 19% live in poverty (living with less than R\$261 (50€) per month); and from one neighbourhood to another, life expectancy can differ by almost 24 years (91, 92). Food insecurity and hunger are rampant problems in Brazil, and worsened in 2020 with the pandemic. In 2021-2022, 33.1 million people experienced severe food insecurity whilst more than half of the population faced some form of food insecurity (93). The percentage of people unable to afford food for themselves or their families rose to 36% in 2021. The increase in food insecurity among the poorest 20% in Brazil during the pandemic increased to 75% in 2021 (53% in 2019), nearing levels in Zimbabwe, which had the highest level of food insecurity in the world at the time (80%) (94). Accessing healthy food is particularly challenging in large urban centres and poor neighbourhoods.



Metropolitan area of the Greater São Paulo

State of São Paulo, Brazil

Population: 12 million inhabitants
 Unemployment rate: 14.6% in 2020 (95)

Poverty rate: 19%

Population facing severe food insecurity: 33.1 million people in Brazil

Share of the national pesticides' consumption and production: 80%



Since the 2010s, São Paulo has been inscribing food and nutritional security into regulatory frameworks, to ensure access to adequate and healthy food and support organic and agroecological production through public food distribution (school canteens and catering). The city proposes an innovative approach to food and nutritional security based on: the creation of public policies and institutions dedicated to the issue; the linking of agricultural policies and policies for food and nutritional security as well as other municipal sectors (transversal approach); and the involvement of civil society in policy-design and decision-making through participation processes. This approach echoes Brazil's Fome Zero strategy and the National Food and Nutrition Policy (PNAN) - originally conceived by a non-profit civil society organisation in 2001 and adopted by President Luiz Inacio Lula da Silva in 2003 - which formally recognise the State's responsibility for ensuring access to adequate food for the Brazilian population (96).

In São Paulo, the Municipal Council for Food and Nutritional Security (COMUSAN-SP) and the Intersecretarial Chamber of Food and Nutritional Security (CAISAN) were established in 2013 (97). To guarantee the efficient implementation of the measures proposed by various bodies, São Paulo City Hall also founded, in 2015, the COSAN (Food and Nutritional Security Coordination). This new institution replaced the former General Supervision of Supply (ABAST) and reinforced the municipality's engagement for a transversal approach to food. The COSAN notably monitored the creation of the Municipal Plan for Food and Nutrition Security (2016-2020), designed with an interdepartmental approach and through a participatory process which involved civil society and non-governmental organisations (98).

In 2023, food security conferences were organised by São Paulo municipality to hear what each neighbourhood had to say about access to food, urban agriculture, incentives, difficulties, etc. A Food Security Observatory (obSANPA) was also opened in April to produce and disseminate data and information about food, agriculture, nutrition, and food culture in the city, as well as to have more public power for action in São Paulo (99). It was established in response to the city's main barrier to creating innovative policies and projects to fight food insecurity: the struggle to collect data and assess policies' impacts due to the lack of historical data and the informal nature of the food system's interactions.



CRESANS: Reference Centre for Food and Nutritional Security

In recent years, CRESANS were created by the municipality of São Paulo in various neighbourhoods. They constitute spaces - similar to community centres - that promote citizenship and social participation concerning food and nutritional insecurity-related issues. They allow municipal officials and technicians, and civil society to come together in collaborative workspaces and design, articulate and promote public policies related to food and nutritional security. CRESAN are also educational locations equipped with experimental kitchens, used for free culinary workshops, vegetable gardens, libraries, and food banks to provide direct support to local communities (100, 101).

As of 2023, two CRESANS have been established in São Paulo but recommendations from the civil society to the COMUSAN-SP in 2021 encouraged the creation of at least three more, to reach the Eastern, Southern, and Central macro-regions of São Paulo (102). Indeed, these locations embody a quest for food democracy* through the creation of new forms of participation and co-decision making in the governance process. Democratic innovations in the fields of agriculture and food (e.g. urban local food policy councils) are vectors of inclusiveness, popular control and empowerment, and transparency. They oppose the corporate capitalist status-quo and can break the power structures in place in the global food system.



INITIATIVE 2

COMUSAN -SP: a civil society consultation to combat hunger

The activities of COMUSAN-SP involve the proposal, monitoring and inspection of municipal actions regarding food and nutritional security. The institution also works with civil society organisations and other municipal departments to better combat the causes of poverty and hunger as well as involve the local population in policy and decision-making processes.

