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ICLEI
Local Governments for Sustainability

THE CITYFOOD MARKET HANDBOOK FOR HEALTHY AND RESILIENT CITIES

IN PARTNERSHIP WITH

gain
Global Alliance for Improved Nutrition

World Farmers' Markets Coalition

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This document is a deliverable of the "Strengthening local fresh food markets for healthier food environments within planetary boundaries" project.

ABOUT THE PROJECT

This project is funded by the Federal Ministry for Economic Cooperation and Development (BMZ) and supported by the Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ). As part of GIZ's Global Programme Transformation of Food Systems, the project—coordinated by ICLEI's CityFood Programme—aims to harness the potential of food markets to promote healthier and more diverse diets while enhancing urban food environments. For more information, visit: cityfood-program.org.

ABOUT ICLEI - LOCAL GOVERNMENTS FOR SUSTAINABILITY AND CITYFOOD PROGRAM

ICLEI - Local Governments for Sustainability is a global network of 2,500+ local and regional governments committed to sustainable urban development. Since 2013, its CityFood Programme (ICLEI CityFood) has leveraged the transformative power of food to build resilience. CityFood accelerates local and regional action for sustainable food systems, fostering collaboration across ICLEI's Regional Offices and key global and regional partners.

ABOUT THE GLOBAL PROGRAMME TRANSFORMATION OF FOOD SYSTEMS

Commissioned by the German Federal Ministry for Economic Cooperation and Development, the programme strengthens local, national and global Transformative Initiatives that shape food systems for healthier diets within planetary boundaries. Taking a systemic, partnership-based approach, it focuses on governance, vision-building, solution development, and broad political and social mobilization for improved food systems.

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Foreword

ARIANE HILDEBRANDT

Director General

German Federal Ministry for Economic Cooperation and Development (BMZ)

Food systems and urban development have been well-established pillars of German Development Cooperation for many years. However, the integration of urban food systems as a specific approach remains less explored. This makes this publication valuable, as it not only enriches the ongoing discourse, but also provides concrete inspiration for practical implementation.

Cities have immense potential for food systems transformation. They are dynamic hubs, home to growing populations with increasing purchasing power and changing eating habits. Complex value chains provide income and livelihoods. However, these changes come with significant challenges. Consumers demand affordable, safe, and nutritious food, climate change puts increasing pressure on cities, food loss and waste are pervasive issues, and urban sprawl often outpaces infrastructure development. Municipal administrations as key actors have to take the lead, bringing together the necessary stakeholders to establish approaches for the effective governance of the transformation processes.

To this end, the German Ministry for Economic Cooperation and Development supports the "Global Program Transformation of Food Systems," implemented by GIZ, as part of its special initiative "Transformation of Agriculture and Food Systems". Through ICLEI, local initiatives in Lusaka and Lilongwe empower local stakeholders, especially women and municipal administrations, to develop practical solutions for strengthening fresh food markets and thus contribute to food systems transformation.

We extend our sincere gratitude to ICLEI and their team for this outstanding work together with GAIN and the World Farmers Markets Coalition. We are confident that this publication will reach a wide audience and inspire meaningful impact in both urban and rural contexts. By strengthening local fresh food markets, we can contribute to a more resilient and sustainable food system that benefits all communities and promotes healthier environments for generations to come.

GINO VAN BEGIN

Secretary General

ICLEI - Local Governments for Sustainability

Access to adequate nutrition is a human right. Yet, food insecurity remains an unrelenting challenge, and access to nutritious and affordable food continues to be a daily struggle for millions. With one in four people facing food insecurity and over three-quarters of them living in urban and peri-urban areas, it is clear that bold, transformative actions by local and regional governments are urgently needed.

ICLEI - Local Governments for Sustainability sees local and regional governments as champions of change with the power to shape sustainable and equitable food systems. Through our CityFood Programme, launched more than a decade ago, we have been proud to lead the way in driving food systems transformation. This Programme has become a hub for fostering healthy people, healthy climate, and healthy landscapes, bringing together urban food experts and committed city leaders from across the globe to co-create actionable solutions in key areas such as urban food environments, public food procurement, food education, and food loss and waste.

Among the many topics we have tackled, one that I find truly fascinating is the influence of urban food environments on diet, nutrition and health outcomes. Local governments have a unique and pivotal role to play, particularly in transforming food markets. Recognising the food market's significance to overcome food insecurity, provide nutritious food, and ensure a sustained income for farmers, we have joined forces with other committed networks and organisations. This handbook is a testament to that recognition, offering inspiration, practical tools, and stories from around the world to guide cities in harnessing the full potential of food markets.

Foreword

LAWRENCE HADDAD

Executive Director

Global Alliance for Improved Nutrition (GAIN)

Food markets across the world are vital, culturally infused, everyday places connecting people and the food system within cities, urban-rural landscapes and across territories and borders. They are abuzz with people sourcing, handling, storing, financing, selling, choosing, buying, repurposing, processing, and wasting food. Operating at different scales with different ownership, mandates, management and financial models, these markets involve the public, private and/or non-profit sectors, and communities. From wholesale to retail, and everything in between, these markets sell a wide range of healthy and unhealthy foods. Examples range from permanent to temporary and mobile, street, organic, farmers and municipal public markets.

Local governments, including city governments, are well positioned and mandated to lead, co-design, coordinate, implement and sustain healthy food environments. This mandate extends critically to markets which are mini food environments in themselves. The challenges of access to affordable healthy food, good food hygiene and safety, and lower food loss and waste affect communities most intensely. Local governments can bring stakeholders together, to flip the narrative of markets solely as cost and service delivery centres towards community food places worthy of innovative financial and infrastructural investment to leverage many other opportunities for just food systems transformation, advancing nutrition for all.

This handbook inspires me because it brings together examples of towns and cities around the world where local governments are actively working with stakeholders to make food markets agents of equitable and sustainable transformation. Local food markets are the capillaries of change. If they are not functioning for improved nutrition outcomes they will remain out of reach.

RICHARD McCARTHY

President

World Farmers Markets Coalition (WFMC)

A funny thing happened on the way to the 21st Century. Humanity unexpectedly rediscovered an ancient mechanism —the public market. Whether your market is traditional, municipal, wholesale, or a newly-minted farmers market, all share one key ingredient: The multiple checkout line. This technique facilitates multiple transactions, choice, and therefore also, trust. This purposeful assembly of competing vendors in a public setting is the special sauce. We must better understand what these institutions have in common, as well as where each approach provides its own costs and benefits to leverage.

Please invest in upgrades to physical space. Vendors and shoppers alike deserve to find one another in clean and safe environments. Plumbing, electrical, hygiene, lighting, and similar investments are welcome. Many markets operate just fine without any physical permanence. Maybe it is time to enjoy the moveable feast! Unless soft infrastructure investments in management and governance leadership are also made, important opportunities will be missed. How so? Consider this illustration. I know my way around many brick and mortar markets, but always struggle to locate the market office. Usually, it is tucked back where no one can find it. Are staff hiding from the public? By contrast, the new generation of farmers' markets are devoted to greeting the public beneath welcome tents, in order to orient and educate consumers. It is this ethos and leadership style that we must invest in.

Let the market be the first place where relationships are built and food is sold – from land to hand.

Executive summary

Urban areas face growing challenges in ensuring food and nutrition security due to rapid urbanization, climate change, and rising socio-economic inequalities. Food markets, which provide access to affordable, nutritious, and culturally appropriate food, are uniquely positioned to address these interconnected issues. Beyond their function as convenient food hubs ensuring the availability and accessibility of food, markets are entry points for fostering inclusivity, supporting equitable urban food systems and resilient livelihoods, and contributing to urban food security. This handbook highlights the importance of food markets as critical food environments, and serves as a practical guide to support local governments with inspiring and actionable policies and strategies to transform their respective markets.

The handbook begins by defining food markets, exploring their diverse scale, operations, and focus, and offering concrete examples from cities worldwide on how they engage with markets. This includes management arrangements, infrastructure, hygiene standards, and services that define different food market environments, offering insights into how these factors influence food security and the livelihoods of market actors. To support effective policy and planning, this handbook also provides tools and strategies for assessing markets, building on lessons learned from Lusaka, Zambia and Lilongwe, Malawi, where such studies were undertaken. These assessments enable cities to critically evaluate the current state of their market environments and develop tailored strategies for improvement.

At the core of the handbook is the **CityFood Market Action Framework**, which provides a structured approach to transforming food markets in cities. This framework is based on 16 global case studies showcasing actionable strategies and innovative solutions that have successfully addressed local challenges facing food markets and emphasising opportunities to support them.

The framework focuses on **four key pillars:**

Policy and Governance: Suggests strategies for integrating food markets into urban planning and policy frameworks, fostering collaboration across departments and government levels, and exploring partnerships with key market actors and community organisations.

Food Market Infrastructure: Proposes solutions to improve and invest in both physical and digital infrastructure to tackle issues such as post-harvest losses and food safety.

Funding and Incentives: Identifies opportunities to raise and/or provide financial resources to sustain food markets and to assist producers and vendors in promoting local, sustainable and affordable produce, while encouraging consumers to support such efforts.

Capacity Building and Awareness Raising: Sheds light on community engagement initiatives, such as workshops and awareness campaigns, as essential tools to foster behavioural change toward healthier eating and sustainable consumption.

The four pillars are supported by practical recommendations within the handbook including policies that ensure equitable food access, the adoption of digital tools to improve market efficiency, and educational initiatives to raise awareness about the benefits of healthy and sustainable food consumption. The handbook concludes with case studies from around the world, offering valuable lessons on how cities can unlock the potential of their food markets. These examples showcase successful transformations, including but not limited to inclusive governance models, investments in infrastructure, promotion of sustainable food systems, and improvements in market hygiene and accessibility.

By reimagining food markets as dynamic urban spaces fostering innovation and inclusivity, the handbook provides a clear roadmap for action, backed by evidence-based strategies and inspiring success stories. It calls on policymakers, urban planners, market actors, and international organisations to collaborate in prioritising food markets within broader urban development agendas. Aligning efforts across sectors and government levels presents an opportunity to transform food markets into powerful agents of change, addressing pressing issues such as food insecurity, malnutrition, biodiversity loss, and climate change.

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Glossary

CIRCULAR ECONOMY | An economic model that preserves the value of resources by reintegrating them into the production cycle. In food markets, it involves reducing waste, repurposing byproducts, and promoting sustainable practices like eco-friendly packaging and local supply chains.

FOOD DISTRIBUTION | The process of transporting and delivering food products from producers or suppliers to intermediaries, retailers, or directly to consumers.

FOOD ENVIRONMENT | The High Level Panel of Experts on Food Security and Nutrition (HLPE) defines the food environment as "the physical, economic, political, and socio-cultural context in which consumers engage with the food system to make their decisions about acquiring, preparing, and consuming food." [1]

FRESH FOOD MARKET | A subset of food markets that specialises in the sale of perishable, minimally processed food items such as fruits, vegetables, meats, seafood, dairy, and baked goods.

FOOD MARKET | Place or system where food products are bought and sold. Food markets may vary greatly depending on a number of factors – including their infrastructure, size and location, the frequency at which they operate, who owns them and how they are governed, as well as the types of products they sell. For more details, please refer to Chapter 5.

FOOD SECURITY | According to FAO, food security exists "when all people, at all times, have physical, social and economic access to sufficient, safe and nutritious food that meets their dietary needs and food preferences for an active and healthy life." [2]

FOOD SUPPLY CHAIN | The network of activities involved in producing, processing, distributing, and delivering food from farms to consumers. When referred to as the food value chain, the focus is on adding value at each stage, such as enhancing quality, sustainability, and market appeal.

FOOD SYSTEMS | The UN Food and Agricultural Organization (FAO) defines food systems as: "Food systems encompass the entire range of actors and their interlinked value-adding activities involved in the production, aggregation, processing, distribution, consumption and disposal of food products that originate from agriculture, forestry or fisheries, and parts of the broader economic, societal and natural environments in which they are embedded." [3]

FOOD WASTE | A reduction in the quantity or quality of food caused by the actions or decisions of retailers, food services, or consumers. Inedible parts of food, such as peels or bones, are excluded from this definition. [4]

MARKET COMMITTEE | A governing body responsible for managing and regulating market operations, including vendor coordination, infrastructure maintenance, and rule enforcement. It typically includes market managers and elected vendors as well as other stakeholders such as local government officials, community members, food safety experts, and farmer representatives, ensuring diverse perspectives and effective oversight.

MARKET MANAGERS | Individuals or entities responsible for overseeing the operations and administration of a market.

MARKET MASTERS | Similar functions to market managers (defined above) on a small market scale.

VENDORS| Individuals or entities selling goods in food markets. The term covers anyone actively engaged in sales, including direct sales by farmers and resales by intermediaries. This term is most commonly recognised across different regions (e.g., compared to "trader").

