



Series **The agrifood system and the challenges of COVID-19**

9

Municipalities and their role in food security and nutrition during times of crisis: learning from the COVID-19 pandemic

Introduction

In recent decades, the planet has begun a process of sustained urbanisation, which has resulted in more people living in cities than in rural areas. In figures, 55 percent of the world's population lives in urban areas, and 85 percent live 3 hours or less from an urban centre of more than 50 000 inhabitants (UN, 2018). Latin America is a clear example of this process: the population living in urban areas has increased from 29 percent of the total population in the mid-20th century to 81 percent today.

This makes it the developing region with the highest urbanisation percentage on a global scale (UN, 2018; IDB, 2019; López and Granados, 2020). Thus, of the 505 million people living in Latin America, slightly more than 100 million live in cities with more than 5 million inhabitants, 200 million live in cities with 300 000 to 5 million inhabitants, and it is estimated that 41 percent of

the region's municipalities have up to 300 000 inhabitants (UN, 2019), who consume up to 70 percent of the food supply (FAO, 2019a).

The projections indicate a sustained population growth in small and intermediate cities by 2030, generating special attention to these urban areas, and the opportunity to develop food and nutrition security (FNS) policies with a focus on cities. Considering social and economic linkages between urban and rural areas, cities have a direct influence on rural territories (da Silva, Belik and Takagi, 2012).

The evidence is diverse regarding the relevant role of municipalities and local governments in coordinating policy actions focused on improving the state of the population's FNS (Bonnal and Maluf, 2009; FAO, 2011; Moncayo and Ramírez, 2017).



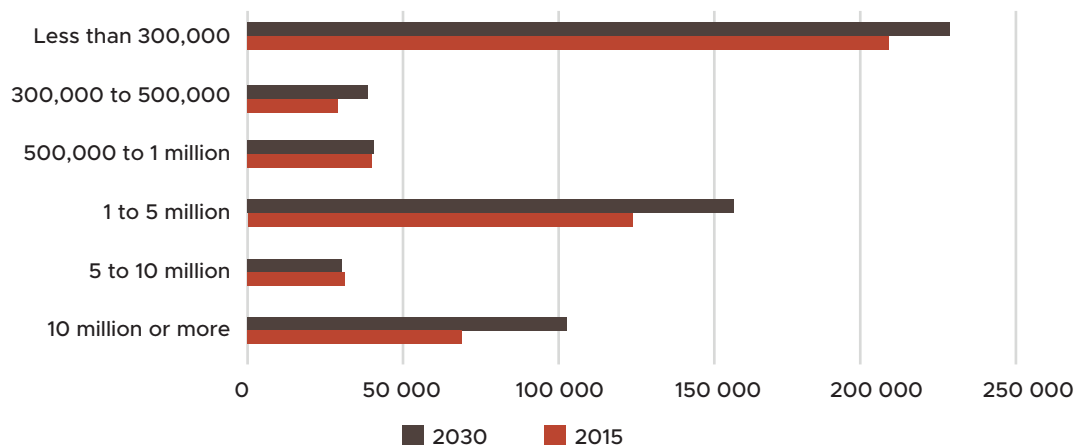
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Furthermore, these municipalities are also considered the “front line” of state management. They have a fundamental role in incorporating the ecological dimension into territorial planning processes, where “open spaces”, the scene of urban inhabitants’ daily life, occupy an increasingly important place in the sphere of policies that seek more comprehensive cities (Feria and Ramos, 2009; López and Granados, 2020).

Taking into account the elements of context described above, in a survey carried out by

the Food and Agriculture Organization of the United Nations (FAO) on impacts on the agrifood system and municipal response to COVID-19 (FAO, 2020), “small” and “intermediate” cities – where more than 270 million people live (see Figure 1) – agree on the importance of promoting a local agrifood system, with schemes that articulate supply and demand with biosecurity and safety standards throughout the process. This would facilitate the recovery and revitalisation of the local economy and promote of healthy eating in the population.

Figure 1. Urban population in Latin America and the Caribbean by size of urban settlement (thousands of inhabitants, 2015 and 2030)



Source: Elaborated by the authors, based on UN, 2019.