A broad campaign of public consultation was notably conducted in 2021 and led to the creation of a set of recommendations and policies to be implemented in São Paulo in the next few years. These recommendations emphasised the role of the municipality in a transition towards a more sustainable and equitable food system and included, but were not restricted to:

- Institute a municipal public supply policy, promoting healthy and sustainable food systems, increasing the availability of use permits for family agriculture enterprises and farmers and also farmers from the city of São Paulo;
- Expand the network of municipal food vendors' stands to at least one per sub-municipality, providing 30% of permits to farmers or traders that commercialise food from family-based and organic agriculture or in transition to organic agriculture;
- Articulate with the National Supply Company to implement a continuous Food Purchase Program
 in the Municipality to guarantee fresh food, preferably from the municipality's family farms,
 organic or in transition, to the socioeconomically vulnerable population;
- Create four Food Banks, one in each macro-region of the city, as a way to promote the offer of healthy food to the population;
- Implement a Food Purchase Program managed and financed with resources from the municipal treasury, to guarantee fresh food to the population in economic vulnerability (102, 103).

^{*} Originally coined by Tim Lang, the term food democracy corresponds to "the degree of control that individuals and communities have over the functioning of local, national or transnational food systems" (Candel, 2022)



Cooperatives and local transformation to increase incomes and fight food insecurity

Cambodia is a highly rural country with 32.5% of its land area dedicated to agriculture and 46.5% of its territory covered by forest (104). In this context, nearly 61% of Cambodians live in rural areas, and 77% of rural households derive their livelihoods from agriculture, fisheries, and forestry (105). In the early 2000s, agriculture was a driver of economic growth and poverty reduction for the country. Indeed, between 2004 and 2012, Cambodia's poverty headcount declined from 53% to 18% (4 million people) of which 60% was from positive developments in the agricultural sector (106). However, a significant portion of the population remains at high risk of falling back into poverty, to the extent that if each Cambodian lost 1,200 Riels per day (\$0.7), the poverty national rate would rise from 18% to 40% (106, 107). Additionally, Cambodia is highly vulnerable to natural disasters (e.g. monsoon flooding and droughts) which regularly put already precarious rural populations at risk.

Undernutrition is rampant in Cambodia: 32% of children under 5 are stunted and 10% suffer from wasting (lack of food and prominence of nutrient-poor food); 15% of the population is undernourished. In the meantime, obesity and overweight are increasing (18% of women) due to the over-accessibility of industrialised and hyper-transformed products (108).



- Siem Reap Province, Cambodia
- Population: 22,500 inhabitants in 2019
- Province's rural areas: 69.4% of the territory (109)
- Agricultural jobs: 50% of the country's labour force (110)
- Share of the national GDP derived from agriculture: 21% (110)
- Poverty rate: 17.8% in 2019-2020 (<u>107</u>)
- Undernutrition: 15%, 32% of children under 5 are stunted (108)
- Obesity: 18% of women of reproductive age (108)



Siem Reap is a predominantly rural province. As in the rest of Cambodia, agriculture plays an important role in the province's local economic growth and rural development and is primarily composed of small-scale family farms. However, local production has not evolved according to the province's recent demographic development (+ 12% between 2008 and 2019). Local products have become insufficient to feed the growing population, triggering the emergence of new supply chains based on importations from neighbouring provinces and countries (110). This phenomenon has created competition for local products and forced producers to lower their prices. It has also reduced the consumption of local high-quality products (vs. imported industrial and processed cheap food) and strengthened food insecurity and malnutrition (111).

To reverse this tendency, various projects have emerged, alongside collaborations between the Siem Reap province and the Hauts-de-Seine department (France) since 2009, as part of international decentralised cooperation between the two territories, and two French NGOs - Agrisud International and GRET (Groupe de Recherche et d'Echange Technologique). Overall, the goal is to fight against food insecurity by supporting and promoting local small-scale agricultural development through three different approaches:

- 1. Train farmers in agroecology, to ensure sustainable and healthy local production;
- 2. Create and sustain agricultural organisations and cooperatives, to structure supply chains and facilitate the marketing and distribution of local products;
- 3. Promote short-supply chains, especially among restaurants and hotels (Siem Reap is a highly touristic region due to its proximity to Angkor), to further strengthen local production and consumption (111).

The implementation remains limited because of various challenges, namely the conflict between tourism and agriculture or food-related policies, as tourism remains the first priority for local powers; the weak control exercised by local governments on the land (important foreign investments); and the lack of national guidelines on farmers' training. Overall, the Siem Reap government's prerogatives, competences and fundings remain scarce, limiting rural vulnerable populations' empowerment and hindering local economic development.



The Apici Project, structuring local agricultural value chains

Since 2010, the Apici Project has been carried out by GRET - with the financial support of the Hauts-De-Seine Departmental Council and other partners - to overcome the lack of organisation among farmers, rural infrastructure and diversity in terms of crops undermining the resilience of Siem Reap's food system (110).