VULNERABLE GROUPS | Populations at higher risk of food insecurity, including low-income households and communities in food deserts with limited access to affordable, nutritious food.


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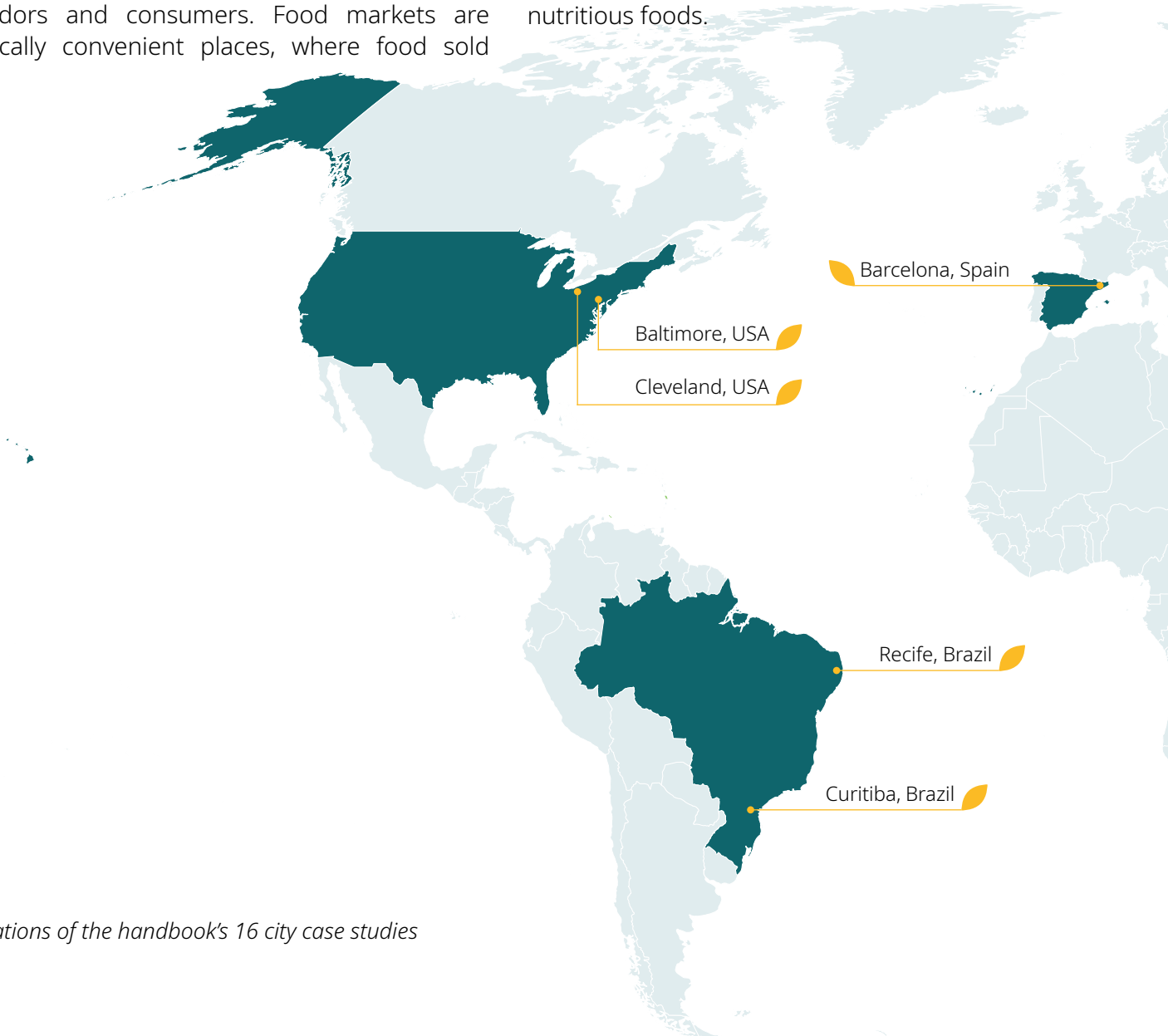
About this handbook

This handbook is a practical guide for local governments interested in leveraging the potential of food markets to enhance urban food security, nutrition and resilient livelihoods. Businesses, researchers, non-governmental and civil society organisation representatives, and community members will also find valuable insights and lessons within its pages. It provides structured information and real city-case studies with actionable insights, focusing on publicly managed markets that operate on a regular basis, be it daily, weekly, or even monthly.

Markets stand as critical food environments bringing together multiple actors of the food system, from farmers to market managers, vendors and consumers. Food markets are typically convenient places, where food sold is sometimes specific to groups such as fruits, vegetables and grains, and other times specific to production types including organic, agroecological and/or locally produced food.

Operating at different scales and in formally and informally designated selling spaces, these markets also vary with respect to management arrangements, hygiene, infrastructure and the provision of basic services. As such, they are key entry points for localising and accelerating sustainable development and addressing inclusion and equity. When provided with adequate support, food markets can indeed positively impact the availability, accessibility and affordability of a diversity of safe, fresh and nutritious foods.

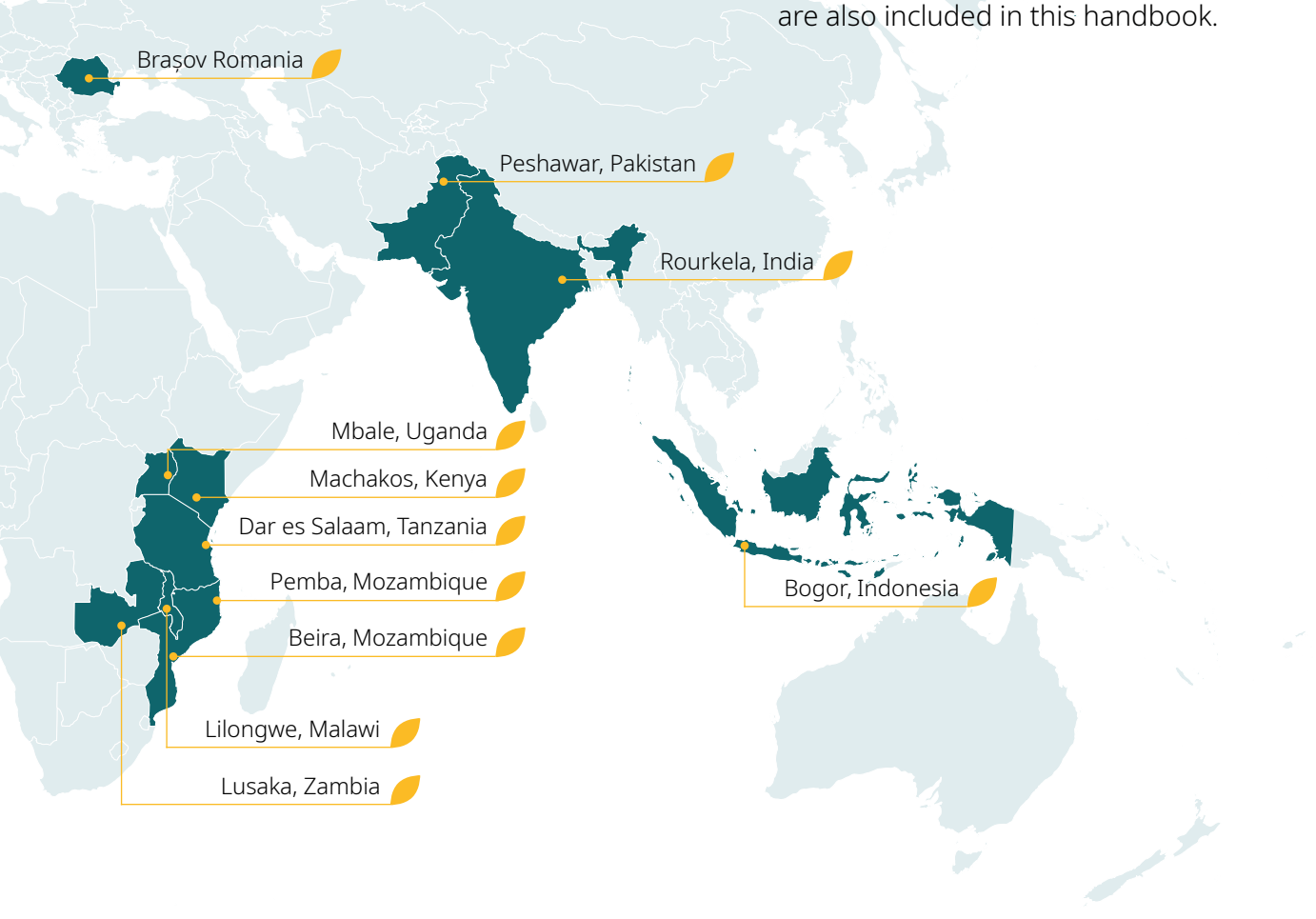


Locations of the handbook's 16 city case studies

A selection of local strategies that strive to strengthen the value of food markets are showcased in this handbook. This selection encourages interested stakeholders and readers to critically assess food market environments, rethink local food systems and climate resilience strategies, enhance the effective promotion of and investment in locally led, inclusive governance and management of markets, and design and finance innovative infrastructure and service delivery models.

The handbook is structured around the **CityFood Market Action Framework**, supported by four pillars built upon **16 city case studies** developed by ICLEI - Local Governments for Sustainability and the Global Alliance for Improved Nutrition (GAIN). Cases are informed by ICLEI and GAIN's programmatic endeavours and their direct consultations with local governments and market actors. In this first edition, the selection of suitable cities focused on ensuring diverse geographic representation, showcasing a variety of food market-related initiatives led by local governments and their partners, and engaging cities interested in sharing their strategies. The goal was to identify exemplary practices across various sub-topics, offering insights that can be shared, scaled and/or adapted to different contexts.

This handbook is one of the outputs of the **Strengthening local fresh food markets for healthier food environments within planetary boundaries** project funded by the Federal Ministry for Economic Cooperation and Development (BMZ) and supported by the Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ). As part of GIZ's Global Programme Transformation of Food Systems [5], the project aims to empower consumers to adopt healthier and more diverse diets while enhancing the resilience of urban food environments, using markets as hubs for positive change. The project implementation focuses on two African cities, Lusaka, Zambia, and Lilongwe, Malawi, whose case studies, experiences, and lessons learned are also included in this handbook.



What food markets are and why they are important

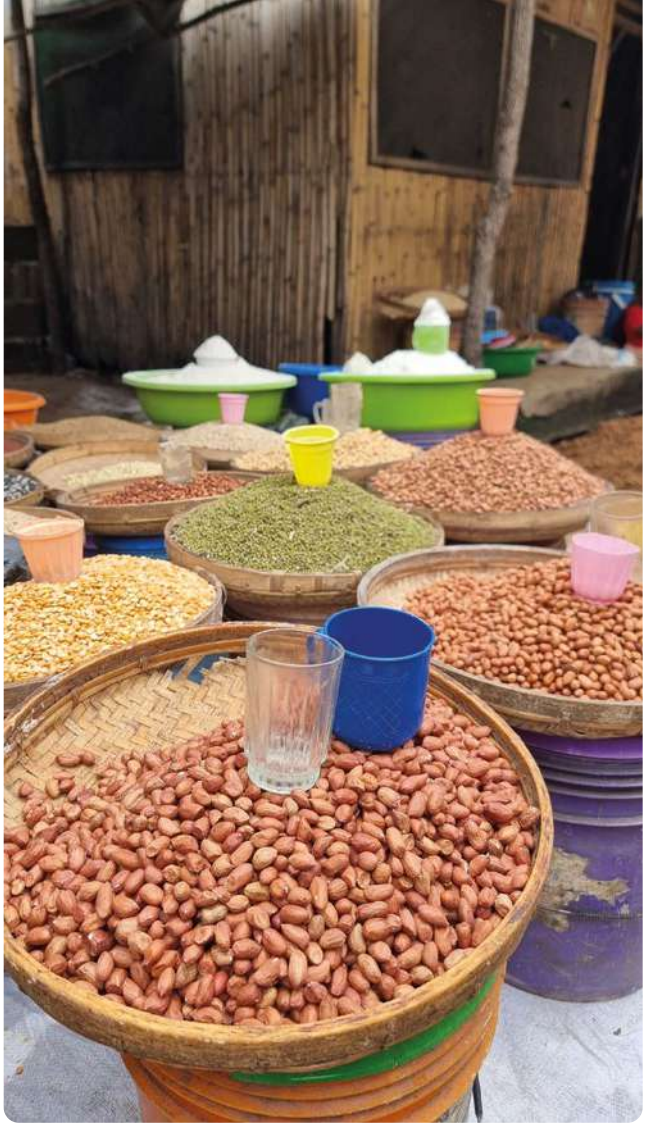
An increasing number of people are migrating to and living in urban areas globally. This rural-urban population transition has often been associated with urban poverty and deteriorated socio-economic conditions, leading to changes in lifestyles and diets as well as inequalities within cities [6]. These trends have also had a significant impact on how food is produced, handled, marketed, governed, and consumed worldwide [7]. In the past, keeping people fed was an important mandate of nation states, enabling governments to retain charge over spaces, people, and economies [8]. The mandate to feed people then moved to cities.

