





URBAN FOOD SYSTEMS GOVERNANCE CURRENT CONTEXT AND FUTURE OPPORTUNITIES

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Abbreviations and acronyms

AGRUPAR Participatory Urban Agriculture Programme

BCF Baltimore Community Foundation
BFPI Baltimore Food Policy Initiative

CAAS Chinese Academy of Agricultural Sciences

CAE School Meals Council

CAISAN Intersectoral Chamber of Food and Nutrition Security

CLF Johns Hopkins Center for a Livable Future

COMUSAN Municipal Council of Food and Nutrition Security
CONPES National Council for Social and Economic Policy

CPC Communist Party of China
CSO civil society organization

EUPHA Urban Development Corporation

EUPHA European Public Health Association

FAO Food and Agriculture Organization of the United Nations

FOLU Food and Land Use Coalition
Food PAC Food Policy Advisory Committee

FPC Food Policy Council
GDP gross domestic product

GMO genetically modified organism

ICLEI Local Governments for Sustainability

IFPRI International Food Policy Research Institute

ILO International Labour Organization

KP knowledge product

MDMQ Municipality of the Metropolitan District of Quito

M&E monitoring and evaluation

MRSC The Municipal Research and Services Center

MUFPP Milan Urban Food Policy Pact

NADHALI Developing Sustainable Food Systems for Urban Areas Project

MOU Memorandum of Understanding

NFNSSC National Food and Nutrition Security Steering Committee

NGO non-governmental organization

OECD Organisation for Economic Co-operation and Development

PAC The Food Policy Action Coalition

PAO Agro-Food Pact of Ouito

PRONAA National Food Assistance Programme

RtF Right to Food

RUAF Resource Centres on Urban Agriculture and Food Security

SDGs Strategic Development Goals

SISAN National System for Food and Nutrition Security

SMAB Municipal Secretariat of Supplies

SMASAN Secretariat for Nutrition and Food Security

SMG Seoul Municipal Government

SMPC Shanghai Municipal People's Congress

TFPC Toronto Food Policy Council

TFS Toronto Food Strategy
TPH Toronto Public Health

TRANSFORM Transformative institutions; Facilitative instruments (policies, plans,

programmes, regulations); Open data; Resources; and Multistakeholder

engagement and multilevel governance

UNCDF United Nations Capital Development Fund

UNDESA United Nations Department of Economic and Social Affairs

UNDP United Nations Development Programme

UNECA United Nations Economic Commission for Africa

UNICEF United Nations Children's Fund

UN-Habitat United Nations Human Settlements Programme

UA urban agriculture

UPA urban and peri-urban agriculture

USD United States Dollars

Executive summary

INTRODUCTION

Ensuring adequate food for people is one of the most fundamental responsibilities of national governments. Historically, governments have invested considerable resources in increasing production of staple foodstuffs to meet national food demands with a focus on the rural farmer. However, the way we live today reveals how the food system affects nutrition and health, livelihoods and jobs and the sustainability of the planet. Changing diets, technology, urbanization, and climate change are shifting how national governments address the food system. Pandemics like COVID-19 are forcing nations to face food system issues in all their dimensions.

Urbanization is occurring rapidly, and the expansion of cities across the globe is giving urban food systems an increasingly important role in shaping the transformation of the overall food system. What urban populations eat and how they source their food carries tremendous implications for the evolution, management and performance of food systems. At present, over half of the world population lives in cities and by 2050 an estimated two-thirds will live in urban areas. Urban areas now account for 80 percent of the USD 9 trillion global food market, or 10 percent of the USD 80 trillion global economy (Van Nieuwkoop, 2019).

Urban food systems comprise the functions and elements of the food system that take place within urban and peri-urban areas, falling within the remit of subnational levels of government – towns, cities, metropolitan districts, counties and provinces. The traditional channel includes wholesale food markets, open-air or wet retail markets, and small, independent retail stores, representing over 80 percent of the market in most countries in Africa and Asia. Informal food vendors and restaurants serve low-income households throughout the world. Supermarkets and restaurants drive the modern food channel, served by state-of-the art wholesale, logistics and food safety systems, capital-intensive food processing, integrated cold chains and food service firms, and private branding, labelling and packaging. Diverse types of urban and periurban agriculture within 20 kilometres of cities account for 60 percent of all irrigated cropland in the world, supplying up to 90 percent of the vegetables consumed in many cities.

The degree of leadership and cooperation required at the city level to ensure effective governance around food security, nutrition, health, food safety, waste management, sustainability and resilience is expanding. As urban food systems evolve, so does the need for institutions and processes to deal with rapid change and the challenges that arise. Cities are increasingly called upon to find solutions to issues that occur within their boundaries, yet their actions in urban areas have impacts throughout the broader food system. During the COVID-19 crisis, responses taken at local levels across the globe illustrate the increasingly important role of local government in food system performance. What's more, governments recognize that dealing with food issues helps them address other urban problems, providing different perspectives, entry points and policy options for action. In every urban context, effective governance institutions and processes are critical instruments for addressing these problems and challenges.

This report presents insights and emerging lessons on food systems governance from the experience of nine cities that have developed urban food interventions – Baltimore, Belo Horizonte, Lima, Medellín, Nairobi, Quito,

Seoul, Shanghai and Toronto – and draws on diverse sources of secondary information regarding the experiences of other cities throughout the world. It highlights entry points for the governance of urban food systems issues; common procedural and content-related considerations when addressing those issues; predominant governance models; and operational opportunities for future investment. Successful examples can encourage other local governments to adapt new approaches and innovate within their own context. Every city will need to navigate the political economy to customize their choices and interventions to local circumstances, priority problems and economic opportunities.

THE CURRENT SITUATION

Cities are beginning to capitalize on the opportunities and address challenges arising from evolving urban food systems. An estimated 32 to 43 percent of people in urban areas in low-income countries are food-insecure (Stamoulis and Di Giuseppe, 2020). The challenges are many. Unequal availability of and access to affordable, nutritious food for a large number of urban dwellers contributes to high rates of all forms of malnutrition, including overweight/ obesity and related health problems (e.g. cardiovascular disease, diabetes, high blood pressure). Many households with weak purchasing power depend on the informal food sector for their livelihoods and for access to cheap and often less nutritious meals and snacks. Despite the role of the informal food sector, it is often ignored, poorly regulated or subject to harassment. Ensuring food safety is an urgent and complex problem for the urban food system. Essential food system infrastructures, including markets, storage, refrigeration, processing, hygiene and sanitation, are largely inadequate for growing cities and changing food demand. Many of these infrastructures are vulnerable to floods, storm surges, zoonotic disease and other food safety shocks. Most require expansion, upgrading and modernization. Municipal government resilience, emergency or contingency plans provide an opportunity to address food system vulnerabilities and threats to critical infrastructure (Tefft et al., 2017).

Development of innovative and highly productive urban and peri-urban production systems that supply cities with nutritious high-value fruits and vegetables and important environmental services are often constrained by land-use plans, zoning regulations and building codes, and insufficient support systems. Urban food system functions often depend on scarce water and energy resources and contribute to rising greenhouse gas emissions, thus requiring their inclusion in municipal sustainability plans and mitigation measures. Moreover, organic food waste can account for as much as 50 percent of municipal solid waste sent to landfills, requiring concerted efforts to reduce loss and waste throughout all food system functions.

On the other hand, the urban food system offers a wealth of employment and livelihoods opportunities in the agriculture, industry and service sectors of the economy. Growth in areas of the food sector related to technology development, innovation, processing, marketing and services are especially appealing to young people, who make up the fastest-growing demographic in urban areas. Local governments are realizing the potential of the food system to provide much-needed jobs for urban dwellers.

EFFECTIVELY GOVERNING URBAN FOOD SYSTEMS - KEY INSIGHTS

Governance refers to the process of interaction and decision-making among public, private sector and civil society actors involved in a collective problem that leads to the creation or reinforcement of social norms, rules and institu-

tions. It relates to the structure, roles and performance of institutions; and the formal and informal processes and mechanisms for mediating differences and protecting rights.

Governance will in great part determine the degree to which cities can effectively address food system problems and how the local solutions can contribute to the structural food system challenges at national and global levels. Good governance depends on functioning institutions, policies, budgets, data, governance mechanisms and capacities specific to the food system. Good governance creates a space for many civil society and private sector actors to participate in resolving concrete problems, increasing the awareness and understanding needed to develop a shared vision to drive the urgency, impetus and energy that underpins political will and political action in support of pragmatic solutions.

Eight insights on urban food systems governance are summarized in the paragraphs that follow.

ORIGINS, IDEOLOGIES AND APPROACHES

Cities' engagement in food issues stems from the needs, interests and the framing of issues by local actors, government officials (at national, provincial and local levels) and champions and celebrities. Cities' approaches to food issues fall into three categories: nationally influenced approaches guided by strong national policies, programmes and plans; city-led approaches driven by civil society, dynamic mayors and city councils, who set an agenda in response to concrete urban problems; and hybrid approaches which benefit from a combination of the two approaches, meshing strong municipal government and civil society leadership with national policy and financial support.

As urban food systems develop, cities are compelled to step up their engagement in agriculture and food issues in face of changing demographics, evolving food preferences, health concerns and climate change. The ensuing food issues emerging from these phenomena provide new entry points for local leaders to engage in different areas of the food system that fall outside of normal directives and plans or supervisory and administrative roles (e.g. licenses, food inspections, markets, zoning). Three different approaches characterize how city authorities are integrating food issues into local development actions.

Nationally influenced approaches. The advantage of a nationally influenced approach is that municipal governments are guided by national sector policies and strategies, benefit from technical expertise and capacity of sectors present at the municipal level, and have access to essential financial transfers from line ministries or central government resources (in the context of decentralization and delegation). Although municipal or local governments (county or district) often have flexibility to adapt interventions to the local context, national line ministries provide the overall strategic direction. The case studies show that nationally influenced approaches implement interventions along sector lines (e.g. agriculture, commerce, health), whether by municipal departments (e.g. Shanghai) or decentralized ministry officials in district or country governments (e.g. Nairobi).

City-led approaches develop in the absence of national sector policies and programmes, technical staff and access to national budgets. In these cities, local authorities start to invest modestly in food issues, supporting small actions to achieve quick wins and at the same time generate evidence, build relationships and establish trust among actors. The advantage of city-led approaches is that they often build on food advocacy and interventions of local

Good governance allows all stakeholders to develop a shared vision and strategy for action.

civil society, both with respect to technical programmes (e.g. urban agriculture) and political engagement through support for "pro-food" mayors. They are designed around the local context and benefit from firsthand knowledge of the potential bottlenecks and key opportunities. City-led programmes in Baltimore and Medellín collaborate widely across diverse departments of municipal government, a tactic that facilitates access to financing and human resources for policy and programme implementation. Collaboration with multiple public, private sector and civil society actors to form workable coalitions and alliances requires creativity, innovation and pragmatism.

Hybrid approaches represent a fusion of the two approaches, meshing strong municipal government and civil society leadership with national policy, programmatic and financial support to create dedicated municipal food departments that lead the implementation of large, integrated programmes.

In all cities, successes have been enhanced with efforts by local government to improve knowledge, to collaborate and coordinate across sectors and stakeholders, and to create a common vision of goals and strategies. In some cities, such as Baltimore and Lima, carefully framed diagnostic studies have generated evidence and understanding of specific urban food problems, starting with local leaders asking the question, "What kind of a food system do we want?" Study results have contributed to the mobilization of political support for key actions to improve local food systems.

In many cities, the expanding urban food agenda is providing a bigger voice in planning and policy dialogue to civil society organizations with extensive experience in food issues. These organizations provide a critical link to communities and help frame food issues to push city governments to act. In Medellín, Quito and Toronto, civil society groups have a long history of advocacy and community organization and have been successful in driving change around issues in the food system. In Belo Horizonte, Seoul and Toronto, special interest groups have developed into a strong political force and become important allies and implementation partners of mayors and local government.

Cities and decentralized local governments (i.e. districts or counties) such as Nairobi and Shanghai implement national programmes and policies, generally along sector lines (e.g. decentralized ministry of agriculture officials at the county level). In other cities, such as Baltimore, Belo Horizonte, Medellín and Seoul, dynamic mayors are committed to supporting specific urban food

issues and feature them prominently in their campaigns and municipal priorities. In the majority of the cities studied, celebrated media personalities or champions have also played a role in catalysing public and political support around emerging food issues. These important figures, together with civil society and the private sector, create conditions that galvanize political will.

Each of the three approaches requires local authorities to work with multiple actors in government, the private sector and civil society, each with its own interests, priorities and way of framing issues. The development of coalitions and alliances is critical for policy dialogue, joint planning, and monitoring and evaluating processes and impact. Good governance allows all stakeholders to develop a shared vision and strategy for action. It requires effective communication, compromises and collaboration. The vision and strategy are also shaped by the existence (or absence) of a national food policy and programme influencing the local agenda.

POLICIES THAT PUSH

Food policy is at the heart of cities' efforts to address systemic issues in the food system. Cities use a diversity of municipal food policy instruments (ordinances, codes) that are consistent with sector-specific, provincial or national legislation to address practical food problems stemming from market and government failures.

Ordinances, by-laws, declarations, resolutions and codes are some of the policy and legal instruments used to address problems affecting the local food environment and to modify incentives and behaviour to improve food system performance. National and provincial policies, standards, guidelines and financing influence how cities use food policies (e.g. Belo Horizonte, Nairobi, Toronto). City-led programme approaches favour easy policy wins across diverse municipal government departments (e.g. Baltimore). They amend existing by-laws, ordinances and codes during periodic review processes while avoiding complex, time-consuming and often contentious issues and policy processes that require abundant human resources. Nationally influenced food programmes in cities or local government may implement municipal legislation linked to national sector policy (e.g. Shanghai for agriculture, commerce).

When countries lack coherent, integrated national food systems policies (i.e. access, sustainability, nutrition and livelihoods/jobs), some cities are guided by lessons and accomplishments of interventions carried out by civil society organizations to design or amend policies and programmes to address visible market and government failures (e.g. public procurement in Seoul and Belo Horizonte).

Cities achieve policy success when there is political support for feasible policy options that seek to solve practical food problems – a convergence of policy, political and problem streams (e.g. school meals in Seoul; the problem of hunger in Belo Horizonte; food deserts in Baltimore). Critical success factors include strong political leadership, capable and well-informed multi-actor task forces, careful attention to framing issues and problems, regular communication, and use of intermediate policy windows of opportunity and capacity support to all actors. However, there are challenges: agreeing to problem definition and framing, lack of data and evidence when the interests and agendas of public, private sector and civil society actors are very diverse (even within each broad group); establishing workable coalitions around a common vision in order to mobilize political support for action on issues lacking concrete problems; developing sufficiently focused policy options; and having sufficient human and financial resources and specialized knowledge and capacities to engage in high-level discussions at the national level.

Maximizing potential benefits of the informal food sector requires well-designed institutional and policy frameworks, and an appropriate enabling environment (legal, regulatory and taxation). In particular, inclusive institutions and cooperation in the design of informal sector regulations are important. In some countries, municipal governments establish independent government bodies to assist and promote the informal sector, serving as a centralized hub for implementing diverse support programmes.

3 INTEGRATED PLANNING

The integration of food into urban development, land-use or sector-specific plans is often the starting point for cities' urban food interventions. Integration of food issues in urban planning aligns food system goals with broad city goals. Integration of food into municipal department sector plans helps facilitate access to financing and broadens support for food across diverse thematic areas and with a larger and greater variety of public, private and civil society actors.

Planning is a cornerstone and key instrument of municipal governments' urban development work. Cities use urban planning as the basis for identifying and prioritizing interventions for the use of space, infrastructure and physical and financial resources to offer services and facilitate ease of living in densely populated settlements. Most food system interventions cannot be implemented if they are not included in plans and are not permitted under existing land-use planning and zoning regulations.

Land-use planning is a particular subset of the urban planning process, determining where a food market can be built, where and how urban agriculture can be practiced, or whether fast food can be sold near schools. Land-use plans guide the development of zoning regulations that dictate the use of space in urban areas.

The integration of food issues in urban planning challenges food professionals to understand planning processes while challenging urban planners to understand food systems. The lack of familiarity and understanding of the topics combined with inadequate technical skills challenge both groups of professionals, pointing to the need for education about food as a system and about planning as a fundamental feature of municipal governance.

In many cities, civil society groups have developed food charters, food strategies and food systems plans to guide food systems work in urban areas. These instruments can be used as the basis for discussions to integrate food systems into urban plans and can serve as a catalyst to involve diverse stakeholders and institutions. Many cities start small, gradually integrating food into sector plans, such as those used by municipal departments of health, housing, commerce, economic development, transportation and education, among others.

Food professionals need to collaborate with urban planners to identify the appropriate planning strategy to advance work on urban food issues. Master plans may provide a shared vision, facilitate coordination, reduce the risk of redundancy and inefficient use of resources, help resource mobilization efforts, and build capacity. Sector-specific plans may allow for greater participation and specialized knowledge, and promote greater flexibility, which will enable cities and actors to respond to new opportunities or challenges in a changing food environment.

XIII

HOUSING URBAN FOOD PROGRAMMES IN INSTITUTIONS

Urban food programmes benefit from an institutional home or setting that allows for effective collaboration and communication among stakeholders, that has adequate human and financial resources, that is close but not too close to local power (retains autonomy) and that can evolve as the food system and programme change. Local governments embed food units in diverse municipal departments; they create dedicated food divisions, units or agencies; they may design and implement interventions separately in departments coordinated by a senior municipal or county official; or they use informal structures before establishing formal units.

Decisions regarding the institutional home for urban food programmes depend on the structure and functioning of local government and its bureaucracy, on the approach (i.e. city-led or nationally influenced), on the priority areas of work, on the interest of municipal departments and on the opportunities to mobilize financial resources. Some cities may start out with informal structures (e.g. working groups, committees, task forces) on pilot interventions before deciding to create formal food divisions or departments. They may continue to use these ad hoc mechanisms to manage new interventions or pilots.

Urban food institutions and processes in city-led approaches tended to develop organically and iteratively. Baltimore used a task force to address the unavailability of nutritious food before establishing a food unit in the Department of Planning in the Municipal Government. Toronto's Department of Health houses the Toronto Food Strategy and Toronto Food Policy Council, providing close ties to the Province of Ontario's Department of Health. In both cities, the ability to collaborate across sectors has contributed to their success. In Belo Horizonte and Seoul, a municipal division or department reporting directly to the Mayor coordinates and governs the implementation of many food interventions managed by multiple municipal departments. In Shanghai, municipal departments or commissions (e.g. commerce, agriculture) design and implement their respective programmes, with coordination provided directly by the Mayor's office, rather than a separate urban food unit.

The case studies reveal that each of these types of management structures can be effective when they meet certain conditions: good coordination between key stakeholders; a shared vision; adequate human and financial resources; technical capacity; and flexibility to innovate and adapt to changing situations. While the institutional home may differ in every situation, experiences point to the importance of clear lines of communication and authority between mayors' offices and the structure tasked with managing the food programme. The choice of institutional home in city-led models may also affect access to budgets (e.g. access to health budgets for nutritious food programmes) and influence the type of personnel contracts of staff (e.g. civil servants or contractual positions). Opportunities to access scarce staff resources is equally important in the early years of food programmes. Finally, institutional homes are not permanent. They change as programmes evolve and as cities elect new mayors. The case studies underscore the importance of institutional agility to change location as circumstances change.

RACING FOR RESOURCES

Assessing human resource capacity, access to financing, political interest and support, and interjurisdictional governance and power are important factors to consider in identifying the appropriate city and level of government to initiate, coordinate and govern interventions.

Case study cities included municipal governments (Baltimore, Belo Horizonte, Medellín and Toronto), metropolitan governments (Lima, Quito and Seoul), a city-county government (Nairobi) and a city-state government (Shanghai), each comprised of diverse types of jurisdictions (zones, districts, communes, townships, towns, subcounties and wards). Many food issues cut across local government boundaries and require interjurisdictional governance mechanisms to address a number of issues, including: land-use zoning and planning; regulations governing urban and peri-urban agriculture; investments in green infrastructure for flood risk reduction and biodiversity; and large-scale projects involving modern wholesale food markets or agrifood parks. Determining in what type of city and at what level of government to coordinate and govern food interventions will naturally depend on the national and local political and governance context, the structure and relationships between levels of governments, as well as multiple factors related to demographics, economics and local politics.

The choice of government unit may affect the ability to deliver services across jurisdictional boundaries and the degree to which civil society, private sector actors, communities and citizens can participate in decision-making and hold government accountable to their demands and programme delivery. A higher level of government (e.g. metropolitan government) may have greater access to human and financial resources, and more responsibility and authority for governing the delivery of services across a large geographic area and economic area. A metropolitan government, for example, may be a more effective level at which to design and approve policies and to coordinate and govern interventions across multiple subordinate jurisdictions at reduced transaction costs and with fewer conflicts. Smaller municipal or submunicipal levels of government, however, given their proximity to communities and citizens, may be better placed to coordinate and oversee community-focused interventions. In larger urban areas with multiple cities, towns and levels of government, interjurisdictional mechanisms become critical for the design, implementation and governance of food interventions.

Larger county governments with decentralized staff from national line ministries (e.g. agriculture or commerce) and with access to national budgets may provide better opportunities for coordinating and governing urban food interventions in small towns and secondary cities in low-income countries. Municipal governments in these smaller urban areas have limited administrative and financial capacities, small staff and suffer from incomplete decentralization programmes and weak public finances, including transfers from central government.

DATA GAPS AND EVIDENCE GENERATION

6

Cities overcome poor operational knowledge, weak empirical evidence, and gaps in data through partnership with universities, Non-Governmental Organizations (NGOs) and international partners to generate critical data and evidence to delimit and prioritize problems, to contribute to a shared vision for action, and to design and monitor the implementation and impact of interventions.

The lack of available valid, reliable baseline data in urban areas represents a real problem for cities' engagement in urban food issues. Cities have a poor understanding and knowledge of many of the basic building blocks of food

systems (e.g. knowledge of what consumers are eating, how much food is wasted, urban production systems, costs and capacities for scaling up investments). Even at the country level, policy analysis has not kept up with the evolution of the food system, the changing geography of rural-urban issues, and the multiple outcomes (nutrition, sustainability, inclusiveness, accessibility). More incisive policy and programmatic analysis represents a major challenge. In the context of fragmented and dispersed data, cities have forged partnerships with universities, NGOs, businesses and technical partners to provide decision-relevant analysis and information (e.g. food assessments in Lima, Medellín and Nairobi; food systems mapping in Baltimore).

Where data exist on legislation, policy, spending and evaluation, decision-makers and diverse actors may not know how to use it, making it difficult to develop viable policy options to respond to priority problems. Effective use of data by public, private and civil society actors will depend on strengthening their capacity to understand and use analytical results and governance mechanisms to manage organized data for decision-making. Cities need to find effective ways to monitor and evaluate performance to achieve results, ensure accountability and distil lessons for improved delivery.

THE "MUST" OF MULTISTAKEHOLDER ENGAGEMENT

Cities have found that engaging, coordinating and managing a large and diverse group of stakeholders is indispensable for resolving complex and interconnected issues in the food system.

Multistakeholder platforms are instrumental to effective collaboration with the wide variety of public sector, private sector and civil society actors involved in food issues. Local government is challenged to find effective ways to interact with existing formal and informal organizations and networks. In many cities, formal stakeholder mechanisms have developed out of technically and politically strong local food movements. In other cities, local food movements and civil society organizations have been the originators, the energy and the drivers behind urban food issues. In some instances, civil society organizations and networks are challenged to move into formal, government-led processes. A change in leadership or the resolution of a problem may also threaten continuity. Ensuring the sustainability of multistakeholder coordination mechanisms represents another challenge. This is important for building trust and capacity across sectors for food system programmes.

Organizations and networks of stakeholders, in general, and the coalitions and alliances that form around specific issues, encounter multiple issues. Priorities differ between government, private sector and civil society, and within each of these groups. Conflicts of interest arise if there are opportunities for some to prioritize their interests over others. Cities are challenged to find ways to minimize such conflicts of interest and to ensure accountability for programme or policy delivery across multiple departments or levels of government.

External organizations have been decisive in providing financial and technical support to urban food interventions, particularly to support stakeholder capacity to understand, participate and act (e.g. Lima, Medellín, Nairobi, Quito). They can play many roles such as raising awareness about certain issues, institutional strengthening, coordinating interventions and implementation as well as monitoring impact, sharing data and undertaking analysis. Development partners may help to push the process along, providing supportto the mobilization of civil support, technical advice to local government, peer-learning in other cities and countries, or funding for pilot programmes.

7

The most successful urban food programmes are characterized by strong municipal and national political support, broad civil society and private sector support, strong institutions and technical capacity, and national and municipal financing.

POLITICAL POWER PLAYS AND SUSTAINABILITY

The sustainability of urban food programmes stems from broad support but is often stymied by several political economy threats: interdepartmental rivalry (and power plays); national governments with different political party affiliations and agendas; and transitions to new mayors with different priorities.

The most successful urban food programmes are characterized by strong municipal and national political support, broad civil society and private sector support, strong institutions and technical capacity, and national and municipal financing. Nevertheless, their existence is often fragile, as diverse political challenges threaten their continuity. Political transitions to new mayors with different political, programmatic and financing priorities will often threaten programmes. Access to central government transfers, technical assistance and national political support can prove difficult in the context of contentious political relationships, divergent political views, or jealousy driven by media attention given to successful food interventions. Interpersonal relationships and interdepartmental rivalry and competition may also threaten programme continuity as departments jockey for influence and power within municipal government. Finally, mature municipal food programmes are often victim of their success, as uninformed or impatient mayors pull funding or prioritise other issues. Effective and skilled navigation of the political environment in which urban food programmes operate is critical for short-term success and long-term continuity, requiring new skills, strong alliances and coalitions, consistent monitoring and regular, well-framed communication. Broad-based public/private/civil society engagement in urban food interventions ensures political buy-in and long-term continuity in food programmes.

CONCLUDING THOUGHTS

Urban food systems have impacts beyond food, and their reach extends beyond urban and peri-urban areas. They are a critical dimension of an integrated urban-rural development agenda, contributing to multiple outcomes that are key to meeting the Strategic Development Goals (SDGs). The governance of these systems brings together issues of human nutrition and health, food systems resilience, environmental sustainability, inclusiveness and job creation and urban development, among others. With crises like the COVID-19 pandemic and rapid urbanization and demographic trends increasing pressure to provide sufficient quantities of safe, affordable and nutritious food, it is more crucial than ever to understand the multiple dimensions of urban food systems, and how they function and connect to the broader economy, society and rural areas. Better knowledge and understanding provides the basis for all stakeholders to work together to find solutions to emerging problems and to create more inclusive, sustainable, nutritious and efficient food systems.

Within the context of international development, different pipelines of work will need to consider how to effectively support urban food systems, whether from an urban development, agriculture transformation, environmental sustainability or other perspective. City examples highlight the diverse entry points to engage in food, from modernizing wholesale and retail food markets, investing in urban and peri-urban agriculture or strengthening food safety to reducing food waste and improving the availability of and access to nutritious food.

While municipal, county and district authorities will likely continue to lead urban food efforts, the determination of the most appropriate level of governance intervention (e.g. municipal, metropolitan district, national, regional and global) will remain an important question for decision-makers as they engage in these issues. This can be done through careful situational and institutional assess-

ments, in order to identify the context and, subsequently, the most probable levels of engagement and model of urban food systems governance system to flourish.

Once the level of intervention is determined, stewarding changes in the evolving urban food space will require significant institutional transformation, creativity and strengthened enabling conditions. The case study cities referenced in this report have been successful, to varying degrees, in establishing the institutional architecture to address food issues at the municipal level. They achieved success in multiple areas: getting food on the municipal agenda; creating or strengthening a food authority at the municipal level; facilitating the development and approval of policies, programmes and budgets in select thematic areas; establishing stakeholder platforms; coordinating across departments and levels of government; mobilizing financial resources and including food in budgets; and partnering with diverse institutes to gain access to an independent source of analytical information. In addition to these institutional achievements, they have produced tangible and positive results for the populations they serve. Much can be gained from their experiences.

Institutions like the World Bank and FAO can help support future work in this emerging urban food agenda, filling knowledge gaps and improving data systems, facilitating upgrades and coherence of national and municipal policies, supporting multistakeholder processes, strengthening public finance and decentralization, investing in priority projects, and ensuring rigorous monitoring and evaluation. Strengthening social capital and building institutional capacities – analytical, technical, financial and management – are crucial to achieving results.

Building on this knowledge product, near-term outputs and activities could contribute to framing urban food systems governance in the context of the COVID-19 pandemic and the many structural food system problems and issues that have surfaced during the crisis. Evidence can be seen in the shifts of food markets, food supply chains and consumer food demand, where the decisions of municipal governments are being made by working closely in tandem with state and national government agencies and ministries. These are seismic shifts in the governance and structure of the food system that arguably demonstrate short-order, next-level trials for a severely climate-challenged world.

This work on urban food systems governance helps frame and provide insight into an emerging set of challenges presented by our urbanizing world as well as the opportunities provided by the growing engagement of cities in food systems. The World Bank and FAO can play an important role in raising the visibility of urban food systems governance and its links to economic development, poverty reduction, and health and food security. The World Bank and FAO have the political, conceptual and technical knowledge and capacity to build on national-level experiences and support governments to accelerate progress towards sustainable, nutritious and inclusive urban food systems.





Introduction Why focus on urban food systems and their governance?



Urbanization is occurring throughout the world at a rapid pace, with burgeoning city populations and expanding peri-urban areas. Globally, as of 2015, about 80 percent of rural residents live within three hours of an urban centre - an increase of 57 percent since 2000 (International Food Policy Research Institute (IFPRI, 2019). Residents of urban areas currently consume 70 percent of the world's food (Cabannes and Marocchino, 2018). With 55 percent of the world's population currently living in urban areas, a proportion that is expected to increase to 68 percent by 2050, what happens in cities drives and shapes our food systems (United Nations Department of Economic and Social Affairs (UNDESA), 2018). While food issues at the national level are largely handled by ministries and agencies, local distribution and consumption of food in populated areas is the purview of local authorities. Cities are increasingly called upon to find solutions to issues that occur within their boundaries, yet their actions can have global impacts - specifically when considering how urban food systems are typically placed in the spotlight during times of food safety and human health issues. Pandemics like COVID-19 highlight how urban food systems governance is squarely rooted in human health, be it through food security, food safety or poor diets. The interconnectedness of urban food and health systems means that opportunities to more efficiently address these issues upstream (through appropriate municipal interventions) rather than downstream (through medical treatment) can save money and, more importantly, lives.

The relative inactivity of national governments in relation to food systems' policies has raised the profile of local initiatives – often sparked by strong civil society organizations (CSOs). Multistakeholder engagement with citizens, CSOs, national governments (when/where relevant) and other actors can impel local governments to address challenges, resolve specific problems, and lead new initiatives in the food systems.

Urban food systems are influenced by many diverse factors: demographic change; urbanization; food consumption, nutrition and health; rapid technological innovation; climate change; resource scarcities; and localized development with stakeholder engagement. Each of these factors alone can provide compelling reasons to engage with urban food systems, and combined they can influence transformational change within urban food systems. These factors are discussed in detail in the knowledge product (KP), Food Systems for an Urbanizing World (Tefft et al., 2017), and a recent landmark report by the Food and Land Use Coalition, Growing Better: Ten Critical Transitions to Transform Food and Land Use (2019) (FOLU, 2019). Focusing on urban food systems governance and its enabling components is a prerequisite to effectively address: (i) changing agrifood systems across the rural-urban continuum; and (ii) the myriad of problems associated with transformational shifts and failures. Urban food systems governance largely depends on the existence of functioning institutions, instruments, resources, data, stakeholder engagement, and multilevel coordination.

This knowledge product integrates aspects of the TRANSFORM framework (Tefft et al., 2017), which recognizes four interlinked food system outcomes sought after by cities: (i) remunerative jobs and better agribusinesses; (ii) affordability and accessibility for food security; (iii) nutritious, diverse, quality and safe food; and (iv) sustainable, resilient agriculture and food systems. Achieving these outcomes depends on enabling conditions broadly categorized as: (i) transformative institutions; (ii) facilitative and progressive instruments (policies/planning/programmes/regulations); (iii) open data, knowledge, and evidence base; (iv) resources for effective public and private financing; and (v) multistakeholder engagement and multilevel governance.

OBJECTIVE

The objective of this Urban Food Systems Governance report is to provide insights and emerging lessons on food systems governance based on the experience of nine cities that have developed urban food interventions (Baltimore, Belo Horizonte, Lima, Medellín, Nairobi, Quito, Seoul, Shanghai and Toronto), as well as diverse secondary sources that highlight experiences of other cities in Africa, Asia, Europe, Latin America, Mid-East and North America, to help inform future World Bank and FAO support for urban food interventions.

TARGET AUDIENCE

This report has been written for a primary audience of World Bank staff as well as practitioners and decision-makers (including mayors) working in urban areas.

DEFINITIONS

In order to effectively convey insights from this report, the following terms and definitions are used:

Food systems include the range of activities in the production, processing, distribution, marketing, preparation, consumption and disposal of goods that originate from agriculture, forestry or fisheries, including the inputs needed and the outputs generated. Composed of traditional, modern and informal channels, food systems also involve the people and institutions that initiate or inhibit change in the systems as well as the sociopolitical, economic and technological environments in which these activities take place. This definition includes food security and the wider set of systems in which food operates. Urban food systems, specifically, hone in on activities that occur in and/or impact urban and peri-urban areas (FAO, 2017).

Agrifood systems combine the words agriculture and food to represent a holistic view of the activities involved in food production, transport, processing, distribution, consumption and waste management while also considering the social, ecological and economic interactions between food systems and other urban systems. It can be used synonymously with the term food systems, and is simply a way in which to make explicit the consideration of agriculture within the food system.

Governance, viewed broadly, refers to the process of interaction and decision-making among public, private sector and civil society actors involved in a collective problem that leads to the creation, reinforcement or reproduction of social norms, rules and institutions. It relates to: the structure, roles and performance of institutions; the formal and informal processes and mechanisms for mediating differences and protecting rights; and the intergovernmental and actor relationships and their ability to exercise power among them. Practically, governance plays an important role in determining whether cities are able to effectively address food systems problems and contribute to the larger structural challenges linked to improved food systems outcomes at national and global levels.