To facilitate the collective marketing of local products, and therefore lower local farmers' costs of production and increase their bargaining power, the Apici project structured the agricultural sector by creating three cooperatives, 36 credit and saving groups (financially helping 2,000 beneficiaries throughout the province to access funding) and a producers' market. The cooperatives, fueled by 35 producers' groups, used a participatory guarantee system (PGS) to certify the quality of local products and the producers' market enabled the direct sale of certified products, recognised for their quality throughout the region.

Structuring the local value chains through cooperatives and accessible distribution spaces has helped resolve market access problems for small-scale local farmers and improve their power of negotiation, strengthening food security both on the side of the producers and consumers (110).



INITIATIVE 2

Trapeang Tim village's spice drying group: facilitating market access by collectively processing local products

Agrisud International is a French NGO that works towards supporting local producers by creating cooperatives and professional associations in Siem Reap, so as to facilitate their access to markets, materials and funding. For example, in Trapeang Time, a transformation unit for spice drying (e.g. turmeric powder, widely used in Cambodian cuisine and for cosmetics manufacturing, ginger and pepper) was created. Agrisud International supported a group of 17 women in the early stages of their project by offering them training, particularly in terms of hygiene, to guarantee the quality of their products and meet market requirements. Improving the processing of turmeric, among other spices, triggered a significant increase in the community's benefits. Thanks to their earnings, the processing unit was able to rely on "the Green Farmers Siem Reap" for their supply, another agricultural group that gathers 300 farms around Siem Reap, producing spices, fruits and vegetables (111).



CASE STUDY VANCOUVER

Food asset mapping to promote food-friendly neighbourhoods and healthy food environments



The city of Vancouver is a Canadian city located on the unceded territories of the xwməθkwəyə́m (Musqueam), Skwxw ú7mesh (Squamish), and səlilwəta‡ (Tsleil-Waututh) Nations. Like the rest of the British Columbia province, it has observed growing food insecurity in recent years, mainly due to the rising cost of food products. Since 2015, food prices have increased by between 2 and 5% per year overall, with an even higher inflation observed for eggs, dairy and poultry (112, 113). Inflation has forced numerous households to limit their food consumption and/or reduce the amount of high-quality and nutritious food eaten. Additional burdens have worsened food insecurity locally and nationally in recent years and revealed the vulnerabilities of Vancouver's food supply chain and food system as well as Canada's: the COVID-19 pandemic, high energy costs, labour shortages, climate change (droughts), etc. (113). The rise in food insecurity has also aggravated the health of many Canadians —the number of type 2 diabetes identified in BC has increased— and disproportionately affected already vulnerable populations, i.e. Indigenous First Nations, homeless and sick people, drug users, etc. (114, 115, 116). Indeed, Vancouver, although currently developing a variety of reconciliation policies and projects, is enshrined into a broader history of colonialism, discrimination and violence towards Indigenous people which remains visible to this day in the inequalities found at the heart of its food system (117).



KEY FIGURES

- City of Vancouver
- Province of British Columbia
- Population: 662,248 inhabitants, 8th biggest city in Canada (118)
- Monthly cost of nutritious groceries for a family of four: \$1,093 (112)
- Increase in food prices: +8% between 2015 and 2017 (112)
- Share of food insecure Canadians, from ethnic minorities: 28.2% of all Indigenous people, 27.8% of all Black people, and 21.7% of all Arab and West Asian people (114)



The City of Vancouver has been committed to creating a just and sustainable food system locally since 2003, considering food a key component to achieve a "Sustainable Vancouver," which is part of a plan initiated by the city in 2002. The Vancouver Food Policy Council was established in 2004, and in 2007, it formulated a Food Charter reiterating the city's commitment to:

- 1. Promoting food systems that contribute to the well-being of the city and region both economically, ecologically, and socially; encouraging local food production and protecting natural and human resources;
- 2. Recognising the right to food for all Vancouver residents;
- 3. Fostering dialogue between communities, governments, and the food system;
- 4. Celebrating the city's multiculturalism (119).

Food systems were also prominently featured in the Greenest City Action Plan (2011) (120).



Supporting food-friendly neighbourhoods, Vancouver's Food Strategy

In 2013, Vancouver's City Council adopted its Food Strategy, which aimed at bringing the city closer to its goal of creating a just and sustainable local food system. Led by the municipal sub-department for Social Policy, the Strategy was divided into five goal areas: supporting food-friendly neighbourhoods; empowering residents to take action; improving access to healthy, affordable and culturally diverse food for all residents; making food a centrepiece of Vancouver's green economy; and advocating for a just and sustainable food system with partners and at all levels of government. Seventy actions were also detailed, targeted towards a large variety of the food system's sectors and stakeholders, including food production (urban agriculture); food processing and distribution; food access; food waste management; and system-wide tools and approaches (120, 121).