However, mayors and their technical teams report limitations in addressing migration, sustained population growth, food insecurity, drought, pollution and poverty, among other issues (FAO, 2017). Similarly, access to healthy food at the local level is limited because producers and consumers are disconnected by multiple intermediary chains, in addition to the lack or dispersion of information on market supply, consumption preferences and use of surpluses (FAO, 2017).

The demographic evidence inspires to prioritise actions in small and intermediate cities,

understanding that big and mega cities have more resources and networks to face their daily challenges. In this sense, FAO seeks to focus its efforts on small and intermediate cities to somehow balance the limited institutional capacity of their municipalities.

This document aims to show how municipalities have responded to the COVID-19 pandemic, as well as a series of policy recommendations to move forward on resilience and sustainability of agrifood systems with nutritional objectives.

¹ In this document, we understand by “open spaces” all areas of the city or of a territory that any person can enter, stay in and transit freely. Some of the most common public open spaces are: squares, parks, urban forests, public libraries, community centres, island hills, river and canal sides, wetlands, among others.

² The document considers “small cities” those with less than 300 000 inhabitants, “intermediate cities” from 300 000 to 1 million inhabitants, “large cities” from 1 million to 5 million inhabitants, and “mega-cities” with more than 5 million inhabitants.

COVID-19 and the challenges related to agrifood systems in Latin American and Caribbean municipalities

At the sub-national level, an agrifood system fulfills functions of supply, stability, safety, generation of employment and income, articulation of actors and processes that happen every minute. The problems they face in their actions are diverse. Without doubt, the discussion on the agrifood system's performance at the local level is not new, and its influence on the food security situation in the countries has been observed for several years. However, the pandemic has highlighted the need to address the problem not in a reactive but in a proactive and strategic manner.

The urban area of a region influences the rural territory, energising markets, partnerships and innovation, leveraging public and private investment, facilitating the articulation of productive initiatives with interest groups and favouring the generation of direct links with national policy (FAO, 2019a). In this sense, the agrifood systems approach has two powerful arguments for the creation of local coalitions: access to food and environmental sustainability (Castellanos *et al.*, 2016). Policies with an agrifood systems approach put sub-national governments at the centre of government action (IPES-Food, 2017). This is made clear by Sonnino, Tegoni and De Cunto (2018):

“Part of the problem of the food issue is situated in a very fragmented context of global governance, in addition to the fact that existing food policies are isolated.” Therefore, they propose to go beyond intersectoral integration, adopting practical considerations (called ‘modularity’) on the ways in which different components of a food system are interconnected.