Over time, cities and urban areas have become key centres of human civilisation with unique food system-related complexities —from population densification to urban sprawl and increased distances to where food is produced.

The right to adequate food is a basic human right and at the core of Sustainable Development Goal 2 "Zero Hunger," yet many urban residents continue to face barriers in this regard [9]. While urban diets are typically more diverse than rural diets, they tend to be lower in quality due to spatial inequalities in accessing local food markets. Although food markets are generally accessible in some capacity, urban sprawl, gentrification, and the displacement of poorer residents to more affordable areas often increase the distance and reduce the convenience of reaching established markets. This limits the availability, affordability, and accessibility of nutritious foods like fruits and vegetables, contributing to the loss of traditional food cultures. Challenges in preparing and storing nutritious meals at home and the rising consumption of convenient, but often more unhealthy foods such as ultra-processed items high in salt, fats and/or sugar [6] have also contributed to increased burdens of malnutrition in urban areas. Low-income households who form the majority of the urban population, and groups such as women, children and elderly people are particularly vulnerable to food insecurity mostly due to accessibility and affordability challenges. Notably, approximately three quarters of the world's food insecure population now reside in urban and peri-urban regions [9].

Cities are best positioned with mandates, locations and routine engagements with communities to leverage food security, nutrition and sustainability opportunities inherent in food markets.

Some food markets were created to improve public hygiene by upgrading the physical structure of the point of sale, while others were established for competent authorities to gain greater control over commerce through the collection of fees, taxation and the control of prices. Beyond this, food markets serve as



Alto Gingone market in Pemba, Mozambique. ©GAIN

socio-cultural spaces and key sites for livelihood generation, engagement, communication and educating the public about healthy food choices. In certain regions, food markets are critical for food security and subsistence, while in others, they cater to more specialised demands, offering niche products. Additionally, food markets are important for local food systems resilience.

By bridging the gap between rural and urban areas, and more widely across territories and borders, food markets also support the availability of diverse, healthy foods, drinks and non food related items and contribute to stabilising prices, shortening food supply chains, enhancing food security, and fostering economic opportunities. Unlike corporate value chains, in which not all farmers can participate due to production quantity requirements, local food markets also give farmers and vendors greater control over pricing [10].

Zooming into food markets: Types and how they function

Markets where food is sold are known by various names and framings, including public or municipal markets, street markets, territorial markets, local markets, traditional markets, organic markets, farmers' markets and wet markets. Many more names for these types of markets are found in languages other than English —from *souks* to *bazaars*, *spaz mandis* and *mercati*, to name a few.

Food markets can range from large, permanent municipal markets with several hundreds of vendors to smaller, temporary setups such as roadside stands, open-air markets, kiosks, or street stalls. They can vary greatly across contexts, taking diverse forms and serving different purposes. It is widely recognised that more needs to be done to bridge multiple disciplines' interpretations, programmatic activities and evidence of and about these markets [11]. This includes definitions of privately managed markets, kiosks and supermarkets and public and informal versions of markets where micro, small, and medium market related businesses operate from [12].

Ginger and garlic vendor in Pakistan. ©GAIN

DEFINING A FOOD MARKET

Defining a typology for food markets is challenging and may not reflect their diversity and complexity. **In this handbook the following indicators are utilised to help provide an overview of food markets, based on various lenses that can be used to observe them:**

SIZE

Markets can be large or small depending on several factors – from calculating the number of vendors or consumers to measuring their physical space.

FREQUENCY

Markets can operate daily, weekly, several times per week, or seasonally.

LOCATION

Location matters not only in reflecting the characteristics of whom the market serves and the distance participants travel to attend but also in shaping the broader social and economic roles that local markets play. While neighbourhood markets may target consumers of a particular town district, municipal markets often draw consumers and vendors from all over the region, thereby serving as economic flagships. At the same time, these markets serve as hubs for community interaction and cultural exchange.

LAND TENURE

Land tenure highlights how land ownership or rental arrangements shape the market's location, structure, operations, and access.

MARKET OWNERSHIP

A market can be owned by a municipality, private individual, for-profit company, civil society entity, social enterprise, or farmer cooperative. Ownership can serve as a proxy for the kind of issues markets may face, as well as for what sort of investments may be needed to bolster the market.

GOVERNANCE

While there is no single method for maintaining good governance, an important element is alignment in what a market intends to do with how it evaluates its efficacy. To assess the market governance structure, key questions include whether the market has operating procedures, guidelines, and/or rules and regulations to ensure its good functioning, from food safety to people's security, and whether these are published. Other elements include establishing a governing board as well as a selection committee or team to evaluate prospective vendors and mechanisms for consumer input.

INFRASTRUCTURE

Physical infrastructure provides insight into the resources necessary to operate a market. For instance, indoor markets may encounter expensive challenges from electricity to roof maintenance or the presence of public restrooms. Categories span from outdoor sheds and indoor halls to entire districts of market buildings and open-air spaces that operate as a singular market system and need to include everything to effectively function, from roads to access the space to hygiene facilities, storage, cooling facilities, and electricity sources.

PRODUCT TYPES

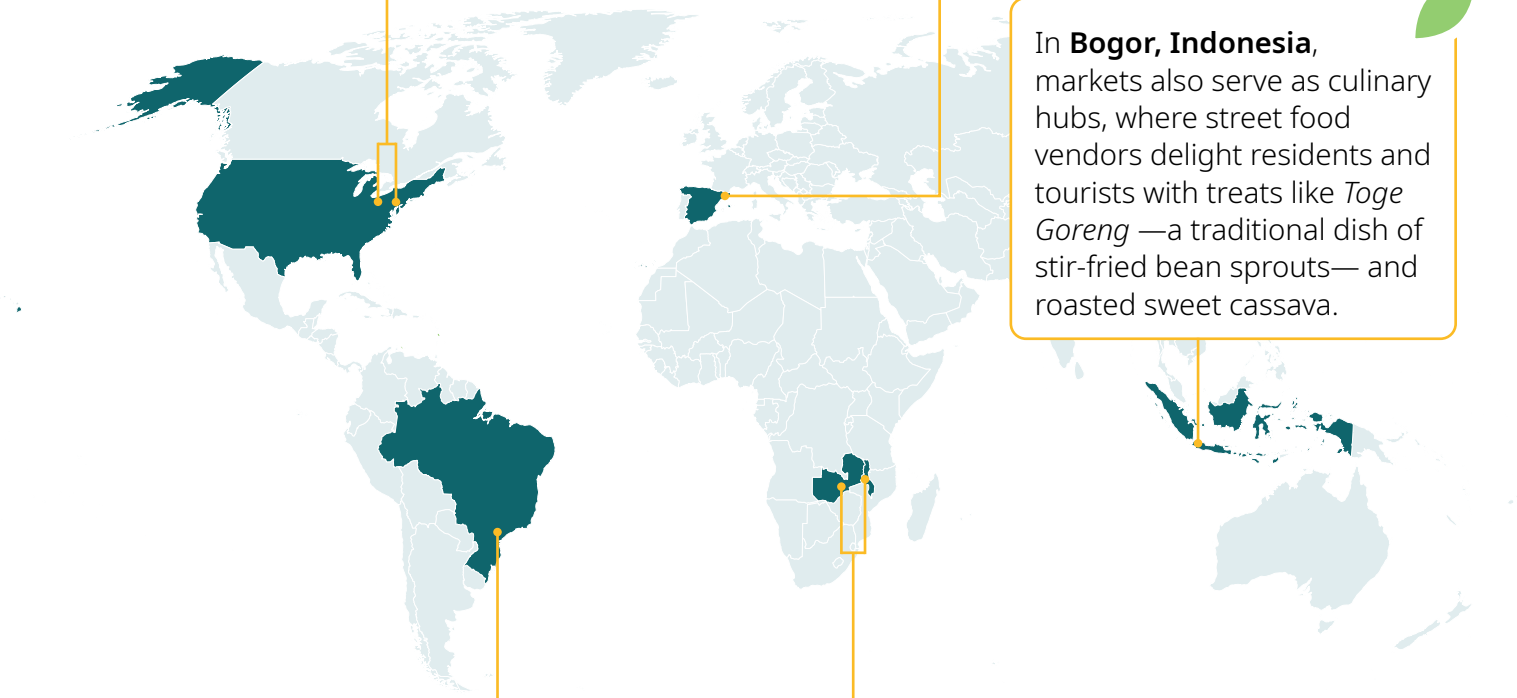
Depending on the kind of market, products on sale may vary significantly – from their origin (region and country versus local and global supply chain) to their production method (from regenerative to organic to conventional) to types of food (fruits and vegetables, grains, proteins, processed food, etc.).

This diversity in food retail landscapes is well represented in the 16 case studies selected for this handbook. A few examples are outlined below:

Examples from the **United States** include **Baltimore**, where municipal markets have operated for over 200 years and offer various products, including local farmers' produce, eggs, meat products, and prepared foods. In **Cleveland**, the increasing role of farmers' markets and farm stands reflects a growing consumer and farmer desire to join forces, enable direct sales, and deliver greater transparency in local food systems.

In **Barcelona, Spain**, 38 municipal markets operating daily are complemented by weekly farmers' markets, providing residents with fresh produce from the region.

In **Bogor, Indonesia**, markets also serve as culinary hubs, where street food vendors delight residents and tourists with treats like *Toge Goreng* —a traditional dish of stir-fried bean sprouts— and roasted sweet cassava.



In **Curitiba, Brazil**, the market landscape is also varied and includes a large municipal market, regional market, 79 different organic and cooperative markets as well as *Sacolões da Família* (Family grocery stores) selling fruits and vegetables, which the city explicitly leverages for social inclusion and the right to adequate food.

Across Southern Africa, food markets such as open-air markets, kiosks, and street vendors remain vital to food security [13]. In both **Lilongwe, Malawi** and **Lusaka, Zambia**, open-air food markets (comprising municipal markets that form the majority, but also cooperative and private markets) play an essential role in providing a wide variety of nutritious, affordable, locally-grown produce, serving the most vulnerable and food-insecure communities.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Unlocking the full potential of food markets: Lessons from cities around the world

UNCOVERING CHALLENGES

Food markets typically share similar functions, activities, and commercial relationships, playing a key role in shaping both local economies and societal dynamics. This commonality leads to shared challenges across countries, such as sustainability, food loss and waste or farmers' access to markets. Markets also encounter unique challenges based on their specific contexts, including governance related issues, inequitable access to resources, and limited infrastructure which often hinder their potential to deliver fair prices, safe food, and livelihoods for small-scale farmers [14].

- **Brașov, Romania:** The size of local farms, which are often small to medium-sized, makes it difficult to maintain a supply of goods year-round. Fresh food becomes less available and more expensive during winter, pushing consumers toward supermarkets as alternatives.
- **Cleveland, United States:** Infrastructure issues hinder the ability of the city's markets to source locally, impacting both processing and distribution capabilities.
- **Lusaka, Zambia and Lilongwe, Malawi:** Food safety and handling standards are major issues due to the lack of basic trading infrastructure and Water, Sanitation and Health (WASH) facilities. High food wastage is also a challenge due to absence of storage facilities and limited market infrastructure.
- **Rourkela, India:** About 34% of fruits and over 44% of vegetables are wasted annually due to inadequate storage facilities, resulting in lower revenues, food contamination, and increased water, and energy consumption.
- **Peshawar, Pakistan:** Food safety is compromised by the use of pesticides, milk adulteration, inadequate food handling practices, and inconsistent enforcement of regulations.

EMBRACING OPPORTUNITIES

When managed effectively, food markets provide more than just food —they offer a platform for learning, for changing behaviours of producers, consumers, and anyone interacting with them, and for business incubation for vendors. These additional benefits are nevertheless not automatic and require active investment, mostly in the management and governance capacity of the market organisation. While room for manoeuvre may vary depending on the policy and regulatory context, local governments have both the opportunity and the responsibility to ensure access to sufficient, safe and healthy diets.

- **Rourkela, India:** In 2021, Rourkela, in collaboration with partner organisations, launched the "E-cool Mandi" project. The initiative installed solar-powered decentralised cold storage facilities across various market locations, benefiting approximately 1,650 vendors and nearly one million residents.
- **Recife, Brazil:** The city has made significant investments in structural improvements across its market facilities in recent years, including the construction of new spaces for vendors and visitors and extensive refurbishments to existing infrastructure. These upgrades have increased the markets' appeal to residents, tourists, and collaborators alike.
- **Bogor, Indonesia:** The city designated 14 street vendor operating zones, each linked to a culinary centre. These zones provide vendors with essential infrastructure such as running water, and allow them to register as legal street food vendors. Registered vendors are eligible for food handling training, while their operations are more easily monitored to ensure food quality and safety.