Urban food systems governance can be understood as the mechanisms and processes in urban and peri-urban areas relating broadly to agriculture, food, ecosystems and health for stakeholders to articulate their interests, mediate their differences and coordinate around government institutions. It is the rules, institutions and practices that set limits and govern the behaviour of individuals, CSOs and private sector actors. It is evolving along the continuum of municipal support.

Building blocks/enabling elements of an urban food systems governance framework (T-FORM): These blocks refer to (i) Transformative institutions; (ii) Facilitative instruments (policies, plans, programmes, regulations); (iii) Open data; (iv) Resources; and (v) Multistakeholder engagement and multilevel governance.

Municipalities, cities, and/or local/municipal government are terms in this paper which do not have one static description; rather, each municipality and/or local government may look quite different depending on the context, particularly when considering low-, middle- and high-income countries. There is an absence of standard international criteria defining "urban" and "rural", "city" and "town", "urban agglomeration" and "metropolitan area" (United Nations, 2016). The increasing use of the term "city-region" stems from the recognition that urban food issues must often be addressed from a larger regional or territorial perspective that encompasses the dynamic urban/periurban and rural space and multiple jurisdictions (Forster et al., 2015a). Food issues are not easily circumscribed within convenient, static boundaries of one municipal district or provincial government. Just as built-up urban areas spill over administrative municipal boundaries into adjoining jurisdictions, so do food systems issues transcend the multiple levels of decentralized government within the dynamic urban, peri-urban and rural space. To the best extent possible, clarifications about each municipality/city referenced in this report are provided throughout the chapters. For example, in Canada, "local government" and "municipal government" are synonymous. In contrast, in Kenya, "local government" refers to county governments whose departments are linked to line ministries in national government.

METHODOLOGY

In order to draw insights and emerging lessons, this knowledge product uses case study analysis, drawing from nine case studies from 2018 which highlight commonalities and unique experiences with regard to urban food systems governance. Case study sites (nine cities) were largely selected based on: (i) historical evidence and data available; (ii) successfulness of the city's urban food systems; and (iii) diversity of the systems (across cities and governance structures) and geographies. As such, the selection favoured cities with modified institutional structures and governance mechanisms and sustained active engagement in support of urban food. Cities with more recent engagement but without sufficient data/information were not considered, nor were cities with more passive, dispersed, or less coordinated approaches to urban food. It should be noted that, in this nascent area of work, it is often difficult to identify cities that support food interventions by line departments in the absence of a central coordinating structure (i.e. some type of food and agriculture unit, director or council). The final selection was as follows:

- 1. Baltimore, United States (North America)
- 2. Belo Horizonte, Brazil (South America)
- 3. Lima, Peru (South America)
- 4. Medellín, Colombia (South America)
- 5. Nairobi, Kenya (Africa)
- 6. Quito, Ecuador (South America)
- 7. Seoul, Republic of Korea (Asia)
- 8. Shanghai, People's Republic of China (Asia)
- 9. Toronto, Canada (North America)

REPORT STRUCTURE

This report is organized as follows:

- Executive Summary
- Introduction
- Chapter 1: Impetus and Entry Points
- Chapter 2: Urban Food Systems Governance: Context and Models
- Chapter 3: Common Elements across City Programmes
- Chapter 4: Differences across Governance Models
- Conclusions

Chapter One presents some of the ideologies and issues that underpin engagement in urban food issues, and the factors that contribute to determining and prioritizing thematic entry points for a city's initial engagement. Chapter Two addresses the types of urban food systems governance that arise; the different models, and the contexts and enabling environments which facilitate the development of those models; and the implied variations in approaches to urban food systems governance. Chapter Three explores common processes and content that city programmes must consider and/or address when acting on urban food systems issues. Chapter Four highlights differences across governance models, with regard to approaches/methods used and their subsequent impacts. The final conclusions highlight obstacles to and opportunities for moving forward, with a summary of the opportunities, challenges, and tentative recommendations for further research and investment. Additional details on case studies, financial mechanisms, and urban/land-use planning can be found in the annexes.

DISCLAIMER

There are several caveats to the results presented in this report. The rapidly emerging engagement of civil society, municipal governments, and private sector actors in urban agrifood systems issues is a relatively new phenomenon, which means that empirical information concerning urban food systems governance is scarce and often weak. As cities' experiences show that the establishment of governance institutions and processes takes time to develop and mature, the results presented capture insights observed up until this moment in time. The situation will undoubtedly change quickly in light of cities' growing engagement in urban food issues.

The results presented are intended to provide a window into some of the issues encountered by cities and insights distilled from their experiences. There is no cookie-cutter approach to urban food systems governance. Although this report indicates that cities may have common traits, it is generally difficult to replicate institutions or decision-making arrangements since each situation is reflective of its context, including institutional, sociocultural, legal and policy traditions of cities and their countries. Cities must navigate the political economy to customize their choices and interventions to their local circumstances, priority problems, and economic opportunities.







Chapter 1 Impetus and entry points



Over the last 30 years, a small but growing number of cities throughout the world have started to engage in agrifood issues in response to the growing mobilization of and pressure from citizens and diverse civil society and private sector actors, academia and public agencies to address specific problems confronting the city. This Chapter discusses those factors which have contributed to enhanced engagement of cities with agrifood issues.

KEY FACTORS

Factors can be broadly categorized into those pertaining to: (i) food security, nutrition, and health/safety; (ii) food sovereignty; (iii) systems resilience and sustainability; and (iv) diversity of influences and approaches.

Food security, nutrition, and health/safety

Out of all the topics prioritized by cities to date, issues of food security or those related to aspects of food security – such as hunger, nutrition, health, food safety and food justice – consistently surface as a prominent entry point. Often linked to food security is the *Right to Food* (RtF) (FAO, 2004). The different ways of framing food security are discussed in the **Belo Horizonte, Medellín** and **Seoul** case studies:

- Belo Horizonte, Brazil, adopted the principle of food security as a human right 13 years prior to the inclusion of the RtF in the Brazilian Constitution. This adoption meant that all citizens have the right to an adequate quantity and quality of food throughout their lives, and the Government is tasked with the duty to uphold that right for all citizens, regardless of socio-economic status.
- In Medellín, Colombia, part of the city's engagement in urban food issues was due to an urban push to address the needs and aspiration of the urban poor, including large numbers of refugees who migrated to Medellín, following prolonged civil conflict.
- In Seoul, Korea, the Metropolitan Government signed an official declaration (June 2017) which gave Seoul citizens fundamental food rights, serving as the basis for Seoul's Food Master Plan.

Food sovereignty

Food sovereignty is a concept that refers to peoples' rights to define their own policies and strategies for sustainable production, distribution and consumption of food that guarantee the right to food for the entire population. It also encompasses the right of peoples to healthy and culturally appropriate food and their right to define their own food and agriculture systems (World Forum on Food Sovereignty, 2001). It has exerted a strong influence on many urban food actors, particularly in Latin America and Europe (including case study cities of **Belo Horizonte, Medellín** and **Quito**), but also those promoting local food systems throughout the world.

Systems resilience and sustainability

Sustainability issues figure prominently in municipalities across the world, including Asia, Europe and North America, where many cities have created cross-sectoral Departments of Sustainability (e.g. **Baltimore**). Agro-ecology is a related concept espoused in Latin America and Europe, whose principles advocate for building life in soil, recycling nutrients, dynamic management of biodiversity and energy conservation at all scales (Nobrega, 2014).

Resilient food systems are increasingly becoming an entry point in urban areas as cities have declared climate change, food safety, and pandemic-related emergencies. Food systems can be linked to cities' efforts to develop and implement comprehensive resilience plans and related response. Cities such as **Baltimore**, **Quito and Toronto** are but a few that have undertaken food systems vulnerability assessments as the basis to develop such plans. One noteworthy case is **Bangkok**, where the private sector also initiated food systems resilience planning.

• After a terrible flood in 2011 which affected 72 percent of the Bangkok area, some large agribusinesses initiated adaptation actions based on lessons learned from the interruption of food supply in the city. They have since developed 100 new distribution units in Bangkok and its vicinity to enhance the efficiency of food distribution to retail outlets while supporting the original ten main distribution centres. Moreover, 450 agribusinesses led by Tesco Lotus developed a new joint distribution centre in Bangkok. This model allowed them to share space and costs of transportation, create more flexible food supply chains, and provide logistics to various corporations (Pornchaleumpong and Rattanapanon, 2015).

DIVERSITY OF INFLUENCES AND APPROACHES

Localism: As a values-based approach, localism emphasizes or prioritizes what is "local," supporting livelihoods, businesses, and the production and consumption of food from nearby rural/territorial areas in urban and peri-urban areas. Localism has led to the promotion of diverse interventions that support a range of key issues: sustainability and resilience; equity, food justice, and food security; social inclusion; and/or health and nutrition. Localism should not be confused with the use of "local," which food companies and consumers may equate with numerous terms including socially responsible, fresh, natural, clean, food with a story, small business, high-quality, sustainable, healthier or climate-friendly, etc. The definition is subjective and multifaceted and may include fresh and natural, family-owned and -produced, delivered direct by producer, artisan or craft, small-sized producer or within 150 miles (Henkes, 2020).

Modernism: The notion of modernism is often present in cities seeking to create urban spaces commensurate with their vision for the future. For example, **Shanghai** aspires to develop into an innovative financial, educational, and ecological city that incorporates food safety, modern and strategically placed markets, and a secure, resilient food system where urban and periurban agriculture (UPA) contribute to provisioning the city with fresh vegetables. The linkage of food to the city's overarching vision provides clear priorities for strengthening food systems.

National influence: Cities' engagement in urban food issues is influenced to varying degrees by the overarching national environment. This can include political agendas and policies which affect decentralization, public finance, and national strategies and initiatives. National sector-wide policies, programmes and budgets may also determine priorities, along with the design and implementation of municipal food programmes. Depending on the context, this can be equally relevant to provincial or state authorities (e.g. in countries with federal systems), where provinces and/or states have authority and power over policies in some sectors (Government of Canada, 2020). National or provincial government policies and programmes may dictate actions and

Resilient food systems are increasingly becoming an entry point in urban areas as cities have declared climate change, food safety, and pandemic-related emergencies.

provide funding for cities, which then may affect municipal actions, as was evident in the case studies of **Belo Horizonte**, **Nairobi** and **Shanghai**.

Dynamic leadership and champions: Experiences point to the importance of dynamic leaders who are effective in mobilizing diverse stakeholders or in helping to overcome political differences and interest group politics to form coalitions in support of an issue or a course of action. In many cities, including Baltimore, Belo Horizonte and Seoul, successive mayors have played instrumental roles in putting food on the municipal agenda and sustaining budgets, programmes and policies. In Baltimore and throughout Toronto's long engagement in urban food programmes, their food policy directors played critical roles in stewarding the design, implementation and sustainability of urban food interventions, creating strategic alliances and working across municipal departments and bureaucracies to champion their city programmes. The Bangkok Metropolitan Administration urban food efforts led by CSOs and supported by the municipal government received strong support and inspiration from the King of Thailand, who promoted the local production and consumption of healthy, nutritious food and inspired community actions in this direction. The power, respect for, and national prominence of his position and voice fueled huge support to the urban food and actions while also helping to limit criticism and opposition from the large-scale food businesses. In the early

City	Influencing Factors	Key Problems	Initial Entry Points
Baltimore, USA	Study results on food insecurity/poor health problems. Dynamic mayor.	Food insecurity. Urban poverty. Poor access to nutritious food.	Food environment mapping. Baltimore Healthy Food Environment. Strategy addressing nutritious food access in urban neighbourhoods.
Belo Horizonte, Brazil	National food policy.Decentralization.Dynamic mayor.Popular champion.	 Urban poverty. Food insecurity. Malnutrition.	Comprehensive food and nutrition programme. School meals.
Lima, Peru	Organized CSOs. Development partners. National policy.	Food system resilience to climate. Food insecurity. Urban agriculture.	Food security and malnutrition. Urban and peri-urban agriculture.
Medellín, Colombia	Organized CSOs. Dynamic mayor and city leadership. Refugee situation. Food sovereignty. Development partners.	Food insecurity and poverty. Markets for local food.	Urban and peri-urban agriculture. Inclusive food markets. Rural-urban linkages (city-region).
Nairobi, Kenya	National policies. Decentralization.	· Food insecurity.	· Urban and peri-urban agriculture.
Quito, Ecuador	Organized CSOs. Dynamic municipal leadership. Food sovereignty. Right to Food.	Urban poverty. Food insecurity. Access to nutritious food.	Urban and peri-urban agriculture. Food marketing systems.
Seoul, Korea	Organized CSOs.Dynamic mayor.National policy.	Food insecurity.Food safety.Healthy diets.	Healthy Seoul Food Strategies. Universal free school meals. Urban and peri-urban agriculture.
Shanghai, China	National policies/plans.Rapid urbanization.Food security goals.	Food safety. Loss of peri-urban farmland. Urban food supply.	Food safety. Food markets. Urban and peri-urban agriculture.
Toronto, Canada	Organized civil society. Supportive municipal and provincial leadership.	Access to nutritious food. Food insecurity.	Community food banks. Diverse food, nutrition and health actions.

 $\begin{tabular}{ll} \textbf{Table 1.1} \\ \textbf{Case study city entry points for urban food engagement} \\ \end{tabular}$

days of **Belo Horizonte's** food programme (1993), the Citizens' Action Campaign Against Hunger and for Life was created to mobilize people in support of efforts to reduce malnutrition and poverty in the country. The reason for its resounding success was due in part to the efforts of one of its creators and most visible campaigners: Herbet de Souza (Betinho), voted the most admired Brazilian in a national survey. Capitalizing on citizens' eagerness, the citizenship campaign provided an opportunity to mobilize people from all classes towards a common cause. The support of Brazil's powerful middle classes for food security issues gave an extra boost for political action in that direction.

THE CATALYTIC POWER OF CONVERGING FACTORS

All of the problems, issues, and (political/social/ideological) elements described above serve as catalysts that launch urban food interventions in cities, whether directly or indirectly (e.g. subtly influencing values, perspectives and motivations). As Table 1.1 shows, many of the selected case study cities began their agrifood interventions by focusing on issues of food insecurity, nutrition and health, which provided an initial pathway for engagement. Successful engagement in urban food issues often requires a convergence of multiple factors, as demonstrated in the **Nairobi** and **Quito** case studies.

In the case of **Quito**, Ecuador, the national legal framework incorporated international principles and rights into its policies, including the integration of food sovereignty within its Constitution and legal framework, which also recognized the RtF. Second, it identified urban organic agriculture as a disaster risk reduction measure which could support food security and nutrition for vulnerable urban producers. This identification contributed to the effective design and implementation of the flagship Participatory Urban Agriculture Programme (AGRUPAR) in 2002. Third, the incorporation of food issues in Quito's urban development plan contributed to continued high levels of political attention.

In Nairobi, Kenya, the Constitution of 2010 created impetus for initial recognition of the RtF, and subsequent food security policies then recognized urban food security as an important objective. Enactment of the 2011 National Food and Nutrition Security Policy and the 2012 Urban Areas and Cities Act set forth the framework for anchoring urban food systems at the national level. Enactment of the 2015 Nairobi City County Urban Agriculture Promotion and Regulation Act brought into focus issues of urban food security, including urban agriculture. Despite this, it was not until 2018 that the Nairobi City County Government would establish an Agriculture, Livestock and Fisheries Department in which to anchor the Urban Food Systems Directorate.





Chapter 2 Urban Food Systems Governance: Context and Models



Urban food systems governance can come in various shapes and sizes, and the model which a particular system follows is dependent upon the context under which it came to fruition. The context (and related model) also influences how urban food systems governance may approach issues and the opportunities it may avail. The **three models** or broad categories of urban food systems governance noticed within the case studies include: (i) City-led; (ii) Nationally influenced; and (iii) Hybrid. These models are not so much a conscious choice; rather, they flow from the relative importance of factors (identified in Chapter 1) which influence a city's approach and the initial entry points of their food interventions.

CONTEXT

First and foremost, a good starting point for understanding a city's potential role in engaging food issues is to view the city as an actor in agrifood issues and examine its current institutional profile; in essence, understanding its context. City type is particularly important, as it indicates whether the city: (i) has a limited mandate within a municipal jurisdiction; or (ii) is actually a larger metropolitan district, county or city-state, comprised of numerous smaller cities and/or towns with multiple jurisdictions. Moreover, understanding levels of decentralization from national and/or provincial/state levels of government will also shed light on whether food systems governance may be prone to city-led, nationally influenced, or hybrid models. For instance, some cities may not have the general mandate, specific responsibilities, or capacity to address the many food systems-related responsibilities if those responsibilities typically fall under national or provincial government mandates. These contextual elements should be considered alongside key impetus, issues and entry points to urban food systems governance in order to predict the overall system of governance most likely to develop.

By considering cities as actors in agrifood issues and conducting an institutional/situational analysis or assessment and pairing that with an understanding of the key issues and entry points most relevant to the city under consideration, it becomes possible to understand the type of model most likely to flourish. It should also be noted that none of the governance models are entirely static; they benefit from being adaptable. Each model comes with pros and cons; its own form of governance and structures that subsequently inform methods of stakeholder engagement, data/information management, coordination, and resources (human and financial) available.

For example, city-led programmes often benefit from high levels of civil society engagement and cross-sectoral collaboration. However, they may find themselves more limited in terms of funding opportunities and/or susceptible to risks associated with political changes in leadership. Nationally influenced models are more common in instances where countries have strong national commitments to food security, safety, sovereignty, nutrition, etc., a strong centralized model of government, or decentralized systems that link national ministries to county or district government. This opens opportunities for government funding but may reduce some of the autonomy, stakeholder engagement, and benefits which can stem from a more grassroots approach. Hybrid models, which arguably bring together the best of both worlds, may be ideal in terms of systemically addressing food issues and overcoming barriers. However, harmonizing national and municipal levels is not always an easy task and can create conflict when priorities diverge.

Table 2.1 presents institutional profiles of the city case studies used in this report. **Baltimore**, **Belo Horizonte** and **Toronto** are municipal governments,

UNDERSTANDING INSTITUTIONS

INSTITUTIONS are the collections of rules, entities, and organized practices important in catalysing and sustaining inclusive transformation through, for example, the setting of common rules and incentives.

INSTITUTIONALIZED is defined as both the formal recognition and formulation of a specific intervention in local and national policy and legislation, and the routine application or support for this formulation. In this regard, institutions or the institutionalization of a given intervention – such as an urban food policy – is specifically about the formal establishment of rules and practices to support that intervention repeatedly over time.

While the creation of new bureaucratic entities, organizations, or staff positions is an example of how interventions can be formally "institutionalized", it is not sufficient on its own. Establishing policies, rules and actions to support the intervention (rather than the bureaucracies themselves) is equally important.

while Lima, Medellín, Nairobi, Quito, Seoul and Shanghai are metropolitan, district or county governments. Governance systems differ dramatically, with varying degrees and levels of: (i) centralization of or control over urban functions; and (ii) formality in the relationships among the multiple jurisdictions in the urban area. Operationally, there are variations in the levels of involvement and cooperation between the central (national), provincial (state), district (county), metropolitan and municipal governments. In each situation, the participating local government is the principal governing unit which is not subordinate to another governing body in the jurisdiction.

CITY-LED MODELS

City-led programmes are generally the result of processes characterized by strong civil society engagement and interested and dynamic municipal governments and mayors. They often flow out of a growing local, civil society food advocacy and movement, with respect to technical programmes (e.g. urban agriculture) and political engagement supporting pro-food mayors. They typically take place in the context of weak national interest and/or contributions to urban food issues. Without immediate direct financial support from both national and municipal governments, city-led models are initially organic in their approach and processes, with an opportunistic orientation to find occasions for successful engagement with diverse public, private and civil society partners to achieve visible positive results.

City-led programmes require creativity and innovation, pragmatism, and extensive collaboration with multiple actors to form workable coalitions and alliances. City-led programmes tend to collaborate widely across diverse departments of municipal government, helping to address funding and human resource constraints (as evident in the **Baltimore** and **Medellín** case studies). Some may implement interventions from within different municipal departments, while others favour a facilitation and idea-incubation model. One example of this idea-incubation model is in **Toronto**, Canada, where the Toronto Food Strategy helps develop and support projects of diverse food actors.

Influencing factors like leadership and champions also play a part in shaping how city-led models approach urban food systems governance and institutionalization of food-focused policies. Specifically, cities with a strong

APPROACHES TO URBAN FOOD SYSTEMS GOVERNANCE **SUCCESS FACTORS** COMMITMENT to resolving urban food problems SHARED VISION and strategy for action **AGILITY** BALTIMORE to innovate and adapt COLLABORATION MEDELLÍN across sectors and stakeholders CITY-LED LIMA HYBRD SEOUL TORONTO BELO NAIROBI HORIZONTE QUITO NATIONALLY INFLUENCED Figure 2.1. Approaches to urban food SHANGHAI systems governance

CITY-LED

- · Driven by civil society, dynamic mayors and city councils
- · Organic in approach and processes; opportunistic orientation; iteratively developed
- · Implemented by diverse municipal departments in alliance with civil society and private sector
- · Enterprising food units solve local problems through collaborative governance

HYBRID

- · Combination of strong municipal government and civil society leadership with national policy, programmatic and financial support
- · Creation of dedicated municipal food departments that lead the implementation of large, integrated programmes

NATIONALLY INFLUENCED

- · Guidance by national sector strategies, plans and policies
- · Benefit from technical expertise and capacity of sectors present at municipal or county level
- · Access to financial transfers from line ministries or central government resources
- · Implementation of interventions along sector lines

City	Type/level	Leader	Population City/Metro	Jurisdictions	Legislative
Baltimore	Municipality	Elected Mayor	0.6M/2.8M	14 districts	14 members
Belo Horizonte	Municipality	Elected Mayor	2.5M/5.2M	9 regions 487 neighbourhoods	41 members
Lima	Metropolitan Municipality of Lima	Elected Mayor	8.9M/10M	43 districts	5 Assembly members
Medellín	Municipality of Medellín	Elected Mayor	2.4M/3.7M	6 zones, 16 urban communes, 5 townships	Elected council
Nairobi	Nairobi City County	Elected Governor	3.5M/6.5M	17 subcounties, 85 wards	Assembly: 85 elected and 38 nominated members
Quito	Municipality of the Metropolitan District of Quito	Elected Mayor	2.7M/3.1M	11 zones	15 members
Seoul	Seoul Metropolitan Government	Elected Mayor	9.8M/25.6M	25 districts	110 members
Shanghai	City-State	Party Secretary	26.3M	16 districts, 210 towns	868 members
Toronto	Municipality	Elected Mayor	2.7M/5.9M	25 wards	25 members

Table 2.1
Case study city institutional profiles

mayor at the helm (where the form of council government typically consists of an executive branch, a mayor elected by voters, and a unicameral council as the legislative branch) tend to place greater focus on supportive policy processes, instruments and stakeholder interaction. Cityled case studies like **Baltimore** highlight the influence of leaders/champions and underscore the importance of having: (i) clear lines of authority and reporting channels for official management of a given food "unit"; and (ii) easy access to top decision-makers.

NATIONALLY INFLUENCED MODELS

Nationally influenced food programmes exist in cities where the municipal or local government (e.g. county) develops and implements programmes and policies based on national guidance or national-level policies and programmes, or for which responsibility is delegated to local government. This approach often benefits from financial transfers from line ministries or central government resources, in the context of decentralization and delegation. Although municipal or local governments often have flexibility to adapt and implement based on



In lower-income countries, a nationally influenced model may be interesting given linkages to local (county/district) governments. Local governments have greater access to human resources when compared to smaller municipal governments because local government officials are often linked to the national government as decentralized officers of national ministries. Access to resources through national governments via a decentralized officer in a county or district is important, and this link may provide better entry points than a strictly municipal government. Given the lack of effective decentralization and weak public finances with respect to central government transfers to municipal governments, the local government option (county or district) can provide more security in a developing context.

BALTIMORE: INSTITUTIONALIZING COMMITMENT FOR SUCCESS

The strong commitment of Baltimore's mayor to urban food systems was evident in 2010 when she hired a food policy director to enhance collaboration among city agencies. The intention was to: (i) establish Baltimore as a leader in sustainable local food systems; and (ii) increase access to healthy affordable food in Baltimore's food deserts. In order to accomplish these goals, the newly hired food policy director created the Baltimore Food Policy Initiative (BFPI), which has transformed a set of food systems recommendations, obtained through a rigorous consultative process, into action, establishing Baltimore as a national leader and model for an urban food systems governance structure.

These accomplishments were not the sole result of mayoral commitment; some of this commitment and subsequent institutionalization of food systems work grew thanks to increased stakeholder awareness of the links between access to nutritious food and health outcomes, the convergence of initiatives in the city's health, education and commerce

departments, and incisive analysis results. With these elements coming together, the Mayor convened the Baltimore Food Policy Task Force, comprised of the city's health commissioner, director of planning, and 16 other representatives from public agencies, modern food retail, universities and civil society. The Task Force identified opportunities to improve Baltimore's food situation and, having been vetted by a broad group of stakeholders, was able to develop 23 actionable programmes, projects, and/or policy ideas to create a food system that would better ensure equal access to healthy food for all residents. It also issued a report with 10 goals addressing healthy and sustainable food issues, which helped lead to the Mayor's creation of the food policy director role in 2010. The subsequent BFPI included the City's Department of Planning, Office of Sustainability, Health Department and the Baltimore Development Corporation. Based on a systemic, comprehensive food system approach, BFPI now functions as a planning and policy shop to identify policy solutions to the city's food challenges.

the local context, there remains programmatic or policy direction from the national line ministries (as in the case studies of **Nairobi** and **Shanghai**). The case studies suggest that municipal or county departments implement interventions along sector lines (e.g. agriculture, commerce, health), reporting directly to senior municipal officials, and there is not necessarily a dedicated food unit.

HYBRID MODELS

Hybrid models represent a fusion of the city-led and nationally influenced models, meshing strong municipal government and civil society leadership with national policy, programmatic and financial support to create dedicated municipal food departments that lead the implementation of large, integrated programmes. Many of the hybrid models grew out of city-led models (e.g. Belo Horizonte, Quito and Seoul). This model best exemplifies cities' use of a systemic food systems perspective and focused, pragmatic actions to resolve practical urban food problems.





Chapter 3 Common elements across city programmes



With an understanding of impetus and entry points and the various models of urban food systems governance which take shape in different contexts discussed in Chapters 1 and 2, it is valuable to consider common procedural and content-based elements which will shape these urban food systems. From processes to content, this chapter covers considerations that should be made regardless of the governance model. Case studies are used to provide concrete examples and highlight contextual nuances, when possible, and interlinkages and impacts across sectors and urban/rural areas are also discussed.

COMMONALITIES ACROSS CASES

Regardless of the type of model, urban food programmes are composed of a variety of actions involving policy measures, community projects, larger investment projects, budget and financing actions, education and awareness campaigns, advocacy and lobbying, and training and advisory services. Their scales may vary substantially, from small neighborhood interventions to large flagship initiatives and programmes, and interventions tend to avoid directly involving the modern, corporate part of food systems, preferring catalytic public goods and interventions to achieve results.

Based on the TRANSFORM framework, achieving food systems outcomes under any model of urban food systems governance will be dependent on the enabling environment. Five broad categories or "enabling factors" should be considered. These categories are: (i) Transformative institutions; (ii) Facilitative and progressive instruments (policies, planning, programmes, regulations); (iii) Open data, knowledge, and evidence base; (iv) Resources for effective public and private financing; and (v) Multi-stakeholder engagement and multi-level governance. The "T-FORM" enabling factors represent important dimensions of the enabling environment that influence the achievement of food systems outcomes, each strongly conditioned by national and local contexts.

TRANSFORM FRAMEWORK









TRANSFORMATIVE INSTITUTIONS

RENUMERATIVE JOBS AND BETTER AGRI-BUSINESS

AFFORDABILITY, ACCESSIBILITY FOR FOOD SECURITY

NUTRITIOUS DIVERSE QUALITY AND SAFFFOOD

SUSTAINABLE, RESILIENT AGRICULTURE AND FOOD SYSTEMS

FACILITATING AND PROGRESSIVE POLICIES

OPEN DATA, KNOWLEDGE AND EVIDENCE BASE
RESOURCES FOR EFFECTIVE PUBLIC AND PRIVATE FINANCING

MULTI-STAKEHOLDER GOVERNANCE MECHANISMS AND CAPACITY

Figure 3.1
TRANSFORM Framework

PROCEDURAL CONSIDERATIONS

Establishing food units

Urban food interventions require the integration of many segments of society, involvement of various levels of governance, and collaboration between different policy areas and levels of government. To fulfill the interventions and address food challenges in the cities, some municipalities choose to institute food units under existing local administrations. City food units can be established as an individual food intervention leading agency or a collaborative coalition among local government departments (see Table 3.1). Belo Horizonte, Medellín and Seoul have their food institutions sit under the food departments or units (typically created as specialized food divisions/agencies), while Baltimore, Lima, Nairobi, Quito, Shanghai and Toronto have established food units in other related departments (e.g. planning, economic development, health). Food units are dynamic entities that may change over time.

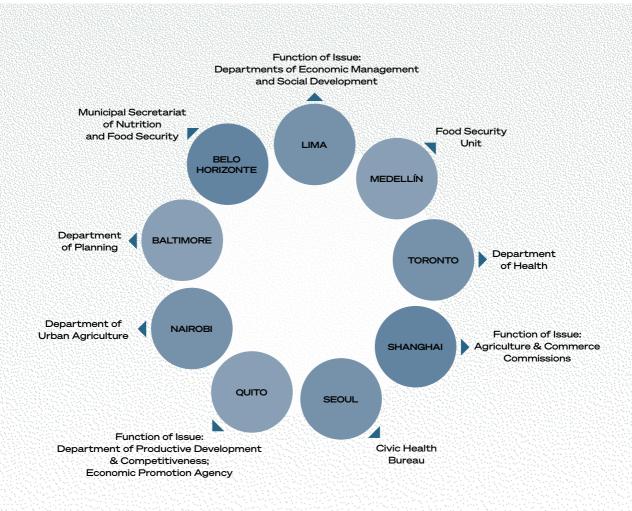


Figure 3.2
Location of city food unit in case study cities

It is also important to keep in mind the variations between food units. For example:

- Institutional structures in Shanghai mirror those at the national level. Agriculture, Health, Commerce and other sector commissions (i.e. departments) play a technical role in the municipal government. Their work is overseen by vice-mayors, who report to the city's mayor, as the chief operating officer for the city.
- In the Seoul Metropolitan Government, nine divisions and two agencies are responsible for food interventions. The Food Policy Division (the former Food Safety Division) in the Civic Health Bureau oversees urban food policy.
- When Belo Horizonte initiated its urban food programme, the Municipal Government established the Municipal Secretariat of Supplies (Secretaria Municipal de Abastecimento SMAB, later renamed the Secretariat for Nutrition and Food Security SMASAN, and followed by the Under-Secretariat for Food and Nutrition Security) to serve as the leader of the city's emerging food programme to reduce food insecurity. By creating a separate administrative structure with its own budget, the Government centralized the planning, coordination and execution of all municipal food interventions, thus mainstreaming food security into municipal public policy, as it had done with other traditional sectors (e.g. health and education).
- Toronto's Food Policy Council (TFPC) was established in 1991. Unlike other food policy councils (FPCs) in North America, it operates as a subcommittee of the city's Board of Health to advise Toronto on food policy issues, in collaboration with the Toronto Food Strategy (TFS) team, established in 2010. The TFPC is unique among city subcommittees in that it has a degree of independence that most do not have, which is an example of successful food planning and policy. Its focus on advocacy, enabling and mediation have been essential for assuring sustainability of the food agenda. As an agile and resourceful multistakeholder mechanism, the TFPC leverages its modest resources from both the Board of Health and the City Council via the Social Development Department. As the newest food-focused entity to be embedded in the Municipal Government, the TFS team was established to guide the implementation of the TFS. The TFPC, with its many community and business leaders around the table, now serves as the community reference group for the TFS.

Discussions of the functions or terms of reference of a food unit are important since a clear understanding and agreement of their priority responsibilities, together with a clear plan of activities, provides the basis for initiating actions on a programme of work. This understanding of the priority functions also contributes to discussions on the most appropriate home or institutional anchor for an urban food unit. Consider that the food unit's institutional setting will also affect its relation to government administration and bureaucratic procedures, which strongly conditions access to human resources and budgets.

Municipal food policy units are often responsible for resolving clashes of competing and conflicting interests that are hashed out in an adversarial manner. Policy decision-making deals with complex issues, involving diverse

IMPORTANCE OF A FOOD UNIT: CASE STUDY EXAMPLES

A food unit's involvement in the design and oversight of municipal food interventions can reduce the risk of overlap and conflicts of interest. For example, in Belo Horizonte, SMASAN contributed to the design and implementation of three programme components. Seoul has formed working groups and lead agencies to coordinate food interventions. In both situations, the food unit coordinates and monitors the design and implementation of the interventions by different departments. Urban food units therefore need to ensure that accountability for multi-department, programme delivery or

policy implementation is clearly indicated, avoiding situations of dual accountability across levels of government or to both the municipality and a national ministry.

As demonstrated in the **Seoul** case study, the diversity, complexity and segregation of various functions might contribute to the difficulty of implementation of an integrated programme with linked sector policies and plans in support of joint goals. Improved prioritization of projects, strengthened coordination of projects and programmes, and the development of common projects are options for improved coordination.

and conflicting interests in a process that is variously messy, fluid, incremental, disorderly and deliberative. To help steward actors and municipal governments through this process, units need competent and experienced staff who have the relevant knowledge, skills, expertise and capacities with respect to both policy content and administrative processes. Developing or accessing this set of capabilities will depend on how, when and where the public, private or civil society actors may engage in the process. Specific areas may include understanding the content of national, state and local rules and regulations or the regulations governing advocacy and lobbying. Policy engagement requires political savvy and agility, skills that only develop through experience.

Planning

Public, private sector and civil society stakeholders have used a variety of strategies to infuse food into a variety of planning documents. They include: (i) stand-alone food sector plans (also referred to as the general plans or master plans); (ii) single-issue food sector plans (dealing with a particular subject (e.g. markets, urban agriculture); (iii) inserting food issues into sector- or municipal department-specific plans; and (iv) integration into the city's comprehensive urban development plan. Determining an appropriate planning approach will depend on a variety of factors related to the stakeholders involved in the process, their specific objectives and uses of the plan, and the history of the food sector's involvement in urban planning. Understanding how different city plans are related and planning processes are structured is important for advancing work on urban food systems.