The Strategy's first goal of supporting food-friendly neighbourhoods focused mainly on strengthening physical food assets and infrastructure that support resilient local food systems and improve access to fresh healthy food such as community or collective gardens, orchards, food markets, kitchens and composting facilities, farmers markets, food storage facilities, and healthy corner stores. These food assets were mapped in 2012 to better identify gaps and opportunities for improvement. In the following years, the City Council implemented a set of actions focused on capacity-building, information sharing, project coordination, public land management and funding, in order to foster healthier food environments. For example, the number of community garden plots was increased by 40% between 2010 and 2016, an Association of Community Garden Coordinators was created, and land use policies and zoning were updated to legitimise urban farming (121, 122).



INITIATIVE 2

Food asset mapping: identifying Vancouver's food access inequalities

In 2021, Vancouver Parks and Recreation worked with the City of Vancouver to develop the Local Food System Action Plan (LFSAP), a 5-year plan which aimed at moving toward a sustainable, just and decolonised local food system (123). Constituting a step further towards ensuring a universal access to sufficient and safe high-quality food, the plan recognised the importance of Indigenous food sovereignty to develop Vancouver's food security, alongside the need to increase equitable access to food assets and services. Rooted in a broader strategy of making neighbourhoods food-friendly, the LFSAP emphasises the importance of communities in fostering food security and of developing relational relationships (as opposed to transactional relationships) to build altogether healthier food environments.

Some food asset mapping was conducted before and after the plan's implementation to gain a better understanding of the geographical distribution of qualitative food assets and their evolution over time. Unlike the 2013 Food Strategy, the created maps included a spatial analysis of the correlations between the mapped food assets and defined "priority areas," where inequalities in food access are most acute. This process enabled local governments to identify underserved areas in Vancouver in 2021 that needed prioritisation (e.g., the Downtown Eastside) as well as areas expected to experience an increase in population density and, consequently, in needs. The spatial analysis also revealed gaps and opportunities in the fight against food insecurity for each type of food asset (124, 125).

CONTRIBUTIONS

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From local to global, there is not one day, one place, one conference where people do not emphasise how badly food systems are failing us. Yet progress remains slow, far too slow, to the point of jeopardising the United Nations' Sustainable Development Goal 2 aiming at creating a world free of hunger. However, while many are watching the SDG2 dying, despite the urgency of the situation, others commit, experiment, and innovate to escape the food insecurity traps that failing food systems have built. In many ways, local governments belong to this latter category, together with other local food system actors.

In recent years, global shocks such as the COVID-19 pandemic and the Ukraine War have reminded us how vulnerable our food systems are and how critical resilience is. Sometimes these shocks were deemed opportunities for changes, not to say transformations. Were they? Unfortunately, not. With hindsight, no one will argue that food systems have been resilient to these two big shocks; there have been no major disruptions of global value chains, at worst a few hiccups, requiring a few adjustments, some temporary and others permanent, but all comforting the predominance of current systems. Let us therefore acknowledge the tremendous adaptive capacities... of such unsustainable food systems.

The crises were so unexpected, unforeseen and global, that the overarching goal has become a rescue mission, thereby forgetting that resilience to shocks and stresses and sustainability where the two faces of a same coin, thereby forgetting that food insecurity and malnutrition were on the rise already before these two crises. Of course, some have suffered along the way. These global shocks have aggravated inequalities. Vulnerable populations have become victims; social safety nets the solution; business-as-usual the big winner.

Except that at the local level, food insecurity and malnutrition is very much palpable and goes beyond a simple statistic. Except that at the local level, shocks and stresses are not limited to the COVID-19 pandemic or the Ukraine War. Local food systems face a wide variety of multiple shocks and stresses, from climate events to natural disasters, from plant or animal pests and diseases to economic crises, from political instability to biodiversity losses. Not to mention that the number of shocks is on the rise. Their compounded impacts on the many segments of food systems has become a 'new normal' they have to make do with, and local food systems in poor countries are much more affected that those in developed countries. The most affected populations are always the same, the most vulnerable at the two ends of the food systems: the poor farmers and the poor consumers. Paradoxically, social protection programs were very helpful, but did not change a thing regarding the sustainability of food systems, until the next crisis...

Local governments are at the frontline of these food system failures and work with endeavour to initiate public responses e.g. public policies, rules and regulations, investments, infrastructure development, etc. Meanwhile, other local actors play a critical role in triggering innovative collective initiatives responding to local needs. At stake is the capacity to capitalise on both dynamics to lead to transformations at a scale able to drive food systems towards resilience and sustainability. All local actors, including local governments should work hand-in-hand to develop a good understanding of what is actually happening, to define and operationalise what transformation means for their food systems. Coordination and therefore governance are critical to leverage transformations and maximise impacts on food systems. This is one possible way of grounding in reality the two additional dimensions of food security and nutrition put forward by the High-Level Panel of Experts on Food Security and Nutrition: agency and sustainability.