While local governments can drive change through conducive framework conditions such as regulations, taxes, subsidies, and other incentives, they need other actors along the food supply chain to also adjust their practices to support local food markets. In this context, an inclusive governance structure that manages markets through cross-departmental and multi-level collaboration, ensuring that all stakeholders are engaged in decision-making processes is essential for securing food accessibility and affordability.

- **Lusaka and Lilongwe:** Both cities established multi stakeholder networks to address challenges facing food market environments. Consultations identified critical areas for intervention, including investment into upgrading market infrastructure, improving waste management, implementing cold storage facilities, and integrating nutrition awareness raising for consumers within market spaces.

Targeting interventions requires an initial assessment of the food market environment. Cities, in collaboration with key stakeholders, need to conduct a preliminary assessment as a critical first step before planning interventions, as it helps cities to gain a comprehensive understanding of community needs, market dynamics and governance structures. This assessment should include, amongst others, collecting background data on the current state of markets, identifying potential partner organisations, clarifying areas needing intervention, and addressing any health and safety issues that affect the local population. Additionally, it should consider the specific needs of the market community including farmers, vendors, and consumers with a particular focus on nutrition. This approach also enables local governments to allocate their often limited resources towards initiatives with the greatest impact and potential for replication.

How to assess food markets and identify opportunities for transformation

Various food market assessment methodologies have already been developed to better understand the functioning of food markets in cities. These include FAO's Mapping of Territorial Markets: Methodology and Guidelines for Participatory Data Collection [15], which includes sets of model questionnaires designed to facilitate preliminary market analysis and gather insights from both vendors and consumers. Another key resource is the Guidelines for Market-Based Food Environment Assessments Instruction Manual by USAID Advancing Nutrition [16], which includes a comprehensive instruction, along with data collection and analysis sheets for conducting market-based food environment assessments, that are modified to be applicable in low- and middle-income country settings.

These assessments provide valuable insights into the availability of different types of produce as well as the characteristics of both food vendors and consumers, and identify key challenges that may require targeted interventions [17]. Due to their participatory nature, market assessments can foster new collaborations between food market actors and government stakeholders, paving the way for more inclusive policy making, the co-creation of platforms and initiatives, and the development of new infrastructure.

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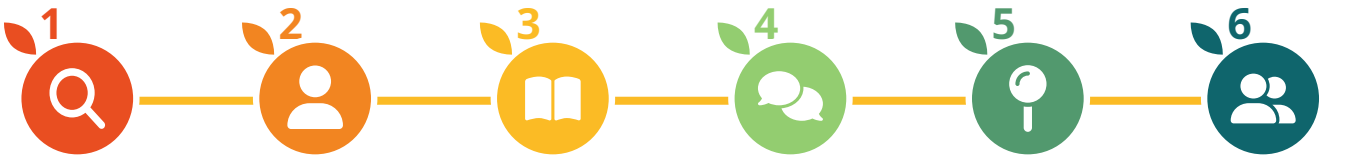
From assessment to action: A step-by-step guide inspired by Lusaka and Lilongwe

In both cities, the food market assessments primarily aimed at understanding the food market landscape and at engaging relevant actors in the selection of markets and the design of targeted interventions. The **Methodology and Guidelines for Participatory Data Collection** was used as a basis and adapted to assess food markets in **Lusaka** and **Lilongwe**.

This assessment encompassed stakeholder mapping, articulating challenges, and compiling existing initiatives and projects aimed at improving food markets.

Additionally, this process identified transformative initiatives linked to food markets, food environments and existing multi-actor networks, and identified potential support needs. A strong emphasis was placed on market investment readiness, assessing the capacity of the selected food markets to attract and effectively utilise investments they may receive. This focus aims to ensure the financial sustainability of the planned investment and to maximise their long-term impact.

A successful food market assessment is one that is done in a participatory manner, actively engaging and empowering both food market actors and the community they are serving. Aligning interventions with the specific needs and goals of stakeholders that are directly involved in the day-to-day operations of food markets promotes the development of a sustainable and resilient market ecosystem. The following components are essential to consider and incorporate when designing a socio-technical intervention for food market environments.



1. DESKTOP REVIEW

Conducting a desktop review is a useful first step in the food market assessment process. In this online scoping, you can look out for key food market studies that were produced in the city, map local and international organisations (NGOs, civil society organisation, philanthropies, local and national level public sector actors, private sector actors) who are doing food market-related work, any past projects that have taken place, as well as project proposals that have not yet been funded. You might find that some cities lack published information on their food markets, while others have already been well-studied. This alone can be considered a finding.

2. ONE-ON-ONE CONSULTATIONS

Through the desktop review, you should have an initial overview of the food market actors in the city. As a next step in this assessment, you might find it valuable to meet with these stakeholders one-on-one, preferably in person. When doing so, you should make sure to include local government actors, for instance, from the Health, Environment, Social Development, and Planning departments, as well as national government actors such as the Ministry of Agriculture. During these consultations, you can find out more about capacities, challenges, opportunities, and past interventions relating to food markets in the city, as well as get on-the-ground information regarding additional players in the market ecosystem.

3. RESEARCH

For a deepened understanding of the food market ecosystem in the city, you may consider commissioning a local research project. Key research items include: 1) mapping the totality of public, private, and cooperative food markets across the city, 2) conducting an investment readiness assessment on a selection of food markets, 3) working with the relevant department to assess the overall capacity of the market and associated business model, and 4) looking at the historical investments in the city to uncover key lessons learned.

In the cases of **Lusaka** and **Lilongwe**, the Market Investment Readiness Index was applied to evaluate the capacity of food markets to attract and efficiently utilise investments. The Market Investment Readiness Index[1] can be used to guide the evaluation of market readiness. Key factors to consider are the current state of infrastructure and services, the governance and management model of the food market, its socio-economic importance and resilience towards climate shocks, and the willingness and ability of the markets to receive and manage funding. Each of these focus areas can have a scoring matrix, which can then be combined to reach a final investment readiness rating. You may want to consider adapting these categories and weighting them according to the city's investment priorities.

1 The Market Investment Readiness Index is a tool developed by ICLEI Africa Secretariat and its partners to assess the potential of food markets to attract and effectively utilise investments. By systematically testing and refining this index, the project aimed to create a robust framework that can guide future investments in urban food markets, ensuring they are better equipped to meet the needs of the urban population and contribute to healthier food environments. The refined tool will be published upon completion. For more information, contact iclei-africa@iclei.org.

4. MULTI-STAKEHOLDER CONSULTATIONS

While research can uncover many key insights, it is important to validate emerging findings against the institutional knowledge that is built into a city. This knowledge sits with local councillors, academics, private sector players, NGOs, consumers and other key stakeholders. Conducting multi-stakeholder consultations in the form of workshops, which involve the participants consulted and identified during the one-on-one consultations, would provide a valuable platform for integrating diverse perspectives. City councils serve as good starting points for these conversations.

> As many cities do not have a dedicated food systems office, it is important to create a sense of buy-in across all departments involved in food markets.

To do this, you may want to facilitate a cross-departmental engagement with local government officials to gain a more nuanced perspective of the existing or future city or ward-level projects, goals, potential synergies, or the subtle politics surrounding a particular food market.

Disseminating the research and scoping findings amongst the local government departments is an important part of building capacity and getting people to work together. You may also want to disseminate the information back to a larger multi-stakeholder group composed of all the people you interviewed during the one-on-one consultations. These feedback sessions create a sense of momentum amongst involved actors. They can be used as a critical touchpoint to validate information and get additional input on unforeseen risks, opportunities, and synergies. You may even want to formalize these groups into a Task Force (composed of city council members across departments) that can support market interventions and a Steering Committee (made up of broader food system actors) that can provide advisory support to ensure the sustainability of the action.

5. SITE VISITS

It is recommended that all actors involved in the food market assessment take the time to visit a range of markets in the city.

> The quickest way to contextualise market interventions is by visiting the food markets themselves, and talking to market leaders, vendors, and customers.

Make sure to observe correct protocols when visiting a food market, which depending on your context, could involve seeking out the market chair or section leader to announce yourselves. If they are available, you can request that they move through the market with you and help to facilitate discussion with other market actors. Take the time to listen to the vendors' perspectives on the market and let them guide you to areas they think can be improved upon.

6. CO-CREATION WORKSHOPS

A final step in the food market assessment process is to host a co-creation workshop at the food market, involving the market leaders, vendors and consumers. If you are seeking to foster changes at a food market, it is important to build a sense of ownership amongst market actors, and leverage their expert knowledge.

> Start by asking the various actors about the pain points and highlights of their market experience.

Together, you can write up some potential solutions on Post-it notes. Following this, create an investment priority timeline along a single line, showing current needs on one side and future needs on the other. Place each Post-it on the timeline, each time asking the market actors where they feel it should be placed in order of priority. The resulting investment timeline will provide you with clear next steps regarding food market interventions. Note that the desired interventions may include both hard infrastructure investments and capacity building or governance support.

Vendor focus group taking part in the co-creation workshop in Lilongwe, Malawi. ©ICLEI Africa

Transforming food markets: The CityFood Market Action Framework

Local governments have the opportunity to translate insights —whether they come from food market assessments or other relevant studies— into effective action. In this section, we explore how cities have adopted innovative policies and strategies to support and strengthen their food markets. These examples offer valuable lessons and practical approaches that can be adapted to diverse local contexts.

Drawing on the case studies from around the world, several overarching entry points have indeed been identified as critical for cities to consider when establishing and managing food markets. These include policy and governance, market infrastructure, funding and incentives, and capacity building and awareness raising.

When brought together, the pillars of the CityFood Market Action Framework can transform how food markets operate, bringing fresh and healthy food closer to local communities.

After introducing the overarching framework, this section will dive into each of the four pillars, highlighting inspiring and replicable practices from the cities featured in the case studies.

I. POLICY AND GOVERNANCE

To ensure the existence, security and efficient functioning of food markets, it is essential to put robust market legislation, local food policies and innovative governance structures in place. In addition to improving market operations, this involves establishing a foundational framework and ensuring policy and governance that allows all types of food markets to exist and thrive [18]. Key actions include:

- **Facilitating access to food markets through urban planning**
- **Fostering policy integration and collaboration across departments and government levels**
- **Establishing participatory decision-making mechanisms**
- **Building partnerships with external organisations**

III. FUNDING AND INCENTIVES

Mobilising financial resources from both public and private sectors, providing vendors with necessary funding and incentives for growth, and collaborating with market managers to develop innovative business models for food markets that allow revenue from income-generating market components (e.g., pay-as-you-use cold-storage units) to be ring-fenced for reinvestment into market infrastructure, being either self-financed markets or owned partially or totally by a public institution. Key actions include:

- **Securing funds for food market development**
- **Connecting farmers to markets**
- **Enhancing food access for vulnerable communities**

II. MARKET INFRASTRUCTURE

Infrastructure investments are essential to effectively and sustainably operating food markets. Local governments need to ensure that food markets are well equipped and that vendors have access to essential facilities. Key actions include:

- **Upgrading and sustaining physical market infrastructure**
- **Leveraging digital tools to streamline market operations**

CITYFOOD MARKET ACTION FRAMEWORK

PILLARS OF ACTION

IV. CAPACITY BUILDING AND AWARENESS RAISING

This includes enhancing knowledge and skills among market vendors, staff, and consumers, ensuring safe and hygienic practices while promoting nutrition awareness and sustainable consumption. Key actions include:

- **Strengthening vendor capabilities on hygiene and food safety**
- **Mainstreaming sustainable food practices within the market space**
- **Engaging consumers through education and awareness raising**
- **Unlocking the social potential of food markets**

THE CITYFOOD MARKET ACTION FRAMEWORK IN PRACTICE

I. Policy and Governance

Local governments have various policy and governance tools to effectively support food markets. Yet, achieving success in this area requires close collaboration with a wide range of actors, including other city departments and the private sector.

FACILITATING ACCESS TO FOOD MARKETS THROUGH URBAN PLANNING

> The location of food markets is crucial in ensuring access to healthy food, as consumers often choose food outlets based on how close and convenient they are to reach [19].

This is particularly important for lower-income residents, who may have limited mobility options and rely on walking, biking, or public transportation. Cities are responsible for determining where markets are allowed to be located, which buildings or public spaces host them, and the permits or regulations that apply to them. By doing so in an inclusive and equitable manner, cities can improve access to food markets for all residents. To achieve this, local governments should integrate food markets into broader urban planning efforts, also considering the connectivity to transportation and food distribution networks.