A comprehensive urban development plan is a leading policy document and tool with legal significance (a blueprint) that provides a roadmap for future growth of a community.

A sustainability plan (type of a strategic plan) is an emerging, innovative policy tool, not typically mandated or required by state law. This feature provides more flexibility and an ability to adapt sustainability plans in response to emerging food issues.

Stand-alone food sector plans developed either by cities or by a city's civil society food movement have proven effective in providing a comprehensive, systemic view of a city's food sector and food systems, identifying opportunities

CONTRIBUTIONS ACROSS AREAS OF CONCERN

Cities' interest in circular economy perspectives helps the food system to contribute to recycling, reuse and sustainable waste disposal.

Quito generates about 2000 tons/day of waste; 57 percent is untreated organic waste, 100 tons/day of which is wasted food suitable for human consumption. The Ministry of

Environment of Quito designed a project to reduce the quantity of waste dumped in landfills by composting 80 tons/day of organic waste from markets, fairs and platforms. In addition, a private food bank retrieves 5 to 7 tons of food per week from markets and supermarkets for distribution to vulnerable communities; 78 percent is vegetables (Rikolto, 2018).

and binding constraints. However, they may be exceedingly large, sacrificing focus for breadth, and may be difficult to operationalize and implement. Some would argue that food systems are too complex to be contained in just one plan (Cabannes and Marocchino, 2018).

- For example, Seoul has effectively used this approach in developing a Food Master Plan which helped Seoul to develop a more holistic food vision and plan for the city moving beyond the city and politicians' traditional focus on food safety and free school meals.
- Quito's planning process is supported, on the one hand, by the civil society sector mobilized through the proposals of the multistakeholder platform Agro-Food Pact of Quito (PAQ), including a draft Food Policy and Action Plan for consideration by the local government. The PAQ prepared and approved a Food Charter for the city that was signed by the Municipality and presented publicly. On the other hand, the city's planning process is supported by its incorporation of food into city planning instruments such as Quito's Vision 2040, the Resilience Strategy and the guidelines of the Metropolitan Development and Regulation Plan 2015-2025, and Quito's Agrifood Strategy. The Strategy aims to address problems related to food insecurity, obesity, diet-related diseases, nutrition, health, environmental and waste management, and generating income and employment opportunities through support to local food value chains and sustainable agriculture to bring local economic development in both rural and urban territories.

Single-issue food sector plans have also been developed by municipalities. They focus on one aspect of food systems. **Beijing, Shanghai** and **Tianjin** (China) have developed wholesale food market master plans along these lines.

Inserting food interventions into various municipal department plans is a variant of the integration approach, introducing a food perspective and addressing sector challenges through the activities carried out by departments of planning, health, housing and transportation, among others.

For example, municipal departments of transportation could codify food systems into transportation planning (including transportation strategic plan update) and include the goal of shifting transportation toward local food access (e.g. plan bicycle and pedestrian facilities to improve access to grocery

stores) to ensure that transit planning supports food access. In this respect, it is important to build the capacity of the planning and transport staff to effectively integrate food systems into their work, since land-use and transportation planners are not typically trained in food systems.

Integrating food into the city's comprehensive urban development plan is generally limited in scope, focusing on actions for which there has been agreement with the municipal government and city planners. As a city's primary planning document, these comprehensive urban development plans are the main vehicle through which a municipal government's annual budgets will be determined and line items financed; therefore, the view holds in North America that these comprehensive plans with integrated food activities are more likely to be successful than stand-alone food plans (Mui et al., 2018). They allow the food sector to vertically and horizontally embed food interventions in the overarching urban plan (Sonnino, 2017). Their development is often complemented by land-use plans and zoning regulations at district levels.

- In Bangkok, technical and legal planning documents that directly relate to the promotion of food systems include the City Planning Act 1975, the Land Development Act 1982 and Bangkok's Comprehensive Plan 2013. In addition, Bangkok has developed and adopted four-year strategic plans in the Bangkok Metropolitan Assembly and the District Administration Officers. City officials and CSOs also used a food perspective to help frame the Environmental Quality Management Plan, the Global Warming Reduction Action Plan and the Green Space Action Plan (Boossabong, 2018).
- In Nairobi, food has only recently been considered for inclusion in the Nairobi Integrated Urban Development Master Plan 2014-2030, a plan that was established to provide a guiding framework for managing all urban development sectors in Nairobi from 2014-2030, and achieving the national goals articulated in Kenya Vision 2030.

Both comprehensive urban development plans and city sustainability plans have the potential to shape the development of specific, lower-level plans, and should ideally complement each other. In **Baltimore**, the sustainability plan influenced several other plans to address food access, including a regional transportation plan, and the comprehensive urban development plan. Baltimore's Emergency Food Working Group also created a formal food protocol for the city's Emergency Operations Plan. This effort was led by a food resilience planner, who reports to the food policy director and staffs the Emergency Operations Center as a point of contact for food-related emergency response.

In many planning contexts, food systems issues have been directly or indirectly addressed in land-use planning and zoning regulations, which usually build on a city's urban development plan. They may address a variety of issues including urban and peri-urban agriculture (UPA), natural resources and conservation, economic development, and parks and recreation.

Some plans are developed to address challenges that have a distinct geographical scope which cannot be described as national, regional, metropolitan or local (e.g. coastal plans, water catchment area plans, environmental plans) (Rapp, 2017).

In other contexts, food systems planning has not taken place, yet decisions affecting the future trajectory of urban food issues are being made. Experts in southern Africa argue that the transformation of current food systems in African cities is taking place in the absence of food systems planning

and is the outcome of planning decisions being made to achieve other urban objectives. For example, urban planning and zoning decisions promote modern food retail and commercial shopping mall development while displacing informal food sector retailers on whom many urban poor depend (Battersby, 2017). For further information on the planning process, please refer to **Annex 1**: **Planning**.

Human resources

Lack of skilled staff and technical expertise to design and implement food policies and programmes represents a major institutional capacity challenge in most countries. The provision of human resources (HR) support (e.g. technical assistance, advice, training, information sharing) for strengthening urban food institutions should be available from national, provincial and local levels. This access to HR is incredibly important for city-led systems, where knowledge of local government procedures and bureaucracy is particularly important.

One way to tackle HR needs is to institutional-

ize technical professionals, such as food systems planners, urban policy coordinators and food policy directors, who are indispensable in designing and facilitating policies, programmes and initiatives across food systems and different city agencies. They can help cities design food systems solutions by mediating conflict, facilitating collaboration and making synergistic connections across departments, food systems sectors and government agencies. Effective collaboration requires these food professionals to understand urban planning and development processes, and for urban planners to learn about the perspectives, challenges and opportunities linked with food systems. For example, South Africa's eThekwini Municipality established a Municipal Institute of Learning to build local government capacity. Since 2009, it has trained 3600 local government practitioners in strategic planning, water and sanitation, solid waste management and revenue management. The Institute fosters collaboration and learning partnerships and networks with local and international universities, research institutes in Africa and international development agencies and trains urban planners to address issues related to the informal sector, land use planning, governance and food security (Smit, 2016).

Increasing the number of staff working on food issues and strengthening the capacities of municipal food units to mobilize and disburse financing facilitates food systems delivery and builds legitimacy. Baltimore understood that food does not fit squarely within one government agency, so the city hired a full-time Food Policy Director to build stakeholders' capacity and foster interagency collaboration. The position is based in the Baltimore Department of Planning's Office of Sustainability, which enables close ties to the mayor, municipal departments, and the multistakeholder platform BFPI, which enables frequent interaction on food issues and sustainability of the food agenda.

Financial resources

Cities finance food interventions from a variety of sources including the municipal budget, transfers from national and provincial government, grants from philanthropic foundations and development partners, and financing from public investment funds, public-private partnerships and other diverse instruments (debt, blended, climate). Cities fund human resource positions in

Human resources in action

In 1995, the municipal food supply agency SMAB in **Belo Horizonte** had a permanent staff of 122, or 0.6 percent of all municipal employees. It also hired 105 contract workers employed in its many different projects. By 1998, its permanent staff had increased to 135 people; another 126 people were working under contract. Among its technical staff, SMAB employed nutritionists, social workers, food technicians and economists. This comprehensive group of staff and increase in overall numbers contributed to the system's overall success.

municipal government, cover programme operating costs and finance investments. Financing strategies differ by the type of food approach (city-led, nationally influenced or hybrid), and are strongly conditioned by a city's size and wealth, its country's constitutional provisions, legal and regulatory frameworks, the broader governance system (e.g. federal, unitary) and degree of decentralization. For full details on financial resources, please refer to Annex 2: Finance.

Multistakeholder engagement

Effective models for multistakeholder engagement provide a space for the different actors and interests in the city to be heard, build networks and facilitate mutual learning. In some cases, a government-supported multistakeholder structure (e.g. the Municipal Council of Food and Nutrition Security (Conselho Municipal de Segurança Alimentar e Nutricional de Belo Horizonte–COMUSAN) in Belo Horizonte) that is well-functioning can ensure coherence of urban food policies and programmes by avoiding duplications and filling in gaps across programmes and stakeholders. In others, when there are limitations in institutional arrangement or support, food activists seek other opportunities, mostly by joining or spearheading existing grassroots' initiatives with emerging champions. In this latter case, food activists and related stakeholders are often first on the scene, prior to more formal government involvement. Stakeholders in the private sector sometimes participate in formal stakeholder engagement initiatives, such as FPC meetings. They tend to lobby policy-makers to maximize benefits or to prevent possible losses (e.g. industry associations in Quito).

There is no single or "right" way to establish multistakeholder mechanisms. Within the case studies, there were examples of: (i) multistakeholder groups providing the impetus for local government involvement and formal institutionalization; as well as (ii) governments (municipal or local) instigating the involvement of stakeholders around very specific activities and/or issues, and continuing their involvement during implementation. Not all engagement was formalized; many times informal engagement evolved into formalized consultation. Also, groups and networks involved as stakeholders are diverse and could include the informal food sector, business associations, food retailers, food transporters, restaurants and others.

Outside of shorter-term advisory partnerships forged through informal channels, using a formal and integrated way of establishing urban food systems interventions requires capable municipalities and mature governance structures for sustained interactions with a broad, inclusive group of actors. Municipal governments can incorporate a committee or an initiative that works independently and solely on urban food systems governance but that still collaborates closely with the municipal government (e.g. through the mayor's office and other departments). Such a formal multistakeholder governance process (e.g. the BFPI in **Baltimore**) allows a multistakeholder coalition to have better access to resources and support from the municipal government. Moreover, the outputs of the collaborative process (e.g. policies) are more likely to be approved by the legislature and put into effect.

Multistakeholder engagement mechanisms may include:

 FPCs. FPCs exist widely throughout North America and usually maintain a formal relationship with government at the national, regional or local level. They can take many forms and serve different purposes, depending on the local context and intention of their creators. They typically operate with minimal resources and often have very little or no staff support. Despite these challenges, FPCs have taken on a range of actions in their communities. These fall under broad categories of research and analysis, community education, policy advocacy, community development through a food systems focus, and food-related service delivery. Some of the more active FPCs have provided leadership in the development of community food security provisions and the incorporation of these provisions into state and federal agriculture policies (Bassarab et al., 2018). As an example, **Baltimore** established the Food Policy Advisory Committee (Food PAC), Baltimore's version of an FPC, comprising 60 stakeholder organizations, as a key pillar of their flagship BFPI. Food PAC works on local projects related to nutrition, hunger and food access, schools, gardening, sustainability and urban agriculture. In addition to regular informal communication, the group meets six times per year to provide updates and raise policy issues/barriers to the food policy director so that BFPI and City Government are abreast of all issues and listen to suggestions of strategies and solutions for addressing them. The city also established a 16-member advisory group of Resident Food Equity Advisors who serve as community liaisons to bring the voices and experiences of citizens to local policy-making. Some jurisdictions have chosen to pursue the creation of a regional FPC (e.g. Puget Sound Regional Council, 2020) rather than a city-based FPC - which is particularly relevant for establishing city-region linkages. The regional FPC can be instrumental in supporting regional food systems, especially if the FPC operates in an area with numerous farms that provide food for city residents. The regional plan would protect regional farmland and food self-sufficiency.

- Municipal government-led but multistakeholder participating networks or partnerships. This is another way to coordinate multistakeholders to better respond to emerging concerns regarding food systems (e.g. Civic Food Committee as an advisory body of public, private and civil society governance in Seoul; municipalityled mainstreaming food policy and platform for UPA in Lima; and Belo Horizonte's multistakeholder advisory board COMUSAN.
- Rural-urban multistakeholder engagement platforms. Some
 multistakeholder platforms involve actors from both rural and urban
 areas, particularly in cities working to strengthen rural-urban
 linkages. For example, Quito created a multistakeholder platform
 composed of more than 20 public institutions (city, provincial and
 national government), civil society organizations (e.g. consumer
 groups, restaurant chefs, organic producers), academia and private
 sector groups and associations. The platform provided a channel
 for rural actors to become involved in policy decision-making
 processes affecting both rural and urban areas.

Generating evidence

Generating analytical evidence needed to develop a shared understanding of policy or programme options, and framing that evidence in a way that speaks to the concerns of decision-makers, the private sector and civil society, will help mobilize support for a real response to agrifood problems. Often data exist but are fragmented among institutional portals and are not consolidated, or there is data overload and lack of capacity to analyse the data and present them in a comprehensible way. Lack of valid, reliable baseline data at the city level hinders cities' engagement in urban food issues. As a result, cities have a poor understanding and knowledge of many of the basic building blocks of

agrifood systems (e.g. knowledge of what consumers are eating) (Ola, 2015). These impediments and lack of quality data require cities and stakeholders to be innovative in using multiple data collection techniques to produce useful information for decision-making.

Access to local analytical capacity is important, since policy and programmatic decision-making is often a time-bound process, and often cities cannot wait for all the evidence to be collected and analysed before making a decision. In many situations, universities, research institutes and think tanks mobilize their own funding to carry out the analysis. In this context, it is important for municipal government decision-makers and independent analysts to regularly communicate and interact during this process.

Cities often need to get creative when it comes to the collection of data and evidence. For example:

- Secondary and publicly available information helped to define city-region food systems in Medellín, which was validated with direct observation, workshops and officials in the Province of Antioquia, the Mayor's Office and Regional Autonomous Entities.
- The Toronto Food Strategy team used the city's Board of Health database on food inspections to analyse food availability issues. The team also added a question on sales of fresh fruit and vegetables into the city's food inspection protocol (Emmanuel, 2019).
 Furthermore, the team used asset and land mapping to inform planning processes.
- In Baltimore, food environment mapping is used as a policy tool. While some cities have approached food access issues by establishing community coalitions to lobby city government for action, Baltimore worked with the Johns Hopkins Center for a Livable Future and the BFPI to develop a methodology for data collection on food availability and access and mapped the food environment in the city (Misiaszek et al., 2018). This successful collaboration led to the food environment mapping tool, which has resulted in new food policies and increased city funding. The Center collected data from government databases, via partnerships with organizations, and through primary collection. The map includes 175 data indicators consisting of the location of supermarkets, food pantries, farms, and the percent of the population in a region that is food-insecure.
- In Belo Horizonte, in the context of the city's programme on Basic Monthly Rations, researchers and students at the University of Minas Gerais collected data on food prices to help the Government monitor competition in the food market and ensure lower food prices to consumers. Regular dissemination of food prices on the radio, on television, in the newspaper and on the internet also helped consumers to identify markets with lower food prices.

Cities are often challenged to develop monitoring and evaluation (M&E) systems because they do not have sufficient human and financial resources to collect the necessary information to construct baselines and track progress. To avoid repetitive work and identify the right indicators, there are several global metric frameworks for cities to use as a starting point.

The Milan Urban Food Policy Pact (MUFPP) provides a comprehensive indicator framework for cities to benchmark. It highlights six key dimensions with a list of 42 quantitative and qualitative indicators measuring: governance; sustainable diets and nutrition; social and economic equity; food production and rural-urban linkages; food supply and distribution; and food loss and waste

(MUFFP, 2015). Similarly, the World Bank and FAO developed a report on "Urban food systems diagnostic and metrics framework: roadmap for future geospatial and big data analytics" (World Bank, FAO and RUAF, 2017).

Once data are acquired and understood, using that evidence for policy and programme development may require understanding the relationship of mayors to city councils and national or provincial leaders, and of civil society to private sector actors and their relationship with the different politicians. Consider that the political economy influences the translation of evidence and analysis of results into policy and food systems interventions; therefore there are times and contexts when the political will override data. There is also an issue of trust in terms of validity of data. When there is a distrust of community and disrespect for the city government, the data collection and analysis may be deemed as fraudulent, depending on who is collecting and analysing. This trust may also depend on the political framing of data and/or the coalition of actors involved. Therefore, existing data should be validated ideally in community meetings and with civil society more broadly, * Details from data when relevant.



In the context of Quito's efforts to reduce urban congestion, a municipal study on transportation and logistics infrastructure concluded that most food enters Quito through three main transportation routes, 49 percent traveling to markets and 23 percent circulating in Quito to sell "to the highest bidder" (Jácome-Pólit et al., 2018). Other cities conduct food transportation studies to identify potential food systems chokepoints and vulnerabilities to diverse shocks (e.g. flooding, storm surges).

Data collection and analysis help produce evidence used by public, private sector and CSO actors to develop food policies and programmes. Policy decision-making often requires diverse urban constituencies to agree on the interpretation of the data and evidence on the specific nature of a food problem or the policy response options. Actors' agreement on data and evidence helps build consensus on what counts as a problem, the shape of it, and the contours of the policy solution. The policy decision-making process also involves considerable give and take of different interests, competing frames and a search for compromise amidst different evidence, policy proposals, and advocacy and communications in public fora and social media, often with provocative rhetoric. At a minimum, alignment between municipal and national government is critical, as witnessed in Seoul, Belo Horizonte and Shanghai in rallying policy-makers (Roberts, 2017). These issues of problem consensus, data generation, and information-framing will be increasingly important in the future as cities tackle more controversial issues and non-shared goals and develop multi-outcome national food policies.

Pushing policy action

Successful policy action can happen when there is a convergence of three streams - a problem stream with a recognizable issue that is considered a problem; a policy stream in which there are feasible policy options to be implemented; and a political stream in which politicians are willing and able to make policy change (Kingdon, 1984; Ridde, 2009). Convergence of the streams often takes place when a window of opportunity opens, whether through consensus-building, actions by a policy champion, or the appearance of a problem or onset of a shock (Chappell, 2009).

Policy decision-making is about channeling visions and goals into quantifiable objectives to be achieved by a set of interventions. It spans a complex web of institutions, processes and actors, each of which are subject to influences and interests of countless parties, and all of whom compete for a role in shaping it.

Cities address these differences through various types of processes. Some cities may ask urban food stakeholders to serve in a consultative role to review municipal ordinances, whether through a hearing process, working group, food council or commission. This option will incorporate opinions of interested groups in the formulation process and also serve to strengthen local ownership in the resulting policy. Other cities may use a more participatory process to collaboratively develop or co-create the policy or to validate technical food policy proposals with communities and stakeholders before they are approved. This option provides opportunities to assess actors' interests, to weigh and balance the strength and diversity of interests, to determine potential political risks, and to develop consensual language to frame the policy. Irrespective of the option used, policy engagement can require significant time and financial resources.

Contrary to many agriculture policies that are developed by ministries of agriculture at the national level, urban food policies operate in a much broader and diverse space, are designed and implemented by multiple sectors (i.e. departments) (see also the "Cross-sectoral planning" section of this chapter), at different levels of government, and involve a large group of actors. Food systems issues often span multiple administrative and political jurisdictions; they do not correspond neatly with city boundaries. The spatial scope of a policy will vary by issue, whether it is centered on the urban core or crosses multiple jurisdictions into peri-urban and rural areas. Interjurisdictional policy boundaries will become increasingly complex with expanding cities and the resulting opaqueness between municipalities, counties and districts in urban, peri-urban and rural areas.

Cities also have opportunities and avenues to influence policy decisions in other jurisdictions. The **Baltimore** food team, for example, actively advocated and lobbied for state legislation on supermarket tax incentives. What's more, innovative city actions have influenced the development of national programmes. **Belo Horizonte** is a strong case in point.

Sustainability and vulnerability of urban food programmes

Several factors contribute to the sustainability and continuity of urban food programmes. They are described in the paragraphs that follow.

A consistent political agenda with a strong mayor and council support, and joint implementation across municipal departments supported by an effective interdepartmental and inter-agency coordination mechanism. The involvement of broad and external partners creates co-ownership, minimizes ties to one politician or administration, and makes it easier for programmes to be sustainably implemented (Rocha and Lessa, 2009). In many countries, broad and strong stakeholder engagement creates the political will needed for mayors and city councils to act on urban food issues, whether proposing and approving policies or prioritizing budget allocations. Leaders and champions respond to a collaborative coalition of public, civil society and private sector actors to translate vision into tangible results, and to turn intentions and aspirations into action and delivery (World Bank, 2015). Implementation approaches that connect food to other urban functions, create partnerships with other municipal departments, and engage civil society contribute to success. Political support from the mayor, city council and CSOs or private sector actors contribute to collaboration with civil servants and the development of food interventions in municipal departments (e.g. education, transport, energy). In some cases, it is effective to have permanent food systems staff across departments and agencies when those staff are able to guide and coordinate the interventions.

Branding and communication. Effective branding and consistent communication of visible results that are recognized by stakeholders and citizens help to sustain access to diverse sources of financial resources. Attention to the programme "branding" helps to establish the legitimacy and to craft a consistent image of the programme. Broad-based awareness and education campaigns are critical complements for the overall programme, and targeted campaigns are critical for effective implementation of programme components.

National/international recognition. Recognition creates visibility and good will for political leadership at all levels, making it difficult to discontinue or dismantle programmes. One example is with Belo Horizonte, where SMAB collaborated with multiple partners and was administratively responsible for programmes that were "owned" by many different local groups and institutions. Belo Horizonte's programmes survived several government transitions, as the city avoided "pet projects" linked to a given political party or local personalities. Belo Horizonte's experience, as a mature food programme extending over 25 years, also underscores the importance of continual policy engagement at municipal, provincial and central government levels, whether through new or amended legislation, to address new challenges through the course of programme implementation. Country and city commitments to regional and international agreements or partnerships and the city's recognition by diverse global fora contribute to broad visibility for the city. Belo Horizonte, Seoul and Toronto, among others, show that recognition and visibility of city programmes and achievements help to keep leaders and stakeholders committed to the agenda. When programmes generate good public relations and a national, regional or international spotlight for the city, it is difficult to stop supporting and funding them.

Despite the presence of these factors, the sustainability of urban food programmes can still be stymied by several political economy threats: inter-departmental rivalry (and power plays); national governments with different political party affiliations and agendas; and/or transitions to new mayors with different political, programmatic and financing priorities. The creation of food policy director positions in many cities will facilitate the implementation of food policy but may also make food systems governance more vulnerable to be challenged by successive administrations if linked

Belo Horizonte: Vulnerability from political change

Belo Horizonte's food programme experienced periods of vulnerability during transitions to new mayors. SMASAN lost its status as a stand-alone department and became a subdivision of the Department of Social Policies in 2015, as a cost-saving initiative. Consequently, while its core activities remained the same (with some natural evolution of programmes), SMASAN slipped down the pecking order of priorities and lost political clout.

strongly to a political position. Likewise, in city-led programmes for which interventions are implemented in a decentralized manner by diverse municipal departments, the implementing department (or incoming mayor) may think that the city does not need a coordinating food unit and that the decentralized food programme interventions can effectively meet the food system's needs. Others may not fully understand (or care for) the principles that guided the previous programmes. Consequently, lack of institutional sustainability may threaten the availability of budget and governance capacity and reduce the effectiveness of food programmes or bring about their outright elimination.

CONTENT CONSIDERATIONS

Urban food programmes across the world exhibit many commonalities with respect to the orientation and priorities of programme and policy content. They include but are not limited to several areas addressed by case study cities: public food procurement; UPA; informal food sector and small-scale producer engagement; rural-urban linkages; and land governance issues.

Public food procurement

When is a public food procurement programme suitable? The tendency for municipal governments to be pragmatic in their orientation often leads cities to focus their interventions on issues for which there is a specific problem that they need to resolve. These problems relate generally to market failures, government failures or failures in governance, all areas that cities deem necessary for public intervention (Krugman and Wells, 2006; Ledyard, 2008). Public food procurement interventions provide an instrument that allows governments to address market and government failures. Many concern problems related to the availability of and access to safe, affordable, nutritious food in urban areas.

Many cities recognize that public food procurement for schools, hospitals, military installations, public canteens and other public institutions represents a significant market for food purchases in urban areas (e.g. school feeding in **Belo Horizonte** and **Seoul**) and a powerful instrument in efforts to improve access to safe, nutritious food. Modifying standards, procedures, meal content and sourcing for these procurement programmes can influence urban agrifood systems in multiple areas.

Cities may also work to improve the nutrition situation in healthy food priority areas, which are characterized by limited availability of and access to affordable and nutritious food. Determining the course of action depends on the definition and causes of the problem. It may be due to insufficient demand, to a market failure (e.g. due to lack of information or barriers to entry for retail stores), to ill-advised government failure (e.g. high taxes or restrictive regulations) or to some failure in governance (e.g. poorly enforced health inspections of unsafe food). Framing the problem of "food swamps" characterized by corner stores full of unhealthy, ultra-processed foods may lead to another set of policy or programme opportunities.

Although many cities accented the provision of public goods to address food systems failures and focused on the public food procurement channel of the food system, they often carried it out in partnership with private sector actors. For example, **Belo Horizonte's** food security programme collaborated with private food suppliers to sell nutritious food at negotiated prices to areas of the city previously neglected by commercial outlets; as part of the deal, the private food firms could operate in more profitable, central locations during other times of the week. **Baltimore** used tax incentives to encourage modern supermarkets to expand to neighbourhoods where fresh fruit and vegetables were not available.

Urban and peri-urban agriculture (UPA)

UPA is a central feature in urban food interventions of almost every city and has strong historical roots in local food movements and civil society programmes. UPA accounts for 40 percent of all cropland in the world located within 20 kilometres of cities and 60 percent of all irrigated cropland (Thebo et al., 2014). Many cities promote the development of UPA and local food systems as part of their efforts to generate jobs, improve the local economy, produce affordable, nutritious food for consumers and public food procurement programmes, expand green infrastructure, or diversify sources of food supply for resilient food systems (Tefft et al., 2017).

Integrating UPA. Cities integrate UPA in urban development and/or sector plans; amend diverse policies, regulations and incentives; and facilitate delivery of support services to producers and other actors. One strategy is to implement interventions and measures in a piecemeal fashion by adopting zoning legislation, permits, or codes on the most pressing issues (e.g. livestock in city centres) while leaving other (more contentious) urban agriculture reg-

BENEFITS OF UPA

City experiences highlight the multiple benefits of UPA. First, it can be an important source of affordable, nutritious food, particularly fresh fruit and vegetables for nutritious diets and better health. Throughout Asia, UPA supplies a large share of vegetables consumed in cities, 90 percent for green leafy varieties (Tefft et al., 2017). Emerging (but still poorly analysed) agronomic and socio-economic data show that hydroponic production systems used in greenhouses, vertical systems and container farms are 11.6, 6.9 and 4.4 times more productive in producing leafy green vegetables than conventional agriculture. They can produce vegetables with 5 percent the volume of water and one-half the growing time as

conventional production (Agrilyst, 2017). UPA, urban forestry, multifunctional green spaces and green infrastructure generate multiple services and benefits across the food, water and energy nexus in managed urban ecosystems and closed-loop systems. For example: biodiversity protection, urban heat island abatement, storm water management, reduced emissions from transportation of agriculture products, decreased food waste, and positive externalities from waste recycling (Clinton et al., 2018; Zhu et al., 2017; Daigger et al., 2016; Rojas-Valencia et al., 2011; DeZeeuw et al., 2011; Golden, 2013; Ellen MacArthur Foundation 2019; Zhang et al., 2010; Weber and Matthews, 2008).

ulations for later. This strategy may leave gaps or loopholes in the zoning code or increase the complexity of the permitting process. Another strategy is to use a comprehensive approach which integrates UPA in urban plans; overhauls zoning and regulatory frameworks that address antiquated, ambiguous or restrictive regulations; and provides clear guidance to urban and peri-urban producers. Examples of the above include: (i) **Quito**'s experience, which highlights an incremental process that started as a project, developed into policies, and culminated in a comprehensive programme; and (ii) **Seoul**'s embracement of UPA via the mobilization of 10 000 civil food brigades to participate in the implementation of urban agriculture programmes at the community level, with strong collaboration between CSOs and the Seoul Municipal Government.

Zoning and regulatory restrictions. Cities use a vast array of regulatory instruments to govern UPA. Zoning and other land-use regulations influence the shape and practice of UPA, dictating the type, form, size, intensity and location. Zoning may limit UPA by restricting production or commercial activities. The creation of urban agriculture zoning districts protects existing urban gardens and farms from future residential or commercial development (unless rezoned). Establishing UPA as a zoning use category (by right or conditional use) regulates what type of urban agriculture is permitted and the size limits on urban gardens in high-density residential zones or larger farms in commercial or industrial zones. Many cities are creative in linking UPA through zoning with multi-use programmes involving housing, education, nature conservation, and biodiversity, with investment in agro-parks or green belts (RUAF, 2020).

Outside of zoning, there are other regulations, codes, permits and standards that govern a multitude of issues ranging from acceptable physical structures, water and soil safety testing, composting bins, noise and odour, fencing, lighting, insurance, signage and protection from threats and nuisance suits. Newer production systems (e.g. rooftop, indoor) are affected by such regulations, which include building codes pertaining to construction standards: floor space ratios; permitted types of material; distance to neighbouring buildings; fire codes; energy sources and roof load capacities; height restric-

tions. Other measures are related to health, safety, aesthetic, or environmental impact.

Diversifying support and services. Cities work with private sector and civil society organizations to provide diverse services in support of UPA including technical training (e.g. organic production), production information, credit, inputs, market intelligence (e.g. on food demand), marketing, product quality and certification, and business advisory services. For example, Bangkok's community-level District Administration Offices developed urban farming learning centres, training courses and promoted organic production, established markets and facilitated private sector leasing of vacant land to ordinary producers. The city's thriving social enterprises, which operate green markets, green restaurants and producer training centres, contribute to the promotion of alternative and more sustainable food production and markets (Boossabong, 2018). In Shanghai, the city recognized the importance of diverse incentives to encourage producers and food companies to apply for green and organic food certification permits

Threats. In addition to the need to work through numerous governance issues, future expansion and intensification of UPA is challenged by inadequate agronomic and socio-economic data and analysis on the feasibility and profitability of diverse production systems and new technologies at different scales and in different settings, appropriate for both low-asset producers and cutting-edge innovators. UPA systems are also threatened by urban expansion, which will destroy an estimated 1.8–2.4 percent of global croplands by 2030, 80 percent of which is in Asia and Africa; these lands are more than twice as productive as national averages and were responsible for 3-4 percent of worldwide crop production in 2000 (Adelekan et al., 2014). Further, low-density urban growth often occurs on flood-prone and environmentally sensitive lands used for UPA and floodwater management, for which hydrology in the catchment area is affected by the loss of vegetative cover, degradation of forests and subsequent use of the land for settlements and urban infrastructure (Bren d'Amour et al., 2017).

Informal sector and small-scale producer engagement

Producers and food systems actors in urban food systems are not always formal, and the informal sector must be taken into consideration when designing city programmes and urban food policies. The creation of organizations is increasingly common in the informal economy as workers seek to overcome their vulnerability and exert political influence through collective action. These organizations often take the form of vendor associations and informal sector trade unions and engage in governance activities, collective bargaining, protests, advocacy work, educational efforts, political campaigns, dispute resolution, alliance building and the provision of concrete benefits ranging from financial support to legal assistance to their members (Kabeer et al., 2013). The International Labour Organization (ILO) has strongly encouraged organization in the informal economy (Orstom and Ahn, 2007).

One significant challenge is that governments are often either unresponsive or hostile to the demands of informal sector organizations. The goal would not necessarily be to formalize them (although regulations adapted to the needs of food vendors and consumers can result in some levels of formalization); but rather, to maximize potential benefits of the informal food sector through well-designed institutional and policy frameworks, and an appropriate enabling environment (legal, regulatory and taxation).

For example, in **Durban**, South Africa, the local government has oscillated between repression, tolerance and support throughout the city's history

Producers and food. systems actors in urban food systems. are not always formal, and the informal sector must be taken into consideration when designing city programmes and urban food policies.

and has adopted an official informal economy policy that seeks to promote enterprise development and incorporate the informal sector into urban development plans (Skinner, 2008). These diverging trajectories further highlight the importance of inclusive institutions and cooperation in the design of informal sector regulation.

In some countries, independent government bodies have been established to assist and promote the informal sector, serving as a centralized hub for implementing diverse support programmes. In South Africa, the Department of Small Business Development in the Department of Trade and Industry has the mandate to support the informal and small, medium and micro enterprises sector, including informal traders. In **Kuala Lumpur**, Malaysia, in 1986, the municipal government established the Department of Hawkers and Traders in the context of enhancing a clean, healthy and beautiful city for citizens and tourists. The department is responsible for licensing vendors and facilitating their access to credit and training in hygiene, business skills and accounting. They also encouraged hawkers to relocate to attractive positions such as food centres in buildings. The city's engagement allows the municipal

department to educate vendors in food safety techniques and supply them with clean water in the new locations, leading to improved food safety (Sharit, 2005).

Rural-urban linkages

Many cities are aware that achieving goals and addressing new and recurring agrifood issues involves actors and actions in peri-urban and rural areas, which extend beyond their jurisdictional boundaries. They use broader territorial approaches and city-region food systems approaches to address challenges of food supply and production, resource management, markets and consumption, and the flow of people, goods and services between urban centres and the surrounding peri-urban and rural zones (FAO, 2020). Diverse international agendas (e.g. Sustainable Development Goals, New Urban Agenda, United Nations Decade for Action on Nutrition, United Nations Framework Convention on Climate Change) incorporate these issues related to rural-urban linkages. In 2018, UN Habitat published a set of Guiding Principles and a Framework for Action for the Urban-Rural Linkages to Advance Integrated Territorial Development (UN Habitat, 2019).