REBECA MONROY

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Over the course of decades, the concept of food and nutrition security (FNS) has evolved, propelled by the maturation of both international and national public policies. The concept's understanding —as the "consistent and ongoing access to nutritious food, aligned with the cultural and regional context", studied through the pillars of stability, availability, accessibility, and biological incorporation— and its implementation has proven intricate, necessitating coordinated, cross-cutting, and intersectoral actions.

Increases in food security around the world have not always been correlated with health improvements (<u>126</u>). For example, despite an increase in food security from 30% to 48.8% in Mexico between 2012 and 2018, the health status of the population, particularly women, reveals heightened rates of hypertension, diabetes, and dyslipidemia. Research conducted in Guanajuato supports national and global evidence that women face the highest vulnerability to food and nutrition insecurity, a risk further exacerbated when their level of education falls below secondary school (<u>126</u>).

Globally, food insecurity exerts a profound impact, particularly on children, with 154 million children under 5 experiencing various degrees of growth impairment, including 51 million who are wasted, 17 million severely wasted, and 41 million overweight or obese — all following rising trends (127).

The COVID-19 pandemic further exacerbated health and household food security-related issues, especially in rural areas. In 2021, 60.8% of households in Mexico experienced some form of food insecurity, compared to 55.5% in 2018. Risk factors included economic and physical barriers with a lack of access to healthy food, job loss, and the presence of children in the household (128, 126).

Climate change also significantly affects food and nutrition security. Pollution of air, water, and soil, along with increased deforestation, contribute to heightened food insecurity. The growing consumption of easily accessible, low-cost ultra-processed products rich in fat and sugar underscores the importance of environmental and technological regulations to address the health environmental impacts of the food processing industry.

There exists a lag worldwide in exercising and ensuring several fundamental rights necessary for maintaining a dignified and healthy life: the right to nutritious and high-quality food, the right to access clean drinking water, and the right to a healthy environment. These three rights serve as essential elements for achieving and preserving another crucial right: comprehensive health, encompassing both physical and mental well-being.

Issues like anemia, stunted growth, and child obesity pose threats to the well-being of a demographic protected by the Human Rights of children and adolescents, as outlined in international commitments and treaties like the Convention on the Rights of the Child and the Sustainable Development Goals Agenda. Although fulfilling these obligations remains a distant goal, significant progress has been made in recent years in the realm of public policies related to health, nutritious food, healthy environments, and the human right to access information (129; 130).

Achieving robust governance in food security requires elements such as active participation, adherence to legal principles, transparency, accountability, consensus-building, equity, effectiveness, efficiency, and responsiveness across governmental and cross-sectoral domains. Effectively addressing food security necessitates coordinated and cohesive actions across various sectors, ensuring the synchronisation of policies and available resources. Governance in food security should encompass a holistic approach, recognising its multifaceted nature and including aspects related to health, economics, culture, education, social dynamics, politics, and the environment. This holistic approach is especially crucial for vulnerable groups: societal democracy remains incomplete as long as issues like inequality, discrimination, and violence persist.

KEY TAKEWAYS



According to Morgan and Sonnino, a new 'food equation' has been taking shape since the beginning of the 21st century, transforming, among other things, the way in which food insecurity is viewed (131). Food insecurity is increasingly urban, as is the world's population (more than half of which lived in cities in 2022). Cities are more sensitive to energy price rises, and more exposed to high temperatures because they are heavily built up and often disconnected from agricultural production, which is pushed back into rural areas (132, 133). Quality food products are more difficult to access, both in terms of availability (over-representation of supermarkets, processed products and fast food of low quality) and from an economic point of view (quality labelled products being more expensive and sometimes imported, etc.) (134, 135).

Faced with these developments, which have multiple social, environmental and economic consequences, a growing number of local and regional governments are innovating and developing systemic food policies to combat food insecurity while creating jobs, preserving resources and enabling everyone to eat healthily and sustainably. The first integrated local food policies appeared in the 1990s in Brazil and North America (Belo Horizonte since 1993 and Toronto since 1992 with its Food Policy Council) (6). They emerged at a time when it had become imperative for local authorities to take up the issue of food; when governments were concentrating mainly on strengthening their social policies. Indeed, the Rio Summit in 1992 affirmed local governments as central players in the environmental transition - leading in particular to the creation of numerous Agenda 21s around the world - while the repeated food crises of the 2000s (hunger riots in the Maghreb, for example) jeopardised civil security, making clear the importance of food systems in maintaining order (local competence). Since then, this local approach to food security has been developing, democratising and diversifying. Nevertheless, it remains relatively recent.

In order to build fair, resilient and sustainable food systems and combat food insecurity in the long term, local and regional governments have various levers at their disposal, depending on the level of decentralisation of the State organisation and the associated devolution of powers and funding.