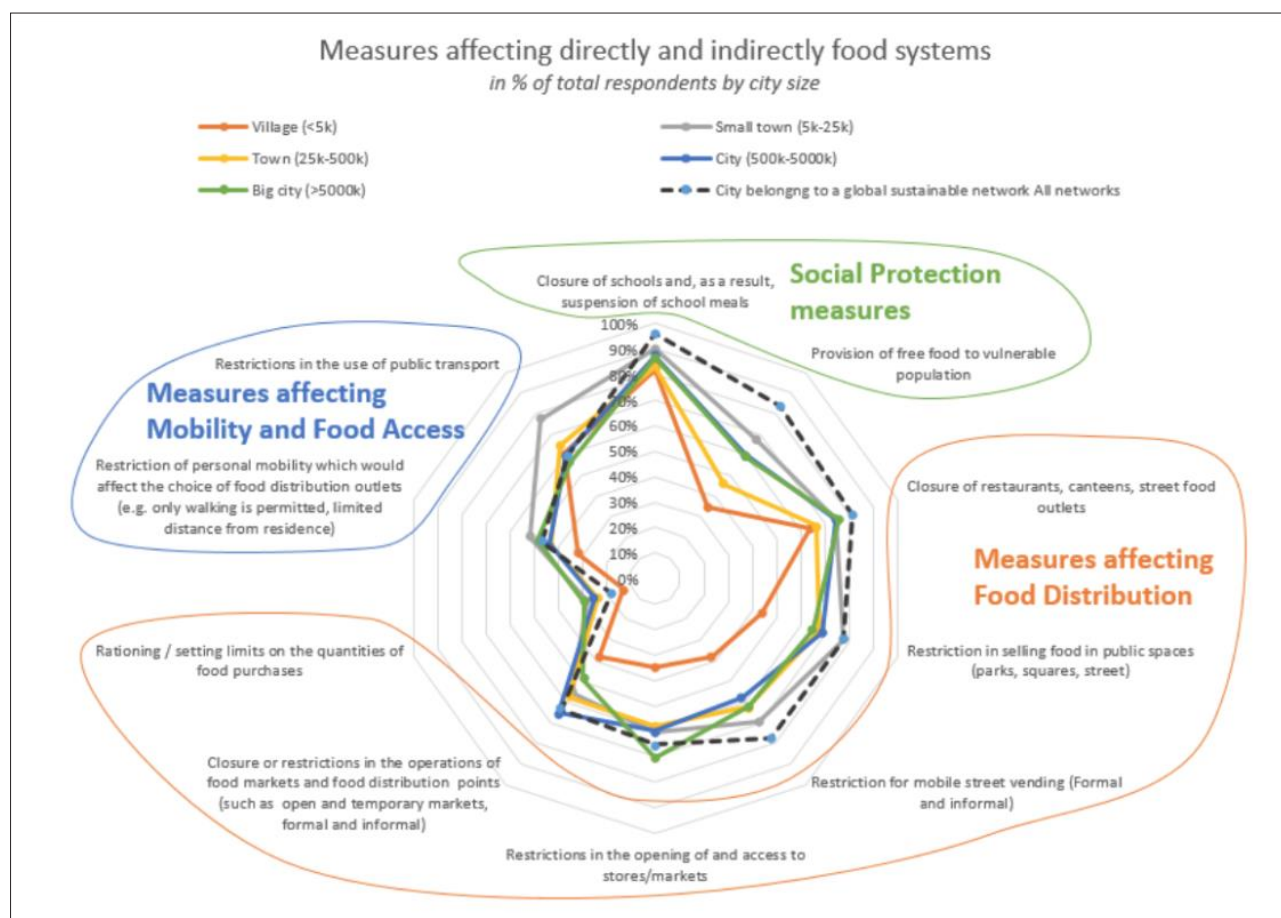
With such background information, it clearly appears that the food system's governance requires articulation, policy coherence, and evidence-based information (Cejudo *et al.*, 2016).

With this approach, and taking into consideration the FAO questionnaire “Food Systems and COVID-19 - Municipal response to the emergency”, carried out between April and June 2020, in which 343 municipalities from 17 countries in the region participated, most of them (78 percent) corresponding to intermediate (50 000 to 500 000 inhabitants) and small (5 000 to 50 000 inhabitants) cities, common problems are observed in terms of the impacts of the pandemic on the local agrifood system, such as:

- In small and intermediate cities, the most noticeable effects were rising prices of basic foodstuffs, and people migrating from urban to rural areas.
- In larger cities, the most noticeable effect was the risk of food insecurity for the most vulnerable populations, as well as panic buying by consumers at the beginning of quarantines.

The measures taken by municipalities to protect the population from infection included actions that limited the operation of supply chains, such as the closure of schools and high schools (over 80 percent of all cities, regardless of size), the closure of restaurants and food services, as well as restrictions on street food sales in public spaces, the use of public transport, and the operation of markets and distribution centres (see Figure 2)

Figure 2. General analysis of measures directly or indirectly affecting agrifood systems in the COVID-19 pandemic at the municipal level.



Source: FAO, 2020.

Municipal responses to potential disruptions in food distribution consisted of various support programmes that included school feeding – even through alternative modalities such as sending rations to students’ homes (a measure adopted in 75 percent of small towns), and in some cases, especially in large towns, the provision of financial resources to the vulnerable population (70 percent). A clear integration between food security policies and social policies, such as income transfer programmes.

These decisions were taken by municipal coordination teams in most cases

(65 percent), with small towns showing the most remarkable diversity in terms of governance measures, such as municipal regulations and the creation of municipal food committees.

When investigating the challenges faced by the municipalities in keeping the agrifood system active in times of pandemic, those of a short-term nature related to contingency and immediate response, and others of a medium-term nature linked to recovery, stand out.