Cities operationalize rural-urban linkages for diverse reasons. They seek to diversify sources of food supply in urban areas for more resilient food systems. Some cities also strengthen local food systems to improve accessibility and affordability of nutritious food while improving local livelihoods and jobs. They improve the quality of school meal programmes through sourcing of fresh, safe and nutritious food. They work across jurisdictions to improve stewardship of natural landscapes that provide food, water, land, forest and diverse ecosystem products and services.

Quito and Medellín are among the cities using a territorial or city-region approach to collaborate with governments of towns and cities in their metropolitan areas and surrounding provinces. Collaboration focuses on integrated land use and market-oriented food production planning to meet changing demand in urban food supply chains. Inspired by Peru's Constitution, which encourages the adoption of policies to reduce import dependency and promote rural-urban equity, 45 percent of the responsibilities of the provincial government of Pichincha were transferred to the Metropolitan District of Quito (Dubbeling et al., 2017). Medellín's system includes 31 municipalities in the Province of Antioquia, representing 2,550 km².

To mitigate the conflicts arising from industrial and agricultural land use and avoid losing farmland to urban development for secondary and tertiary industries and construction, the Municipal Government of **Tianjin**, China designed a three-zone interaction policy, consisting of industrial parks, agroparks and rural communities. Diverse accompanying measures helped to protect the high percentage of its food supply grown in peri-urban and nearby rural areas, including transfer of land-use rights from farmers to cooperatives and businesses, and promotion of seed varieties and farming technologies to increase land and labour productivity of vegetable and livestock production (Cai et al., 2011). The Government offered apartments in neighbouring communities and jobs in agroparks and industrial parks to farmers.

The Government of **Belo Horizonte** developed several programmes that link producer interest in opportunities to earn higher incomes with consumer demand for improved access to affordable, high-quality food items. The "Straight from the Countryside and the Harvest Campaign" used a transparent public process to assign fixed sale points to rural producers to sell their fruit, vegetables and tubers at lower prices than other market outlets. The city facilitated market access to rural producers for wholesale and retail tran-

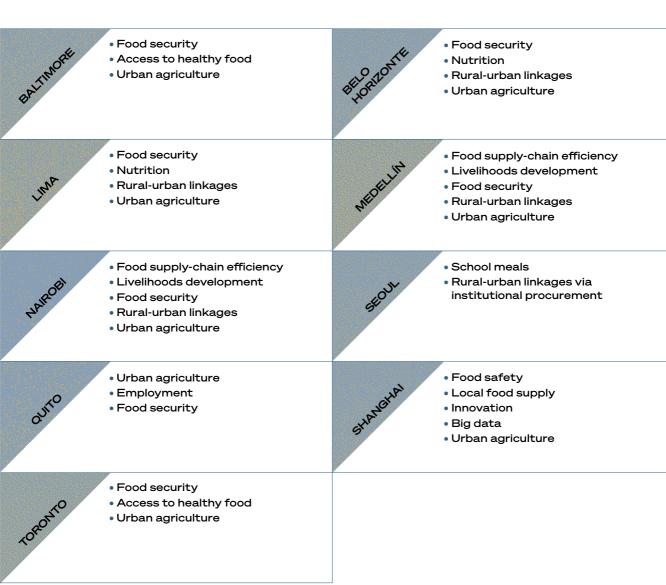


Figure 3.3
Case study city programme intervention areas

sactions in wholesale markets. Through their Green Basket programme, the Municipal Supply Department served as an intermediary between hospitals, restaurants and other institutional customers willing to buy vegetables and fruit directly from small rural producers. The "School Meals Programme" contracted with local producers and businesses to source fresh fruit, vegetables, cereal, eggs and meat for a nutritious menu, at significantly lower transportation and distribution costs.

In November 2016, with a goal to improve the quality, safety and nutrition of school meals while increasing demand for locally and sustainably produced food, the Mayor of **Seoul** Metropolitan Government (SMG) initiated and signed an agreement with Korea's nine regional governors to launch the "Urban-Rural Co-prosperity Public Meals Programme". The programme was



URBAN FOOD SYSTEMS' POLICIES, PROGRAMMES FOOD SUB-SYSTEMS Supermarkets F-commerce Restaurants TRADITIONAL Open markets Small stores PUBLIC PROCUREMENT School meal programmes • Social protection programmes Hospital food MEDELLÍN BALTIMORE NAIROBI INFORMAL Farmers' markets Public Health Act Integrated territorial Street vendors approach to Policy permits & supermarket standards for quality of Food and Nutrition incentives and safe food Informal restaurants Sovereignty & Security OUITO **SHANGHAI** POLICIES, PROGRAMMES Municipal market Food safety SHANGHAI/TIANJIN & STRATEGIES infrastructure & regulations Integrated policy for services policies/ industrial, agropark & INTERVENTION AREA programme rural development **BALTIMORE** QUITO Healthy Vending Resilient Quito **RURAL URBAN** Machines policy Strategy LINKAGES **FOOD SAFETY** TORONTO TORONTO 'Grab Some Good' Toronto Resilience **MARKETS** Strategy mobile food markets programme TRADITIONAL ΙΙΜΔ MODERN Ordinances promoting UA NUTRITION & protecting urban valleys for & HFAITH environmental URBAN services **AGRICULTURE** RESILIENCE NAIRORI **UA** Promotion and Regulation Act FOOD MEDELLÍN FOOD **SECURITY** Municipal Policy of Food and Nutrition WASTF Sovereignty and Security COMPREHENSIVE BELO HORIZONTE PUBLIC Popular Restaurants programme PROCUREMENT INFORMAL **BELO HORIZONTE** school meal policies/programmes SCHOOL SEOUL FOOD 'Eco-Friendly Free MFAIS School Meal Program' **VENDORS** SHANGHAI SEOUL SEOUL Food waste policy Food Master food cart, truck and Plan/Basic Food vending regulations **TORONTO** Ordinance Integration of food **BALTIMORE** in Waste Management **BELO HORIZONTE** Mobile Food Vending Food and Nutrition Strategy legislation Security Policy & Programme

Figure 3.4
Urban food systems' policies, programmes and strategies

piloted in 2017, and in 2018 six Autonomous Districts of Seoul signed Memoranda of Understanding with six local governments. In 2020, all 25 Autonomous Districts of Seoul are expected to take part in the programme. In 2018, the Mayor of Seoul and the Korean Minister of Agriculture, Food and Rural Affairs signed a Memorandum of Understanding to collaborate in three areas under the programme: (i) assure a stable supply of beans and green leafy vegetables as non-Genetically Modified Organism (GMO) substitutes for processed foods (soy sauce, soybean paste, and cooking oil); (ii) establish an ecofriendly agricultural products procurement system for school and public meal programmes; and (iii) increase urban-rural exchange, education and promotion.

Land governance issues

Land-use planning and zoning are important urban planning instruments for food interventions in urban and peri-urban areas. They affect land use for food markets, food processing and agrifood parks. They regulate the location for sales of unhealthy food and govern the right to practice certain types of UPA. Land-use planning also protects green areas and forests for biodiversity, floodwater management and other ecosystem services (Clinton et al., 2018). Since land-use planning for food interventions is relatively new, the empirical knowledge base is quite limited (Boossabong, 2018). Depending on the activity being considered, issues surrounding land use can arise when developing a city's urban food systems – for example, issues of land ownership, or multipurpose areas or zones where areas of interest may conflict. For these reasons, land-use planning should be considered during the development of city programmes.

While often used interchangeably with urban planning, land-use planning is typically one element of a comprehensive urban plan that seeks to order and regulate the use and management of land within a government jurisdiction in an effort to promote positive social and environmental outcomes and efficient use of resources. A comprehensive or strategic land-use plan provides a set of broad policies to guide future land use and development in a local government jurisdiction. A zoning ordinance and maps provide specific regulations about how property owners may use and develop parcels of land consistent with the comprehensive land-use plan, while complying with federal, state, regional, and local laws and regulations. Zoning breaks up a city or town into physical districts, according to the present and potential use of the properties in each area in which only certain land uses or structures are permissible. The general idea is that certain land uses are incompatible with each other, meriting their separation into different zones.

National goals, strategies and frameworks influence the guidelines, strategic plans and specific zoning plans of cities. They may consist of the following options: devolution of authority to municipalities; direct conferral by national authorities; and municipal implementation of national policy. For example:

Devolution of authority to municipalities: Nairobi's land-use planning is grounded in successive Master Plans developed in 1927, 1948, 1973 and 2014, the latter providing an integrated guiding framework to manage urban development in Nairobi City County from 2014-2030 in support of Kenya's overarching development goals espoused in Kenya Vision 2030. Kenya's 2011 Urban Areas and Cities Act recognized UPA as a critical component of integrated urban planning. The national government devolved responsibility for agriculture and food security to the county in 2013.

- Direct conferral by national authorities: Municipal governments in China exemplify the direct conferral of authority from national to municipal levels with respect to land-use policy for food systems. For agriculture, the national-level State Council approves a plan that indicates the amount of arable land to be protected in every province, county, prefecture/city and township. Shanghai's Master Plan 2016-2035 sought to create compact, rural residential settlements in the urban periphery using fiscal and employment incentives.
- Municipal implementation of national policy: In Medellín, national law 388 impelled municipalities to develop land-use plans to respond to local needs, following years of conflict and unrest.

Cities have utilized land-use regulatory instruments to advance urban food interventions along six thematic areas:

- 1. Planning and regulations to protect UPA land
- 2. Land-use regulations for UPA
- 3. Land-use regulations for food market development
- 4. Land-use planning for environmental services and biodiversity
- 5. Land-use regulations for nutritious food environments
- 6. Using an agrifood perspective for mixed-use urban development models.

For further details, please see Annex 1: Planning.

BRINGING IT ALL TOGETHER

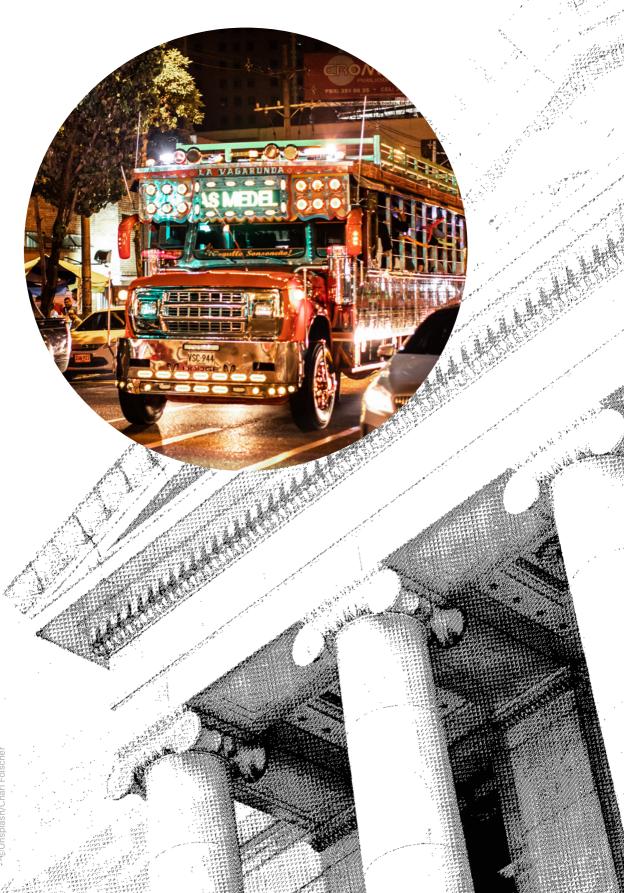
Many cities complement programme interventions with work on policy issues that address structural agrifood issues in urban areas that may hinder performance of interventions. The joint implementation of programmes and policies, together with strategic investments, represents a comprehensive implementation approach to deliver results. Cities prioritize multiple food intervention areas focused on practical problems and in diverse sectors involving multiple municipal departments. Table 3.2 highlights some of the many thematic areas that constitute cities' primary agrifood interventions, although the specific names and framing of the issue may differ substantially between cities.

Noteworthy is **Baltimore**, which has developed a comprehensive approach using policy and direct programme interventions to support urban agriculture prioritized in the city's sustainability plan. In most successful city programmes, education and awareness-raising interventions are a critical complementary input. For example, in **Belo Horizonte**, education was a theme running through all project interventions, helping to maintain the continuity and sustainability of the programme. Public education campaigns addressed nutrition and good eating habits as well as food safety, handling and presentation, environmental sustainability and food security as a human right. In order to better visualize the plethora of instruments which affect food system policies, planning, regulations and programmes, please refer to Figure 2.1, Figure 3.4, and Figure 4.1.





Chapter 4 Differences across governance models



The development of supportive food policies, plans and programmes is directed in part by the model of urban food systems governance being used. This chapter covers examples of how city-led, nationally influenced and hybrid models take different actions with regard to policies, plans and programmes, stressing differences between governance structures, as well as some providing important lessons (about shortcomings and opportunities) based on existing evidence. The chapter also touches upon varied approaches to stakeholder engagement.

It is important to remember that the formation of partnerships and effective modes of collaboration and cooperation – both vertically and horizontally throughout government, society and the food systems – is critical for achieving positive food systems outcomes. In particular, coordination steers the development and oversight of deliberation, negotiation, and coproduction of plans, programmes and policies; the facilitation of actor participation; and moderation of conflicts. This chapter will also identify key issues relevant to multi-level governance, and requirements for effective governance.

It is also important to keep in mind that there are two overarching governance structures: vertical and horizontal. Vertical governance refers to the linkages and relationships between the different levels of government (national, subnational (provincial, state), district, metropolitan, municipal and community), including their institutional, financial and informational aspects. Horizontal governance refers to the connections between actors at the same level, namely between the multiple departments or agencies and diverse private and civil society actors at the municipal level (The Municipal Research and Services Center (MRSC), 2020).

Understanding the current state and practice of decentralization in a country is important to understand the overall context in which provincial, county or district and municipal governments and urban food units operate. Decentralization affects issues related to authority, autonomy, accountability and capacity of local governments and their departments. Understanding the status of decentralized governance and its vertical relationships can provide insights into the incentives, challenges and opportunities facing urban food units.

Clarifying responsibilities between cities and other levels of government in decentralized states will be important for urban food units as they seek to develop their programmes through stronger collaborative arrangements with provincial and national ministries. This clarification may also improve access to financial resources, whether through diverse types of public finance transfers, access to financing associated with local implementation of national programmes, or opportunities to assess and develop other innovative ways to collect and use fiscal resources.

CITY-LED APPROACHES

As discussed in Chapter 2, city-led programmes are generally the result of processes characterized by strong civil society engagement and interested and dynamic municipal governments and mayors. They typically take place in the context of: (i) weak national interest and/or contributions to urban food issues; but (ii) stronger municipal governments. They tend to be organic in their approach and processes, jumping on opportunities for successful engagement with diverse public, private and civil society partners to achieve visible positive results. They are more often typified by horizontal governance.

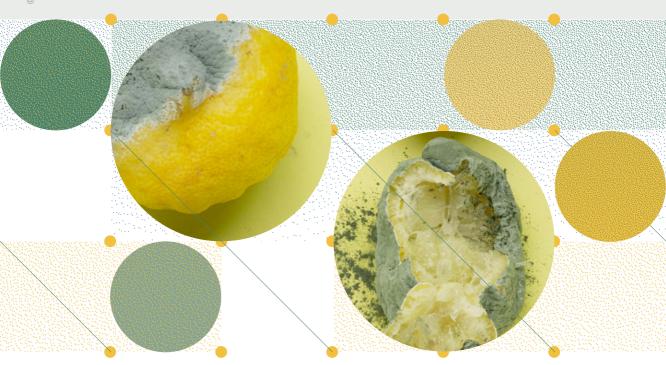
UNDERSTANDING FOOD POLICY

Food policy consists of formal, public decisions that include laws, ordinances, guidelines, and official statements made by government entities which affect how food is produced, processed, distributed, purchased and protected. While national food and agricultural policy shapes food systems, state and municipal governments, the private sector and CSOs are examining their authority and respective roles in changing policies at the institutional, local, county, provincial and national levels.

Municipal governments use a variety of policy instruments to implement agrifood interventions, the choice of which is strongly conditioned by the country's legal traditions and governance procedures and the specific policy objective. Policy actions and legislative authority, in particular, are generally limited to what the national or provincial government legal frameworks allow.

Municipal authorities can design and adopt ordinances or by-laws to become part of the municipal code; issue executive directives, resolutions or orders; amend regulations governing licensing and permits; contract for procurement decisions; court decisions; and develop guidelines, standards and codes of practice.

Municipal food policy work is diverse and can involve multiple instruments and interventions. Cities' policy activities may include: providing public education on food policy issues; promoting diverse kinds of advocacy; lobbying for and endorsing legislation at municipal, state or national level; participating in regulatory processes; endorsing other agencies' or organizations' policies; providing expert testimony; and forming coalitions or public dissemination campaigns (Sherb et al., 2012).



THE POWER OF CIVIL SOCIETY

City experiences highlight the tremendous mobilization of civil society and notable investment in improving local actors' awareness and knowledge of issues. Civil society's capacity to contribute to the formation of strong opinions on the priority urban food issues in their communities has grown considerably in recent years. This clarity of opinion and understanding of the issues and options affect the emergence and flow of a problem stream. The way issues are framed exerts a major influence on the formation of stakeholders' and the larger public's opinion on the issues. Leadership within civil society and CSOs also plays a role in how agendas are framed and pushed forward. The specific framing of the problem and the "issue definition" also determine whether stakeholders may participate in a coalition that supports the consensual terminology around

an issue (Roberts, 2017). For example, in Lima, private sector actors were not willing to support policy language related to "healthy" food but agreed to the use of "nutritious" food. The intensity of stakeholders' opinions and preferences is equally decisive to the generation of political will (Charney, 2009).

SUBMUNICIPAL GOVERNANCE: LINKAGES TO COMMUNITIES

Baltimore hired 16 Resident Food Equity Advisors to work as neighbourhood focal points, helping to solicit input for the design of urban food programmes and feedback from communities on implementation. They also communicate results from city council meetings to neighbourhood residents (Freishtat, 2019).

Policy approaches

When cities decide to ramp up an emerging urban food programme (from their traditional municipal-led food approach), an opportunistic approach will focus the municipal food unit's policy work as it identifies opportunities to modify existing policies or develop new instruments. This approach is consistent with a food unit's low level of institutional capacity and experience in the early phase of its development. The unit may look for low-hanging policy fruit to pick, seizing opportunities in the stages of the policy process that the unit hopes to influence.

This approach may also favour less-demanding processes (such as when policies are up for renewal) or administratively easier instruments (such as permits, licensing, technical codes (e.g. building) or procurement issues). Achieving some early wins through this opportunistic approach will help to build credibility, momentum and energy for food issues in city government and among diverse alliances. Understanding the administrative and legal calendar for future processes is an important prerequisite for this work. Certain features of an opportunistic approach may be used in other approaches. For example, Baltimore is one city that has effectively used this approach at the onset of its efforts to move beyond its traditional food interventions to address critical food problems in the city, particularly with respect to the impact of poor access to nutritious food.

Mayors play many important roles, especially within city-led models. Mayors may be able to propose policy options and resolutions, administer them, manage budget and contracts, and assure execution and management of laws and functions. Mayors may not be able to make policy, but they can have a strong influence on the process and resultant decisions. They propose budgets, oversee staff-led studies and undertake analyses related to proposed studies, and make policy recommendations to councils. They also maintain

relations with key interest groups while the department heads they appoint will influence other actors involved in the policy process (MRSC, 2020).

Programme implementation

Opportunistic implementation. This approach or phase is characterized by a growing awareness of and a city's emerging vision and commitment to engage in agrifood issues. It is also attuned to the importance of increasing the visibility of successful agrifood interventions that contribute to the mobilization of further support. The programmes may start slow with small actions while helping to gather evidence, build relationships and establish trust. For nascent programmes, the approach allows municipal agrifood staff and stakeholders to have a conversation with people in other sectors. Being opportunistic depends on good partners and allies. The approach allows other municipal departments (e.g. health, transportation, environment, energy) to see themselves in this work. Focusing on food systems resilience, for example, allows agrifood people to speak with emergency management, although food had never been part of emergency planning (Toronto Medical Officer of Health, 2017). The opportunistic phase is often an important stepping-stone to the development of a more comprehensive programme. Municipalities may also focus on quick wins in areas such as regulatory, policy and administrative review and reform. The review or drafting of planning instruments provides a number of opportunities to build in food systems principles.

Baltimore is noteworthy for focusing on actions that would generate "quick wins." In this approach, the city food unit uses a food perspective to assess and identify actions that are consistent with the city's emerging food vision. It may seek to identify diverse policy instruments that may be up for renewal, such as permits or administrative actions that can be made by the municipal executive. The municipal food unit professionals may also consider actions that can occur on a more regular basis, or could be undertaken more quickly, for which the approval process is relatively shorter and less administratively cumbersome. An action with an approval process requiring multiple signatures, extensive consultations or hearings, the involvement of multiple city departments, lengthy studies to conduct, or complex negotiations between stakeholders with differing views or undertaking a zoning amendment would probably not be included in this phase, given the relative complexity and time required for the tasks.

Advocacy and movement-building. While most prevalent or instrumental in the early period of urban food systems development in **Belo Horizonte**, **Nairobi**, **Quito**, **Seoul** and **Toronto**, advocacy and movement-building continue to play an instrumental role in the design, implementation and accountability of food interventions (Clayton et al., 2015). They have also played a decisive role in framing municipal issues and supporting mayors with pro-food agendas. Political will is not simply a reflection of the interest and commitment of political leaders to food issues; it is often the result of politically engaged and powerful groups of citizens and CSOs that strongly support food issues and impel politicians to action.

- Seoul's agrifood story is grounded in the sustained mobilization and activism of CSOs. Engaged in food systems governance issues at an early stage, the CSOs have been very active in the whole process of urban food systems governance in Seoul. The heads of a number of organizations played critical roles in the Civic Food Committee of Seoul, which had a significant impact on food policy and programme implementation.
- In Toronto, the TFPC has served for 30 years as a community and stakeholder reference group centered largely on urban food advocacy, and with a focus on equitably supporting the institutional building blocks for major food initiatives, and to facilitate knowledge transfer, connections and support to the diversity of public, private sector and civil society stakeholders engaged in urban food interactions.

HONING IN ON HORIZONTAL GOVERNANCE

The need for horizontal governance, as seen within city-led approaches, stems from early decisions in programme and policy design and implementation to deliver through or collaborate with diverse municipal departments and agencies and private sector and civil society actors. Governance and coordination can range from shared food vision and definitions, information exchange among ministries, to the creation of an integrated policy strategy for the government, joint diagnostics and elaboration of solutions, joint implementation of food programmes, and shared M&E (Bourgault and Lapierre, 2000; Peters, 1998).

National policies can stipulate or provide options for multilevel coordination. Municipal governments' ability to assure quality horizontal governance allows them to effectively implement national programmes in their cities.

As with other sectors such as social services,

education or health care, municipal food units can be entrusted with supervision, enforcement or delivery of services of national programmes, provided that decentralized regulations and practices allow for these responsibilities to be allocated to municipal governments, that they have the requisite capacities and that there are effective coordination mechanisms. For example, Peru's nationally administered National Food Assistance Program (PRONAA) is implemented through its Food Supplement Program, whose implementation was transferred to cities in 2009. Seoul's food policy division supported the Mayor's office in mobilizing support and budget from almost every department and agency in the SMG for the city's universal school feeding programme.

Facilitation and idea-incubation. Some municipal government food programmes view their role primarily as one of facilitation and support of ideas and actions that public, private and civil society stakeholders may propose and initiate. Support may be offered in a variety of ways. For example, cities may facilitate the design and implementation of policy measures, whether in support of project or programme action or as an independent undertaking. They may facilitate access to financing or consider contributions of public seed funding to propel the action if funds are available. This approach may invest in stakeholder or community trainings on priority areas of interest. They may also facilitate the design and implementation of assessments and analyses that address specific problems or opportunities. Cities may also invest in knowledge management actions that respond to stakeholder interests or contribute to advance understanding, advocacy and action.

NATIONALLY INFLUENCED APPROACHES

Nationally influenced food programmes are vertical (hierarchical) in their governance structure. As explained in Chapter 2, these models come to fruition in cities where the municipal or local government (e.g. county) develops and implements programmes and policies based on national guidance or national-level policies and programmes, or for which the responsibility has been delegated to local government. This approach often benefits from financial transfers from line ministries or central government resources, in the context of decentralization and delegation.

UNDERSTANDING VERTICAL GOVENANCE

It is important to understand the distribution of functions and competencies and the level of discretionary powers of different levels of government. In many cities, this relates to the local agencies of national, provincial (state) and municipal government existing side by side in the same location but with different roles and responsibilities. For example, national, provincial and municipal governments may all have officials working in the city on some aspect of nutrition and health issues, each of which may involve food. Some of these

intergovernmental relationships may date back to countries' earliest traditions but have also evolved significantly in the context of decentralization processes.

Vertical governance can be challenged by a lack of clarity in the assigned roles and responsibilities, the mismatch between roles and resources, political discord between levels, and variable capacity and capabilities across levels of government and within countries (Kerr et al., 2000).

Policy approaches

Food policies in most cities are influenced by national and provincial policies, whether through alignment or directly through the application (implementation) of national or provincial laws and regulations. For example, Lima's and Nairobi's relatively new urban food programmes have been built on national policy initiatives. Alignment of municipal to national policy is also evident in Shanghai. Although Baltimore did not follow a nationally influenced approach (it was city-led), it still aligned municipal policies to provincial (i.e. state) and federal policies, which were opportunistically leveraged. In the case of Baltimore, the BFPI worked on food policy at all levels that impact Baltimore residents, from changing practices within organizations and institutions, to changing regulations at a city level, to advocating on legislation at a state and federal levels.

A survey of over 250 food policy councils (i.e. a form of multistakeholder platform) in the United States found that the older ones (over three years old) tend to work more on federal policy issues while the younger ones tend to develop their own policy proposals (Bassarab et al., 2018).

There are a number of case studies where urban food agendas take shape and are amplified following various strategy, policy, programmatic and budgetary actions taken by national governments. For example:

- In Nairobi, Kenya's enactment of the 2011 National Food and Nutrition Security Policy, the Urban Areas and Cities Act of 2011, the 2014 Food Security Bill and the 2015 Nairobi City County Urban Agriculture Promotion and Regulation Act served as the institutional foundation for the Nairobi City County Government to establish an agriculture, livestock and fisheries department that would anchor the urban food systems directorate.
- In Belo Horizonte, in the context of Brazil's decentralization efforts, the decision of the federal government to devolve implementation or delivery responsibilities to municipal governments pushed the city to intensify its engagement in urban food issues.
- In contrast, the emergence of Lima's urban food agenda was slowed by the country's weak decentralization efforts and

administrative devolution of responsibilities to local government. Nonetheless, national legislation provided the framework and context for Lima's enhanced engagement in food issues, although at a slower pace. The National Food Security Strategy 2012 – 2021 and the Organic Law of Municipalities (Law No. 27972), which gives greater powers and functions for municipalities' role in food issues, provided a foundation for Lima's adoption of the 2012 Ordinance 1629 Promoting Urban Agriculture as a strategy of environmental stewardship, food security, social inclusion, and local economic development in the province of Lima.

National authorities create and promote appropriate formal and informal mechanisms for dialogue and coordination between different levels of government, with the strong involvement of local governments in the definition, implementation and monitoring of urban and regional policies and plans. National governments can also promote openness and transparency as well as accountability and responsibility in all spheres of government through strengthened national systems (e.g. audit offices and procurement systems) and independent legal mechanisms for the administrative resolution of conflicts. Furthermore, national governments play an important role in ensuring the collection of localized data – with the help of national statistical offices in collaboration with local governments and local stakeholders – to facilitate M&E of national and subnational urban development policies (London School of Economics and Political Science, 2016). For example:

- Belo Horizonte's initial efforts in 1993 were supported by the federal government's launch of the Zero Hunger programme and creation of the National Council of Food and Nutrition Security. In 2006, under the National Law on Food and Nutrition Security, Brazil developed a National Policy on Food and Nutrition Security. The establishment of the National System for Food and Nutrition Security (SISAN) was guided by Brazil's visionary commitment to the inter-sectoral nature of food and nutrition security and to social participation in policy and programme design, delivery and monitoring.
- In Kenya, to implement 2011 National Food Security and Nutrition Policy (NFSNP) and 2014 Food Security Bill, under the national leadership of the Kenyan Food Security Authority, the Government created County Food Security Committees to coordinate local actions and inter-agency and stakeholder collaboration.

With regard to national food-policy formulation, a limited number of experiences highlight the following insights, which dovetail those encountered in the case study cities:

An institutional model based on a cross-governmental task force
or supra-ministerial actor may be best placed to host a formulation
process for an integrated food strategy or policy framework. The
experiences of Brazil's National Council of Food and Nutrition
Security, the United Kingdom's Cabinet Sub-Committee on Food,
and the Dutch Alliance for Sustainable Food may provide insight into
the challenges of identifying an institutional coordinator for an
integrated approach to policy advice. Sector ministries with
entrenched interests may find it difficult to manage a level playing
field and assure a transparent process open to all sectors, civil
society and private sector representatives and all levels of govern-

METROPOLITAN GOVERNANCE

Governance in larger metropolitan areas comprising multiple towns and cities assumes different forms and functions depending on the country. First, individual cities may be relatively autonomous with minimal and voluntary coordination between each other. Second, others are mixed, composed of many semi-autonomous local municipalities and governmental organizations working together as a metropolitan area, each with responsibility for certain functions while others fall under the aegis of regional, provincial or national government agencies. Third, a central

government and state enterprises may guide overall urban development with varying degrees of governance and management by the metropolitan government (Shanghai). Fourth, comprehensive models grant considerable functional power and autonomy to the metropolitan government (Quito; Abidjan). Each differs by the degree of formality and use of formal and informal coordination structures. They also are not static structures, evolving in response to urbanization, new problems and political considerations (UN-Habitat, 2008).

- ment (Sustainable Development Commission, 2011; Government of the Netherlands, 2020; Rocha, 2018; Leão and Maluf, 2012).
- The institutional host will need to carefully and transparently manage the problem stream, the evidence and policy stream, and the process of framing the problems and the issues.
- Establishment of broad alliances across sectors and thematic areas
 is critical to bridging differences and uniting around a common
 vision. Actors must often move beyond their sector comfort zones to
 build the politically requisite alliances in support of an integrated
 policy. A lack of knowledge and experience may limit the effective
 engagement of CSOs in political processes, particularly in lobbying
 and working behind the scenes with senior bureaucrats and
 politicians.
- Political discourse unfolds or takes place in newspapers, social media, parliamentary and judicial arenas, and behind closed doors. Savvy communication is important.
- Nationally known figures with a strong personality and access to the public can play a decisive role in advancing the agenda.
- Taking advantage of sector policy processes and other policy-related "windows of opportunity" can help to build the tentacles of this approach towards broader food systems goals.
- Top political leadership can change quickly, with new leadership ideologies and priorities.

It should be noted that many of the these insights highlight that food policy formulation has been promoted more through actors outside national ministries of agriculture; however, if urban food systems governance is to flourish, particularly in countries more prone to nation-led governance models, it will require strong, positive ministerial support going forward.

Programme implementation

National policies, programmes and financing in Lima, Nairobi and Shanghai have played an influential role in the development of urban food systems. In these situations, nationally influenced approaches may be used by cities in the early stages of their programme development, to evolve as they develop capacities

URBAN FOOD SYSTEMS' GOVERNANCE RELATIONSHIPS

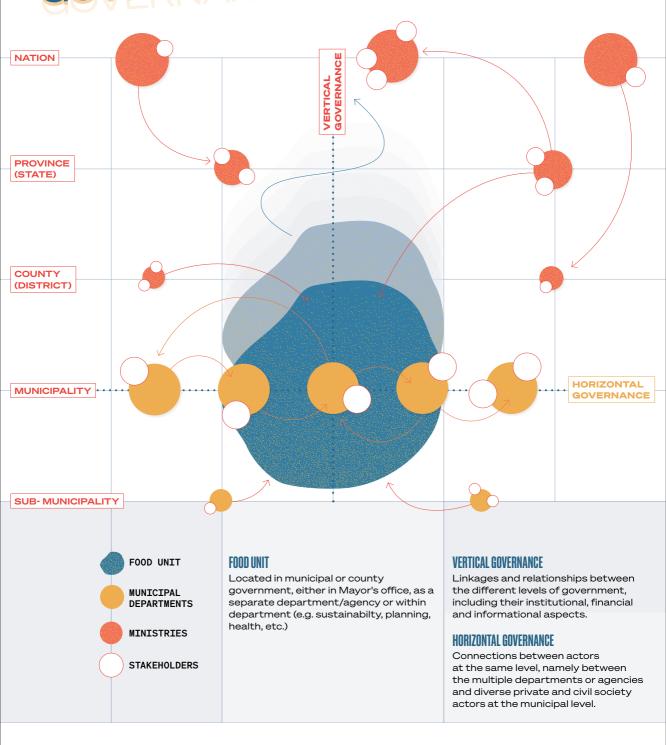


Figure 4.1.
Urban food systems' governance relationships

and strengthen processes to design, implement and govern municipal-led interventions.

Consider **Shanghai:** Policy decision-making is a national-level process, although with space for local variation and experimentation. National priorities and five-year plans provide strategic vision and guidance to municipal policies. Technical officers from municipal commissions (e.g. Agricultural and Rural Affairs Committee) may draft policies for approval by the Shanghai Municipal People's Congress or its Standing Committee, which oversees implementation and monitors against benchmarks. The Government may enlist academics, research institutes and think tanks to support policy analysis and design, while business and industry associations and boards of state-owned enterprises may provide input to the process. The Party and city may also use Leading Small Groups, informal groups consisting of a select group of senior staff to advise on or contribute to the drafting and implementation of policy (Ahrens, 2013; Kreab Gavin Anderson, 2013; Miller, 2008; Shanghai Provincial People's Congress, 2010).

Another example is **Kenya**, where decentralization processes led to the creation of, and delegation of responsibilities to, the City County of Nairobi. County-level agriculture officials responsible for the design and implementation of urban agrifood interventions in Nairobi report to national ministries, thus linking to sector programmes and accessing financial resources for programme implementation.