1. Giving opportunities for all to play a role in the transition towards a sustainable and localised food systems

Local and regional governments have certain tools to raise awareness, educate, and capacitate the population on the importance of healthy and sustainable eating: action must be taken on the supply, but it is also urgent to shift demand towards fresh and healthy products. Schools (Rufisque) and training centres (Antananarivo, Amman), when they rely on local expertise, are tools for nourishing and ensuring the well-being of individuals but also educating them about the benefits of healthy eating and the basics of agricultural production through community gardens to strengthen their resilience in case of shocks (thus reducing dependence on food purchases and inflation, etc.). Local governments can also support the establishment of training centres for agricultural and food-related professions: strengthening skills is a prerequisite for structuring new sectors. Furthermore, institutionalising food security issues (Catalonia, Vancouver) while opening these institutions to citizen participation (São Paulo) allows for the strengthening of the skills of both local officials and individuals, making the fight against food insecurity a multi-stakeholder effort - which is a key part of implementing effective local food policies. Local governments and their partners, local communities, schools, local producers and cooperatives, the informal sector, and other stakeholders must all work collaboratively to achieve positive results. Beyond local collaboration efforts, international and decentralised cooperations allow for knowledge exchange, capacity-sharing and financial assistance, which greatly contribute to the success of food initiatives (Rufisque and Montpellier, Siem Reap and Hauts de Seine, Chefchaouen and Andalusia, Amman and Belgium). They can be tools for local and regional governments from the Global South to respond to the needs and priorities identified by local communities and stakeholders, in contrast to donorled international cooperation.



2. Committing to urban, sustainable and income-generating agriculture

Climate change impacts urban environments, which are largely paved and covered with concrete and often lack agricultural production spaces (making them more susceptible to extreme weather events such as floods and accumulating heat islands due to limited space for cooling and rain drainage) (136). Urban agriculture is a means of localising food production near urban consumption centres and creating jobs at the local level (Amman, Vancouver). Although often insufficient to 'feed the cities' (Havana is one of the few global cities to develop urban agriculture policies aimed at self-sufficiency), urban agriculture revitalises urban food ecosystems and combats food insecurity for both producers (income and self-consumption) and consumers (local and high-quality products) (137, 138). It notably facilitates access to fresh products for low-income households who do not have to purchase them (139). Furthermore, the use of agroecological practices and/or traditional practices (Durban, Vancouver and Antananarivo) promotes the democratisation of environmentally friendly, sustainable, and resilient agriculture.



3. Structuring local agricultural sectors and localising added value

Some regions choose not to export their raw materials but instead develop local artisanal or even industrial economies – with the support of subsidies and the provision of facilities and equipment – to foster a virtuous circle through the creation of income and a high-quality local food supply (Catalonia). Indeed, the local processing of agricultural products from the region (spices in Siem Reap, edamame in Durban, mushrooms in Chefchaouen) is a way to retain added value, creating wealth and non-offshorable jobs throughout the food chain. In order to support the structuring of local agricultural and agri-food sectors, public institutional catering (school canteens, as well as hospitals, government buildings, prisons, etc.) can also be mobilised as a stable and substantial market that provides steady income to local producers and their families, thereby ensuring their food security (Rufisque, Antananarivo, and Montpellier use school canteens for this purpose).



4. Creating employment and wealth by engaging with vulnerable populations

Economic activities related to agriculture and food in a region are diverse and varied. Local and regional governments can support the creation of jobs and income by providing incentives and facilitating frameworks, especially for populations furthest away from employment opportunities (youth, women, refugees, etc.) by: supporting the communication and promotion of local products and traditional knowhow, as well as providing funding for the development of agro-tourism (Chefchaouen) or specific spaces and/or assistance for certain groups (Amman) (140, 141). For example, women, who often face extreme food insecurity due to the discrimination they experience, become drivers of territorial development (Chefchaouen). Other initiatives focus on creating attractive economic opportunities in rural areas to encourage young people to cultivate in their territory and preserve local resources and traditions. By revitalising peri-urban and rural areas, where jobs are scarcer, and by engaging the most vulnerable populations, the aim is to enhance the local heritage through employment and wealth creation, thus ensuring a source of income for those most affected by food insecurity, enabling them to access sufficient and healthy food.

Overall, many of the initiatives of local and regional governments studied in this report provide support to vulnerable populations, whether they are women, children and young people or farmers. Involving these groups into the fight against food insecurity is essential to deeply transform local food systems and make them economically and socially sustainable and resilient.