Table 1 presents the challenges according to each component of the agrifood system.

Table 2. Challenges to contingency and recovery of municipal food systems.

	Supply chain	Food environment	Food consumption patterns
Short term - contingency	<ul style="list-style-type: none"> • Organisation of food purchase and sale, with respect for social isolation and health measures. • Re-establishment of marketing in wholesale markets, fairs and local points of sale. • Municipal infrastructure available for storage, refrigeration, seed banks and agricultural inputs. • Biosecurity in production areas. 	<ul style="list-style-type: none"> • Information, updated databases of the population during the pandemic, employment, production, health. • Price and supply chain monitoring for the basic food basket. • Local management to coordinate the food system. • Coordination of actions with government bodies to deal with the pandemic and other phenomena. 	<ul style="list-style-type: none"> • Raise awareness of biosecurity measures. • Raise awareness about healthy food consumption. • Development of campaigns on the improvement of food consumption patterns in coordination with public institutions.
Medium term - recovery	<ul style="list-style-type: none"> • Strengthen the productive infrastructure, marketing channels and the articulation of producers and traders at the local and regional level. • Food sector employment recovery (HORECA). • Local food production programmes, associativism, and fair trade at the local, regional level. • Assurance to short production circuits. • Reconversion of food sales fairs in order to improve their sanitation. 	<ul style="list-style-type: none"> • Provide municipalities with economic resources to strengthen biosecurity measures in the agricultural sector. • Technical assistance, protection, incentives and inputs to producers and SMEs • Facilitate access to credit with low rates and simple protocols. • Maintain strategic food reserves in municipalities and communities. • Review and analysis of the municipal FSN policy. 	<ul style="list-style-type: none"> • Extension in food safety and sanitation. • Local consumption. • Nutritional recovery.

Source: Elaborated by the authors, based on FAO, 2020.



Municipal response to the transformation of agrifood systems

The COVID-19 pandemic has exposed significant gaps and critical weaknesses in urban agrifood systems, national systems and coordination between the two levels. In many cases, the health crisis has become a food and nutrition security crisis. Moreover, the potential of local and municipal governments to adopt measures related to the agrifood system was not fully exploited to prevent such a crisis. This change process in the agrifood system is necessary because even before the pandemic there were multiple threats to its sustainability: inequity in people's access to healthy and safe food, and environmental sustainability derived from the challenges of climate change, just to mention the most relevant ones.

However, urban agrifood systems' transformation needs to take a long-term perspective and think beyond the immediate. This requires an urgent understanding of the root causes of vulnerability in urban areas, and the promotion of policies, planning and actions to mobilise existing local and national resources to accelerate the inclusive transformation of urban food systems (FAO, 2020).

Considering the challenges posed by municipalities and other actors, they all aim to establish mechanisms to improve coordination between different parties and links, and the possibility of coordinating the food system in real time.

In 2019, the *Framework for the Urban Food Agenda* (FAO, 2019a) established as a concrete component to involve the food system with territorial policy. The objectives set were clear: planning and interaction between the national and sub-national levels; improvement of the food environments; commitment to an efficient and circular supply chain; inducing innovation in the agrifood system in small and intermediate cities; and availability of evidence-based information, highlighting the role of urban areas and their influence on the rural territory. The ultimate goal is to energise markets, partnerships and innovation, leveraging public and private investment, facilitating the articulation of productive initiatives with stakeholders and generating direct links with national policy (FAO, 2019b).

To move forward in this articulation, **four areas of opportunity for transformation are identified, which contributed decisively to the economic and social recovery of municipalities in a context of pandemics:**