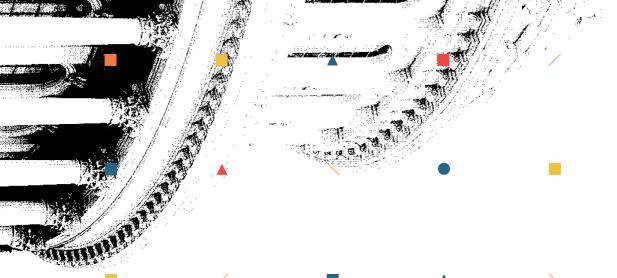
HYBRID APPROACHES

With hybrid models, there may be a blend of both vertical and horizontal governance, as these models represent a fusion of the city-led and nationally influenced models. As discussed in Chapter 2, hybrid models mesh strong municipal government and civil society leadership with national policy, programmatic and financial support to create dedicated municipal food departments that lead the implementation of large, integrated programmes.

Policy approaches

Hybrid models tend to be run as city-led programmes with national support (or overarching programmatic approach). The programmatic and mature phases of urban food programme implementation are characterized by cities in which the food units have gained some initial experience and institutional capacity in designing and implementing interventions, effectively maneuvering through the complex political economy to produce positive results and gain operational experience needed to scale up and develop more comprehensive and integrated programmes and policies. In many cases, in addition to launching flagship initiatives like the **Baltimore's** BFPI, **Seoul's** Food Master Plan and **Vancouver's** Food Strategy, municipal food units oversee the development and implementation of comprehensive urban food policies.

- The Seoul Basic Food Ordinance, enacted in September 2017, establishes the policy architecture for Seoul's aspiration to develop a sustainable food system and achieve food security for all citizens. The Ordinance consists of 35 articles that address the guiding principles, the duties of mayor and citizens, the goals and role of the Food Master Plan and Food Charter, responsibilities of the food policy advisor, roles of diverse food committees and subcommittees, and parameters for results framework indicators.
- Belo Horizonte's pioneering Food and Nutrition Security Policy (Law No. 6.352, 15/07/1993) initiated the city's food engagement and created SMAB, an agency under which all food-related policies and programmes were centralized.



POLITICS AT PLAY

Leaders and champions can exercise political power to positively advance urban food agendas. Considerably more challenging situations occur when actors exercise their power to block or stymie the advancement of municipal food agendas, such as when the mayor is from an opposing political power to the country's president. In these situations of "vertically divided authority", the president or national actors from the ruling party can subvert municipal mayors (as part of their efforts to retain power) through a variety of administrative, fiscal and political actions and tactics to undermine established rules, practices and power structures. These actions may include: blaming mayors for poor performance; stripping mayors of authority or subdividing an administrative unit

(municipality) to be replaced by new, political appointees; blocking mayoral initiatives; postponing elections; reducing municipal government autonomy or eliminating responsibilities; creating ambiguous or opaque administrative responsibilities that can be shifted or manipulated; rescinding intergovernment transfers or imposing limitations on cities to collect taxes; delaying external funding; taking credit for a city's successes; and offloading or assigning new, "unachievable" responsibilities to cities (Resnick, 2014, 2015, 2018). Conversely, when the political identity of the municipal mayor is consistent with the party in power in the central government, the city may be able to more easily benefit from central government financial transfers and political support (Panday, 2006).



• Since 2003, Vancouver has been working to support a just and sustainable food system. This commitment builds on food systems initiatives and grassroots community development that dates back decades in the city and its province. In January 2013, the city council adopted the Vancouver Food Strategy, which integrates a full spectrum of urban food systems issues within a single framework, including food production, processing, distribution, access and waste management. The results are more far-reaching than standalone food policies, and more in keeping with a systemic approach to urban planning and development that aims to improve social, economic, environmental and health outcomes (City of Vancouver, 2013).

Cities that use this overarching programmatic approach may also successfully integrate food policies in multiple departments of municipal governments. This multidepartment strategy in which food is remapped onto other policy issues benefits from the capacity, experience and portfolio of interventions in municipal departments, their relationship with diverse target groups, and their potential access to department co-funding to successfully implement policies and interventions. It also helps to strengthen a shared policy discourse around food issues in the city.

Municipal departments of health and sustainability have been leading many of the food policy interventions undertaken by cities. Health departments have served as a leading partner and a key entry point for many cities, particularly where they are prioritizing interventions to address poor access to affordable, nutritious food and rising levels of malnutrition (e.g. obesity) and diet-related disease (e.g. diabetes). This engagement may reflect public health officials' sensitivity to food issues through their work in hygiene, safety and nutrition (Berg et al., 2006; MacRae and Donahue, 2013). Collaboration with municipal departments of sustainability also provides a diversity of policy and programmatic entry points for food interventions, aligned with the broader sustainability agenda of cities. Green transportation and renewable energy programmes are consistent with food systems' efforts to reduce the carbon footprint through expansion of electric last-mile food delivery or solar-powered cold chains. Food waste reduction initiatives align with sustainability plans to decrease solid waste in landfills. Innovative UPA interventions contribute to green infrastructure and resilient ecosystems, renewable water and energy- or green-certified buildings (e.g. rooftop).

This section on hybrid models has cited a few examples where national policy has been developed and approved in certain thematic areas that are important to both urban and rural food systems. **Brazil** and **Korea** are two countries that have developed urban-oriented food policies at the national level. For example, the Korean Ministry of Agriculture has passed legislation regarding specific actions in support of urban agriculture. Brazil's 2010 National Food and Nutrition Policy and the related National Food and Nutrition Security Plan, developed by the Ministry of Health to improve the diet, nutrition and health of the Brazilian population, provided an integrated framework, set of procedures and funding for the decentralized implementation of a wide range of food policies and programmes by state and municipal authorities (Brazil Ministry of Health, 2012). Most countries, however, have not developed specific national food policies related to urban food issues or targeting urban populations.

As work on urban food issues and food systems expands, national food policy development represents a future priority area of work. Just as with

REALIZING INTERJURISDICTIONAL COORDINATION AND SUPPORT

Vertical governance in hybrid approaches may require support to and monitoring of submunicipal levels of government involved in the delivery of food interventions. Municipal food units may also play a catalytic role in supporting the development and implementation of policies, programmes and investments across multiple levels of government. For example, in Korea, the SMG used vertical governance in both directions to effectively implement the Urban Rural Coexistence Public Meal Service Project. The SMG ensured the project was consistent with national policies

and programmes, ensuring political and financial support from the national Government. The SMG also facilitated the development of partnerships with 25 autonomous districts (i.e. submunicipal units of government) located in the city of Seoul. The SMG also worked with local government in rural areas in Korea to directly procure food and provide quality meals to children. This type of local government facilitation and coordination will become increasingly important to operationalize the growing interest in territorial approaches and future rural-urban linkages.

decentralization policies that determine the roles, functions and resources available, most cities would benefit from greater guidance and policy content provided by a new holistic and integrated vision for national food and agriculture policy with a systemic perspective of the agrifood system, including urban issues.

There are few functional examples of national food systems strategies or policies that are holistic and systemic, embrace the entire food system (both rural and urban), and are inclusive of multiple food outcomes (e.g. nutritious food and sustainability), their interrelationships, and multisector and multilevel government engagement.

The Food Strategy for **Wales** (2010) represents one example that followed this logic. The Strategy set out to build connections and capacities across the food system, "integrating disparate strands of food policy (such as nutrition, food hygiene and food production) and to link food policies with other key initiatives (such as waste and energy minimization, sustainable tourism and transportation)" (Marsden et al., 2000). Other efforts to develop integrated food strategies or policies (some which were unsuccessful) are limited to a small number of countries, including Australia, Canada, Ireland, The Netherlands and the United Kingdom (Andréea et al., 2018; Buckton et al., 2019; Carey et al., 2015; Cullerton et al., 2016; European Public Health Association (EUPHA), 2017; Agriculture and Agri-Food Canada, 2020; Kenny et al., 2017; Parsons, 2017). The European Union has recently embarked in this direction (De Schutter, 2013).

Programme implementation

Programme implementation in a hybrid model is often characterized by the development of a politically or popularly visible, integrated, flagship programme or policy. **Belo Horizonte, Quito and Seoul,** to varying degrees, have evolved along these lines, either starting slowly and gradually developing, or benefiting from national, provincial and municipal funding to develop a large programme.

The ability of cities to follow this approach is facilitated by the existence of functioning municipal institutions and interjurisdictional mechanisms with

GOVERNANCE IN FOCUS: EMERGING ISSUES

What are nascent interjurisdictional governance entry points? There are few examples of formal vertical governance mechanisms and structures used by cities and by provincial and national governments for agrifood issues. This relative lack of formal vertical governance mechanisms will become increasingly important as countries develop systemic national food systems strategies and policies and as urban areas begin to more systematically address issues that split increasingly fluid and ill-defined jurisdictions between cities, towns and rural areas. These challenges will be most acute in rapidly urbanizing metropolitan areas, particularly those characterized by expansive, low-density urban development that pushes into peri-urban and peri-rural areas.

However, interjurisdictional coordination needs to happen at the operational and political levels. Even if metropolitan governments may present certain benefits across spatial levels of government, they may present more difficulties from the sheer number of existing institutions to coordinate or oversee, and potentially the overlapping nature of their jurisdictions (boundary disputes). Institutional incentives for coordination are influenced by several factors, including whether elected government officials, government agencies or "special" bodies are involved, each with different patterns of accountability (Panday, 2006). Diverse results

to date suggest that there is minimal interjurisdictional coordination in many parts of the world (Farvacque-Vitkovic and Kopanyi, 2014). This is attributed to the lack of an institution or mechanism with a mandate to promote interjurisdictional coordination. It is compounded by lack of incentives, financial support, project continuity and political economy.

Future work on horizontal and vertical governance may consider several emerging issues: (i) Are large urban agglomerations that are managed and controlled by national governments with a governor appointed by the head of state (e.g. Abidjan, Cairo, Lagos) a more effective means for governing issues in large, expanding urban areas with multiple subordinate jurisdictions? (ii) Is there a tradeoff between increased centralization and local autonomy and initiative? (iii) Is it feasible for several cities to consider sharing or pooling human resources, institutional and governance processes and mechanisms for agrifood interventions (planning, coordination and cooperation structures, facilitation functions and resource mobilization)? This option may be most appropriate between larger and smaller cities looking to expand urban-rural or big urban-little urban linkages; or several cities merging with the suburbs of a central city (i.e. conurbation) or large metropolitan area (UN-Habitat, 2008).

provincial or national government. A supportive and organized multistake-holder group contributes to advance cities along this path. A relatively well-developed planning, policy and programme framework may already exist, providing a foundation upon which the city can take action to address specific issues relevant to its programme. In some situations, cities may be able to draw on financing from diverse sources (public, private, national, municipal), providing a more resilient financial base. Programme sustainability may be facilitated by continued political support from successive municipal mayors.

- Belo Horizonte's innovative food security policy and programme that originated in the 1990s and was managed by SMASAN catalysed an integrated thinking of the food system. Rather than addressing "food for hungry students" in a department of education, or "food for needy people" in a department of social assistance, or "food for consumers" in a department of commerce, or "food from family farmers" in a department of agriculture, the policy and programme steered away from a compartmentalized approach to integrate all food systems aspects, components and purposes under three parallel and interconnected programmes. In 2004 after the advent of Brazil's Zero Hunger strategy, it partnered with the federal government to expand its programmes (Rocha 2001).
- Quito is a good example as a city articulating urban agriculture with
 the RtF which has evolved into the flagship AGRUPAR programme.
 AGRUPAR operates in the eight administrative zones of the
 Metropolitan District of Quito to enhance food security and promote
 food processing, access to microcredit, microenterprise
 management and marketing. The programme mobilizes support
 from technical departments of local and national government,
 universities, CSOs, the private sector and development partners to
 assist 12 250 urban and peri-urban farmers and 380 communitybased organizations (FAO, 2014).

Nationally influenced and opportunistic city-led models appear to be the most practical and feasible options for towns and cities initiating work on agrifood issues and programme development. They are either linked to the power, resources and support of national governments or they opt for a more agile approach to introduce and implement sectoral food interventions, where possible, in departments of the municipal government. The latter (opportunistic city-led) may be feasible for larger cities that have access to human and financial resources, but less realistic for smaller cities with weaker resource linkages. In both cases, efforts may start slowly and with small actions to achieve quick wins while helping to gather evidence, build relationships and establish trust.





Conclusions



Urban food systems have impacts beyond just food, and their reach extends beyond just urban and peri-urban areas: their spheres of influence affect the geographical (e.g. nearby rural areas, urban planning), the sectoral (e.g. agriculture, health, education, transport) and areas of concern (e.g. food safety, security, nutrition). Urban food systems governance brings together issues of human nutrition and health, food systems resilience, environmental sustainability, inclusiveness, job creation, and urban development, to name just a few. With crises like COVID-19 and demographic trends bringing urban food systems into the spotlight, it is more crucial than ever to understand how these systems function and seek opportunities to influence these systems for the better.

The report draws attention to several emerging lessons for food systems and urban development. First, it is evident that effective governance of urban food systems requires interventions to be implemented across many sectors. Urban food systems are ecosystems that influence livelihoods, environment, health and culture. Second, city experiences show that innovation is not just about the latest technology; it also concerns social and institutional innovation that helps governments and stakeholders address socio-economic problems and improve human capital. Third, the case studies highlight the tremendous value and power of participatory approaches and involvement of civil society and private sector actors in governance processes. Discussions between municipal government and informal food sector associations, for example, are an important first step for designing actions to improve livelihoods and jobs, reduce poverty and improve food security for a large segment of the urban population. Fourth, some cities have effectively merged a systemic food systems perspective with a pragmatic problem-solving approach, allowing them to contribute to seemingly intractable problems, such as improving human nutrition and contributing to planetary health.

Within the context of international development, different pipelines of work - be they urban, agriculture, environment, water, among others - should consider how they can address different components of urban food systems. Sectors that are usually siloed in different ministries at the national level are often more integrated (especially in the current crisis) at the municipal and subnational governance levels. This report has highlighted the diversity of issues which projects can address, be it through modernizing wholesale and retail food markets, establishing UPA programmes, strengthening food safety systems, or understanding and/or evolving consumer food preferences and demand. For example, cities can improve solid waste management by working with food system actors to reduce food waste or address food systems vulnerabilities in resilience plans. They can facilitate investment in zero-emission food transport and mandate off-peak deliveries to reduce congestion and greenhouse gas emissions. They can also invest in new sanitation and waste management infrastructure which embraces closed-loop systems to treat greywater and solid waste for use in UPA. Framing efforts using a food systems lens can illuminate areas of concern that require integrated management and coordinated cross-sector action. Investment in improved data systems and food systems analysis must complement operational work, using rapid diagnoses and in-depth studies to generate information as projects are designed and implemented.

Governance efforts must incorporate approaches for working with government at different levels (vertically) and across departments (horizontally) and strong multistakeholder engagement. Determining how to take action will depend on the type of governance model at hand: vertical or horizontal; city-led, nationally influenced, or hybrid. Each governance model has

The time is right for disseminating and conveying the importance of urban food systems to achieving sustainable development goals.

implications on resource access (financial and human), level and type of stakeholder engagement and overall planning processes. How planning processes are facilitated and brought to fruition can impact the overall sustainability of a given plan, project, programme or policy.

Food issues at the national level are largely handled by various ministries and agencies, while local production, distribution, consumption and disposal of food in population centres is the purview of local authorities. Interestingly, most of the engagement with and political momentum for an urban food agenda has occurred, to date, with mayors, city councils and civil society actors at the municipal and metropolitan district levels. While municipal and district authorities will likely continue to lead urban food efforts, the determination of the most appropriate level of governance intervention (municipal, metropolitan district, national, regional, global) will remain an important question for decisionmakers as they address urban food problems. This can be achieved through careful situational and institutional assessments, in order to identify the context and, subsequently, the most probable levels of engagement and model of urban food systems governance to flourish (as discussed in Chapter 2). Once the level of intervention is determined, stewarding changes in the evolving urban food space will require significant institutional transformation, creativity, and strengthened enabling conditions (like the T-FORM enabling factors in the TRANSFORM governance framework).

The case study cities referenced in this report have been successful, in varying degrees, in establishing the institutional architecture to address food issues at the municipal level. They have achieved success in multiple areas: getting food on the municipal agenda; creating or strengthening a food authority at the municipal level; facilitating the development and approval of policies, programmes and budgets in select thematic areas; establishing stakeholder platforms; coordinating across departments and levels of govern-

ment; mobilizing financial resources and including food in budgets; and partnering with diverse institutes to gain access to an independent source of analytical information. Beyond these institutional achievements, they have also produced tangible results for diverse urban beneficiaries.

Building on this knowledge product, near-term outputs and activities could contribute to framing urban food systems governance in the context of the COVID-19 pandemic and the many structural food system problems and issues that have surfaced during the crisis. The isolation or diminishment of urban food systems in relation to the rest of agriculture and broader food system should be put to rest with the COVID-19 experience. Evidence of this can be seen in the shifts of food markets, food supply chains and consumer food demand, where the decisions of municipal governments are now being made closely in tandem with state and national government agencies and ministries. These are seismic shifts in the governance and structure of the food system that arguably demonstrate short-order, "next level" trials for a severely climate-challenged world.

This work on urban food systems governance helps frame and provide insight into an emerging set of challenges presented by our urbanizing world as well as the opportunities provided by the growing engagement of cities in food systems. FAO and the World Bank will play an important role in raising the visibility of urban food systems governance, and its links to economic development, poverty reduction and health and food security. They have the political, conceptual and technical capacity to build on national-level experiences and support governments to accelerate progress towards resilient and sustainable urban food systems. The time is right for disseminating and conveying the importance of urban food systems to achieving sustainable development goals.







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Annex 1 Planning

WHAT YOU NEED TO KNOW

1 It all comes down to context.

National planning policies and frameworks and planning ministries generally provide the guiding principles and broad frameworks to which urban development plans should be aligned and congruent. Understanding national sector policy frameworks as they pertain to urban food issues is equally important to assure coherence between national, regional and municipal levels as well as between sectors. Service agencies are not likely to follow national or urban plans that conflict with their own agency plans, or that are the product of decision processes with which they were not involved (Forster et al., 2015b). The successful design and implementation of food programmes in the urban context will also depend on whether the issues and interventions are aligned with wider city needs (Haysom, 2015).

National strategic documents also provide important contextual information, visions and goals to which planning should relate. For example, the goals articulated in Kenya Vision 2030 provide an important reference for aligning **Nairobi**'s urban plan and the integrated food-related aspects.

Understanding the steps and nuances of the planning process in the country or city is equally important for effective participation in the process. In **North American** cities, urban planning and local land-use planning are often carried out by an independent planning commission, made up primarily of private citizens. These commissions serve as an advisory arm to the local governing body (e.g. the city council) with respect to the adoption of formal plans and review requests for amendments to existing regulations (Harvard Law School, 2017). In **Bangkok**, the Policy and Planning Division of the Bangkok Metropolitan Administration – the regional government of the Bangkok metropolitan region – collaborates with universities, professional planning think tanks, diverse public agencies, the private sector and civil society to manage the planning process (Boossabong, 2018). **Quito's** recent planning process builds on mobilized civil society, Quito's Vision 2040 and the guidelines for the Metropolitan Plan of Development and Regulation 2015-2025, which contributed to the development of Quito's agrifood strategy (Pacto Agroalimentario).

2 Human resources are critical.

Partnerships with universities, research institutes, professional urban planners, non-profit organizations and planning think tanks can provide technical assistance and training to food units and food actors on the urban planning process. Participation of or access to an urban planner familiar with local planning procedures is important to help non-specialists understand the process and identify opportunities for incorporating food into sector plans like transportation

and health. Urban planning involves detailed technical tasks but is strongly embedded in municipal politics; understanding interests and strategies of municipal departments, the private sector and civil society is important for effective engagement.

A shared vision and diagnostic assessment is the first step.

3

Developing a vision or a strategy for the food interventions is generally the first task undertaken prior to or as part of the planning process. Formulating a vision with aspirational goals is an important step for municipalities to articulate their values, ideas and priorities. Cities may use a variety of terms to refer to the various outputs of their planning process (e.g. charter, strategy, policy, plan). A strategy articulates an outcome-focused vision whereas a plan indicates the steps to achieve that outcome. Food charter expresses institutional willingness to promote food policy in the municipality without binding commitment. A policy is generally (but not always) subordinate to strategy, specifying a principle(s) or a statement of intent that is meant to guide decisions and achieve specific outcomes. Some cities may produce a separate strategy document to be followed by a separate plan.

- Toronto and Vancouver developed an integrated policy document, presenting a strategic vision and principles, overarching goals and an action plan.
- The Mayor of Lima incorporated UPA as part of a strategic vision for a new urban development model. Lima approved Municipal Ordinance No. 1629 in line with this vision, defining urban agriculture and agricultural practices to provide food products and increase food security for Lima (Cabannes and Marocchino, 2018).

Language and framing are key. Successful integration of food in a planning document is strongly conditioned by how an issue is framed, how aligned it is with city goals and priorities, and whether it will gain political acceptance from other actors. How cities and stakeholders use language to frame issues is important for establishing coalitions and alliances, developing advocacy materials, and communicating to a larger audience. The use of certain terminology and political messaging may encourage others to work together or discourage them from doing so. City experiences show that when there is agreement on how to talk about an issue, it becomes the basis for shared understanding and a vision for addressing problems.

- In Quito, stakeholders jockeyed to influence the framing and priorities of the food policies under discussion. Tensions between the private sector, civil society and the central government related to the recognition and inclusion of food sovereignty and ultra-processed products.
- Baltimore's food policy unit decided to adopt a de-politicized approach to food access in their flagship BFPI to avoid disagreement and conflict with any members of the coalition supporting its design and implementation. While the BFPI embraced existing and new research about hunger and poor food access in the city, the initiative did not elaborate on the structural causes of these problems and did not endorse or condemn any approach to solving poor food access. This framing strategy enabled the members to reach consensus.

ANNEX 1: PLANNING

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Stakeholder participation is critical for effective food planning. Close to 60 percent of urban planners who have worked on food issues in North America underscored the role of citizen and community support in determining whether to include food issues in local urban plans; they also highlighted the important roles played by the awareness and support of elected officials and the local planning agency (Hodgson, 2012). For example, **Brazil**'s decision in 2001 to establish a "right to the city" statute allows citizens to participate in local government decisions (United Nations, 2016).

Diagnostic assessment goes a long way. Plan development is greatly facilitated by some type of diagnostic assessment that analyses and presents information on key issues under consideration for inclusion in the plan. These assessments are also useful to help assemble baseline information for subsequent M&E. A systemic and inclusive assessment process can help institutionalize the food systems perspective while providing a useful framework for thinking through the logic of the plan and the challenges and opportunities among the different, interconnected functions, actors and policies to potentially be addressed by plan activities (Cabannes and Marocchino, 2018).

The devil is in the details.

Urban development planning is a vast and well-developed field, both academically and in practice. A few select issues, out of the multitude of concepts and instruments, is applicable to planning for food.

Temporal coherence. The duration of food-related plans can be of various durations and contain elements with short-, medium- or long-term time horizons, including those of the plan in which food activities may be integrated. To enhance the sustainability of food interventions and potentially avoid shutdown or non-continuation with changes of government, cities may want to consider longer planning cycles that transcend political or election cycles (De Cunto, 2017). It may also be advantageous to break the design and implementation of planning into more digestible sets of activities that are consistent with the short- and medium-term priorities of elected officials, or that are consistent with elected officials' term of office (UN-Habitat and UNECA, 2015). However, longer-term planning cycles may help mobilize more predictable levels of financing (Resnick, 2016) as well as provide the requisite time to deliver programmes and policies that tackle complex food systems issue that can't be completed in four to five years (Hawkes and Halliday, 2017).

Determining the appropriate scope and focus. Plans must find a balance between the proper breadth and focus of the content; this is often a challenge in the early stages of urban food interventions (Cabannes and Marocchino, 2018). While a narrow set of activities may be more feasible and realistic to design, secure funding for and implement, some cities advocate to plan for activities in several thematic areas to avoid concentrating all the energies and resources in one area that may be currently popular or important but could lose favour in the future. Longer-term plans with multiple thematic or sector entry points could help to garner support from supporters of those issues as well as provide new choices for support by incoming mayors.

Jurisdictional focus. As plans are developed in specific jurisdictions (e.g. municipalities, metropolitan districts, counties), the goals, components and activities should naturally be consistent with the jurisdictional mandate, roles and responsibilities. In **East Asia**, an average of 60 percent of urban areas with

greater than 100 000 people are contained within a single jurisdiction (Baker, 2017). In plans that span multiple jurisdictions (e.g. city and county), planners must be aware of the congruence between plan activities and the target jurisdictions. Multijurisdiction, spatial planning that covers larger metropolitan regions and counties encompassing jurisdictions in peri-urban areas seems particularly germane for many food systems issues that span this rapidly evolving space (e.g. land use, food provisioning, UPA). For example, **Belo Horizonte's** efforts to improve access to food started with planning that connected food needs to other outcomes and translated a holistic food systems vision into concrete areas for operational interventions. Integration of planning processes across jurisdictions may start with other issues such as transportation, health, education or other services that may be able to incorporate food.

5

Determine the conditions for effective implementation.

It is desirable to identify the conditions which facilitate effective implementation of plans and those that hinder it. Who has the capacity to implement the plans? Should food be inserted into plans or should there be a separate food plan? Experiences suggest that in the early stages – which are characterized by minimal capacities and financing, and newness to the process – it may be wise to prioritize the insertion of certain food activities into municipal department (sector) plans or the city's urban development plan, opting to delay development of a comprehensive food plan until the food unit has been successful in building key professional and institutional relations before advancing the agenda.

LAND-USE PLANNING: INTERLINKAGES AND IMPACTS

What is land-use planning?

Land use planning and zoning are important urban planning instruments that have a significant impact on food interventions in urban and peri-urban areas. They affect land use for food markets, food processing and agrifood parks, regulating the location for sales of unhealthy food, the right to practice certain types of UPA and retain and protect green areas and forests for biodiversity, floodwater management and other ecosystem services (Clinton et al., 2018). Given the relative newness of land-use planning for food interventions, the empirical knowledge base is guite limited (Cabannes and Marocchino, 2018). While often used interchangeably with urban planning, land-use planning is generally one part of a comprehensive urban plan that seeks to order and regulate the use and management of land within a government jurisdiction in an effort to promote positive social and environmental outcomes and efficient use of resources. A comprehensive or strategic land-use plan provides a set of broad policies to guide future land use and development in a local government jurisdiction. A zoning ordinance and maps provide specific regulations about how property owners may use and develop parcels of land consistent with the comprehensive land-use plan, while complying with federal, state, regional and local laws and regulations. Zoning breaks up a city or town into physical districts, according to the present and potential use of the properties in each area in which only certain land uses or structures are permissible. The general idea is that certain land uses are incompatible with each other, meriting their separation into different zones. Some planners are working on the design of the public realm or space, involving the use of flexible and incentive-based instruments that provide compensation or offers rights to the private sector (e.g. developer) when it contributes to a public goal, such as the provision of public facilities to improve the urban environment (Jung, 2019).

Land-use planning entry points for urban food interventions

Cities have utilized land-use regulatory instruments to advance urban food interventions. Experiences from the use of land-use policy and planning in six agrifood thematic areas are discussed below.

Planning and regulations to protect conversion of UPA land to urban use

The projected tripling of the global urban land area between 2000 and 2030 (Angel et al., 2011; Seto et al., 2012) is projected to destroy 1.8–2.4 percent of global croplands by 2030, 80 percent occurring in Asia and Africa on land that is more than twice as productive as national averages, and which was responsible for 3–4 percent of worldwide crop production in 2000 (Bren d'Amour et

al., 2017). National governments have acted to protect land for food production. In Organisation for Economic Co-operation and Development (OECD) countries, governments address farmland conversion by agriculture and land-use policies (whether financial incentives or regulatory oversight), albeit in an uncoordinated manner between the different departments and levels of governments (OECD, 2017). China's policy governing land conversion (2006) allows local governments to convert certain amounts of arable land to urban uses provided that an equal or larger amount of land beneath farmhouses is converted to agricultural use (Li et al., 2018).

2 Land-use regulation for UPA

3

Zoning land for agriculture is one measure used by governments to protect land from competing uses, helping to establish or safeguard UPA as an economic activity and producers as a professional category. A survey conducted by FAO found that UPA is often excluded from - or not explicitly included in - city land-use planning and management in most cities (FAO, 2014). For example, in Quito, urban land-use plans do not explicitly recognize the concept of UPA, which is surprising given the achievements of the AGRUPAR programme in the Quito Metropolitan District. The development of a new territorial food policy now faces the challenges of working at this larger cityregion level and across different jurisdictions (Blay-Palmer et al., 2018). Zoning and other land-use regulations influence the shape and practice of UPA. They may not recognize UPA as a land-use category or restrict agriculture activities and commercial enterprises in most zoning districts. They are often outdated and inadequate for newer forms of UPA on rooftops, in buildings and underground. In 2011, Lima's Mayor incorporated UPA as part of a strategic vision, which led to the modification of land-use ordinances and the creation of the Metropolitan Urban Agriculture Program. In 2016, Baltimore's Department of Planning launched the "Transform Baltimore" initiative to rewrite the city's zoning code. This new code included definitions and use standards for UPA and community-managed open space, which had previously not been included as permitted or conditional uses.

Land-use regulation for food market development

Land-use regulations are central to creating diverse, retail "foodscapes" by either enabling small-scale, independent foods shops and restaurants or limiting food commerce to stores or chains that can afford higher rents and fill large retail spaces. Zoning codes and licensing procedures affect access by urban food markets, sometimes creating barriers to entry. They also dictate whether businesses can establish fresh produce markets or stands in residential neighborhoods. Cities' licensing process for food vendors, such as through a waiver of licensing fees, will affect whether markets or stands are set up in underserved neighbourhoods. Planning decisions technically lie with planning departments. However, developers, financiers and investors, market researchers, property management companies and leasing companies, retailers and suppliers play critical roles in shaping the urban retail landscape. Their ability to influence planning processes has contributed to the expansion of supermarkets and malls in many countries, often to the detriment of the informal food sector and low-income consumers who depend on informal vendors, shops and restaurants for their food (in contexts where poverty limits access to cheaper supermarket food) (Battersby, 2017). The OECD has recommended that governments should not allow the use of private covenants on land that aims at stifling competition and restricts the use of land for specific activities (OECD, 2017).



Land-use planning for environmental services and biodiversity

Cities are also aware of the diverse environmental benefits and services provided by agriculture, forests and green space in urban and peri-urban areas, and can use spatial planning and interjurisdictional coordination to govern ecosystem services through zoning, easements and public trusts. In 2010, Medellín adopted a novel approach to manage and conserve biodiversity, launching the first local action plan on urban biodiversity in the country. As the main planning instrument in Colombian cities, Medellín's Land Use Plan was adjusted in 2014 to support this strategic approach and engaged multiple stakeholders. As part of Lima's overall strategic vision of sustainable urban development, the municipality approved the Metropolitan Environmental Policy via Ordinance No. 1629. This ordinance serves as an incentive mechanism to: (i) create gardens on rooftops, walls, schools, homes and productive green areas through UPA on available private and municipal property; and (ii) support other initiatives relating to the treatment and reuse of solid and liquid waste for urban farming. The Metropolitan Environmental Agenda approved through Municipal Ordinance No. 1640 incorporated UPA among its objectives to protect urban valleys that provide environmental services to the city and the conservation and increase of productive green areas through urban farming on sustainable plots. The Plan for Concerted Development (2012-15) incorporated UPA in urban planning instruments. It sets strategic goals such as green area per capita, protecting and maintaining agricultural valleys in the south, and promoting the incorporation of UPA into green areas and urban public spaces as a strategy to improve the quality of life of the population of Lima province (Cabannes and Marocchino, 2018).



Land-use regulation for nutritious food environments

North American cities have extensively used zoning to regulate land development in order to protect health, welfare and overall well-being. The have innovated to establish "zoning for healthy food" to encourage a healthier food environment, especially around schools and in underserved neighbourhoods. Cities have used different tactics and entry points to engage and incentivize private sector actors to achieve this objective. Some cities use zoning to regulate the location and number of fast food restaurants, particularly their proximity to schools. They may frame fast food restaurant regulations in terms of their effect on the aesthetic quality of cities or transport congestion and traffic levels. They may also seek to limit certain types of restaurants through business-licensing regulations. In addition, cities may promote the marketing of fresh fruits and vegetables through zoning and licensing to establish market-places.

6 Using an agrifood perspective for mixed-use urban development models

Mixed-use development models that incorporate residential, commercial, food or natural blue-green landscapes may provide opportunities for introducing food interventions in the urban space, particularly where issues of jobs and inclusiveness, climate change and green growth and resilience assume growing importance. Many European cities have developed comprehensive land-use programmes that combine community gardens with housing, education, nature conservation and biodiversity; Chinese cities have created agro-parks or green belts; and real estate developers throughout the world are integrating UPA in residential development or building housing around a working farm ("agri-hood") that allows residents to participate in production or benefit from fresh produce and farmers' markets.

Annex 2 Finance

Cities finance food interventions from a variety of sources, including the municipal budget, transfers from national and provincial government, grants from philanthropic foundations and development partners, and financing from public investment funds, public-private partnerships and other diverse instruments (debt, blended, climate). They fund human resource positions in municipal government, cover programme operating costs and finance investments. Financing strategies differ by the type of governance model (cityled, nationally influenced or hybrid), and are strongly conditioned by a city's size and wealth, and its country's constitutional provisions, legal and regulatory frameworks, the broader governance system (e.g. federal, unitary) and degree of decentralization.

Local governments generally rely on three sources of funding: own revenues from local taxes, fines and user fees; intergovernmental fiscal transfers from central and provincial (state) government; and local government borrowing and debt. With the exception of larger cities in middle- and high-income countries, intergovernmental fiscal transfers are the major source of financing used by most local governments in the world, supplementing insufficient local revenues from a small tax base to pay for recurrent or capital expenditures. There are many types of such transfers. Some transfers are unconditional, based on transparent formulas. In many countries, transfers are primarily conditional, earmarked for the provision of specific services. Others may use performance-based grants, subsidies and subvention, sometimes available through competitive or matching processes (UN-Habitat, 2015; Fjeldstad, 2006; Hobdari et al., 2018; UNCDF, 2016; UNICEF, 2016; Farvacque-Vitkovic and Kopanyi, 2014).