The City of **Cleveland**, for instance, supports farmers' markets, farm stands and privately owned markets through its zoning codes, which require an approval process to ensure compliance with established standards. Additionally, the city implements a "15-minute city planning framework," which aims to ensure residents can access essential services, including food, within a 15-minute commute by public transport, walking, or biking [20]. Moreover, as

part of the zoning code, the city's Urban Garden District Initiative ensures that urban garden areas are appropriately located and protected to meet the needs for local food production, allowing equitable access to the gardens' food supply throughout the city.

Conversely, in **Lilongwe**, the local government has formally zoned five roadside areas as "off-street markets" to allow food vendors, vital to the city's food provisioning system, to build trading stalls in an organised and safe manner, following predefined design specifications to ensure their stalls are well-maintained and do not obstruct traffic. Moreover, these vendors are now registered with the city council and contribute through regular monthly fees, formalising their businesses with the urban economy. Similarly, in **Bogor**, the municipality operationalises 14 official city culinary zones where street vendors sell food. In each zone, a culinary centre established by the city provides vendors with fixed operating locations, as well as places where they can receive training on nutrition, hygiene, food safety and food waste supported by the Department of Health.

Culinary centres in the city of Bogor provide permanent locations and essential infrastructure to street vendors. ©GAIN

FOSTERING POLICY INTEGRATION AND COLLABORATION ACROSS DEPARTMENTS AND GOVERNMENT LEVELS

The management of food markets intersects multiple mandates beyond food policy, including urban planning, housing and social services, climate and the circular economy, and as such, many different departments within the municipality have an influence on how food markets are run. Other levels of government are also often involved in aspects of the market, as is the case for agricultural produce regulations and food safety monitoring in some countries.

> To effectively develop market-friendly public policies and legislation, local governments should foster better policy integration and cross-department collaboration at the municipal level and also look into ways to collaborate with regional and national governments.

This process requires first to map existing policies, competencies and responsibilities within the city administration with a view to assess where synergies lie, as well as identifying barriers food markets may face when operating within or interfacing with municipalities. Such an approach provides a solid foundation for food markets to operate securely, deliver essential services, and foster sustainable practices, all while ensuring market policies align with broader urban development strategies [18].

To enhance availability, accessibility, hygiene and food safety in markets, the Departments of Health, Agriculture, Sanitation, Environment, Transport, and Urban Planning within the Municipal Council of **Beira, Mozambique**, work in close collaboration. These departments, along with additional actors in the market sphere, including representatives from a women's association and a consumer group, form the multi-stakeholder market management committee that was co-

designed and established shortly after the COVID-19 pandemic. This committee has successfully operated for the past few years and offers a scalable city-market model of inclusive governance.

Likewise, in **Machakos, Kenya**, where market management is the mandate of the County government, collaboration across departments and levels has proven critical in the effective management of food markets, bringing together several County departments (Trade, Industry, Tourism and Innovation; Water, Irrigation, Environment, Sanitation and Climate Change; Agriculture, Food Security and Cooperative Development; and Health) to work hand in hand with market committees, who are themselves capacitated to support these goals and activities on a daily basis.

Illustration of the collaboration between stakeholders in effective food market management in the Machakos Municipal Market. ©GAIN

Another example includes **Peshawar**, where several policies and partnerships aim to support the Metropolitan Government's objectives of shortening food supply chains, improving food security and nutrition, and zoning markets. Achieving these goals requires coordination across different food-related sectors and government entities, spanning local, provincial, and national spheres —Peshawar's market committees and municipal corporations, the Khyber Pakhtunkhwa Food Safety and Halal Food Authority, and the Pakistan Standards and Quality Control Authority, to name a few. Collaborative efforts on stabilising food market prices, especially of culturally preferred foods, setting guaranteed minimum prices, and food safety legislation and monitoring help make food in the markets more affordable and safe.

ESTABLISHING PARTICIPATORY DECISION-MAKING MECHANISMS

While local governments can drive change through regulations, taxation, subsidies, and incentives, other actors such as farmers, consumers, food retailers, institutional buyers, and food companies hold significant influence on the food retail landscape. In many contexts, key decisions may include establishing transparent pricing systems, improving access to financial services, investing in market infrastructure, and incentivising the production and promotion of a diverse range of nutritious foods, for instance, through support for organic or agroecological farming practices [21].

> Inclusive partnerships involving all actors along the food supply chain, such as farmers, vendors, consumers, processors, community organisations, and local authorities from rural, peri-urban, and urban areas, are essential for creating viable and equitable food market models that make healthy food accessible and affordable.

Inclusive partnerships can take the form of management bodies or advisory boards, enabling actors to actively participate, particularly during major decisions-making processes (e.g., market renovations, new infrastructure, opening hours, market locations). By establishing inclusive participation mechanisms, each group can advocate for their specific interests: Vendors

for the support of livelihoods, consumers for food access, affordability and public health, and community for public space and civic engagement.

A successful example is the establishment of the Good Food Council and Good Food Parliament in **Mbale, Uganda** serving as multi-stakeholder platforms for dialogue, accountability and collective decision-making, formed initially with the goal of improving food safety in the city. A key outcome of this new governance structure has been the development of a Food Ordinance, aimed at addressing safe food practices in the markets. Through these bodies, local farmers, for instance, are able to voice their needs and enable other actors —including the municipality— to understand how farmers can best be supported in overcoming food market-related challenges.

Similarly, in **Lusaka**, the Lusaka Food Policy Council (LFPC), established in 2020, has a mission to encourage and facilitate dialogue and collaboration among food-related organisations, agencies, services, farmers and food distributors, consumers, businesses, and government to develop strategies for the promotion and facilitation of a functional, sustainable food system for the city. The recent city council approved the city-region food systems office, which will support LFPC in this role.

The **Bogor** government is working together with street food vendors association leaders to establish a cross-sectoral working group, develop multi-stakeholder operating guidelines as part of the regional development plan, and capacitate local leaders on nutrition, food safety, and the reduction of food waste. This structural improvement not only promotes the inclusion of small-scale food supply chain actors and small and medium enterprises but, in turn, enhances the availability of diverse, fresh, and seasonal foods.

BUILDING PARTNERSHIPS WITH EXTERNAL ORGANISATIONS

While inclusive decision-making is a precondition for successful market operations and investments, the actual implementation and management of markets also requires collaboration with a broad range of actors, such as local organisations, food recovery initiatives, and private sector.

Partnerships can improve a programme's effectiveness, increase the impact of market interventions, ensure transparency, foster greater buy-ins, and expand its reach.

Several cities have partnered with the private sector to support food market management, particularly in separating, collecting, and processing food waste. For example, **Lusaka** collaborates closely with private entities to implement waste separation in its markets, as does **Cleveland**. In January 2023, the City of Cleveland launched a pilot project to reduce and rescue food waste at its historic West Side Market. Partners included the Hunger Network, a community food rescue organisation, as well as local composting partners Rid-All Green Partnership and Rust Belt Riders. The project conducted a waste audit and found that most of the food waste was compostable. Over its duration, the West Side Market rescued 2,269 pounds (1.13 tons) of food for distribution to 12 organisations and composted almost 40,000 pounds (18.14 tons) of food. Following this, the city developed recommendations for food waste and food recovery, including the installation of on-site refrigerators and rolling carts for food safety and flexibility.

Street with market stalls in Peshawar, Pakistan. ©GAIN

Such partnerships are not limited to food loss and waste, but they can also be leveraged for advocacy and knowledge gathering. **Curitiba, Brazil**, for instance, has built partnerships with the private sector to develop monitoring tools and raise public awareness on healthy food consumption. Similarly, **Dar es Salaam, Tanzania**, together with the Transforming Urban-Rural Food Systems (TURFS) consortium, is conducting an exploratory study to inform a city roadmap to a climate smart, regenerative, circular food system that is also inclusive, equitable and just. This study focuses on better understanding food system relationships in key areas e.g., local and urban agriculture, supermarkets, and public food markets and governance with a view of developing a roadmap which reduces barriers and leverages opportunities for systemic transformation.

THE CITYFOOD MARKET ACTION FRAMEWORK IN PRACTICE

II. Market Infrastructure

A food market's infrastructure encompasses both physical and digital elements, including the facilities where markets are held, storage spaces, logistics that support the market operations, and digital platforms that enhance connectivity and efficiency.

Physical and digital infrastructure plays a vital role in enhancing food safety, hygiene, reducing food waste, and increasing market connectivity and efficiency. Whether markets are open-air or housed within a closed structure, municipalities can play a key role in supporting the vendors and facilities needed to set the stalls and store products, manage waste, and ensure that consumers can effectively access and utilise the space.

The level of municipal involvement in these aspects can vary significantly. In some cities, food markets are privately managed and held on private property, with the municipality's role limited to enforcing safety measures. In others, the municipality takes full responsibility for organising and regulating the food market, managing buildings, issuing permits, and more. There are also instances where food markets operate in an unregistered manner, leaving vendors legally unprotected.

The municipal role in ensuring adequate food market infrastructure will vary whether markets and their physical space are owned by the municipality or another entity. Nevertheless, even those markets run by private or nonprofit entities need municipal support in assuring infrastructure, whether through public-private investments, permitting processes, or access to municipal services such as district-wide internet access, road access, street lighting, and

waste services. Digital infrastructure, such as online platforms, can further enhance market operations by connecting producers and consumers, facilitating sales, and providing real-time insights into market performance.

UPGRADING AND SUSTAINING INFRASTRUCTURE

Rapid urbanisation is increasing the demand for fresh produce in urban areas, placing significant pressure on the existing food market infrastructure. Farmers and vendors often face challenges in storing, transporting, and selling their produce, due to inadequate trading facilities, lack of roofing, and insufficient WASH facilities, resulting in high levels of food loss and waste.

To address these challenges, local governments can play an important role by directly providing or facilitating investment in infrastructure upgrades, such as cold storage, drainage systems, solar-powered stalls, waste management and composting systems, and energy-efficient facilities. These enhancements will ultimately help meet the growing demand for fresh and healthy food in urban areas.

Rourkela's cold storage facilities. ©Pratham Parida, Koel Fresh Private Limited

In **Rourkela**, 83% of farmers and vendors cited the lack of storage options as the primary reason for distress selling. Building on this observation, investments in cold storage and improved food market infrastructure became the priority measure to prevent distress sales by farmers and create more sustainable economic opportunities for them. Through the project "E-cool Mandi," the municipality has shown significant benefits in reducing vegetable wastage and improving the livelihoods of vendors, particularly women.

A number of cities have implemented programmes to separate organic waste in food markets and recycle it into compost, which can later be used as fertiliser for urban agriculture and gardens. For instance, **Lusaka** has introduced bio-digesters in markets and transformed a former dumpsite into a well-managed facility where waste is processed and repurposed. Other cities like **Barcelona** have implemented recycling programs to ensure organic waste collection in municipal markets.

Some cities have explored and implemented innovative strategies and temporary infrastructure to ensure a consistent supply of fresh food to local communities, as exemplified by Brașov. With only one food market serving a population of 47,500 inhabitants, **Brașov** faced challenges in providing accessible, healthy food to its most vulnerable residents. To address this, the municipality invested in pop-up markets ("flywheel markets"), taking place weekly in the city's outskirts, including in its most economically disadvantaged neighbourhoods, offering a regular supply of fresh foods to lower-income households.

LEVERAGING DIGITAL TOOLS TO STREAMLINE MARKET OPERATIONS

Beyond physical infrastructure, local governments can also leverage technology to improve management of both physical and virtual markets. These include optimising operations for food market actors across the spectrum, strengthening market accessibility, improving connection between farmers and consumers, and gaining valuable insights into market performance through data-driven approaches.

One such approach involves setting up digital platforms to directly connect producers and consumers and facilitate market sales. **Brașov** is planning to launch an online platform that will allow consumers to pre-order farmers' produce and get it directly delivered to the market.

Conversely, in **Curitiba**, the Municipal Secretariat of Food and Nutritional Security (SMSAN) collaborates with the Curitiba Social Action Foundation to make electronic vouchers available to vulnerable families purchasing food at Family Warehouses, which are subsidised food retail centres serving 388,000 families. As part of broader efforts to modernise the markets and improve their efficiency and accessibility, **Baltimore** helped streamline operations and facilitate payment methods for vendors and farmers by implementing a unified point-of-sale (POS) system across the city's markets, with the sales data generated also being used to support bids for new investment.

In addition to such infrastructure provisions, local governments also play an important role in enabling supportive environments and establishing regulations for digital spaces, most notably for food safety. In **Bogor**, the rise of food online digital marketplaces like Go-Jek and GrabFood has facilitated expanded opportunities for street food vendors by providing both physical and virtual platforms, increasing access to their offerings and raising awareness of local culinary foods. However, food safety remains a challenge, particularly in digital marketplaces where consumers lack full transparency into vendors' operations. To address this, the city is developing a multi-stakeholder platform to improve food safety, nutrition, hygiene, and waste reduction among street food vendors.