- **Resilience:** a powerful link between food systems and green infrastructure in cities. In the region, the COVID-19 pandemic has drawn attention to the importance of local food systems, highlighting the vulnerability of these systems to any interruption in the supply chain, and the impact on food security, employment and income generation (FAO, 2020).
- **Governance:** in the framework of the implementation of the Urban Food Agenda by FAO and governments in Latin America and the Caribbean, studies are being developed on the dynamics of food systems at the local level in Argentina, Colombia, Costa Rica, Mexico and Peru (see Table 1). This information integrates some data on food systems' footprint, such as food loss and waste, land use, and distances between production and consumption sites.
- **Innovation:** FAO is working to provide technical leadership and develop capacity and innovation, in partnership with the public and private sectors. The Organization also promotes collaboration and partnerships between state, business and academia at the municipal level. In this sense, innovation is part of "functional food circuits", a territorial instrument to reduce the gap in access to healthy food in small and intermediate towns and cities in Latin America, where participating municipalities will manage their territorial food system in a transparent and participatory manner with a focus on employment, nutrition and circularity.
- **Circular economy:** In Latin American and Caribbean food systems, 20 percent of food is lost or wasted (FAO, 2019). Much of this loss is surplus that still has value and can be shared, recycled, recovered and reused. Currently, Mexico City's Central Market is promoting opportunities to introduce this circularity approach in its operation, in order to generate clean energy, organic fertilisers, and food recovery through food banks, or low-processing by-products.

Some interesting windows of opportunity for improvement can be translated into support measures for municipal management to foster

the agrifood system's sustainability within these areas. They are indicated below:

Action 1: improving governance at national and municipal level

- Develop food councils of public-private coordination at the level of municipal territories. The municipal councils for food and nutrition security that already exist in some countries of the region can also be strengthened with this new approach.
- Set up a food system working group in the national associations of municipalities.
- Design and implement a sub-national (state, provincial, departmental, regional) food resilience and action plan.
- Draw up development and land use planning, with a focus on food.

Action 2: information and knowledge management

- Promote access to national and international information systems that include geo-referenced data on social, economic, agro-climatic and environmental aspects.
- Develop territorial information systems that include data on food basket prices, food supply routes and production, among others.
- Implement training and outreach programmes for municipal officials, civil society and other actors in the food system.

Action 3: food safety and biosecurity

- Establish biosecurity protocols in public and private food production, marketing and supply establishments.
- Develop awareness campaigns on local and safe consumption.
- Offer training in food handling for sale.

Measure 4: articulation of supply and demand

- Promote territorial market platforms, with local identity, proximity, food safety and sanitation.
- Build municipal capacity to implement e-commerce programmes.
- Favour agreements and concessions for the use of infrastructures with biosecurity protocols.
- Generate alliances between large urban (consumption), intermediate and small municipalities with producers.
- Implement local food purchase and consumption policies, such as institutional food procurement.
- Facilitate the organisation of public spaces for food marketing and stimulate local business tables.

Finally, the greatest lesson that municipalities can learn from the economic and social recovery after the COVID-19 pandemic is that it is not possible to move forward alone; to do so, they have a series of strategic allies such as:

- Sub-national governments and territorial authorities.
- Provincial, autonomous, departmental, regional, state governments, others.
- National government bodies linked to local government issues (Ministries of Agriculture, Finance, Health, Education, etc.).
- City networks and mechanisms for city-to-city cooperation on issues such as public procurement, healthy food, platforms for articulation, biosecurity, local production, such as the Milan Urban Food Policy Pact (MUFPP), the Climate Leadership Group (C40), Mercociudades, Local Governments for Sustainability (ICLEI), among others.
- Multi- and bilateral South-South cooperation, cooperation agencies of developed countries and other forms of technical cooperation.
- National associations of municipalities and trade unions, which are essential for dissemination, awareness and dialogue with government bodies at national level.
- Parliamentary Front against Hunger (FPH) at municipal level, parliamentary commissions on issues related to food, decentralisation of the State, budget, among others.
- Private sector, understood as large retail-type companies, as well as micro, small and medium-sized enterprises and their associations.
- Organised civil society, such as consumer associations, urban producers, among others.
- Entities linked to the development of knowledge and evidence, such as universities, study centres and non-governmental organisations (NGOs).