Nationally led urban food programmes often receive funds from central government budgets through decentralized ministry offices, while nascent city-led programmes without immediate access to national funding are more opportunistic in mobilizing resources from municipal department budgets, philanthropic foundations and development partners. More mature city-led programmes and hybrid approaches benefit from a mix of national, provincial, municipal and sectoral budget transfers. For new municipal food interventions and programmes, it may take time to access municipal, county or national and provincial budgets, hinging on the ability of a food unit to collaborate with the mayor's office, city council and municipal departments or national or provincial officials. The opportunistic approach discussed below is particularly important in the early stages.

DEVELOPMENT PARTNERS

As with financing from philanthropic foundations in North America, development partner financing has played catalytic roles in funding cities' food initiatives. In **Quito**, the pilot precursor to the AGRUPAR programme benefited from financial support from Canada's International Development Research Centre to complement municipal government financing and beneficiary investment (FAO, 2015). FAO has played similar catalytic roles in funding capacity development and assessments in **Lima**, **Medellín** and **Nairobi**. Many cities throughout the world benefit from active participation in global city networks, partnerships, pacts and international platforms leading to the mobilization of financing, technical assistance, trainings and analytical support.

MUNICIPAL AND PROVINCIAL ECONOMIC DEVELOPMENT CORPORATIONS

Many cities use semi-autonomous economic development corporations or state-run enterprises to finance innovative food programmes and investments. With profits from Medellín's city-owned utility company, Urban Development Company (EDU), an economic development corporation, finances infrastructure investments and food security projects in low-income areas in the urban periphery. In conjunction with Medellín's Green Belt initiative, and using a participatory development model to build trust and community engagement, EDU has financed eco-garden projects targeting access to land and training for single mothers. Quito's Economic Development Agency (CONQUITO) implements AGRUPAR and finances innovative productive activities and services to microenterprises for employment creation and equitable wealth. The Baltimore Development Corporation's Food Desert Retail Strategy supports food stores and stimulates retail development in neighbourhoods without grocery stores.

ACCESSING LOCAL, PROVINCIAL AND NATIONAL GOVERNMENT FINANCING

Cities receive the largest share of funding from municipal budgets and transfers from provincial or national governments, using different sources to finance various programme components. Belo Horizonte benefited from the decentralized implementation of Brazil's school meals programme, financed by the Ministry of Education in the federal government, with infrastructure and personnel costs covered by the municipal government. Per federal legislation requiring 30 percent of funds to be spent on purchases from small family farms, decentralization generated significant savings as the city increased competitive local sourcing resulting in lower purchase prices and reduced transportation and distribution costs. In Belo Horizonte's 1995 USD 17.8 million food budget managed by SMAB, federal government transfers financed 46 percent (most for school meals), municipal funding contributed 45 percent, and the remaining 9 percent was generated from its restaurant and food basket programme revenues and fixed and mobile market permit fees. The USD 8 million municipal funding represented 1.65 percent of the city's 1995 municipal budget (Coelho et al., 1996). By 1998, municipal food expenditures represented 0.95 percent of the city's budget; programme revenues generated 11 percent of the cities' total food budget.

In Seoul, nine municipal divisions and two agencies of the SMG budget contributed funding to the Seoul Food Master Plan. Similarly, for its school meals programme, budgets of the Seoul Metropolitan Office of Education, the SMG and 25 Autonomous Districts financed 50 percent, 30 percent and 20 percent of programme costs, respectively. A national government matching fund of USD 3.3 million financed construction and management of the school meals management support centre. Financing from several municipal government departments and agencies (e.g. Human Development, Economic Development and Competitiveness, Economic Promotion) has sustained Quito's AGRUPAR programme through four municipal administrations.

ACCESSING PRIVATE CAPITAL

Cities are beginning to mobilize diverse private resources to finance agrifood investments. Building and modernizing essential food infrastructure and financing agrifood businesses to keep pace with urbanization, evolving food systems and consumer food demand will need to access new sources of private capital. Municipal bonds, public-private partnerships, social impact and



sovereign wealth funds, blended finance models and green and climate financing are but a few. Instruments that use different means to capture the increment in land value resulting from public investments used to finance infrastructure projects are equally relevant. Their use requires sustained support and technical assistance.

MOBILIZING RESOURCES TO PAY SALARIES

City-led approaches are challenged in the early days to identify funding sources to finance human resource positions. Mobilizing funding requires an understanding of how government functions, an ability to frame problems and actions to meet funders' interests, the capacity to forge relationships and alliances with diverse public, private and civil society actors, and an agility to navigate complex social and institutional environments. Starting small, using windows of opportunities and generating early wins build success to propel programme development. Regular communication and collaboration with mayor's offices and city councils are important to align interventions to political priorities, budgets and existing programmes.

At the start of **Baltimore's** programme, the city applied for and pooled grants from four funders to finance a government contractor position based in the city's Office of Sustainability, with the Baltimore Community Foundation (BCF) serving as the fiscal agent. Within one year, the director became a city employee and no longer relied on grant funding for salary. This seed funding allowed the nascent food unit to initiate interventions, the successes leading to the establishment of the BFPI with three city-funded positions and two grant-funded employees. BCF's Sustainability Food Fund remains a strong partner for the city, providing support for additional staffing, programmes and policies.

Between 1991 and 1998, the **Toronto** Food Policy Council leveraged USD 220 000 annual joint funding from the city and Province of Ontario to mobilize



more than USD 7 million dollars from other sources for community food projects. Similarly, since 2010, the Toronto Food Strategy has been able to attract funding from charitable foundations and the provincial government for multiple initiatives. With inspiration from the **Vancouver** Food Policy Council, the City of Vancouver funds green initiatives with 50 percent matching funding from the Vancouver Foundation (MacRae and Donahue, 2013). The city of Toronto's Public Health (TPH) funds 50 percent of the director position of the Toronto Food Strategy, with the other half coming from user fees and contributions from other municipal government departments. The provincial Government of Ontario and city of Toronto fund TPH on a 75/25 percent cost-sharing basis.

Case studies suggest the effectiveness of using existing staff/sector specialists in municipal or local government (e.g. decentralized Ministry of Agriculture civil servants in **Nairobi** City County) to design and implement interventions.

CHALLENGES AHEAD

Future successful food work in small towns, secondary cities and counties will require effective fiscal decentralization and enhanced public finance mechanisms that improve revenue collection, expenditure management and intergovernmental transfer systems. Limited payment capacity for basic services, a weak tax base, underdeveloped financial sectors, weak cadaster systems and a large informal sector compound these challenges. Clarity on local government functions and control over financing are also important, whether involving the transfer of power and funding from national to local government (i.e. devolution) or shifting responsibilities but not decision-making power (i.e. deconcentration) (UN-Habitat, 2015; Fjeldstad, 2006; Hobdari et al., 2018; UNDP, 2019; UNCDF, 2016; UNICEF, 2016; Farvacque-Vitkovic and Kopanyi, 2014).

Annex 3 City case studies

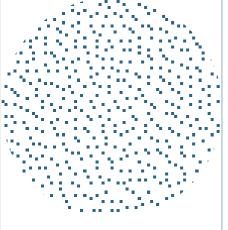
- 1 BALTIMORE, UNITED STATES
- 2 BELO HORIZONTE, BRAZIL
- 3 LIMA, PERU
- 4 MEDELLÍN, COLOMBIA
- 5 NAIROBI, KENYA
- 6 QUITO, ECUADOR
- 7 SEOUL, KOREA
- 8 SHANGHAI, CHINA
- 9 TORONTO, CANADA



Case Study 1 Baltimore, United States

OVEDVIEW

Implementing a comprehensive, coordinated and opportunistic food systems governance approach to address poor health and low access to affordable, nutritious food, informed by rigorous analytics and mapping tools



AT A GLANCE

- City-led governance model
- Food access and insecurity and health inspired initial action and served as entry points.
- Three-tiered approach to governance with: (i) intergovernmental collaboration; (ii) a community organization coalition; and (iii) a resident advisory group. The approach won the city recognition by the Milan Urban Food Policy Pact (MUFPP) in 2016.
- Resident-driven policy with an equity lens: Baltimore intentionally acknowledged and addressed causal links between structural racism and food access, and sought to use an equity lens in developing and implementing policies from a resident-driven perspective.
- Data to drive support and shared vision: Baltimore generated buy-in to the concept of food access through food environment mapping, which highlighted "food deserts" across the city. Maps have been used as policy tools to create a shared understanding of food systems among elected officials.

KEY CHARACTERISTICS

Population (City)
Surface Area
City Type
Location of City Food Unit
Leader
Gross Domestic Product (GDP)
Start as a Food City

593 490 (2019) 238.4 km² (2010) Municipality Department of Planning Elected Mayor USD 205 billion (2019) 2010¹

1 "Start as a Food City" refers to the approximate date when municipal governments, CSOs and private sector actors began to enhance their engagement in food issues. Baltimore has been internationally acknowledged for its progressive and nimble approach to food systems governance (Messner, 2012). Based on analytical evidence, it: moved to address food access and insecurity; hired one of the country's first food policy directors; founded the Baltimore Food Policy Initiative (BFPI); and continued to grow its collaborative structure across government and community organizations. The city exemplifies a comprehensive approach to city food policy and governance to address poor health and low access to food, informed by food systems mapping tools.

INSTITUTIONS AND GOVERNANCE

Baltimore's food programme developed incrementally, using informal processes and the creation of task forces with civil society and municipal departments to mobilize actors and initiate food interventions. In 2009, Baltimore's mayor convened a Food Policy Task Force, comprising the city's health commissioner, director of planning, and other representatives from public agencies, food retail, universities and civil society to identify opportunities to improve Baltimore's dire food situation. The Task Force issued a report with ten goals addressing healthy and sustainable food issues. The city understood that food does not fit solely into one government agency, which led to the creation of a food policy director position in 2010. The full-time position would be responsible for building stakeholders' capacity and fostering interagency collaboration, facilitated in part by the role being based within the Department of Planning's Office of Sustainability. This gave close connection to the Mayor, municipal departments, and the BFPI.

One of the director's first actions was to create the BFPI, an interagency collaboration between the city's Department of Planning, its Office of Sustainability, the Health Department and the Baltimore Development Corporation. Based on a systemic, comprehensive food systems approach, the BFPI functions as a planning and policy shop to identify policy solutions to the city's food challenges through local, state and national policy changes (Freishtat, 2019). It enables frequent interaction on food issues and sustainability of the food agenda. Not long afterward, the Food Policy Action Coalition was formed to provide organizations and institutions regular opportunities to interface with the BFPI. In 2016, the resident food equity advisors were created to bring a greater resident voice to the process. This structure has allowed Baltimore to be flexible and responsive to changing needs and evolve its approach to food systems through broad stakeholder participation.

As a policy shop, the BFPI does considerable work on state and federal policy that will impact Baltimore at the local level. At the state level, this includes advocacy for legislation to allow the city to issue tax credits, ensuring funding for Baltimore City priorities within larger allocations, and inserting food access priorities into larger bills. Federally, Baltimore has helped influence the implementation of programmes like the Supplemental Nutrition Assistance Program and the creation of a pilot project for retailers to accept online payment for food with cash transfers, with Baltimore as one of the first pilot cities.

Baltimore was one of the early signatory cities of the MUFPP and, in 2016, won the MUFPP award for Governance for its three-tiered approach to governance: intergovernmental collaboration; community organization coalition; and resident advisory group. The approach works as follows: The BFPI facilitates interagency collaboration (consisting of five staff members across the three key agencies) to develop strategic partnerships with and provide technical assistance to 15 agencies involved in food systems policies, strategies and programmes. The Food Policy Action Coalition – Baltimore's

version of a food policy council, comprising 60 stakeholder organizations in the Baltimore community – meets quarterly to raise policy issues to the BFPI, solve problems and set agendas. The coalition also serves as a mechanism for networking.

In that same year (2016), Baltimore moved one step closer towards collaborative governance by establishing a 16-member advisory group of resident food equity advisors who serve as community liaisons to bring citizens voices and lived experiences to local policy-making (Quaglia and Geissler, 2018). Advisors are residents who meet regularly with the BFPI, providing voice and ground-truthing to the development policy issues such as corner stores, and food and public housing. The BFPI produces briefing papers to assist their advisors in carrying out their functions, and pays them for their time and expertise. Advisors have opportunities to present their recommendations to city leadership, including the Mayor and city council, and are able and expected to hold the BFPI accountable in the implementation of their work. As a result of the Advisors' Small Food Retail Strategy recommendations, the BFPI was awarded the Healthy Food Priority Area Funds to administer.

APPROACH

Policies and plans

Baltimore effectively used the opportunistic approach at the onset of its food-focused efforts to move beyond traditional food interventions to address critical food problems in the city. For example, Baltimore provides tax incentives to encourage modern supermarkets to expand to neighbourhoods lacking fresh fruit and vegetables. One change that impacted land-use planning was the 2016 update of Baltimore's Zoning Code. This allowed the BFPI to develop a land-use approach to solidify and support urban agriculture, including definitions and use standards for UPA and community-managed open space, which until then had not been included as permitted or conditional uses. Additionally, the Building Code was updated to allow high tunnels, which enabled existing urban farms to scale up significantly and signaled to other farmers that the city was visibly supportive of urban agriculture.

Equity and diverse representation

Since the civil unrest in 2015, the BFPI (and the Department of Planning at large) has taken a much more intentional approach to acknowledge and address the causal links between structural racism and food access and seeks to use an equity lens in developing and implementing policies from a resident-driven perspective. While apolitical framing helped secure virtual agreement of the initial institutional coalition members, this new push towards equity-driven framing has broadened the coalition to include more people-of-colour-led organizations and grassroots efforts.

Baltimore's Sustainability Plan influenced several other plans to address food systems and food access, including a regional transportation plan and the comprehensive plan in Baltimore. Baltimore's Emergency Food Working Group also created a formal food protocol for the City's Emergency Operations Plan. This effort was led by a food resilience planner, who reports to the food policy director and staffs the Emergency Operations Center as a point of contact for food-related emergency response.

After being updated in 2019, Baltimore's Sustainability Plan now includes specific chapters on Food Systems and Urban Agriculture, with chapters aligned to the Sustainable Development Goals. The plan was developed with feedback from over 1000 stakeholders and explicitly asks agencies and implementing organizations to use an equity lens in their work. Tracking the progress of food interventions relies on a strong results framework, reliable baseline data, cost-effective data collection, and timely and widely disseminated progress reports to communicate results to local officials and stakeholders.

Programmes

Programming in Baltimore took a very city/municipal-led, opportunistic approach. Baltimore took actions that would generate "quick wins", establishing a precedent for how to partner, design and implement policy or programme actions, and achieving outcomes that benefit the implementing agency or department as well as the food unit. In this approach, the city food unit uses a food perspective to assess and identify actions that are consistent with the city's emerging food vision. It may seek to identify diverse policy instruments that may be up for renewal, such as permits and procurement contracts, or administrative actions that can be made by the municipal executive. The municipal food unit professionals may also consider actions that can occur on a more regular basis, or could be undertaken more quickly, for which the approval process is relatively shorter and less administratively cumbersome.

Baltimore developed a comprehensive approach using policy and direct programme interventions to support UPA through an Urban Agriculture Plan and the city's sustainability plan. An environmental planner in the Office of Sustainability works with the Department of Housing, Recreation and Parks and Department of Public Works as part of the "Homegrown Baltimore" initiative to increase the production, distribution, sales and consumption of locally grown food within the city. In addition, the initiative has assessed local government-owned land suitable for UPA. Based on suitability criteria on location of land, land size, agronomic characteristics, economic development activity, community issues, and need, the city issued five-year leases (with year-to-year notice to vacate) to qualified farmers for USD 100 per year with no taxes on non-profit farms and changed state policy to provide Urban Farm Tax Credits to for-profit farms. The city also developed a set of soil safety standards and provides access to water for urban farms and gardens at a significantly reduced rate.

Resources and financial sustainability

Baltimore seized opportunities to utilize start-up financing for urban food. One example of this is the BFPI, which grew from one employee (the current director, initially hired as a consultant) to six city-funded positions. One unique aspect of Baltimore's arrangement was the relationship between Baltimore City and the Sustainability Food Fund at BCF, which was established to support the city's food policy work and initially fund a food policy position. Although many funding agencies often have narrowly focused issues for which they provide funding, cities can often frame problems or issues in a way to access diverse sources of funding. Four funders focused on public health, food security and urban development agreed to jointly provide USD 70 000 to initially fund the position as a contractor to city government, with the BCF serving as the fiscal agent. Philanthropy dollars were used to prove the case for the position, with the intention that the position would become city-funded.

Within one year, the director became a city employee and no longer relied on grant funding for salary. The relationship between the city and the Sustainability Food Fund allowed the director to write proposals for additional staffing as well as programme and policy implementation through the city, until those staff were brought in as city-funded positions. This allowed Baltimore to build one of the larger dedicated food policy staffing structures in the United States. In 2019, the City of Baltimore created the Healthy Food Priority Area Funds, which the BFPI uses to support grants to community organizations implementing the Small Food Retail Recommendations, and other projects that support the city's food systems vision.



Details on data

While some cities have approached food access issues through community coalitions pressuring city government or government edicts, Baltimore successfully identified its needs, used available research to drive and inform action, established priorities, and acted expeditiously with a focus on sustainability. In 2008, the Johns Hopkins Center for Livable Future (CLF) developed a food environment mapping tool, and, in 2012, BFPI and CLF jointly released a city food environment map. CLF collects data from government databases, via partnerships with organizations, and through primary collection. The map includes 175 data indicators consisting of the location of supermarkets, food pantries and farms, and the percentage of the population in a region that is food-insecure (Pincus, 2017). In 2015, the BFPI created food environment briefings for each city council district and state legislative district so that policy-makers could understand the full scope of the food environment in their districts, which has resulted in new food policies and increased city funding.



Case Study 2
Belo Horizonte, Brazil

OVERVIEW

Comprehensive approach to addressing food insecurity and malnutrition through multilevel public action, mainstreaming food security into public policy, and robust stakeholder engagement to assure continuity of urban food systems governance

AT A GLANCE

- Hybrid food systems governance model
- Eradicating hunger and fighting poverty as the entry points
- Resource decentralization permitted municipal governments to promote many locally defined and socially progressive programmes previously administered at the federal level.
- Integration of food policies through multiple departments of municipal government
- Continual policy engagement at all levels of government

KEY CHARACTERISTICS

1993

Population
Surface Area
City Type
Location of City Food Unit
Leader

Start as a Food City

2.5 million (2019)
330.9 km² (2010)
Municipality
Municipal Secretariat of Nutrition and Food Security
Elected Mayor
USD 88.3 billion (2016)

Brazil has become the international benchmark for measuring national commitment to food security. Its Zero Hunger strategy, launched in 2003, made eradicating hunger and fighting poverty key objectives on the domestic agenda. The Government adopted a national food security and nutrition policy recognizing the inalienable right of all citizens to sufficient, good-quality food, and implemented the policy with a combination of emergency measures and programmes to redistribute income, boost food production and create employment. Ten years earlier, however, these goals and principles were already embedded in Belo Horizonte's municipal programmes for food and nutrition security. When Belo Horizonte initiated its renowned urban food programme in 1993, 17 years prior to the inclusion of the Right to Food in the Brazilian constitution, the city adopted the principle of food security as a human right, whereby all citizens have the right to an adequate quantity and quality of food throughout their lives, which the Government has a duty to uphold for all citizens. The integration of Belo Horizonte's long-standing municipal food programme complemented by the national Zero Hunger strategy created a hybrid-led model to address issues of food availability.

Belo Horizonte has used an overarching programmatic approach and has successfully integrated food policies in multiple departments of the municipal government. One of the first integrated food security policies to be developed in the world was due to a dedicated food agency within city government. This policy survived for over 25 years through numerous changes in city government. Belo Horizonte's pioneering food policy is generally considered to be an outstanding example of an integrated and place-based approach to food security, and has served as an example for the federal Zero Hunger strategy introduced in 2003. Setting up a specific municipal department (SMAB, later known as SMASAN) that works across and links different traditional municipal departments (education, health, social services, spatial planning) to develop and implement the city-region's food security programme has been a key factor for success. Its lines of action and institutional philosophypublic responsibility for the right to food – have had a major impact on improving the social equity and inclusiveness of Belo Horizonte's food system.

Under the 2006 National Law on Food and Nutrition Security, Brazil developed a National Policy on Food and Nutrition Security, and all levels of government (federal, state, and municipal) were invited to participate in the construction of a National System for Food and Nutrition Security (SISAN). The key to the Belo Horizonte strategy for food security was SMAB, and the main projects include:

- School Meals: After decentralization of the programme, federal funds were transferred to municipal governments, which significantly improved its cost-effectiveness
- Supply Programme (Abastecer): The government allows licensed traders to sell fruit and vegetables in designated areas, on the condition that they offer at least 20 products at fixed, reduced prices.
- Straight from the Countryside and the Harvest Campaign: aimed at facilitating direct interaction between small rural producers and urban consumers.

INSTITUTIONS AND GOVERNANCE

In Belo Horizonte, the decision of the federal government to decentralize implementation or delivery responsibilities to municipal governments pushed the city to intensify its engagement in urban food issues. In 1993, when Belo Horizonte initiated its urban food programme, the municipal government established SMAB to serve as the leader of the city's emerging food programme to reduce food insecurity and to address perceived failures in the conventional food system.

In 1998, SMAB had 135 permanent staff, and another 126 working under contract. Among its technical staff, SMAB employed nutritionists, social workers, food technicians and economists. By creating a separate administrative structure with its own budget, the Government centralized the planning, coordination and execution of all municipal food interventions, thus mainstreaming food security into municipal public policy. This sent a clear signal that food was a municipal priority.

Brazil established a robust vertical coordination mechanism in the context of its innovative policy and institutional framework to improve food security and nutrition. Belo Horizonte's initial efforts in 1993 were supported by the federal government's launch of the Plan against Hunger. In 2006 under the National Law on Food and Nutrition Security, Brazil developed a National Policy on Food and Nutrition Security. The establishment of SISAN was guided by Brazil's visionary commitment to the intersectoral nature of food and nutrition security and to broad CSO participation in policy and programme design, delivery and monitoring.

Belo Horizonte was very efficient and adept at ensuring strong coordination between various government and citizen groups and agencies to address improving food security. Some examples include:

- The Municipal Council of Food and Nutrition Security (COMUSAN), created in 2003, a 24-member advisory board and a vehicle for civil society involvement in SMASAN's programmes. One-third of COMUSAN's members are representatives of municipal departments, while the remaining two-thirds are from the education and research sectors, social movements, consumer groups, the food industry, agricultural workers, and professional organizations, all of whom participate on a voluntary basis. COMUSAN's work in developing, implementing and monitoring programmes is supported by a secretariat of SMASAN staff, which brings a degree of formality and accountability.
- The multisectoral makeup of councils which oversee individual programmes, such as the School Meals Council (CAE). Under federal legislation, CAEs are responsible for monitoring the implementation of the school meals programme at the municipal level. In Belo Horizonte, the CAE has representatives from the Government (appointed by the mayor), from education workers, parents, teachers, and CSOs.
- The Interministerial Chamber for Food and Nutrition Security in Belo Horizonte (CAISAN-BH), an intersectoral (interdepartmental) body created in 2015 in fulfillment of federal requirements under SISAN. It is intended to give other municipal departments a formal role in SMASAN's governance, and to ensure integration and transparency. It is made up of civil servants from SMASAN and the departments of social policies, health, education, social assistance, rights and citizenship, and environment. Under SISAN, CAISAN-BH has a legal obligation to interact with COMUSAN;

this interaction is facilitated by their overlapping memberships. CAISAN-BH is responsible for drawing up the Municipal Policy and Plan for Food and Nutrition Security, which is based on the outcomes of the Municipal Conference on Food and Nutrition Security convened by COMUSAN. Thus, COMUSAN plays a crucial role in ensuring public participation in policy development, so that it is informed by the actual needs and priorities of the people and, as such, has a high degree of legitimacy.

APPROACH

Policies and plans

The city's pioneering Food and Nutrition Security Policy initiated the process and created SMAB – an agency under which all food-related policies and programmes were centralized. This has been SMAB's greatest accomplishment: mainstreaming food security into municipal public policy.

Belo Horizonte's experience, as a mature food programme extending over 25 years, also underscores the importance of continual policy engagement at municipal, provincial and central government levels, whether through new or amended legislation, to address new challenges through the course of programme implementation. In 2003, ten years after the creation of SMAB in Belo Horizonte, the federal government created its Zero Hunger strategy. This strategy re-established the civil society-led National Council for Food Security and initiated work on Brazil's landmark food security policy architecture: passing several federal laws and decrees to establish the Law on Food and Nutrition Security (2006), its Policy and Plan on Food and Nutrition Security, and modifying the Brazilian Constitution to include food as a human right (2010).

Belo Horizonte's efforts to improve food access started with planning that connected food needs to other outcomes: education on healthy food; market regulation to improve the affordability of selected nutritious food products; reduction of the distance between local producers and consumers; communal restaurants offering affordable, nutritious meals; agriculture diversification and job creation; and food banks for food loss and waste management.

It should also be noted that, from 2009 to 2011, Belo Horizonte's City Council approved a law to include UPA as an accepted form of nonresidential land use, with subsequent revision of the city's UPA policy.

Projects and programmes

National policy and politics were strong drivers of urban food programmes. The launch and implementation of Belo Horizonte's urban food programme in 1993 coincided with the federal government's unveiling of the Plan Against Hunger. Based on the principles of solidarity, partnership and decentralization, which were also incorporated into Belo Horizonte's programmes, the federal government programmes represented a response to the popular citizen mobilization under the "Citizens' Action Campaign against Hunger and for Life" and the political pressures and specific proposals made by Brazil's Workers' Party (and other parties on the centre-left).

Programme implementation in Belo Horizonte was also facilitated by resource decentralization established under Brazil's 1988 new Constitution. This permitted municipal governments to promote many locally defined, socially progressive programmes (previously administered at the federal level), particularly the school meals programme financed by the federal government



but administered at significantly lower cost by the municipal government with political support from local food suppliers.

The 2011 Integrated Metropolitan Policy of Food and Nutrition Security in Belo Horizonte translated the city's commitment to the human right to adequate food into five programmes that address the conditions underlying this commitment; namely, that the focus remain on distribution and consumption across the urban-rural continuum. The five programmes worked to:

- support family agriculture
- offer quality food at affordable prices
- eradicate hunger and malnutrition
- · promote local food consumption and urban agriculture
- promote the quality of life in rural areas

Belo Horizonte had a unique overarching philosophy to its programmatic approach. The city's innovative food security policy and programme that originated in the 1990s, managed by SMASAN, catalysed an integrated thinking of the food system. The policy and programme steered away from a compartmentalized approach such as addressing "food for hungry students" in a department of education, or "food for needy people" in a department of social assistance, or "food for consumers" in a department of commerce, or "food from family farmers" in a department of agriculture. Rather, it integrated all food systems aspects, components and purposes under three parallel and interconnected programmes:

- supplementary food assistance to food-insecure households
- equitable food access by regulating the price of healthy staples and linking the private sector to areas with poor food access
- provision of technical and financial incentives to local and small-scale food producers for intra- and peri-urban production.

Its strategy was to partner with other city departments in implementing its programmes and in accessing its target public. In 2004, after the advent of Brazil's Zero Hunger strategy, it partnered with the federal government to expand its programmes.

Utilizing public procurement

Belo Horizonte addressed food systems failures through public food procurement which was carried out in partnership with private sector actors. Fixed and mobile private food suppliers would sell nutritious food at negotiated prices to areas of the city previously neglected by commercial outlets; as part of the deal, the private food firms could operate in more profitable, central locations during other times of the week. Education was a theme running through all project interventions, helping to maintain the continuity and sustainability of the programme. Public education campaigns addressed nutrition and good eating habits as well as food safety, handling and presentation, environmental sustainability and food security as a human right.

Belo Horizonte sought to address food security and provision of nutritious food through programmes that directly link producer and consumer, thereby providing producers with opportunities to earn higher incomes and consumers with improved access to affordable, high-quality food items. Through the "Straight from the Countryside" programme, rural producers selected through a public process are assigned fixed sale points throughout the city at which they can sell their products. In 1999, 36 rural producers from ten municipalities around Belo Horizonte participated in these programmes, offering a variety of fresh leaf vegetables, roots and fruit at lower prices than

BUILDING LEGITIMACY

Belo Horizonte had to overcome public perception of government services as corrupt, low-quality and inefficient. Effective programme delivery to improve access to affordable, nutritious food depended on motivated, accountable and competent staff to implement interventions. Belo Horizonte's experience also highlights the importance of technically and administratively competent and experienced staff with motivation and initiative. The ideological motivation and political dedication of SMAB's civil servants also contributed positively to the outcomes.

In addition, there was a determination and a pride among staff to prove that the local government could deliver quality programmes for the poor in a transparent, non-corrupt fashion. This goal required attention to detail to maintain high nutritional standards, cleanliness and safe food, which were hallmarks of the programme. These characteristics allowed a small but dedicated staff to implement a programme that helped the city to achieve tremendous gains in improved food security in just a few years.

in other outlets. Through programmes such as "Straight from the Countryside" and support for farmers' markets throughout the city, Belo Horizonte became the only major Brazilian city in which fresh fruit and vegetable marketing through alternative stores largely surpassed the volumes marketed through supermarkets. Urban consumers improved access to affordable, quality fresh fruit and vegetables while low-income rural producers gained a market, contributing to reduced migration to urban slums.

The City Supplies Centre is a fixed market covering an area of 10 000 square metres, where farm producers trade 40 000 tons of horticultural commodities per year, through both retail and wholesale transactions. The Municipal Secretariat for Food Supply also initiated a "Green Basket" programme under which it served as an intermediary between hospitals, restaurants and other institutional customers willing to buy vegetables and fruit directly from small rural producers.

Multistakeholder engagement

In the early days of Belo Horizonte's food programme, the Citizens' Action Campaign against Hunger and for Life was created to mobilize people to assume their citizens' rights and fight malnutrition and poverty in the country. It was a resounding success, in part due to the efforts of one of its creators and most visible campaigners, Herbet de Souza (Betinho), who was voted the most admired Brazilian in a national survey (even ahead of Pelé of soccer renown). Capitalizing on citizens' eagerness to push for policies with high ethical values, after many years under authoritarian regimes, the citizenship campaign provided an opportunity to mobilize people from all classes towards a common cause. The support of Brazil's powerful middle classes for food security issues gave an extra boost for political action in that direction.

Widespread "ownership" and partnership ensured the sustainability of service provision in Belo Horizonte. Among SMAB's main partners were other government departments (especially Public Health, Education, and Environment), the private sector (small farmers, food manufacturers and store operators), NGOs (the Citizens' Action Campaign, the Network for Exchange in Alternative Technologies and others), philanthropic groups (running day-

DECENTRALIZING SOCIAL PROTECTION FOOD PROGRAMMES

Decentralization benefited some social programmes previously administered at the federal level. This is especially evident in the school meals programme financed by the federal government but administered locally by SMAB. Such decentralization allowed for significant savings (e.g. in transportation costs and bulk food purchases) and enabled the programme to support local suppliers. The school meals programme has been in place in Brazil since 1954 under the Ministry of Education. In 2017, the programme served 40 million meals to 155 000 students in 218 public schools in Belo Horizonte. Federal funding per child/day is about USD 0.09 for food. The municipal government covers all other costs, such as infrastructure and personnel. The

Municipal Secretariat for Food Supply increased the number of its potential suppliers for the programme to obtain competitively lower prices on its purchases. As much as possible, suppliers were recruited among local producers and businesses, significantly reducing transportation and distribution costs (with a bonus of providing greater incentives to the local economy). Federal innovative public food procurement legislation requires 30 percent of funds to be spent on purchases from small family farms. Partnership with the federal government, such as the one in the school meals programme, promotes cost- effectiveness, lowering the overall cost of SMAB and all its programmes to less than 2 percent of municipal budget.



care centres, community centres and nursing homes), community associations and the University of Minas Gerais (which collected the data for SMAB's Basic Monthly Ration). Such a widespread and strong partnership network was a key factor in guaranteeing the continuity of SMAB's programmes. By 2000, SMAB had survived two government transitions, and its programmes were not seen as "pet projects" of a given political party or local personalities. Although their administration was under SMAB's responsibility, they were "owned" by many different local groups and institutions.

Details on data

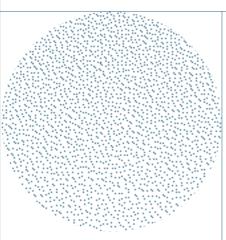
Belo Horizonte developed local partnerships to analyse data and improve urban food knowledge. The University of Minas Gerais helped with data collection for SMAB's Basic Monthly Ration. Twice a week, SMAB published the prices of 45 basic household consumption items (36 food items, 5 personal hygiene products, and 4 household cleaners) found in 40 commercial establishments (supermarkets) in the city. The lists compiled by researchers at the university were distributed to newspapers and posted in bus stops throughout the metropolitan area. The information was also accessible by phone or via internet. The intent of this initiative was to inform consumers and guide them on where to find basic products at the lowest prices, thus increasing competition among commercial establishments.



Case Study 3 Lima, Peru

OVERVIEW

Harmonization of national and local policies for UPA as part of a holistic food security and resilience strategy, with international organizations playing an important role in supporting public, private sector and CSO actors to discuss and prioritize actions in diverse areas (e.g. markets, climate).



AT A GLANCE

- Nationally led food systems governance model
- Food security and overcoming malnutrition as the entry points
- Policies at the city level aligned with the National Food Security Strategy for Peru: The legal framework includes city-level policies which align with the National Food Security Strategy.
- Raising awareness and opening discourse among various stakeholders: Presenting issues from different scales or dimensions of the food system and broadening the knowledge of actors in other disciplines who were not aware helped encourage more informed practices.
- Involvement of many international organizations and alignment with national food security policies were beneficial.

KEY

CHARACTERISTICS

Population (City)
Surface Area
City Type
Location of City Food Unit

8.9 million (2017) 800 km^2

Municipality

Function of Issues - Departments of Economic Management

and Social Development

Leader GDP Elected Mayor USD 19.98 billion

Start as a Food City

2012

The impetus for food systems policy in Lima has many factors. Recent impacts of severe weather, earthquakes and drought have brought sustainability of food systems and food security to the spotlight in Lima. Recent climate events, like El Niño, and climate changes have highlighted weaknesses in the way Lima's food system works, with shortages or problems in logistics for food distribution. Socially speaking, these environmental factors have implications on livelihoods, food provisioning, and overall participation, with efforts to improve food distribution/access. However, environmental factors and their social implications are not the only impetus for addressing food systems in Lima. The city has also been motivated by the goals of overcoming poverty and reducing levels of malnutrition. These goals are part of key strategies at the national level.