5. Ensuring high-quality and locally-sourced food "safety nets"

In the face of food insecurity, some local and regional governments distribute funds to NGOs and/or directly provide emergency food aid (monetary or in-kind). The distributed products are often sourced from supermarkets or imported, to the detriment of nutritional quality and local industries. By relying on local supply, food aid can support local producers, create employment, and contribute to a virtuous cycle of territorial development (locally produced and processed food aid). When school canteens and cafeterias are supplied locally, they also serve as an important food safety net for children while guaranteeing outlets for agricultural and food actors in the region (Rufisque, Montpellier). In fact, school cafeterias provide daily access to healthy food for children, leading to better academic performance and reducing household food costs. Some regions go even further and contemplate making food a right for everyone: they are putting in place and experimenting a food social security system (Montpellier).

Overall, certain sectors, stakeholders and approaches seem particularly important in the fight against food insecurity and arise from each of the best practices studied: schools, tourism, local markets, financial and technical support, cooperation with companies and cooperatives but also with informal workers, women's role and empowerment, culture, systemic approaches, participation of stakeholders, decentralised cooperation, self-sufficiency instead of donor-led assistance, relation to waste, etc.

Although local and regional governments have various levers at their disposal to fight food insecurity, they also face challenges and barriers in implementing innovative policies. In most of the world's countries, the State remains the main holder of powers and competencies, especially with regard to food and agriculture. Local and regional governments therefore do not have the necessary competencies to act upon a wide range of issues, including some directly impacting food insecurity (e.g. food environment regulations, school canteens, etc.). Additionally, many of the Global South local and regional governments lack the funds to develop large-scale and long-term plans and policies to tackle food insecurity. Whilst they can benefit from international or development-related aid, in the past, it has often proven to be donor-led assistance, which rarely sustains local innovative initiatives.

The informality of food systems in the Global South (street vending, informal community-led organisations, informal settlements particularly in poorest neighbourhoods, etc.) also renders the impact assessment of policies and projects difficult in many places (e.g. Rufisque, Siem Reap and São Paulo). This is an obstacle to better estimating how successful a project or policy is, as well as to understanding the favourable conditions and barriers that make a project or policy possible or not. Furthermore, informal relations between stakeholders as well as local culture and beliefs often shape specific on-ground difficulties, that can only be considered by introducing local knowledge into the policy-design and making process: women's reluctance to sell their products in public markets in Chefchaouen; social and cultural meaning of shopping in supermarkets or eating fast food products in Durban; difficulties for local farmers to handle bureaucracy in São Paulo, etc.

In the future, local and regional governments will have to face additional challenges with regard to increasing urbanisation and the growing effects of climate change. It will likely become increasingly harder to access arable lands within and around cities - as it is already the case for Antananarivo - and might limit the expansion of urban agriculture policies and worsen the urban-rural dichotomy already visible nowadays. Climate change will further disrupt the opportunities for food production. Natural disasters are expected to become more intense and common, particularly in the Global South where food insecurity is already a critical issue. The transformation of local climates will also force an evolution of agricultural practices (e.g. progressive shift of Southern Mediterranean countries' agricultural practices to the Northern ones) and require enhanced North-South and South-South cooperation. The most vulnerable rural and marginalised populations will likely be the most affected by said changes, triggering exacerbated food insecurity outside cities, as well as within. Indeed, fewer food production possibilities will lead to an increase in food prices (scarcity principle), impacting disproportionately the most precarious households. Climate change will therefore likely disrupt supply chains - further than conflicts have so far (and likely will in the future) - and aggravate food insecurity. Additionally, migrations will likely become more intensive and frequent due to natural disasters, climate change and conflicts. By 2050, 216 million people are expected to move within their countries' borders, which would further worsen the challenges associated with population concentration, high density and massive urbanisation (142).

KEY RECOMMENDATIONS

The local and regional governments mentioned in this study have developed innovative policies to address urban food insecurity in a systematic and comprehensive manner. However, many challenges and barriers remain, including the national and international regulatory and policy frameworks that can sometimes hinder the implementation of actions at the local level. Therefore, several recommendations can be made to local, regional and national governments, as well as international institutions.



1. Making food an unconditional right

The International Covenant on Economic, Social and Cultural Rights recognises the "right to an adequate standard of living, including adequate food," as well as the "fundamental right to be free from hunger" (UN, 1966). Making food an unconditional right means providing high-quality food accessible to all (community canteens, etc.). Institutions can and must intervene by mobilising various tools to create opportunities to escape food insecurity, rather than simply "assisting" the most vulnerable populations (job creation, relocation of activities, financial assistance, public services, etc.). Individuals should be able to be active participants in their food choices to avoid the psychological violence and historical stigma associated with food aid. Paying for a portion of the products, learning how to cook, assisting in production, etc., are ways to protect human dignity and self-esteem for vulnerable individuals.