Fresh food trader. Lizulu Horticulture Market, Lilongwe, Malawi. ©ICLEI Africa

THE CITYFOOD MARKET ACTION FRAMEWORK IN PRACTICE

III. Funding and Incentives

Financial support for food market actors is critical to facilitate the sale of affordable, fresh, and locally sourced products. Public financing mechanisms (which, where needed, can be complemented by private sector investments) may take various forms from investing in infrastructure upgrades to providing technical expertise and support, offering market stalls at no or minimal cost, and supporting access to healthy food through food-purchasing assistance programmes.

SECURING FUNDS FOR FOOD MARKET DEVELOPMENT

In order to support access to markets for both producers and consumers and upgrade the market infrastructure, municipalities can partner with private investors or leverage public financing opportunities. In the past two years, **Baltimore** has thus successfully raised over $2 million for redevelopment projects through a combination of federal and state grants as well as non-governmental grants. These funds have enabled the city to lower barriers for new businesses by reducing startup costs, in addition to facilitating Supplemental Nutrition Assistance Programme (SNAP) authorisation. The unified POS systems also helped support fundraising efforts, by offering accurate sales data on the market in its totality to provide insights on its performance.

Similarly, in Mozambique, **Pemba's** municipal government policy puts an emphasis on supporting partnerships with local and international non-profit organisations. Supported by funds from the Norwegian government and by GAIN for the actual implementation, the city constructed a hybrid wholesale-retail public food market in 2023-2024. The physical market structure and climate-resilient infrastructure including cold rooms was complemented by support to enabling conditions, including management training and financial payment

mechanisms, improving access to safe, diverse, nutritious foods that support vendor livelihoods and vendor and consumer health.

CONNECTING FARMERS TO MARKETS

> Providing tailored support to local and smallholder farmers is critical to help them overcome common barriers such as inadequate infrastructure, access to finance, or limited market reach.

Supporting local and smallholder farmers can take the form of financial assistance (e.g., microloans or subsidies for market stall setup) but also in-kind support (e.g., designating a portion of market stalls for their use, offering mentorship programs, or providing logistical support). Promotion of local products within the markets and throughout the city can also enhance visibility and sales [18, 19, 21, 22].

In **Brașov**, the city supports local farmers by prioritising their access to market stalls, applying a discount rate, and allowing them to only pay rent for days they actively use the space. Likewise, **Cleveland** has implemented the Gardening for Greenbacks Program, which supports economic development for urban farmers and food businesses, offering up to $5,000 in grants and supporting farmers in the form of infrastructure, garden tools, or supplies needed to expand and sell to local markets.

ENHANCING FOOD ACCESS FOR VULNERABLE COMMUNITIES

Providing financial incentives to consumers — such as vouchers— can also prove particularly effective in supporting low-income households' access to local fresh and healthy food. Based on this observation, many countries and cities have implemented food assistance programmes and policies. **Baltimore**, for instance, works with the U.S. Department of Agriculture on the Supplemental Nutrition Assistance Programme (SNAP), a national programme aiming to provide food-purchasing assistance for low-income households. The city has facilitated SNAP authorisations so that almost every market accepts SNAP payments to expand access to fresh food. Other municipalities across the U.S. have also fostered SNAP through legislation requiring all markets in their jurisdiction to partake by funding the infrastructure and technology needed for markets to accept and process these benefits or via matching programs to supplement federal funding.

In **Curitiba**, which placed the human right to adequate food at the centre of its food policy, Family Markets offer high-quality fruits and vegetables at affordable prices in areas identified as food deserts, strategically located near bus terminals and Family Warehouses, making them easily accessible to city residents. The Food Bank and Solidarity Table initiative also redirects edible food rescued from public facilities to provide free, dignified, and safe food to socially vulnerable people. Food Bank and Solidarity Table beneficiaries are supported by the Food and Nutritional Security Schools Project, which launched a social incubator in which residents can access professional training courses and job opportunities in collaboration with educational institutions, commerce, and industry to reach higher levels of social emancipation.

THE CITYFOOD MARKET ACTION FRAMEWORK IN PRACTICE

IV. Capacity Building and Awareness Raising

While adapting the policy framework and investing in physical infrastructure are essential pillars to support food markets, they alone do not suffice to raise the sale and consumption of good quality and healthy food. In that regard, **local governments are instrumental in influencing both what vendors promote and sell, and what consumers choose to buy**.

STRENGTHENING VENDOR CAPABILITIES ON HYGIENE AND FOOD SAFETY

Ensuring food safety and hygiene in markets does not only require adequate infrastructure, but also building capacity among vendors on proper hygiene practices, food handling and storage, as well as waste management.

In **Mbale**, the city council thus provides training and extension services to farmers aimed at improving agricultural practices, knowledge on timely harvesting, safe food handling practices and appropriate storage methods. To further enhance food safety practices, the Good Food for Cities (GF4C) programme facilitated a food safety training programme and invited vendors to put what they had learned into practice by participating in a competition. Such programmes, taking a holistic approach to addressing food safety by implementing market upgrades and training, have shown to be effective in shifting the perspectives of consumers and vendors towards improved food safety and hygiene practices.

In **Beira**, leadership initiatives such as the Good Food Campaign promote food safety and hygiene practices among market vendors who are voluntary campaign members. A combination of market infrastructure investments over recent years, including WASH structures, food safety training, and the city council led design and implementation of the multi-stakeholder market management committee; further support resilient markets by providing a safe, clean food

space with hygienic practices to the benefit of vendors and consumers, including in some of the most vulnerable community areas of Beira.

MAINSTREAMING SUSTAINABLE FOOD PRACTICES WITHIN THE MARKET SPACE

Municipalities have a critical role to play in incentivising market managers and vendors to sell nutritious, sustainably produced food, to better promote such produce within the market space, and to adopt sustainable practices such as the reduction and effective management of food waste. Recognising this, **Barcelona** launched its Green Commerce initiative which trains and incentivises vendors to sell local and organic produce sourced directly from farmers and local fish markets. This programme, which has now been extended to all the city's municipal markets, also encourages vendors to collaborate with food banks in order to tackle food waste.

This issue has also similarly been tackled by SMSAN in **Curitiba** through initiatives such as the Food Waste Reduction Project. Following a diagnosis that identified usable organic waste generated at public markets and fairs, social institutions were mapped and registered to which edible foods could be redirected. To support these efforts, the city provides vendors with training on food separation to encourage an increase in food donations, as in the Curitiba Municipal Market, which aims to become the country's first zero-waste market. Moreover, the Metropolitan Region Food Development Programme provides technical and institutional support to local family farmers and thus facilitates their access to markets.

Beyond training programmes, additional tools can be explored, such as in **Lusaka**, which launched a campaign to mandate vendors to clean markets on the last Saturday of each month.

ENGAGING CONSUMERS THROUGH EDUCATION AND AWARENESS RAISING

While collaborating with vendors is critical, it is also important to complement it with consumer education and engagement efforts to facilitate more informed food choices. This is why a number of cities have decided to organise market tours or school visits to harness the potential of markets as spaces of learning and awareness raising.

Brașov organises food market tours —among adults and children— to raise awareness of the benefits of eating fresh, local and seasonal products. In **Barcelona**, similar tours are organised for pupils to learn about sustainable food consumption and ways to prevent food waste. Both cities also put in place a dedicated labelling or colour-coding system to make it easier for consumers to identify farmer stalls. In addition, **Barcelona** complemented these efforts by rolling out a broader advertising campaign around the importance of local products for cooking traditional and seasonal dishes.

Blue stalls signaling resellers at the Astra Market.
©Andrei Paul, Brașov Municipality

Some cities have chosen to focus their awareness-raising efforts on specific groups. In **Bogor**, for example, most schoolchildren purchase their daily snacks and meals from street food vendors. To promote healthier diets and encourage informed food choices, the city has launched several programs to improve childhood nutrition at home and in schools. These campaigns —such as Eat Fish on Friday, the National Breakfast Week, the Safe Food Movement, and the Healthy Schools Campaign— help connect city-level initiatives with national efforts. In collaboration with the Bogor Municipal Government, the Ministry of Cooperatives and Small and Medium-Sized Enterprises (MSMEs) actively promotes local food systems and micro-businesses, including those within city street markets. This includes initiatives like festivals that showcase local produce, such as the Koro bean.

Market stall in Recife, Brazil. ©Divulgação CONVIVA/PCR

UNLOCKING THE SOCIAL POTENTIAL OF FOOD MARKETS

As urban spaces, food markets can be leveraged further as an essential component of a city's social fabric.

Food markets bring all types of populations across genders, ages, and socio-economic classes together and represent spaces of social cohesion, dialogue, and the celebration of local food cultures.

To unlock the often untapped potential of food markets, local governments can begin by analyzing consumer patterns and socio-economic profiles across different markets to tailor programs to diverse needs. In **Brașov**, for example, research revealed that permanent markets are more popular among the elderly, while pop-up markets attract families. This insight allowed the city to customize social activities —such as tastings and music events— to better match the preferences of different consumer profiles.

Similarly, in **Barcelona**, municipal markets hosted over 500 cultural and gastronomic events in 2023 alone and organised market tours for over 7,000 students. In **Recife**, public markets serve as vibrant hubs for tradition, culture, and cuisine. During Carnival season, markets gain even more prominence, hosting decentralised events that attract both tourists and locals. The same occurs during the region's traditional São João festival in June, when CONVIVA Mercados e Feiras, the municipal authority managing markets and fairs, integrates its facilities into the artistic lineup with itinerant performances.

Photo on the right: Lizulu Horticulture Market, Lilongwe, Malawi. ©ICLEI Africa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Conclusion

As shown in this handbook, food markets have immense, yet often untapped potential to drive food system transformation. They play a crucial role in addressing key challenges such as malnutrition, food insecurity, sustainable food production, farmers' and vendors' livelihoods, circularity and waste management, and the well-being of local communities. In this context, local governments have the opportunity and the responsibility to support and strengthen their food markets as hubs for health and nutrition, learning, behaviour change, and civic life.

Through its CityFood Market Action Framework, this handbook offers actionable tools and strategies to guide policymakers and stakeholders toward supporting and sustaining markets as essential components of the urban food landscape. The case studies and strategies presented here demonstrate the real-world impact of well-supported markets, from Barcelona's awareness raising activities to Lusaka's multi-stakeholder engagement and Rourkela's innovative cold storage solutions. They offer replicable models and practical insights that can inspire governments around the world to strengthen their local food systems.

The pathway to nourishing our communities and securing our food systems lies in the food markets of our cities and towns. By embracing their potential, we can create healthier, more resilient, and sustainable futures for all.

Case studies: Cities transforming their food markets around the world

The following 16 global case studies provide concrete examples of how local governments from Africa, Europe, North America, South America, and South Asia have developed strategies and innovative solutions to address challenges in food markets. They served as inspiration for the four pillars of the CityFood Market Action Framework. Jointly developed by ICLEI and GAIN, with valuable contributions from cities and regional partners, the case studies reflect a rich geographic diversity from across the ICLEI and GAIN networks, offering a suite of solutions that can apply to different contexts. The selection prioritised local government-led initiatives, aiming to identify good practices across various sub-topics that could be shared and replicated.

These case studies not only showcase innovative solutions but also highlight the power of collaboration and local leadership in transforming markets. Cities can shape the future of food markets through policy, infrastructure, and innovation, influencing what is grown, traded, and consumed. By learning from these experiences, urban leaders can adapt and scale impactful strategies that foster sustainability, resilience, and inclusivity.

Baltimore, USA

556,723 inhabitants

239 km² city's surface

MOST IMPORTANT ECONOMIC SECTORS

- Financial and professional services
- Health and bioscience technology
- Culture and tourism
- Information and creative services
- Logistics
- Advanced manufacturing

DID YOU KNOW?

Baltimore is home to the oldest continuously operating public market in the U.S., with Lexington Market founded in 1782 —serving flavors and history for over 240 years.

Photo: Baltimore Lexington Market. ©Abigail Lammel

GOVERNANCE & MARKET CONTEXT

Baltimore is home to one of the oldest continuously operating public market systems in the United States, with six historic public markets serving the city for over 200 years. Initially focused on fresh produce, these markets have diversified over time to include a mix of local farmers' goods, produce aggregators, and prepared food vendors. Each market is unique, providing a wide array of fresh foods, with most offering access to Supplemental Nutrition Assistance Programme (SNAP) benefits, USA's largest nutrition assistance program. In addition to its public markets, Baltimore hosts a robust network of farmers markets, which play a vital role in the city's local food system. Among these, the Baltimore Farmers Market stands out as the largest in the state of Maryland, serving as a community cornerstone for 47 years. Building on this legacy, the city plans to launch a new outdoor farmers market on repurposed city land in the coming year. This market will focus on offering eggs, poultry, and locally sourced beef and lamb, further enhancing access to fresh, regionally produced foods.