Having multiple entry points to food systems issues creates a very complex scenario and has assisted in progressively raising awareness and public concern on the issue of food security. Over time, it became evident that the understanding of food systems was limited. Under the leadership of the City of Lima's Economic Development Management Department, a comprehensive approach to food systems governance was launched. A multi-actor platform and core group were created to prioritize actions and coordinate programmes. Nearby rural jurisdictions and rural organizations were included in the planning of programmes to protect valuable farmland and plan new markets and short supply chains. The legal framework includes city-level policies which align with the National Food Security Strategy for Peru.

INSTITUTIONS AND GOVERNANCE

Policies, projects and food standards of the Municipality of Lima respond to the national plans and the regulations and policies dictated by the national government. In 2002, a Multisectoral Commission on Food Security was created to formulate the National Food Security Strategy. As the regulatory and supervisory body of the municipality, the City Council passes bills and turns them into ordinances. The Platform for Urban Agriculture, Environmental Committee of Municipality and Roundtable for Poverty Reduction serve as dialogue mechanisms, creating space for certain agenda items to be discussed and inform final decision-making.

APPROACH

Aligning with national programmes and legislation

National legislation provides the framework and context for Lima's engagement on food issues. These include the following:

- The National Food Assistance Programme (PRONAA) was created in 1992 to provide free food to school children. PRONAA established different modalities of food aid which were grouped together under the Food Supplement Programme.
- The **Articulado Nutrition Programme** was created in 2009 to reduce chronic malnutrition in children under five years of age.
- The National School Feeding Programme "Qali Warma" was created in 2012 as part of the Ministry of Development and Social Inclusion and provides food to children in public education institutions.
- The National Food Security Strategy 2012–2021 and the Organic Law of Municipalities (Law No. 27972) give greater powers and functions to municipalities on food issues and provide a foundation for Lima's adoption of the 2012 Ordinance 1629 on UPA as a strategy of environmental stewardship, food security, social inclusion and local economic development in the Province of Lima.



The national programmes put in place and described above provided a strong framework for Lima to develop its food sustainability programme. Peru's nationally administered PRONAA is implemented through its Food Supplement Programme, whose implementation was transferred to cities in 2009. Similarly, Peru's National School Feeding Program (Qali Warma) for primary school children is delivered by territorial units under regional divisions and coordinated by local stakeholders in compliance with national provisions through local Purchase and School Feeding Committees.

Policies and plans

In 2011, Lima's mayor incorporated UPA as part of a strategic vision that attempted to establish the foundations of a new urban development model and position it in urban plans as a land-use category. In 2012, the Mayor's Office recognized the importance of growing food in the city for socio-economic development and improved diets of the poorest citizens. This political support and vision of a new urban development model led to the modification of land-use ordinances.

As part of Lima's overall strategic vision of sustainable urban development, the municipality approved the Metropolitan Environmental Policy via Ordinance No. 1629. This ordinance serves as an incentive mechanism for: (i) investment in UPA on rooftops, walls, schools, homes and productive green areas on available private and municipal property; and (ii) support for other initiatives relating to the treatment and reuse of solid and liquid waste for urban farming. Ordinance No. 1629 defines UPA and agricultural practices to produce food and non-food plants, and procedures to raise small livestock in compliance with animal health laws and zoning laws. It aims to safely produce and sell food products and animal feed (Municipality of Metropolitan Lima, 2017).

The Metropolitan Environmental Agenda approved through Municipal Ordinance No. 1640 incorporated UPA among its objectives to protect urban valleys that provide environmental services to the city and the conservation and increase of productive green areas through urban farming on sustainable plots. In addition, the Plan for Concerted Development (2012-15) incorporated UPA in urban planning instruments. This latter plan set strategic goals such as green area per capita, protecting and maintaining agricultural valleys in the south, and promoting the incorporation of urban agriculture into green areas and urban public spaces as a strategy to improve the quality of life of the population of Lima Province (Cabannes and Marocchino, 2018).

Projects and programmes

Lima's programming approach stems from traditional approaches of national-led development actions. In addition to budgetary support, the national government provides staff training programmes and technical assistance to local government on agrifood issues. The Directorate General of Environmental Health in the Ministry of Health provides capacity building programmes on surveillance and food safety control.

One of the internationally supported projects which has contributed to Lima's efforts to address urban food systems issues is the NADHALI project ("Developing Sustainable Food Systems for Urban Areas: Piloting a Holistic Approach in NAirobi (Kenya), DHAka (Bangladesh), and LIma (Peru)"). The NADHALI project supports the development of key institutional building blocks: a vision; support from the municipal and national ministries; broad stakeholder engagement; and a forward-looking plan. Within this context, the project's most important contributions have been to open spaces of dialogue and discussion, presenting issues from different scales or dimensions of the

food system and broadening the knowledge of actors in other dimensions who were unaware of food systems issues.

Multistakeholder engagement

In the interplay between various interest groups and actors, social, political, and economic conflicts between actors participating directly in food production, access and use, can create conflicting responses when facing different environmental and social food systems challenges.

Food system stakeholders participate in dialogue and decision-making through diverse fora. The CSO-led urban agriculture platform provides a space for dialogue between 60 producer organizations, food system CSOs and universities on issues related to UPA. The Municipal Government of Lima consults with food system actors through diverse committees, including the city's Environmental Committee of Municipality and the Roundtable for Poverty Reduction.

Under the NADHALI project, FAO established an informal group of CSO and private sector actors to advise the project on urban food issues. Building on this informal experience, a counselor in the Municipality of Lima established another group, with many of the same members, to advise the city on food systems policies and educational communication on diverse food systems issues.

The ability of Lima to engage with international organizations, align with national programmes and utilize a multistakeholder platform in discussions have been key. There is great value in intersectoral dialogue. What is important to a ministry representative such as the current crisis on markets may be quite different to the agenda of civil society representatives. Bringing these actors together helps to open the dialogue and negotiate issues such as food justice and planning for food spaces in cities.

Details on data

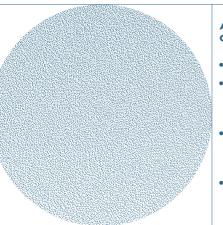
The city collaborated with FAO and the University of Lima to carry out a Rapid Urban Food Systems Appraisal. Based on FAO's Rapid Urban Food Systems Appraisal Tool (RUFSAT), which combines value chain, territorial and geospatial analysis, the appraisal results highlighted several food systems challenges: high logistics and transport costs due to inadequate coordination in food market functions; minimal knowledge of food safety among food systems actors; a high prevalence of poor nutrition and obesity in various districts of Lima stemming from consumption habits; and socio-economic inequality between rural and urban actors. The appraisal highlighted the emerging set of informal and formal actors active in Lima's dynamic food culture (Lazarte and Méndez, 2018). Appraisal results contributed to the development of Lima's Food Charter and underpin the city's ongoing programmatic, policy and governance work on food issues. Inspired by the results of the RUFSAT assessment, the city also developed a virtual, user-friendly interactive tool that allows open access to food data, maps and results. This tool has helped CSO to freely access and use information for their work on urban food issues.



Case Study 4 Medellín, Colombia

OVERVIEW

Institutionalization of food security as a public policy, establishment of a dedicated municipal food security unit, and strengthening of rural-urban linkages for food security through an inter-institutional taskforce



AT A GLANCE

- Food security and nutrition as the entry point
- Strong city-led policies focusing on food security and nutrition were developed with an emphasis on local food sourcing. Strong mayors supported commitments.
- Multistakeholder involvement: Medellín had a clear vision as to the importance of enabling different actors/groups to come together to resolve problems of food security.
- Institutional integration was partly facilitated by external organizations (e.g. FAO) but also through Medellín's comprehensive public policies.

KEY CHARACTERISTICS

Population (Municipality)
Surface Area
City Type
Location of City Food Unit
Leader
GDP
Start as a Food City

2.4 million (2019) 381 km² (2014) Municipality Food Security Unit Elected Mayor USD 33 billion (2018) 2009 Medellín's engagement in urban food issues stemmed from a number of factors:

- Prolonged civil conflict
- The needs of the urban poor, including a large number of refugees who migrated to Medellín and the surrounding Province of Antioquia
- The challenge for Medellín and its metropolitan area, (Aburrá Valley) to reduce inequalities between urban, peri-urban and rural areas
- Highly fragmented and uncoordinated territorial planning and inefficient food supply flows.

As a result of these factors, the Aburrá Valley and the Antioquia region are highly dependent on external food provisioning and are thus prone to disruptions, increased transport costs, inefficiency, and ultimately higher prices for consumers (Dubbeling et al., 2017). Even though 70 percent of its territory is rural, the Aburrá Valley imports 76 percent of its food consumption needs. There was recognition that local government had to step up to take responsibility and leadership in addressing these issues.

INSTITUTIONS AND GOVERNANCE

Medellín is the first city in Colombia with a dedicated Food and Nutrition Security Unit. Created in 2009, it has an annual investment of approximately USD 45 million. The role of the municipal authorities in public policy on food and nutritional security has been growing – the Government of Antioquia also institutionalized the issue of food security and nutrition as public policy in 2003 through the Management of Food Security and Nutrition programme (FAO, 2016). Furthermore, three consecutive mayors supported the city's commitment to participatory development and social inclusion. Additionally, numerous municipal officials and civil society actors were influenced by the concept of "social urbanism", which articulates a vision of urban transformation, social inclusion, and equality to address the root causes of poverty, violence and economic decline.

Medellín's efforts began with the construction of comprehensive public policies that facilitated collaboration between each of the Antioquia government institutions. This enabled supportive actions to be combined to stimulate local economies and overcome determinants of food supply and demand which would otherwise not be possible and would not allow for equitable food distribution.

To this end, FAO and the Resource Centres on Urban Agriculture and Food Security (RUAF) facilitated institutional integration between the Government of Antioquia, the Medellín Mayor's Office, and local governments in the metropolitan area by creating an inter-institutional task force *Alianza por el Buen Vivir* (Good Living Alliance). In bringing together entities responsible for designing and implementing plans, programmes and projects that strengthen rural-urban linkages, the task force aims to generate political, administrative and economic synergies that facilitate the implementation of actions in the city-region.

APPROACHES

Policies and plans

It should be noted that political will to promote a process of territorial integration between city and rural areas has been constant over the last few decades in Medellín. This has led to the creation of the Metropolitan Area of the Aburrá Valley in 1980 under Law 3104 of 1979, and subsequently the formulation of

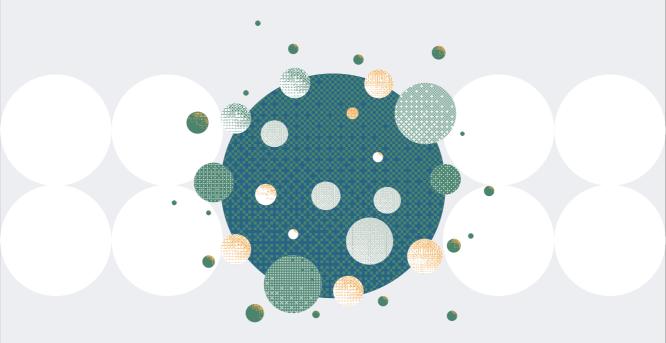




the Plan for Metropolitan Development, established in 1985, to address the increasing interdependence between Aburrá Valley and the rest of the region. The "Public Policy on Food and Nutrition Security and Sovereignty" programme, created by the Council of Medellín in 2005, laid the groundwork for the creation of the inclusive and participatory Food Security Unit that has further developed different action plans and launched specific programmes targeting vulnerable families, children and the elderly.

The policy of the Government of Antioquia is aligned with the National Food and Nutrition Security Policy prepared by the National Council for Social and Economic Policy (CONPES) in 2008 (CONPES 2008). In recent years, the city of Medellín has led public policy processes focusing on food security and nutrition as a pillar of territorial development where the regional and territorial food system is key to supply the population with sufficient food.

Medellín and the Antioquia Province have taken a leading role in Colombia by pioneering solutions to eradicate hunger and chronic malnutrition and creating conditions of food self-sufficiency in the region. In this context, the city has launched an ambitious Plan for Food and Nutrition Security for the period 2016–2028, to ensure a hunger-free and food-sovereign city. As food availability and supply play a strategic and central role in the Plan to meet city food needs, the understanding of the food system in the rural-urban continuum has become a priority, especially to identify strategies of territorial planning to: (i) facilitate the cooperation, coordination and integration between producers and local markets; and (ii) build a more equitable and functional relationship between rural and urban populations.



CREATIVITY TO ADDRESS COVID-19: ALTERNATIVE SUPPLY CHAINS

Through the various city-region food systems, tools have been created to consolidate marketing circuits and proximity markets in order to generate greater connectivity between food production and consumption. This creates a supply alternative where groups of food vendors are created in popular neighbourhoods of the city supplied through the municipal programme of urban and peri-urban gardens, called Huertas para el Abastecimiento (Orchards for Food Supply). During the first two weeks of compulsory quarantine (beginning 25 March 2020) in response to the COVID-19 pandemic, the programme helped mobilize 20 tons of food. Overall, the programme generates income for producers, lowers the costs of supplying vendors, and ensures a secure channel of food supply. In addition, the City Council is very active in strengthening food distribution channels, including supporting farmers with transportation services. Through the support from the local authorities to connect local producers and private companies, more than 7 tons of food from neighbouring rural communes were distributed. In addition, the authorities also facilitated the supply of food from local producers to popular canteens to benefit the most vulnerable populations in Medellín.

In parallel, some citizens and farmers are keeping the agricultural economy alive by creating local distribution channels and networks, through WhatsApp or other social media to supply local markets within the same neighbourhood and commune with fresh fruits and vegetables. Many small farmers are becoming visible and reachable by consumers who used to prefer large supermarkets. Other citizens have been active in promoting other initiatives such as "Compra Local" (Buy Local), a digital platform that allows producers to supply "Farmers' Markets" online. On its first day. the platform had 12 000 visits and reached 120 farmers' markets; during the first three days, 8.2 tons of food from local producers were sold.

In the midst of the COVID-19 crisis, the territorial perspective and the concept of city-region food systems, recently included in the city's food and nutrition security programmes, are significantly contributing to the city's crisis response. Interventions address supply chain disruptions by connecting Medellin's food system actors and identifying and creating alternative supply chains that complement government action and allow territorial integration.

More recently, the Government of Antioquia presented the Dozenal Plan for Food Security 2020-2031. This plan allows for territorial planning and seeks to guarantee progressively stable, safe, sustainable food and nutritional security in the Antioquia. It defines six key strategies affecting: (i) governance; (ii) sustainable food production; (iii) sustainable food distribution; (iv) healthy and sustainable food environments; (v) social protection to guarantee the human right to healthy food; and (vi) science and technology for the food system.

Innovative programmes

One of the first concrete programmes developed by the city of Medellín to address food systems was the City-Region Food Systems Programme, led by FAO and RUAF from 2015 to 2018. The programme defined the city-region food system as a geographical space where the greatest number of social, environmental and economic interactions occur – supplying the city-region with about 30 percent of its required food. The knowledge generated around the city-region allows local institutions to proceed wisely, quickly and effectively during times of crisis (including pandemics like COVID-19) through evidence-based decisions in relation to food, while avoiding any deepening of social problems.

Overall, attention in Medellín has been placed on transformative investments to improve the quality of life, connectivity and opportunities for those living in informal settlements located in the urban periphery. Medellín has focused on prioritizing actions that respond to the needs of the lowest-income citizens and neighborhoods, for which investment in public infrastructure (e.g. library, transport) would serve to catalyse additional investment in surrounding areas as well as contribute to social engagement.

Land use

National Law 388 impelled municipalities to develop land-use plans to respond to local needs. Conforming to the provisions of this Law, Medellín adopted Agreement 46 of the 2006 Municipality of Medellín Territorial Management Plan. This agreement provides a regional vision, policies, projects and programmes aiming at harmonious and coordinated metropolitan, subregional and regional development. It ensures that traditional agriculture is preserved, land is not fragmented, rural sanitation is improved, and organic agriculture, reforestation and ecotourism are promoted.

In 2010, Medellín adopted a novel approach to manage and conserve biodiversity, launching the first local action plan on urban biodiversity in the country. With USD 250,000 in city funds and USD 200,000 in in-kind partner contributions, Medellín and a broad coalition of scientific and CSO partners carried out an innovative biodiversity assessment. The assessment identified: (i) 4 478 plant, insect and animal species and their functional uses in food, trade and medicine; (ii) the most crucial ecosystem services for Medellín's residents (e.g. regulating water supplies; pollinating plants; leisure and recreation; food production; pollution control); (iii) stakeholder perceptions of ecosystem services and linkages with biodiversity; and (iv) 180 constraints limiting effective and integrated biodiversity management. The city and partners used this information as the basis for a local action plan to promote biodiversity conservation and a comprehensive valuation of ecosystem services. The assessment report was also adopted as a public policy through a city commissioner's agreement in 2014, committing the city to invest annually in the comprehensive management of biodiversity and its ecosystem services. Results also supported the formulation of Medellin's Land Management Plan (Mejia and Echeverri, 2018).

Multistakeholder and institutional involvement

Over the last decades, Medellín has used diverse food-related, social protection measures and productive investments in UPA to improve food security for the over 300 000 people in the city who have been displaced by Colombia's protracted civil conflict. Medellín's Urban Development Corporation (EDU) and Department for Social Inclusion and Family have designed and implemented many interventions in collaboration with CSOs and the private sector. The EDU is the city's economic development corporation responsible for delivering infrastructure investments. The EDU's infrastructure and food security projects are funded from profits of Medellín's city-owned utility (gas/water/electricity) company. Working primarily in Medellín's low-income areas in the urban periphery, the EDU has financed eco-garden projects, implemented in conjunction with Medellín's green belt initiatives in the surrounding hillsides. These projects support single mothers with access to land and training for UPA. The Department for Social Inclusion and Family also funded gardens for vulnerable families and provided a monthly pack of coupons for them to spend on fresh food at the local market (Baker and de Zeeuw, 2015). Food banks and community restaurants have also played important roles in addressing food insecurity in the city.

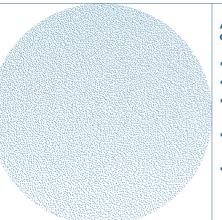
Medellín has collaborated extensively with the Department of Antioquia (for which it is the capital). Both the local government (Departmental Assembly of Antioquia) and national ministries have collaborated with the municipal government of Medellín to upgrade land-use plans to support UPA (e.g. establishing supra-municipal agrarian districts to protect urban and peri-urban land for agriculture and rural development). More recently, under the *Alianza por el Buen Vivir* (Good Living Alliance), the Mayor's Office, the local government of Antioquia and the metropolitan area of Valle de Aburra, with support from FAO, have initiated interventions to address food market failures (e.g. high costs, poor information, unfair competition and negative environmental impacts), improve inclusive growth and competitiveness, and support producer associations and other food system actors to enhance investment and economies of scale (CFS, 2016).



Case Study 5 Nairobi, Kenya

OVEDVIEW

Comprehensive institutional and regulatory framework for UPA as a food security strategy and multilevel urban food systems governance - harmonization of UPA policy between county and national governments



AT A GLANCE

- Nationally led food systems governance model
- · Food insecurity as the entry point
- Regulatory Acts, strongly linked with national policy, helped drive efforts to ensure food security through UPA.
- Although driven nationally, both vertical and horizontal governance are used for implementation to ensure stakeholder engagement.
- Support from international organizations has enabled Nairobi to further its multistakeholder engagement in urban food issues.

KEY CHARACTERISTICS

Population (City-County)
Surface Area
City Type
Location of City Food Unit
Leader
GDP

Start as a Food City

4.4 million (2019)
696 km² (2019)
City-County
Department of Agriculture
Elected Governor
USD 34.2 billion (2019)
2015

The overarching national context of food insecurity strongly drove urban food systems governance in Nairobi. Chronic food insecurity was a significant problem throughout Kenya, including Nairobi. After initial government resistance to UPA on food-safety grounds, strong multistakeholder engagement, facilitated by the Mazingira Institute, helped to ensure that urban and periurban food production emerged as part of the solution for the provision of healthy food to the city's most vulnerable communities. Nairobi's involvement in food issues was and is also linked to: the country's development of Vision 2030; devolution acts stemming from the 2010 Constitution of Kenya; urbanization regulatory frameworks; and the efforts of the Ministry of Agriculture to articulate food interventions at the county and city levels. Nairobi demonstrates how a comprehensive regulatory framework can support urban agriculture, with related multilevel coordination and harmonization of regulations and policies between county and national governments.

INSTITUTIONS AND GOVERNANCE

The 2015 Nairobi City Urban Agriculture Promotion and Regulation Act, which established the regulatory framework under which urban agriculture in Nairobi could be practised, resulted in the creation of the Nairobi City County Urban Agriculture Promotion Advisory Board to oversee legal compliance. The Board consists of a chairperson, secretary and four other members. It works with an Executive Committee Member from the Nairobi City County Government and is responsible for developing programmes to promote and regulate development of Nairobi's UPA.

Nairobi includes a blend of horizontal and vertical governance. Horizontally, the city county government is tasked with coordinating sector working groups and other interested stakeholders, including the Department of Public Health in the Ministry of Health, responsible for enforcement of the Public Health Act (Cap 242), which ensures adherence to sanitation and hygiene standards in both rural and urban areas. The Nairobi City County Urban Agriculture Promotion Advisory Board was legally established through the Nairobi City County Agriculture Promotions Act of 2015 and is comprised of four civil society and private sector members knowledgeable of urban planning, agriculture, public health and economics. The Board advises city county government on the goals for and promotion of urban agriculture, livestock and fisheries.

Vertically, Kenya's 2011 National Food Security and Nutrition Policy (NFSNP) and 2014 Food Security Bill (approved by the Senate) provided the country's overarching food framework to achieve food and nutrition security. To harmonize inter-agency efforts and minimize conflicts and redundancy, the NFSNP established the national Food Security Authority and the County Food Security Committees with oversight provided by the National Food and Nutrition Security Steering Committee. The 2014 Food Security Bill created the Food and Nutrition Security Secretariat (supported by Stakeholder Technical Committees) to coordinate the implementation of NFSNP strategies centered on emergencies, nutrition, food availability and access, food safety and food quality.



APPROACH

Policies and plans

Nairobi's food policies were influenced by national policies, through the application and implementation of national laws and regulations. As a result of devolution of agriculture, livestock and fisheries production to county governments in Kenya, Nairobi developed policy to promote UPA. Harmonization of policy between local, county and national governments was essential for addressing urban and rural challenges.

The 2015 Nairobi City County Agriculture Promotion and Regulation Act is underpinned by the following pieces of national legislation: Article 43 of Kenya's 2010 Constitution, which guarantees Kenyans' RtF; Kenya's Vision 2030, which includes urban food security as a key priority for the country due to the growing urban population; Kenya's 2011 National Food Security and Nutrition Policy; the 2014 Food Security Bill; and the 2011 Urban Areas and Cities Areas Act, under which the County Integrated Development Programmes and the Nairobi Integrated Urban Development Master Plan 2014-2030 were developed. Kenya's 2011 Urban Areas and Cities Act, enacted to address the diversity of development needs in urban and rural parts of counties, recognized UPA as a critical component of integrated urban planning. The subsequent approval of the Nairobi City County Agriculture Promotion Regulation Act in 2015, providing a comprehensive regulatory framework for UPA, regulated access to land and water, prioritizing access for residents of high-density and informal settlements. It also foresaw the incorporation of UPA in the planning process as a component of land-use and food policies, zoning, marketing and associated infrastructure. UPA has been also incorporated into the Master Plan and the Strategic Plan 2015-2025.

Nairobi's land-use planning is grounded in successive Master Plans developed in 1927, 1948, 1973 and 2014, the latter providing an integrated guiding framework to manage urban development in Nairobi from 2014 to 2030 in support of Kenya's overarching development goals espoused in Kenya Vision 2030, which includes food safety and security among the priority strategies and actions to contribute to the goals of enhanced quality of life and inclusiveness.

Programmes and projects

Programmes to promote UPA have involved efforts to ensure: (i) training and capacity-building in sustainable crop cultivation and livestock-raising; (ii) collaboration between relevant stakeholders in managing organic waste; (iii) production of quality aquaculture; (iv) monitoring and regulation of UPA in accordance with the relevant legislation; (v) hygiene and sanitation in the handling and treatment of agricultural products; (vi) collection and maintenance of data on UPA activities and programmes; (vii) development of UPA infrastructure; and (viii) animal welfare standards, product identification and traceability systems (Hunter College and New York City Food Policy Center, 2018).

Multistakeholder engagement

The Nairobi and Environs Food Security, Agriculture and Livestock Forum is a multisectoral platform and network initiative for collaboration among food system actors including smallholder producers, and formal and informal food vendors (Levenston, 2020). Initially founded by the Mazingira Institute in 2003 as a space for knowledge exchange on UPA and livestock, the forum has

contributed to the establishment of a farmers' network and has developed partnerships with other CSOs.

While a myriad of civil organizations are emerging to drive capacity-building and advocacy on urban food systems in Nairobi, other efforts have become operational thanks to the implementation of programmes or projects that target one or more components within urban food systems. For instance, in 2013, Oxfam Great Britain and Concern Worldwide initiated the creation of a Food Vendors' Association, which was launched in four low-income settlements in Mathare, Huruma, Mukuru and Kibera in Nairobi. The purpose was to enhance distribution of food in the low-income sections of the city. There were around 700 association members, including women selling vegetables and cooked foods, butchers, *kiosk* owners and livestock keepers. Members were organized into local groups that jointly buy products as well as participate in savings schemes. Under the NADHALI project, a participatory food systems governance mechanism – the Food Liaison Advisory Group – was developed and used in Nairobi to serve as a multistakeholder platform that collectively represents the voices of the various food systems actors.

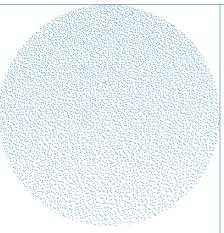
To coordinate multistakeholder engagement both horizontally and vertically, different mechanisms were established. A horizontal coordination mechanism was developed for all public, private and civil society stakeholders in Nairobi County through the Nairobi Food Security Technical Committee, in collaboration with the Nairobi County Urban Agriculture Promotions Advisory Board. Vertical coordination, in contrast, takes place between the county and the national government (and other counties) through the County Food Security Committee. These mechanisms build on existing collaboration, such as between the departments of agriculture and health, which collaborate in the enforcement of hygienic and sanitary standards for quality and safe food (e.g. Public Health Act (Cap 242)).



Case Study 6 Quito, Ecuador

OVERVIEW

Informal processes and task forces with civil society, municipal departments and the private sector (with international partner support) to incrementally plan and implement interventions centered on UPA and livelihoods, subsequently institutionalized and brought to scale



AT A **GLANCE**

- Hybrid food systems governance model
- Building food resilience as the entry point
- Flagship programme development of a participatory urban agriculture project
- Spontaneous approach using informal processes/task forces to mobilize actors and initiate interventions
- Continual policy engagement at all levels of government

CHARACTERISTICS

Population (Capital) Surface Area City Type

Location of City Food Unit

Leader

Start as a Food City

2 million (2020) 372.4 km²

Municipality of the Metropolitan District of Quito Function of Issues - Department of Productive Development

& Competitiveness; Economic Promotion Agency

Elected Mavor USD 24.7 billion

2002

The Municipality of Quito (officially the Municipality of the Metropolitan District of Quito - MDMQ) is the governing body of the city of Quito and the Metropolitan District. They are administered through nine Administrative Municipal Zones. The city of Quito has long been involved in agricultural activities. Quito is a city with high volcanic, seismic and climatic vulnerability, which is why building food resilience was considered critical to addressing emergency situations. However, the city planning department only incorporated food as a matter of concern in 2002, in the wake of an economic crisis that left nearly 50 percent of the population living below the poverty line. People had migrated to the city in droves, causing the population to nearly double within two decades. Many people, particularly those in inner-city neighbourhoods and hillside communities, resorted to small-scale agriculture in order to provide food for their families. Poverty and food insecurity became issues that the city urgently needed to address. The municipality has identified urban organic/ agro-ecological agriculture as a measure of disaster risk reduction in support of food security and nutrition, which led to establishment of the flagship AGRUPAR (a participatory urban agriculture project). Quito's engagement with the food agenda is characterized by a spontaneous approach, using informal processes and the creation of task forces with civil society and municipal departments to mobilize actors and initiate food interventions.

INSTITUTIONS AND GOVERNANCE

The Ecuadorian central government, represented by the Ministry of Agriculture, has actively and consistently participated in the food systems governance process. In 2008, the RtF was incorporated into the Ecuador Constitution, and in 2018 the "National Plan for Good Living" was created. Leveraging these national initiatives, the MDMQ has assumed a leadership position in the formulation of the food policy for Quito-Region, especially through the Economic Development Agency of Quito (CONQUITO) and AGRUPAR. In 2016, Quito created a multi-actor space composed of more than 20 public institutions (city, provincial and national government), civil society, academia and the private sector (chambers and associations). The Food Charter of Quito-Region incorporates food on the public agenda through a holistic food systems approach. The Resilience Strategy, presented in 2017 by the MDMQ, includes a food development plan (with an urban agriculture focus) for sustainable agricultural production and sustainability of the food system in Quito.

APPROACH

Since the enactment of Ecuador's constitution in 2008, Quito has adopted a city-region food systems approach to assist in the planning and prioritization of food crop production in the greater Quito metropolitan area. This work has been organized around a food sovereignty system, incorporated in a new Constitution to encourage the adoption of food policies to "avoid dependency on food imports" and "promote equity within rural and urban spaces." Based on this approach, all competencies of the regional government, comprising 44.6 percent of the surrounding Province of Pichincha, were transferred to the MDMQ (Orsini et al., 2017). The Metropolitan District the of Quito (urban axis and rural areas) constitutes the first food ring in which the city has promoted the production of corn and beans, fruit, potatoes, cereals, some fruits and vegetables, as well as a small share of flowers and alfalfa. The second ring comprises the Quito-Region in the Province of Pichincha and is dedicated to the production of cash crops such as broccoli, cattle, milk and flowers and to major food-processing firms. This structure has facilitated cross-jurisdictional





planning and coordination between the city of Quito, surrounding municipalities and the provincial government (Dubbeling et al., 2017).

Policies and plans

At the national level, Ecuador incorporated international principles and rights into its policies, including the integration of food sovereignty in its Constitution and legal framework, which also recognized the RtF, together with the principles of participation, transparency, gender equality, inclusion and social economy. Achieving this result was not without difficulty, as certain private sector actors were opposed to the use of concepts of food sovereignty, ultra-processed foods and healthy eating to frame the engagement.

Quito's food planning process is supported by the civil society sector mobilized through the proposals of the multistakeholder platform Pacto Agroalimentario de Quito (AgroFood Pact of Quito). It also benefits from the incorporation of food into city planning instruments such as Quito's Vision 2040, the Resilience Strategy, the guidelines of the Metropolitan Development and Regulation Plan 2015-2025, and the Framework of the MUFPP, which contributed to the development of Quito's Agrifood Strategy. The Strategy aims to address problems related to food insecurity, obesity, diet-related diseases, nutrition, health, environmental and waste management, as well as to generate income and employment opportunities through support to local food value chains and sustainable agriculture in order to bring local economic development in both rural and urban territories.

Challenges with land-use plans

Challenges experienced by the AGRUPAR project in Quito relate to the lack of a facilitating legal framework for UPA and the need to integrate UPA further into municipal spatial planning as part of urban land-use plans, as well as the plans on the use of vacant public space. At present, the latter do not explicitly recognize the concept of UPA, which is surprising given the achievements of AGRUPAR.

Projects and programmes

In 2015, Quito became one of eight cities throughout the world to test and implement the City-Region Food System programme. The city took an integrated approach to constructing an agrifood policy for the city-region in a participatory fashion, evaluating the current food system, and taking concrete measures to improve it. It was the result of this evaluative approach that helped Quito identify areas of vulnerability.

When examining Quito's overarching programmatic approach, one sees a good example of a city connecting UPA concepts with the national RtF. Combining these in response to Quito's identified food resilience vulnerabilities led to the MMDQ establishing AGRUPAR as a strategy for food security and poverty reduction. Intended for the most vulnerable among the population, this initiative sought to improve access to healthy and nutritious food, and provide opportunities for entrepreneurship and income growth, especially for women heads of household. It has been implemented by the municipality's Economic Development Agency, CONQUITO, whose vision is to create an entrepreneurial, sustainable and innovative city that encourages productive investment, generates employment and distributes wealth equitably through the financing of innovative productive activities and/or services to microenterprises in the city.

Successful implementation of AGRUPAR and the continuous work on UPA have transcended administrative periods of change in local government for more than a decade and has led to the current effort to formulate food policy. AGRUPAR is part of a municipal programme with a municipal annual contribution of approximately USD 270 000. This amount covers the cost of training,



technical advice and logistics. It also covers part of the costs of seed, equipment, bees and animals such as poultry, guinea pigs. However, while Quito's city government remains the main source of funding, around half of the investment in productive infrastructure – such as micro-greenhouses, small sheds for animal husbandry, and drip irrigation sets – comes from participants (Baker and de Zeeuw, 2015). The programme has also received funds from international cooperation to carry out studies and improve the infrastructure of the gardens, as well as to strengthen some of its services (such as training for potential urban farmers).

Multistakeholder engagement

In 2016, Quito created a multistakeholder platform composed of more than 25 public institutions (city, provincial and national government), civil society (organizations, consumer groups, chefs and ecological and organic farmers), and academia, the private sector (chambers and associations) and international cooperation. (e.g. RUAF and Rikolto). The platform provides a channel for rural actors to become involved in the policy decision-making processes affecting both rural and urban areas. It is also a space for discussion and preparation of proposals for public food policies for the city.

A large and diverse group of civil society stakeholders in Quito has proposed a draft Food Policy and Action Plan for consideration by the local government (through its Secretary for Productive Development and Competitiveness), which has been endorsed by more than 1 400 citizens and organizations in a consultation process. This multistakeholder platform debated the merits of developing and passing a city ordinance through the metropolitan city council or using a Mayor's Resolution to recognize the platform and advance the discussion of food policy at the same time that the electoral campaign was developing. The members of the platform were concerned that a Mayor's Resolution could be perceived as a political initiative of the municipal administration that was concluding and therefore could detract from the city's food policy by not being recognized by the new administration. This example underscores the value of a multistakeholder platform for creating a shared vision and political commitment from key stakeholders. It also highlights the importance of knowledge of the actors to advance towards a common policy objective. The Pacto Agroalimentario de Quito prepared and approved a Food Charter for the city that was signed by the Municipality and presented publicly. The elaboration of the Charter showed that it is possible to agree with actors that have diverse interests but a similar concern for food.