References

- Bonnal, P. and Maluf, R. 2009. Políticas de desenvolvimento territorial e multifuncionalidade da agricultura familiar no Brasil. *Política y Sociedad*, 14: 211-250.
- Castellanos, D. C., Jones, J. C., Christaldi, J., and Liutkus, K. A. 2017. Perspectives on the development of a local food system: the case of Dayton, Ohio. *Agroecology and Sustainable Food Systems*, 41(2): 186-203.
- Cejudo, G. and Michel, C. 2016. Coherencia y políticas públicas: Metas, instrumentos y poblaciones objetivo. *Gestión y política pública* 25(1): 3-31.
- Da Silva, J. G., Belik, W., and Takagi, M. 2012. Sugerencias para la formulación de una política de seguridad alimentaria en América Latina. En J. G. da Silva, M. E. Del Grossi y C. G. de Franca (coords.), *Fome Zero (Programa Hambre Cero) La experiencia brasileña* (43-58). Brasilia. Ministerio de Desarrollo Agrario. (also available at <http://www.fao.org/3/a-i3023s.pdf>)
- FAO and ECLAC. 2020. *Food systems and COVID-19 in Latin America and the Caribbean: A first look at impact, and country response*. Bulletin 1. Santiago. FAO. (also available at <http://www.fao.org/documents/card/en/c/ca8677en>).
- FAO. 2011. *Global Food Security Governance: The Crucial Premise to the Twin-Track Approach*. Rome. (also available at http://www.fao.org/fileadmin/templates/righttofood/documents/other_documents/2011_good_food_security_gov/FoodSecurityGovernanceWorkshop_backgroundpaper.pdf).
- FAO. 2017. *Reflexiones sobre el sistema alimentario y perspectivas para alcanzar su sostenibilidad en América Latina y el Caribe*. Santiago. (also available at <http://www.fao.org/3/a-i7053s.pdf>).
- FAO. 2019a. *FAO framework for the Urban Food Agenda. Leveraging sub-national and local government action to ensure sustainable food systems and improved nutrition*. Rome. (also available at <http://www.fao.org/3/ca3151en/CA3151EN.pdf>).
- FAO. 2019b. *The state of Food and agriculture. Moving forward on food loss and waste reduction*. Rome. (also available at <http://www.fao.org/3/ca6030en/ca6030en.pdf>).
- FAO. 2020. *Cities and local governments at the forefront in building inclusive and resilient food systems. Key results from the FAO Survey "Urban Food Systems and COVID-19"*. Rome. (also available at <http://www.fao.org/publications/card/en/c/CB0407EN>).
- Feria, J. M. and Ramos, J. 2009. Funciones ecológicas del espacio libre y planificación territorial en ámbitos metropolitanos: perspectivas teóricas y experiencias recientes en el contexto español. *Scripta Nova. Revista electrónica de Geografía y Ciencias Sociales*, 299(13).
- IADB. 2019. *Urban Sustainability in Latin America and the Caribbean*. Washington D. C. (also available at <https://publications.iadb.org/en/urban-sustainability-latin-america-and-caribbean>).
- IPES-Food. 2017. *What makes urban food policy happen? Insights from five case studies*. (also available at http://www.ipes-food.org/_img/upload/files/Cities_full.pdf).
- López, S. and Granados, S. 2020. La Infraestructura Verde como alternativa ante la expansión urbana en Santiago de Chile. *EN BLANCO. Revista de Arquitectura*, 12(29): 94-105. (also available at <https://polipapers.upv.es/index.php/enblanco/article/view/13017>).
- Moncayo, M. and Ramírez, A. 2017. *Gobernanza en seguridad alimentaria y nutricional. Factores para su viabilidad y sostenibilidad: Evidencia de siete países de América Latina*. Santiago. FAO.
- Sonnino, R., Tegoni, C. L. S., and De Cunto, A. 2018. The challenge of systemic food change: Insights from cities. *Cities*, 85: 110-116. 2018. (also available at: <https://doi.org/10.1016/j.cities.2018.08.008>) CONFIRMAR LINK
- UN. 2018. Las ciudades seguirán creciendo, sobre todo en los países en desarrollo. *Noticias ONU*. [Online]. [Cited 24 November 2020] <https://www.un.org/development/desa/es/news/population/2018-world-urbanization-prospects.html>
- UN. 2019. *World Urbanization Prospects: The 2018 Revision* [Online]. [Cited 24 November 2020]. <https://population.un.org/wup/>

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