Baltimore's public markets are managed by a quasi-city agency that operates independently but collaborates with a board of directors. This agency, supported by a 12-person administration team, handles all aspects of market operations, including maintenance, Point of Sale (POS) systems, and small business support. In addition, Baltimore plays a key role in organising an annual convention alongside a dedicated group of individuals who manage local and farmers' markets. This event attracts participants from surrounding regions, offering a platform for learning, networking, and sharing innovative solutions that benefit the broader community.

CHALLENGES

Baltimore faces a significant challenge with food deserts, with limited grocery stores across the city. While public and farmers' markets aim to address this issue, the high cost of local produce remains a barrier, and partnerships with community development organisations remain

vital. Additionally, Baltimore aims to expand access to fresh food by increasing the reach of SNAP infrastructure and license on behalf of multiple markets.

Over the past decade, small-scale independent farmers have been retiring and closing up operations, and it is becoming difficult to integrate new farmers into municipal markets. Active farmers have found limited capacities to operate stalls themselves, leading to the local produce being sold by vendors instead. To address this challenge, there is a recognised need for more comprehensive support to these municipal markets, and redevelopment efforts are underway to improve access to healthy food in economically depressed areas. Partnerships charitable foundations are being explored to secure grants for these community development projects.

POLICIES AND INITIATIVES

Baltimore's Food Policy and Planning Division, supported by experts in food access, resilience, and systems planning, is at the forefront of building a fair and sustainable urban food system. Through the Baltimore Food Policy Initiative (BFPI), the division focuses on three core pillars: fostering interagency collaboration, coordinating the Food Policy Action Coalition (Food PAC), and engaging Resident Food Equity Advisors (RFEA). These efforts work together to address disparities in health, economics, and the environment, particularly in communities facing high levels of food insecurity.

The division's approach prioritizes four key strategies. First, it uses policy to create a more equitable food system by integrating food considerations across government initiatives and collaborating with residents on research, planning, and policy-making. Second, it builds resilience at individual, community, and systemic levels by tackling urgent food needs while fostering long-term sustainability and equity. Third, the division supports and amplifies the local food economy through initiatives like "Good Food Procurement" standards and programs that back local food businesses and recovery efforts. Finally, it promotes urban agriculture by identifying and making city-owned land available for farming, creating pathways to land ownership, and supporting growers in adopting sustainable, responsible, and profitable practices. These efforts reflect Baltimore's commitment to ensuring food equity and resilience for all residents.

Baltimore's public and farmers' markets operate under strict regulatory frameworks. Businesses must be registered federally and at the state level and obtain a city food licence to operate in the markets. These businesses are also subject to regular inspections to ensure compliance with food safety standards. The markets are currently implementing unified POS systems to streamline operations, and to help ensure accurate sales data, facilitate diverse payment methods, and enable efficient tracking of customer retention metrics. This technological advancement is part of broader efforts to modernise the markets and improve their efficiency and accessibility, with the data generated also being used to support bids for investment and the viability of markets.

RESULTS AND LESSONS LEARNED

In the past two years, Baltimore has successfully raised over $2 million for redevelopment projects through a combination of federal and state grants as well as non-governmental grants. These funds have enabled the city to lower the barriers for new businesses by reducing startup costs, facilitating SNAP authorisation, and hiring a Food Equity Manager. To effectively secure funding for food market initiatives within the city, Baltimore recommends several strategies, including hiring a dedicated development person or outsourcing grant writing, staying current with policy changes and grant opportunities, and utilising leases, and a unified POS system for aggregated information on market sales, payment methods, and customer retention metrics.

Barcelona, Spain

1,660,000 inhabitants

99 km² city's surface

MOST IMPORTANT ECONOMIC SECTORS

- Food Processing and manufacturing
- Culture and tourism
- Services

DID YOU KNOW?

Barcelona's markets are home to different cultural traditions. During the Feast of Sant Joan in June, celebrating Catalonia's patron saint and the summer solstice, markets fill with cake and cava. Come Halloween, it's all about chestnuts and sweet potatoes, keeping the centuries-old tradition alive for market-goers.

Photo: Sant Antoni Market. ©Barcelona City Council

GOVERNANCE & MARKET CONTEXT

Barcelona is home to 38 public fresh food markets, which are distributed across the city's ten districts and all housed under covered buildings. 65% of the population has a market within a 10-minute walking distance, and 85% of consumers go there by foot. Legally, local regulations from the Barcelona City Council govern market operations, while sanitary, agricultural, and trade regulations are issued by the Regional Government of Catalonia.

The management of municipal markets is shared between public and private actors:

- The Barcelona Municipal Markets Institute (IMMB), an autonomous entity within the city council, is responsible for the maintenance of buildings, administration, commercial management, and market promotion, collaborating with various city departments on food policy, waste management, and mobility.
- The Federation of Municipal Markets of Barcelona (FEMM) brings together various vendor associations and represents their interests within the IMMB's Board of Directors. Each market is coordinated by its own vendor association (which includes a Director from the IMMB), that is responsible for the daily maintenance of market equipment, overall market supervision and revitalisation efforts.

In addition to the 38 municipal markets, there are weekly farmers' markets, directly managed by each district. The IMMB maintains a close relationship with the districts and neighbourhood associations, which also play an important role in market management and are involved in the city council's decision-making process.

CHALLENGES

The City of Barcelona faces various challenges in enhancing and leveraging fresh food markets, including the promotion of shorter food supply chains and direct engagement of farmers from the region. In addition to limited agricultural space around the city, farmers indeed face a range of regulatory, bureaucratic and time constraints that hinder their direct access to markets and can discourage new generations

from taking up agriculture-related jobs. These challenges notably resulted in rising tensions between the municipal and the farmers' markets.

Fresh food markets also face an increasing competition with supermarkets, which have longer opening hours and often remain cheaper. In the poorest neighbourhoods in particular, many people favour supermarkets over (more expensive) markets, a symptom of economic and social inequality in consumer access to markets.

POLICIES AND INITIATIVES

To address these challenges, the IMMB has launched a number of initiatives, including those targeting students, to promote fresh and local produce and educate residents on their benefits. The IMMB has also harnessed the power of markets as important spaces for social inclusion (notably catering to elderly people and newcomers) by hosting events in the markets themselves[2], and as means to address climate challenges, by reducing food waste and increasing the energy efficiency of buildings.

Barcelona has been working to promote local and regional products to increase the competitiveness and sustainability of municipal markets. Through the Green Commerce programme, vendors are incentivised to sell more 'green food products' —i.e., food coming directly from farmers or from the fish market auction. Incentives focus on the marketing and distribution of local products through vendor training (e.g., on how to use social media as a promotion tool) and a new labelling system that makes it easier for consumers to spot stalls selling "green products". The municipality has also developed a commercial campaign to advertise such sales through informative material showcased in the market and continues to promote traditional and seasonal dishes, linking them to the widely recognised Mediterranean diet. As of April 2024, around 500 vendors were part of this project.

To tackle food loss and waste, the IMMB established awareness-raising initiatives (i.e., encouraging vendors to set up partnerships with food banks), recycling programs to separate organic waste in markets, and infrastructure improvements to add new cold storage spaces. Through the Plastic Zero project, part of the Green Commerce programme, the IMMB aims to tackle single-use plastic waste.

RESULTS AND LESSONS LEARNED

Barcelona's various initiatives have achieved significant results over the past years. The latest figures show that 60.7% of the local population buys in fresh food markets. The municipality leverages its fresh food markets as an essential component of the social fabric, hosting multiple cultural and gastronomic activities (550 events in 2023 only), and organising market visits for children and youth (7,000+ students in 2023). The city managed to curb the markets' total waste by 26.8% since 2019 and scale up the production of renewable energy (e.g., through solar panels on markets' roofs), providing a stable hot water supply and reducing GHG emissions by 151 tons.

These interventions, combined with multiple educational activities, aim to increase the number of people buying at municipal markets. The municipality is also trying to mitigate tensions between municipal and farmers' markets by facilitating farmers' access to municipal markets and financially supporting existing farmers' markets.

Looking ahead, along with continued investments into energy-saving and renewable market infrastructure, the IMMB is planning on improving municipal market management by enhancing data collection on consumption and purchase habits to help decision-making, strengthening the role of vendors' associations and the FEMM, and working on an economic support model to promote vendors' associations' economic self-sufficiency.

2 "Mercats per la Porta Gran" and "Menja't el Món"

Beira, Mozambique

592,090 inhabitants

620 km² city's surface

MOST IMPORTANT ECONOMIC SECTORS

- Agriculture
- Fisheries
- Services

DID YOU KNOW?

As a major port city with the Indian Ocean on one side and landlocked countries like Zimbabwe and Malawi on the other, Beira is a strategic and vital economic hub for the region.

Photo: Munhava Market, renovated with support from GAIN's Keeping Food Markets Working Project. ©GAIN

GOVERNANCE & MARKET CONTEXT

Regulating, investing in, and overseeing markets is a municipal responsibility situated with the Beira Municipal Council and part of the mandate of the Promotion of Economic Activities and Markets Council. To facilitate the availability, accessibility, hygiene and food safety in markets, this council is supported by various other municipal government departments, including the Departments of Health, Agriculture, Sanitation, Environment, Transport, and Urban Planning. PROCONSUMERS, the Association for the Study and Defense of the Consumer, is a national initiative that also has a presence within public markets, settling disputes between vendors and consumers, ensuring that consumers are not sold unsafe food and that scales are calibrated correctly [23].

Beira has 14 public (formal) food markets, categorised as Wholesale Supply, District, Rural and/or Provisional Markets. These markets sell fresh food products, such as fruits and vegetables, fish and animal-sourced products. While public markets are registered with the municipality and vendors pay fees to occupy their spaces, there remains a large degree of informality in and around these markets. Approximately 40 informal markets have emerged spontaneously, often in response to the demand for fresh food and other goods, especially in underserved areas. They also appear outside of public food markets, providing important complementary goods, like dried and canned items, as well as processing services, including grinding, pressing or slicing fresh products like leaves or coconuts. These products and services are not found in formal public markets as these tend to focus on the sale of fresh foods. With the connectedness of formal and informal markets, some vendors choose to sell in both public and informal street markets but at different times [23].

CHALLENGES

Climate change is evident in rising sea-levels, severe flooding events, and increasing occurrence of high-impact cyclones and tropical storms. Beira's infrastructure including that of roads and markets as well as supply chains

and market operations have been significantly impacted by such climate disruptions. Additionally, availability of food in Beira is largely dependent on long and cross-border supply chains and trucker transportation, but with some products coming from close by, like eggs. In this way, the economic resilience of both nearby small-holder farmers and long supply chains, as well as internal market constraints each have significant influence on how vendors sell and stock food [23].

Public, local food markets often fail to receive essential public services, like basic WASH and waste management services [23]. Due to municipal capacity and budget constraints, many public markets lack service support and infrastructure like designated raised stalls, roofs, ice makers, cool rooms and renewable energy. This in turn impacts nutritional and food safe quality and affordability of fresh food and resultant food waste.

POLICIES AND INITIATIVES

Beira Municipal Council has implemented several strategies and plans to manage its markets more effectively. The city's 2035 Master Plan includes zoning regulations to organise market locations and support efficient urban growth [24]. To enhance basic services, the Water and Sanitation Infrastructure Administration works to improve water supply management and drainage systems, ensuring markets have access to clean water and proper sanitation [25]. Waste management is governed by the Environment Act and Solid Waste Management Regulations (2014, 2016), which establishes frameworks for efficient waste collection and disposal, and maintaining clean market environments [26]. The Beira Municipal Recovery and Resilience Plan outlines strategies to enhance urban infrastructure and environmental sustainability, essential for market functionality and food supply chains [24]. Leadership initiatives such as the Good Food Campaign promote food safety and hygiene standards among market vendors through voluntary membership [24].

Collaborations with organisations and experts have benefited Beira's markets and urban resilience planning. This includes rehabilitation and requalification of public food markets post Cyclone Idai in 2019, as well as food safety training and establishment of market inclusive governance mechanisms. In this way, Beira Municipal Council has substantially supported all eight public food markets and improved market infrastructure, management and inclusive governance in the markets of Munhava, Massamba and Gorjao, which are located in three of the most populous and poorest areas of Beira.

RESULTS AND LESSONS LEARNED

To this day, Beira City Council's co-designed multi-stakeholder market management committee, established post COVID-19, continues to be successfully operational and offers a scalable city-market model of inclusive governance. The committee falls under the government unit Markets and Fairs and is framed by co-designed values, including gender inclusion, open and committed cooperation, stakeholder ownership and action.

Investments in market infrastructure are reshaping the availability of sufficient, safe and nutritious food, as well as food handling and safety in Beira's markets, which may ultimately lead to improved food security and diet quality for consumers, and livelihood prosperity for vendors. There is a need to provide market vendors with food washing and cooking facilities, as well as cold room storage. Additionally, the municipality is exploring how to inclusively and equitably integrate informal markets into formal governance structures and the formal economy—while maintaining their flexibility—within existing resource constraints. Providing basic services and developing better trading spaces to enhance market environments is a priority for informal markets [24].