Quito's decision to identify UPA as a measure of disaster risk reduction in support of food security and nutrition for vulnerable urban producers also underscores the importance of strategically framing food issues to be consistent with actors' interests, key institutions' delivery capacity (i.e. agriculture) and broader urban development narratives (i.e. resilience) (MUFPP, 2018); these factors contributed to the effective design and implementation of AGRUPAR.

Private sector organizations from agricultural production, manufacture of food and beverages, and trade participated sporadically in stakeholder consultations through the National Association of Manufacturers of Food and Beverage and the Chamber of Agriculture of First Zone in Ecuador. While they were in favour of the adoption of the Food Charter, they questioned the use of the concepts of "healthy eating" and "food sovereignty," proposing to include only the concept of "nutrition", arguing that there is no consensus on these concepts or that they are inaccurate. The process of discussing the Food

Charter and the Action Plan of Quito demonstrates the challenges of formulating public policy when faced with differing positions on the issues.

Building on the city's desire for political openness, which aims to generate consensus, the formulation of Quito's Agrifood Policy was led by the Secretary of Productive Development and Competitiveness and CONQUITO in the MDMQ, involving the political level (secretaries and directors) and technical teams from multiple departments and agencies including Planning, Social Inclusion, Health, Environment and Markets Board.



Case Study 7 Seoul, Korea

OVEDVIEW

Addressing salient issues of food safety, free school meals and food insecurity through sustained mobilization and activism of CSOs, culminating in urban food systems governance formalization, including integrated food policy backed up by efficient linkages among plans and programmes and national support

AT A GLANCE

- Hybrid food systems governance model
- Food safety and food insecurity as entry points
- Intergovernmental and agency fiscal transfers to support various food programmes
- Multilevel governance and horizontal coordination
- Multistakeholder engagement led by municipal government but with multistakeholder participating networks

KEY CHARACTERISTICS

Population (Metro)
Surface Area
City Type
Location of City Food Unit
Leader
GDP

Start as a Food City

9.7 million (2020) 605.3 km² Metropolitan Government Urban Food Department Elected Mayor USD 894.9 billion (2018) 2012 The issues of food safety, free school meals and food insecurity of marginalized and elderly citizens spurred Seoul's urban food story. The city has been engaged in food systems governance issues from an early stage, and the mobilization and activism of CSOs were important factors. Several heads of organizations have played critical roles in the Civic Food Committee of Seoul, which significantly affected food policy and programme implementation. Seoul has achieved significant results, including the development of the Food Master Plan and its success in developing a universal, eco-friendly and free school feeding programme.

INSTITUTIONS AND GOVERNANCE

Seoul is one of the cities that has effectively used a stand-alone food sector planning approach in the development of its Food Master Plan. The plan was proposed by the Hopeful Food Network (a civil society network) and accepted by the Mayor of Seoul in 2015. The municipal government's Food Policy Division and Food Safety Working Group took responsibility for its development in 2017. The plan helped Seoul develop a more holistic food vision for the city, moving beyond the city and politicians' traditional focus on food safety and free school meals. Over 2000 public, private and civil society actors representing all food issues and all parts of the food system collaborated on the development of the Food Master Plan.

In order to achieve its vision, Seoul engages numerous divisions of government, agencies and various subordinate agencies to engage in urban food issues; for example, its approach to food safety and sustainability involves multilevel governance. Various groups concentrate on specific planning in diverse areas ranging from food hygiene and safety, food interventions, livestock safety, dietary improvement, as well as social policies addressing community welfare, eco-friendly meals, among others.

The development of Seoul's universal school meals programme depended on the political and financial support from the national government, and the success of its Urban Rural Coexistence Public Meal Service project depended on effective vertical governance as well. The city facilitated the development of partnerships between 25 autonomous districts of the Seoul Municipal Government (SMG) (a sub-municipal unit of government) and rural areas in Korea to directly procure food and provide quality meals to children. This type of facilitation and coordination function will become increasingly important to operationalize the growing interest in territorial approaches and future rural-urban linkages.

Horizontal coordination of food-related division and agency heads is assured through Seoul's Civic Food Subcommittees, while bureau chiefs are members of the Planning and Coordination subcommittee of the Civic Food Committee. Seoul's Food Policy Division supported the Mayor's office in mobilizing support and budget from almost every department and agency in the SMG for the city's universal school feeding programme. This citywide effort also entailed participation and coordination of Seoul's dynamic CSOs that participate with municipal departments, other public agencies and private sector representatives in the large number of working groups that the Government uses for planning, designing and overseeing diverse parts of the municipal food programme, including school meals.

Despite efforts to design and implement a detailed, comprehensive and integrated food programme, supported by linked plans and sector policies, in practice the Seoul Civic Food Committee was challenged to coordinate the large programme, assuring effective communication, cooperation and information exchange among its ten subcommittees. The diversity and segregation



THE POWER OF FOOD: LOCAL POLITICS AND FREE SCHOOL MEALS

In June 2010, many candidates for local elections in Seoul and the education superintendent elections adopted the issue of free school meals as one of their key campaign issues. While the ruling Conservative Party suffered electoral defeat elsewhere, the Conservative Party candidate was successfully elected as Mayor of Seoul, largely due to his political commitment to the phased introduction of free school meals. The opposition party candidate was also in support of free school meals, though more specifically campaigned for "universal eco-friendly free school meals".

In October 2010, city councillors proposed the "Seoul Eco-friendly Free School Meals Support Ordinance". Although the newly elected mayor of Seoul demanded reconsideration of the draft ordinance, the city council went ahead and passed the ordinance in December 2010, together with the 2011 budget, which included funding for the universal free school meals.* Although the Mayor did not officially announce the ordinance, the City Council Chairperson made it public in January 2011. Three days after the Chairperson announced the ordinance, the Mayor requested the City Council to reconsider

the budget. The request was rejected, and, five days later, the Mayor brought the case before the Supreme Court. The Court also ruled in the Council's favour. By June 2011, a CSO that was against universal free school meals requested that a public referendum be held on the free school meal programme, to which the Mayor agreed. The referendum was held in August 2011 but was invalidated due to insufficient voter turnout.

With these defeats, the Mayor resigned, and a by-election was held in October 2011, resulting in the election of an independent opposition candidate as the new Mayor of Seoul. In December 2011, the new mayor submitted an act of withdrawal of the invalidity confirmation suit over the free school meal ordinance. Three days after the submission, the City Council passed the modified ordinance. In January 2012, the new Mayor finally made public the universal free school meal ordinance. The Mayor won reelection in June 2018, starting his third four-year term.

*Universal school meal programmes were also a contentious issue between mayoral candidates in Belo Horizonte.





Intergovernmental fiscal transfers have helped finance the Seoul Food Master Plan in Korea. Municipal/subnational local budgets have been created to support local food interventions, while financial resources transferred from the central government are tailored to support a vast national programme. Some examples:

The Seoul Food Master Plan was financially supported by nine Divisions: Food Policy Division housed in Civic Health Bureau (USD 6.8 million); External Cooperation Division, Welfare Policy Division, Community Welfare Support Division, Family Division (USD 19.6 million); Eco-Friendly Meal Division (USD 13.6 million); and Family Division in Women and Family Policy

Affairs Office, Special Enforcement Division for Public Safety, Living Environment Division in Climate and Environment, Urban Agriculture Division in the Economic Planning Office (USD 4.8 million).

The Universal Free School Meal Programme was funded 50 percent by the Seoul Metropolitan Office of Education, 30 percent from SMG, and 20 percent from 25 Autonomous Districts.

The national government provided a matching fund of USD 3.3 million for the establishment of the children's meal service management support centre.





of subcommittee functions makes it difficult to implement an integrated program with linked sector policies and plans in support of joint goals. To improve coordination, Seoul may look to: improve prioritization of projects; strengthen coordination between projects and programmes; and develop common/shared projects.

APPROACH

Projects and programmes

Seoul's 2017 Food Master Plan outlined a comprehensive set of strategies that guided the development of the city's food interventions: improve the poor's access to food; facilitate linkages between small- and medium-sized family farms and cities; address food- and nutrition-related public health issues; design inclusive policies and participatory governance; invest in food-related, social safety nets; address food issues with linkages to public health, welfare, employment, housing and urban planning; make food systems more ecofriendly and sustainable; and support the diversity of food cultures coexisting Seoul.

The universal, eco-friendly and free school feeding programme is one of the flagship programmes developed by the city in collaboration with national, provincial and local governments in Korea. Other programmes consistent with this strategic vision include: improving access to nutritious food through the promotion of fruit and vegetable vending machines, fruit retailers and fruit cafes at public transport hubs and public institutions; and developing, promoting and recognizing "low salt" restaurants and certifying nutritious "smart meals" at restaurants, child care centres, corporate cafeterias and in convenience store lunch packs. A smart meal contains 500 to 1000 kcal (15-20 percent from fat) and less than 1400 mg of sodium. Social protection programmes include food vouchers and public kitchens. Behaviour change programmes promote nutritious Korean cuisine.

Sourcing local food for school meals

The 2017 Urban-Rural Co-prosperity Public Meals project in Seoul, signed through a Memorandum of Understanding, is an example of municipal government-facilitated linkages between rural and urban areas aiming at improving the quality and nutrition of school meals while increasing demand for locally produced food. The content of the Memorandum focuses on: a stable supply of food; eco-friendly procurement of local food for school and public meal programmes; and education programmes. The project is managed by the Eco-friendly Meal Division in the Lifelong Learning Bureau of Seoul, which oversees prices, quality and safety of the food ingredient supply chains.

Multistakeholder engagement

Seoul's agrifood story is grounded in the sustained mobilization and activism of CSOs. Engaged in food systems governance issues at an early stage, the CSOs have been very active in the whole process of urban food systems governance in Seoul. The heads of a number of organizations played critical roles in the Civic Food Committee of Seoul, which had a significant impact on food policy and programme implementation. Each of the other sections in this case study illustrate the extensive engagement and pervasive influence of CSOs and the private sector in the prioritization, planning, design and implementation of Seoul's food interventions.

Policies and plans

The Metropolitan Government of Seoul, together with 350 citizens representing civil society, the private sector, producers and academia, signed an official declaration in June 2017 of Seoul Citizen's Fundamental Food Rights, serving as the basis for the Seoul Food Master Plan. This is illustrative of a top-down approach – municipal government-led but with multistakeholder participating networks. The Seoul Food Master Plan was finalized through a robust consultative process which involved more than 150 debates with citizens, including about 2 000 experts from various areas such as food safety, nutrition, agriculture, distribution and meal service as well as welfare facilities and local governments promoting local food development in Jeonju and Wanju.

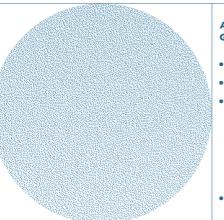
Seoul's Basic Food Ordinance was also the result of broad stakeholder discussions and public hearings (for over two years) among municipal officials of the SMG and Autonomous Districts, private sector representatives and CSOs. It benefited from technical inputs from the SMG's Committees on Seoul Food Governance and Urban-Rural Co-prosperity Governance, to name a few. The Basic Food Ordinance (enacted in September 2017) established the policy architecture for Seoul's aspiration to develop a sustainable food system and to achieve food security for all citizens. The Ordinance consists of 35 articles that address the guiding principles, the duties of Mayor and citizens, the goals and role of the Food Master Plan and Food Charter, responsibilities of the food policy advisor, roles of diverse food committees and subcommittees, and parameters for results framework indicators. Like other countries, Seoul's set of comprehensive food policy ordinances are associated with and often mandated by central government food policies (typically Acts), covering a far-reaching gamut of issues (Chung and Olson, 2019). Other municipal ordinances developed by the SMG also address a wide-ranging number of food-related issues.



Case Study 8 Shanghai, China

OVERVIEW

Strengthening food systems through aspirational vision of a national food-safe model city, underpinned by three-level approach to food systems at the municipal, district and township levels emanating from national-level direction



AT A GLANCE

- Nationally led food systems governance model
- Food safety as the entry point
- Strong national policies set the stage with a shared food vision: "develop into an innovative financial, educational and ecological city in which (i) food safety; (ii) modern and strategically placed markets; and (iii) a secure, resilient food system with urban and peri-urban agriculture (UPA) would contribute to provisioning the city with fresh vegetables"
- Three-tiered approach, while emanating from the national level, enabled townships, districts and municipalities to set goals and achieve status as a food-safe model city, which facilitated a sense of ownership at all levels and continued to strengthen the multilevel coordination.
- Multistakeholder engagement helped shift and redistribute power from local government to key actors.

KEY CHARACTERISTICS

Population (Metro)
Surface Area
City Type
Location of City Food Unit
Leader
GDP
Start as a Food City

24.3 million (2019)
4 000 km² (2018)
City-State
Function of Issue — Agriculture & Commerce Commissions
Party Secretary
USD 534 billion (2019)
2008

Shanghai aspires to develop into an innovative financial, educational and ecological city for which food safety, modern and strategically placed markets, and a secure, resilient food system with UPA will contribute to provisioning the city with fresh vegetables. With food so intrinsically linked to this aspirational vision for the city, the vision provides clear priorities for strengthening the food system – priorities and linkages which are equally present in the city's food plan. Shanghai's urban food programmes and institutions strongly emanate from comprehensive policy and planning frameworks established by the national government and the municipal government, as well as strong national policies.

China's engagement in urban food systems is strongly conditioned by a combination of factors: (i) the 1992 Constitution of the Communist Party of China (CPC), which included a focus on modernizing the agriculture sector; (ii) China's rapid urbanization and need to develop a resilient food system to feed its growing urban populations; (iii) China's early emphasis on the economic development reforms (1978-2000) regrading "wen bao" (having sufficient clothing and food throughout the year) followed by the goal of a "xiaokang" (a living standard by which people can enjoy a lifestyle commensurate with a middle-income country) (Yao, 2000); (iv) China's focus on poverty alleviation, articulated through the Guiding Opinions on the Three-Year Action to Win the Fight against Poverty (Hou, 2018); and (v) China's supply-side structural reform, which is a key focus area in the 13th Five-Year Plan on improving quality of supplies to meet evolving consumer demand, increasing supply chains and improving retail efficiency, to be achieved through regional planning, coordinated rural and urban development, tax incentives and the use of advanced and green technologies (KPMG, 2016).

INSTITUTIONAL BACKDROP

Institutional structures in Shanghai mirror those at the national level. Agriculture, health, commerce and other sector commissions (i.e. departments) play a technical role in the municipal government. Their work is overseen by vice-mayors, who report to the city's mayor, as the chief operating officer for the city. Since Shanghai is a direct-controlled municipality of China, the Mayor occupies the same level as a provincial governor but serves under the CPC Shanghai Municipal Committee Secretary or Shanghai CPC Party Chief. The Shanghai CPC Party Chief chairs the Communist Party of Shanghai Committee, which is the chief administrative authority in Shanghai. The Shanghai Municipal People's Congress (SMPC) is the local legislature, playing an analogous role as the National People's Congress. Shanghai's 16 districts also have local (submunicipal) People's Congresses, which have recently been granted decision-making authority on major local development issues (e.g. organized inquiries into food security by Pudong District People's Congress) (Li, 2017).

Example of stakeholder engagement

The Minhang Urban Agriculture Development Programme in Shanghai employed a multistakeholder approach to develop the Multistakeholder Policy Development and Action Planning with support core team members from the district government, village commissions, Shanghai Jiaotong University, Minhang Agriculture Commission, the Agriculture Service Extensions and two towns: Magiao and Pujiang. This multistakeholder participatory approach shifted the previously municipal and local government-dominated power to the key actors involved in participating in the planning of UPA development in China.

Institutionalized stakeholder engagement

Technical officers from Municipal Commissions (e.g. Agricultural and Rural Affairs Committee) may draft policies for submission to the municipal version of the State Council, and will be ultimately responsible for implementation, following approval by the SMPG or its Standing Committee (Anderson, 2013). Academics, research institutes and think tanks may also be enlisted to support



policy analysis and drafting processes, while business and industry associations and boards of state-owned enterprises may provide input to new or existing policy development. The Party and city may also use Leading Small Groups, informal groups consisting of a select group of senior staff, to advise on or contribute to drafting policy and to contribute to its implementation (Miller, 2008).

The Standing Committee (the permanent body) of the SMPC will also directly participate in an implementation oversight and monitoring role (SMPC, 2010). Just as national ministries will often be responsible for or wield tactical influence in interpreting, administering, implementing and overseeing broad policy directives, local governments may also have space to develop and enforce their own policy directives (Ahrens, 2013).

APPROACH

Policies and plans

Strong national policies helped set the stage for Shanghai's food vision. Overall direction emanated from the national level and provided a shared aspirational goal of being a national food-safe model city, and the mirroring of national institutional structures at all levels helped in facilitating the multilevel coordination.

Policy implementation and decision-making are analogous to national-level processes, albeit with space for local variation and experimentation. Guided by the 1979 Organic Law of the Local People's Congresses and Local People's Governments, and with a focus on consensus-based decisions, municipal policies are checked to ensure consistency with national priorities and their adherence to the Chinese Constitution (Gao and Wu, 2017). Five-Year Plans, articulated at both national and municipal levels, serve to provide strategic vision and guidance and benchmarks for results. Cities are given a fair amount of leeway to experiment and craft policies tailored to conditions in their jurisdiction. Alignment of municipal to national policy in China is facilitated through the links between municipal-level People's Congress and the Chair of the CPC in Shanghai (who ranks above the Mayor) with their national counterparts in the CPC.

The primary impetus for Shanghai's food policies was its focus on food safety. Efforts began in 2008 with the establishment of Shanghai's Municipal Food and Drug Supervision Administration, and a number of important milestones followed, including: a food safety credit system; administrative measures for food safety information and traceability implementation; the enacting of the Food Safety Supervision Workplan; and, ultimately, the creation of the "Regulation on Food Safety in Shanghai" in 2017. Also notable is that SMPC approved the 13th Five-Year Plan (2016-2020) on the city's agriculture development, which includes a goal for 70 percent of local agriculture production to be organic and pollution-free (Ministry of Natural Resources, People's Republic of China, 2010). The municipal policy stems from China's national legislation in the same area (Shi, Jiang and Yao, 2018).

Similarly, a variety of national agriculture sector policies, action plans and programmes related to agricultural modernization, agricultural science and technology innovation, sustainable and modern agriculture development provided the technical framework for Shanghai's interventions in urban and peri-urban agriculture (Hosseinifarhangi et al., 2019). This new agriculture sector policy framework, together with Shanghai's land-use planning processes, allowed the city to address urban development and urban food supply priorities.



Between 1979 and 2008, the Shanghai population grew by 66 percent and urban/built-up land increased by 210 percent, leading to sharp decreases in croplands, water bodies, and bare lands (Zhang et al., 2011). In 1990, arable land covered 61 percent of the city area, decreasing to 57 percent in 2000 and 45 percent in 2010 (Shi, Jiang and Yao, 2018). The Shanghai Land Use Master Plan (2006-2020) set out to make rational use of land resources, and lead the spatial layout of urban development, controlling the reduction of cultivated land, promoting land consolidation and reclamation, developing modern agriculture, and striving to increase the production capacity and efficiency of agricultural land. This plan was consistent with 1986 China's Land Administration Act (last amended in 2004) and a State Council-approved plan to protect specific amounts of arable land in every province, county, prefecture/city and township (Meligrana et al., 2008). The Shanghai Master Plan 2017-2035 followed this pattern, seeking to create compact, rural residential settlements in the urban periphery, using fiscal and employment incentives to encourage farmers and rural residents to move to cities, consolidating fragmented, agricultural land into larger holdings to achieve economies of scale and promoting modern practices to increase land and labour productivity.

Projects and programmes

Urban food programmes emanate from comprehensive policy and planning frameworks established by the national government and the municipal government. The city's focus on food safety, UPA for urban food supply, and modern wholesale and retail food markets flow from the city's vision, the national and municipal planning processes, and national sector policies. Shanghai, along with Beijing and Tianjin, developed wholesale food market master plans to guide the development of modern wholesale food markets in the urban periphery of the cities.

China's National Sustainable Agriculture Development Plan (2015–2030) guided the city's interventions in support of agricultural innovation and technology development to achieve self-sufficiency. The Chinese Academy

Applying an agrifood lens for mixed-use urban development models

The Sungiao Agricultural District in Shanghai is part of a larger urban plan to convert a part of a neighbourhood into an agrifood/ technology hub to showcase research and development and enhance awareness and education on new agriculture and food technologies in a mixed-urban development with green space (parks and greenhouses), residential and commercial space, and a science museum. The Shanghai government had designated this 9.3-square-kilometre area of the city in the mid-1960s, with the intent of attracting bioengineering and biopharmaceutical companies to set up research facilities working in tandem with city greenhouses (Sasaki Associates, Inc., 2020).

of Agricultural Sciences (CAAS) is the Chinese national, agricultural scientific research organization under the Ministry of Agriculture. Together with diverse state-owned enterprises, it played an important role in funding concrete agrifood programmes throughout China, including Shanghai. UPA interventions focused on the adoption and adaptation of modern agricultural technologies and innovative methods (e.g. hydroponics, indoor horticulture, vertical farming, closed-loop systems), which are 90 percent more water-efficient and 20 times more productive. CAAS' Agricultural Science and Technology Innovation Programme and the Vegetable Basket Programme for year-round vegetable production benefited from research and design partnerships and technology transfer from foreign companies. National funding from CAAS, state-owned enterprises and China's Agricultural Development Bank helped finance these programmes (Hosseinifarhangi et al., 2019).

Other major initiatives include: the "Double Green Project", which was implemented in all the vegetable production bases in Shanghai to ensure that produce and the production process are green; and the "Traceability" initiative, which focuses on Shanghai's plan to integrate more than ten existing agricultural

product traceability platforms with Shanghai's unified food safety information traceability platform. Submunicipal or district level UPA interventions included investment in UPA irrigation systems and technical assistance to farmers, cooperatives and agro-enterprises in technology adoption, marketing and food quality control (Cai *et al.*, 2011).

Details on data

Big Data programme initiatives include the "Tianyan System", which was developed to objectively reflect the quality and safety of restaurants reviewed by consumers and provides reference for the regulatory authorities. Shanghai's establishment of a Food Safety Credit System of food operators and new regulations on food safety have contributed to improved food safety as recorded by the city's food risk assessments FAO, 2018; People's Republic of China, 2009; Shen, 2015).

Budgeting processes

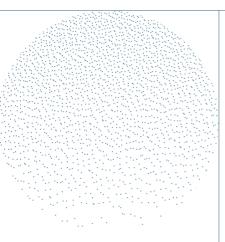
Shanghai has a three-level public budgeting system (city-district-township), with each level having its own budget plan. It uses public finances to leverage social and investment capital to support construction of modern agriculture and food systems (Shanghai Municipal People's Government, 2012). The city also improved the funding mechanism between the municipalities and districts through a project-based approach and used incentives rather than subsidies to improve the effectiveness of financial instruments. The city also strengthened financial performance M&E and linked the evaluation results with funding opportunities for the following year.



Case Study 9 Toronto, Canada

OVERVIEW

Transformation of ad hoc food initiatives and civil society engagement at grassroots level into formalized local governance mechanisms embedded within local government institutions which holistically address all food systems dimensions through policy and programme facilitation to ensure food security.



AT A GLANCE

- City-led food systems governance model
- Historical roots in local food movement and CSOs, institutionalized in Toronto Food Policy Council (TFPC)
- Nutrition- and health-focused food system as the entry point, although this later included other initiatives that addressed food security and resilient food systems
- Two food-oriented institutional entities directly embedded in Toronto's municipal infrastructure
- Ability to identify points of intersection with other organizations and interest groups
- Unique position of the Toronto Food Strategy, which enables it to have a greater degree of independence and flexibility in policy and planning compared to other city subcommittees

KEY CHARACTERISTICS

Population (City)
Surface Area
City Type
Location of City Food Unit
Leader
GDP
Start as a Food City

2.7 million (2016) 630.2 km² Municipality Department of Health Elected Mayor USD 330 billion 1991 As the urban food agenda expands, CSOs with a long involvement in food issues are gaining a stronger voice in planning and policy dialogue and are compelling city governments to act. In some cities, such as Toronto, civil society groups have a long history of advocacy and community organization. These groups have been successful in gaining the attention of city government and driving change around issues in the food system.

In Toronto, the CSO that gave impetus to the eventual formation of Toronto's institutional food entities was "Food Share Toronto", which started in 1985 with a vision of "Good, Healthy Food for All" and aimed to create a resilient, just and sustainable food system. The TFPC was established in 1991 as a subcommittee of the Toronto Board of Health to advise the City of Toronto on food policy issues – particularly in relation to hunger and the issue of food banks. At the time, the Toronto City Council regarded food banks as a disgrace and wanted to develop something more than what was perceived as just a charity response.

INSTITUTIONS AND GOVERNANCE

The TFPC is the oldest food policy council in the world located in a major city. The guiding document of the TFPC is the Toronto Food Charter, which was unanimously passed by the Toronto City Council in 2001. The TFPC connects diverse people from the food sector, farming and civil society to develop innovative policies and projects that support a health-focused food system. It provides a forum for action across the food system. TFPC members identify emerging food issues that will impact Torontonians, promote food systems innovation, and facilitate food policy development. The TFPC is an example of how ad hoc food initiatives at a grassroots level can be successfully formalized into a local governance mechanism embedded within a local government institution which holistically addresses all food systems dimensions through a broad policy framework.

The TFPC, unlike other food policy councils in North America, operates as a subcommittee of the city's Board of Health, which is one of ten committees reporting to the Toronto City Council. It is unique among city subcommittees in that it has a degree of independence that most do not have, which is an example of successful food planning and policy in motion. The breadth of board members' experience allows the TFPC to provide authoritative, credible input on an extensive range of food-related issues.

In 2008, building on almost two decades of leadership and work of the TFPC, Toronto's food leaders initiated a process to develop the Toronto Food Strategy. Inspired by a report entitled "The State of Toronto's Food: Discussion for a Toronto Food Strategy", which was presented to the Toronto Board of Health, Toronto's Medical Officer of Health convened an informal 21-member steering group to develop the strategy. Comprising community food experts and senior City staff, the steering group's mandate was to guide the development of a consultation report which articulates a bold but practical vision for Toronto, identifying both long-term objectives and short-term initiatives and actions to move towards the vision. Developed in 2009 through a consultative process with public and private sector entities and CSOs, and endorsed by the City Manager in 2010, the goal of the Toronto Food Strategy team was to work alongside the TFPC and develop an action plan and platform for public health actors to become involved in food matters. The TFPC, with its many community and business leaders around the table, now serves as the community reference group for the Toronto Food Strategy (Fridman and Lenters, 2013).

Similar to the TFPC, the Toronto Food Strategy is institutionally linked to the City of Toronto's Board of Health. The Toronto Board of Health is one of



four municipal Boards of Health in the Province of Ontario, established under and governed by the Health Protection and Promotion Act (City of Toronto, 2020).

APPROACH

Policies and plans

Most actions taken in municipalities or cities of Canadian provinces occur through by-laws. The City of Toronto Act stipulates that the municipality will exercise its powers through these by-laws, which are the primary legislative instrument of municipalities in the Province of Ontario. The City Council makes decisions by adopting or amending recommendations from its committees and City officials contained in reports and communications. This means that, for changes in food systems planning – including urban planning – by-laws and action through by-laws are crucial. Since 1834, Toronto has enacted 198 000 by-laws (City of Toronto, 2012).

The TFPC and the Toronto Food Strategy have advocated, promoted and facilitated the development of a wide range of food policies touching almost every aspect of urban food systems over their three decades of engagement in Toronto. They address among others: local food procurement; comprehensive policies to support urban and peri-urban agriculture; food truck, cart and vending regulations; food business licensing and regulations; food markets; farmers' markets; food waste; food service jobs; food safety regulations.

In the early days, the TFPC assisted the City of Toronto in establishing broad policy frameworks, initially through the Toronto Declaration on Food and Nutrition in 1992, followed by the 2001 Toronto Food Charter (TFPC, 2015). In 2010, Toronto Public Health and the TFPC championed the development of the Toronto Food Strategy and creation of its team.

The city has also been a strong advocate for healthy food policy at the federal level, including regulations on use of artificially produced trans-fat, student nutrition programmes and commercial advertising targeted to children under 13 years of age.

Projects and programmes

In a similar vein to its vast policy work, the TFPC and the Toronto Food Strategy have equally long histories of engagement in facilitating and incubating the development of a multitude of programmes and projects across city departments and in collaboration with CSOs and private sector actors. These programmes address many aspects of Toronto's food system. Both the Toronto Strong Neighbourhood Strategy 2020 and TO Prosperity (Toronto Poverty Reduction Strategy) emphasize the need to improve access to healthy affordable food for all Toronto residents. Toronto Public Health partnered with the Environment and Energy Division and commissioned a study to identify the most significant risks climate change would pose to food distribution and access within Toronto, incorporating food system-related recommendations into the Toronto Resilience Strategy. Food systems also play a central role in Transform TO, Toronto's climate action strategy to reduce greenhouse gas emissions by 80 percent by 2050. The Toronto Food Strategy incubates and prototypes initiatives, such as the social supermarket model, working with food producers, manufacturers and distributors to redirect surplus food to customers while reducing food waste, and through a kitchen and café, which provide nutritious meals while breaking social isolation and bringing community together (Toronto Public Health, 2018).

Multistakeholder engagement

The TFPC brings into focus the multifunctional character of the food agenda through enlarging the realm of food and its relevance for the Toronto area by identifying points of intersection with other organizations and interest groups. By starting with the basics – the creation of a Food Charter and the inclusion of food as a public health priority – and building up, a solid foundation was created for more sophisticated and interconnected policy initiatives. The TFPC has the energy of an NGO despite working inside an urban governance system, and continuously juggles the conflicting interests of multiple stakeholders.

Toronto began to realize that its food security was also dependent on preserving rural farmland in surrounding areas. As a result, since 2012, the TFPC has expanded its interventions to include the Greater Horseshoe area surrounding the city by establishing the Golden Horseshoe Food and Farming Alliance — an innovative governance body which coordinates and facilitates farmer organizations' participation in food systems planning and policy, as well as the input from various food industry associations and civil society organizations. The Toronto Golden Horseshoe Food and Farming Action Plan identified pathways for a more integrated and coordinated approach to food and farming viability in the area to ensure that the Golden Horseshoe enhances and expands its role as a leading food and farming cluster.

In response to funding uncertainties, Toronto stakeholders have created an informal group, Friends of the TFPC, composed of several high-level and politically connected supporters to lobby municipal and provincial governments for continued support to programmes and budgets for staffing.

The Toronto Food Strategy uses a multisector approach to build capacity at the city level and to facilitate collaboration with external partners such as institutions, community agencies and the private sector to facilitate effective policy and regulatory change and to incubate initiatives to expand access to healthy, affordable and diverse food, and create good food jobs. The Toronto Food Strategy uses diverse food entry points to meet divisional and city goals, thus involving extensive collaboration with many city divisions and departments.

Leveraging resources

Toronto opportunistically mobilized funding from multiple stages to finance the initial food-related interventions. For example, between 1991 and 1998, the TFPC, funded jointly by the city and province with approximately USD 220 000 a year, helped raise more than USD 7 million from other sources for community food projects. Since 2010, the Toronto Food Strategy has been able to attract funding from charitable foundations and the provincial government for multiple initiatives.

Public financing from municipal and provincial government budgets contributed to the operation of city food systems governance interventions such as the TFPC. The TFPC used an innovative financing mechanism to cover operational costs for intersectoral work on city food matters. The intention of Toronto Public Health and the City Council was to have a permanent city employee focused on running and managing the Toronto Food Strategy team to guide overall food systems activities within the city. In 2016, the Government of Ontario funded 72 percent of the Toronto Public Health gross operating budget, the City of Toronto covered 24 percent and the remaining 4 percent was generated from user fees and other divisions in the City. This 75/25 cost-sharing formula for most public health services means that every USD 1 of investment by the City results in USD 4 of public service. Toronto Public Health funded 50 percent of the position of Director of the Toronto Food Strategy, the other half was financed from user fees and contributions from other divisions

in the municipal government. The Toronto Food Strategy does not fund projects or activities but works jointly with partners that can implement projects.

Details on data

The TFPC and the Toronto Food Strategy have facilitated and supported numerous data/information and analytical exercises through their long engagement in food issues, working to improve the evidence base needed for stakeholders and the Toronto City Council to make informed decisions. In the context of work undertaken by the Toronto Food Strategy team, analysts and officials discovered a 15-year database in the city's Board of Health. The database was a compilation of inspections for every restaurant, retail or other institution involved in the sale of food, including information on their opening and closing dates and inspection results. The Toronto Food Strategy team was able to convince city planners of the value of this source of information on food availability and to subsequently insert a question regarding sales of fresh fruit and vegetables into the inspection protocol (Emmanuel, 2019). Additionally, Food Asset Mapping, using the North American Industry Classification System, informed food planning, channeled public and private investments, addressed access to nutritious food and helped established a land bank.

The Toronto Food Strategy has also supported the University of Toronto's Food Environment Policy Index project to track the progress that municipal governments across Canada have made toward improving food environments and implementing obesity prevention policies and actions. This collaboration will help identify a comprehensive list of proposed food policy actions that need to be addressed.

Evolving food consumption patterns, increasing malnutrition and public health concerns, rapid urbanization, climate change and crises like COVID-19 are shifting how countries think about food systems. With over two-thirds of the world's population destined to live in urban areas by 2050, cities across the world are stepping up their engagement in food and agriculture, finding innovative ways to address challenges and opportunities in rapidly evolving food systems.

Urban food systems governance: current context and future opportunities looks at how nine cities – Baltimore, Belo Horizonte, Lima, Medellín, Nairobi, Quito, Seoul, Shanghai, Toronto – are tackling food issues. It explores different entry points, governance approaches and policy solutions. And it shows how local government is teaming up with civil society and the private sector, as well as provincial and national government, to create more inclusive, sustainable, nutritious and efficient urban food systems. The lessons and insights from these cities can inform the investment and policy activities of international financing partners and decision-makers working on urban issues.