Furthermore, experiments in food social security are currently taking place in France and Belgium and could lead the way to ensure that an individual's economic resources no longer hinder their right to healthy food (basic income). By leading experiments relating to the right to food, local and regional governments could pave the way for wider policies at the national level and test the feasibility of various innovative policies.



2. Fostering balanced territories: promoting urban-rural cooperation for equitable employment distribution

As the significance of cities continues to grow, they face major challenges in terms of infrastructure, transportation, energy, employment, education, health, and food (6). Since the industrial revolution, a geographical, economic, cultural, and political dichotomy has developed between urban and rural areas. It is imperative to counter it in order to promote balanced and dynamic territories. It is crucial to better understand the potential of each territory, particularly rural areas, by creating attractive employment opportunities in the agricultural and agri-food sector (fair wages, longer holidays, collective projects, etc.) and developing innovative tools for urban-rural cooperation such as reciprocity agreements.

To ensure the localisation of food systems, it is equally essential to support and encourage local production for local consumption. To facilitate this transition, local and regional governments must take the lead in creating and funding appropriate training programs, jobs opportunities, and infrastructure in urban areas encompassing logistics, distribution and retail outlets, among others.

The overarching goal is to generate employment and wealth outside urban centres, ensuring access to decent incomes and, consequently, sufficient food for everyone. This becomes particularly relevant at a time when a significant number of individuals are leaving rural areas in search of better opportunities and facing high rates of unemployment, poverty, and food insecurity in cities.



3. Engaging vulnerable communities in the fight against unhealthy eating

Education and awareness of future citizens are essential for creating sustainable food systems, particularly in the fight against unhealthy eating. Through school cafeterias, governments can help children better understand the importance of healthy eating and develop culinary skills. School programs also play a role in revaluing the agriculture sector, giving children the opportunity to understand the food chain and the value of local agriculture and food production, and promoting self-production as a skill to be transmitted to students (food education).

Furthermore, local, regional and national governments can take action on advertising campaigns in public spaces to create food environments that promote, raise awareness and facilitate access to healthy and quality food for both children and adults. Indeed, food awareness and education should encompass programs and policies targeting children as well as adults from different backgrounds and social groups.



4. Empowering local industries: harnessing public services and infrastructure for sustainable food systems

Local and regional governments play a pivotal role in fostering sustainable food systems and supporting local industries by effectively utilising the public infrastructure at their disposal. Through school cafeterias, hospitals, and institutional catering, they have the opportunity to provide secure and stable outlets for local farmers. This not only ensures a continuous and reliable market for producers but also contributes to the overall health and food security of a significant portion of the population.

On a broader scale, national governments, international organisations, and local and regional governments, if they have the competencies, should address the unfair distribution of resources which indirectly contributes to food insecurity. They could do so by legislating against land grabs to ensure the right to access land for all; acting against agricultural regional specialisations and monoculture farming to prevent large-scale cultivation of unsustainable and non-resilient crops, protect local biodiversity and work towards forms of food autonomy and self-sufficiency; and acknowledging the colonial roots of the contemporary food system to work towards a less unequal distribution of resources and therefore food insecurity around the world.



5. Driving changes: collaborating across cities and governments for robust food security frameworks

The creation of comprehensive policies for ensuring food security at the local and regional levels remains limited. Therefore, it becomes crucial for governments already engaged in this endeavour, to promote the sharing of good practices and engage in advocacy efforts with other cities and governments in their country. The aim is to foster the development of frameworks that support the establishment of legislation on a broader scale. National governments, in particular, have the option to decentralise certain competencies in the agriculture and food sectors to more effectively combat food insecurity. By entrusting municipalities with the responsibility of school cafeterias, the aforementioned leverage points could be utilised more easily to support local industries and educate children about healthy eating. Moreover, policies that closely align with local realities can be tailored to preserve farmers and safeguard agricultural environments.



6. Fostering global collaboration: research and financial support for local food policies

The challenges of urban food insecurity extend beyond national borders, underscoring the significance of fostering international cooperation between regions and countries as well as with research centers around the world. Decentralised cooperation, research and innovation can play a pivotal role in developing effective local food policies and complementing local knowledge and needs with technical knowledge and capacity. Through research and broader international collaboration, there is an opportunity for mutual learning and the exchange of best practices among different localities and countries, thus fortifying local food policies.

International organisations play a crucial role in this collaborative effort, mobilising financial resources to support local food policies. This may involve establishing dedicated funds for addressing urban food insecurity, leveraging international funding, and strengthening international cooperation mechanisms. Foundations may be a source of further financial assistance by structuring dedicated funds to innovative food policies (e.g. Fondation Daniel et Nina Carasso in France). Many local and regional governments around the world lack the funds to develop extensive and long-term plans to fight against food insecurity. Therefore, advocating for a significant increase in both national and international financial investments is essential to ensure an effective response to the challenge.



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