Bogor, Indonesia

1,114,018 inhabitants

111 km² city's surface

MOST IMPORTANT ECONOMIC SECTORS

- Agriculture and fishing
- Transport and communication
- Trade and hospitality

DID YOU KNOW?

Bogor is a culinary hotspot, famous for its vibrant street food scene. Must-try treats include Toge Goreng, fried sprouts with noodles and tofu, and Ubi Bakar Cilembu, roasted sweet cassava.

Photo: Focus group of women street food vendors from an informal association as part of GAIN's Inclusive Urban Food Systems Project. ©GAIN

GOVERNANCE & MARKET CONTEXT

Bogor's Development, Planning, Research, and Innovation Agency oversees multiple departmental mandates related to food systems, serving as the main authority for food vendors. The city has 14 officially recognised street food vendor zones, where the municipal government, supported by private sector donations, has established culinary centres - permanent spaces equipped with basic services for vendors. Vendors who operate from culinary centres benefit from being automatically registered as legal street food vendors and are eligible to receive support by the local government. There are currently 5,000 registered street food vendors and kiosks [27], with an estimated 12,000 vendors working within the city[3]. This means that approximately 7,000 vendors are not formally recognized in the governance structure of the informal food market ecosystem of Bogor, and therefore are at risk of being evicted daily.

Vendors within the same operating zones form registered cooperatives, with elected leadership and governing bodies to manage daily operations. Membership grants vendors legal employee status within the cooperative, allowing them to access social security benefits such as health insurance and pension funds.

CHALLENGES

While popular, many street food vendors operate on sidewalks and roads, contributing to traffic congestion. Additionally, much of the food sold is unhealthy, and with 99% of school children in the city purchasing snacks and meals daily from street food vendors [28], there is a need for an improved enabling environment in Bogor that promotes and increases access to safer and healthier street food options.

3 Informal discussion with Ela Rosliana, S.Sos - head of Division micro/small/medium enterprises. This data was obtained from the results of coordination in the MSME sector with the civil service police unit.

Mobile food marketplaces and delivery apps are widely used in Indonesia, Go-Jek and GrabFood originating in Indonesia. The rise of digital food marketplaces through these apps has provided street food vendors with both a physical and virtual marketplace, expanding access to their offerings. However, when ordering online, consumers cannot assess hygiene conditions of the food stalls where meals are prepared. Additionally, food delivery poses health challenges, as delivery agents serve multiple vendors, often causing delays in food arrival [27]. Presently, only one culinary centre has methods for managing and separating solid waste between the city's weekly garbage pickups. Infrastructure including WASH facilities are not provided to individual kiosks within culinary centres, but shared amongst two or three kiosks. As a result, less than 50% of kiosks within culinary centres have direct access to WASH facilities, preferring to avoid setup costs by washing at communal water stations[4].

POLICIES AND INITIATIVES

Government objectives for market improvement include preserving tradition and cultural heritage, supporting short food supply chains, enhancing food security and nutrition, and reducing food loss and waste [29]. Various programs target childhood nutrition both at home and in schools, such as the Eat Fish on Friday campaign to combat stunting, National Breakfast Week, the Safe Food Movement, and the Healthy Schools Campaign. The Ministry of Cooperatives and MSMEs alongside Bogor Municipal Government also works to promote local food systems e.g., through festivals which showcase local produce like *koro* beans [30].

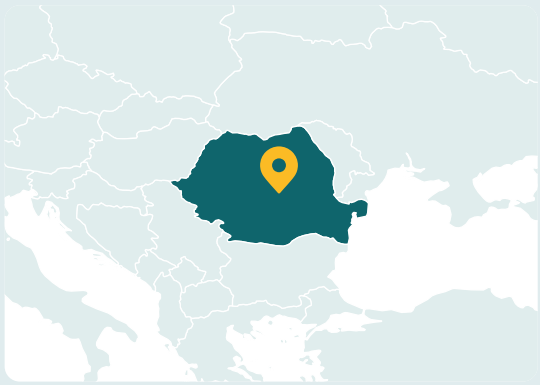
The Ministry of National Development and Planning Agency, Directorate of Food and Agriculture coordinates national plans through legislation. This includes the National Action Plan for Food and Nutrition, the National Pathway for Food Systems Transformation, and the National Medium- and Long-Term Development Goals [31]. Meanwhile, the President oversees food governance, reserves, and trade systems [32]. The West Java Provincial Government manages staple food distribution and pricing, focusing on wet markets and key staples [33].

RESULTS AND LESSONS LEARNED

The city is working together with GAIN and street food vendor association leaders to establish a cross-sectoral working group and multi-stakeholder platform as part of inclusive local food systems governance and localisation of the United Nations Food Systems Summit (UNFSS) national pathways. The aim is to increase communication and collaboration between vendors and governmental actors, with a focus on food safety and reducing food waste. This effort is further supported by the recent development of a capacity-building tool tailored for street food vendors, covering nutrition, food hygiene, safety, and food waste reduction. In 2023, Bogor Municipal Government officially became a signatory of the Milan Urban Food Policy Pact, reinforcing its commitment to food systems transformation [34].

4 Informal conversation between GAIN Indonesia and the Bogor Department of Health.

Brașov, Romania



480,000 inhabitants

1,640 km² city's surface

MOST IMPORTANT ECONOMIC SECTORS

- Culture
- Tourism
- Services

DID YOU KNOW?

On the 9th of March, guests and friends are served a bowl of Mucenici—dumplings boiled in syrup with walnuts. This traditional dessert marks the Feast of the 40 Martyrs of Sebaste.

Photo: Astra market. ©Andrei Paul, Brașov Municipality

GOVERNANCE & MARKET CONTEXT

Public fresh food markets in Brașov are managed by the Public Markets Administration Service, a municipal institution under the Brașov administration. This service oversees trade activities, product quality control, and market management. Legally, fresh food markets are regulated at both the local and national levels. At the local level, regulations address practical matters such as stand allocation [35], while at the national level, broader regulations define who is permitted to trade in markets [36].

There are six permanent public markets — Dacia, Astra, Tractorul, Star, Bartolomeu and De Miercuri— spread throughout the city, but not equally distributed. During summer weekends, publicly-managed pop-up markets (referred to as "flywheel markets") also move throughout the city.

CHALLENGES

Limited access to markets is one of Brașov's most pressing challenges. While there is one shop for every 1,700 inhabitants, there is only one market for every 47,500 inhabitants. This is particularly true in the Bartolomeu Nord and Noua neighbourhoods on the city's outskirts, where residents need to take multiple means of public transport to reach a market. This creates significant barriers to accessing healthy food, especially for vulnerable groups.

Additionally, most farmers in the Brașov region are small or medium-sized, making it challenging for markets to ensure a stable flow of goods throughout the year. This causes significant differences in the availability and price of fresh foods in the winter period (November-March) compared to the most productive season (April-October), ultimately pushing people to purchase at supermarkets. Finally, other challenges include the high administrative burden for small-scale farmers to sell in public markets, as well as the prevention and management of food waste within markets.

POLICIES AND INITIATIVES

To counteract challenges and incentivise residents to buy from local markets, the municipality has put in place a number of

initiatives to inform people on the origin, quality and benefits of the market's products. These are complemented with measures to support local farmers.

- **Promoting local and sustainable food production:** The municipality has implemented a color-coded system to distinguish between the two types of market vendors. Agricultural producers, who sell their own produce, have yellow stalls, while vendors, who sell products sourced from wholesale markets or farmers who do not sell directly, have blue stalls.
- **Supporting direct sales from farmers:** National and local legislation [37, 38] provide specific incentives for local farmers. Farmers benefit from the direct allocation of stalls on a first-come first-served basis and only pay the rent when they actually use the stalls. Local farmers have an additional discount of 3 RON.
- **Raising awareness among consumers through dedicated educational activities:** Brașov, through the FoodCLIC project, uses markets to raise awareness among adults and children to the benefits of eating fresh, local and seasonal products, types of food and where they can find the best prices. Interventions also take place in schools (starting with vulnerable neighbourhoods), in which students can taste local products and learn about the benefits of buying local and having a healthy diet.

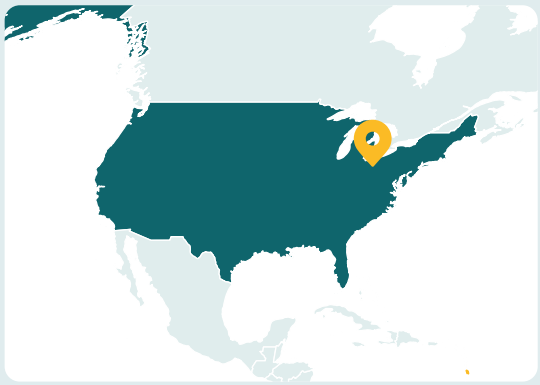
RESULTS AND LESSONS LEARNED

Brașov is committed to leveraging fresh food markets to promote locally grown foods, encourage the local population to buy fresh and healthy products and to support small-scale producers. In the near future, the city foresees adding green stalls to markets, to signal typical products coming from the mountains surrounding Brașov. With that same aim of promoting local culinary tradition, Brașov is also planning to increase the number of local fairs that sell such products, as they deem it particularly important for young people to get to know these foods.

To enhance access to markets, the municipality also wants to increase the number of pop-up markets, taking place weekly in the outskirts of the city and allowing the most vulnerable neighbourhoods to have direct access to healthy food. Brașov recognises and values the social function of both permanent and pop-up markets and wants to further leverage their potential in bringing people together. Investing in both types of markets indeed allows to reach different target audiences —permanent food markets being favoured by the elderly, while pop-up markets attract families and younger generations (e.g., by organising tastings and music events).

On the farmers' side, to facilitate the connection with consumers, the municipality is planning to launch an online platform where people will be able to see and pre-order farmers' produce, that will be then delivered directly at the market. As for food loss and waste, Brașov plans two types of actions: to invest in additional (cold) storage spaces inside markets in order to preserve the food and, on the other hand, to partner with local food banks, such as Banca Regională Pentru Alimente Brașov to ensure that food surplus is systemically donated rather than thrown away.

Cleveland, USA



361,607 inhabitants

213.6 km² city's surface

MOST IMPORTANT ECONOMIC SECTORS

- Agriculture and forestry
- Food processing and manufacturing
- Culture and tourism

DID YOU KNOW?

Cleveland's prime spot on Lake Erie, one of the world's greatest freshwater resources, has fueled industrial growth and sustained livelihoods. Its rich food history—from thriving urban agriculture to the rise of supermarkets—reflects the city's diverse heritage and vibrant community.

Photo: Westside Market. ©Anna Zaremba, Cleveland City

GOVERNANCE AND MARKET CONTEXT

Cleveland's food retail landscape is diverse, encompassing brick-and-mortar retailers, grocery stores, convenience stores, farmers' markets, and farm stands. Farmers' markets operate directly between producers and consumers, running throughout the summer and sometimes year-round, while farm stands are managed by farmers on their own production land. Both are supported by city zoning codes and undergo an approval process to ensure compliance with standards. A notable exception is the West Side Market [39], a market historically owned and managed by the City of Cleveland that recently transferred management and operation to the Cleveland Public Market Corporation (CPMC). The CPMC, with its independent staff and community-led board of directors, will effectively and comprehensively address the evolving needs of merchants and customers at the West Side Market. While the City of Cleveland retains ownership of the market's land and facilities, CPMC will independently manage the Market's operations, oversee renovations and upgrades, develop and promote new public programs, and lead fundraising efforts for capital projects, fostering a collaborative approach with various stakeholders to expand opportunities for local producers and restaurant vendors [40].

Collaboration in Cleveland's broader food retail ecosystem involves private market operators, community development organisations, and the city departments. The city's Economic Development Department works closely with private entities to offer financial incentives, including tax breaks and funding opportunities for grocery and convenience stores. Cleveland implements the Gardening for Greenbacks Program, which supports economic development for urban farmers and food businesses, and supports farmers in the form of infrastructure, garden tools, or supplies needed to expand and sell to local markets. Additionally, the city supports markets through the Neighborhood Retail Assistance Programme (NRAP) [41], which provides loans to entrepreneurs to promote locally-owned, non-chain restaurants and retail.

CHALLENGES

Inadequate infrastructure hinders the ability of Cleveland's farmers' markets to source locally, impacting both processing and distribution capabilities. Additionally, urban farmers struggle with accessing funding opportunities, as some local funding processes are somewhat inconvenient, while federal applications are extremely rigorous, creating substantial barriers. Despite these challenges, the current administration remains committed to food access and sustainability supported by a community that values these efforts.

POLICIES AND INITIATIVES

In Cleveland, a series of strategic policies and initiatives has been introduced to tackle food waste reduction, strengthen local food systems, and promote a circular economy. The Cleveland-Cuyahoga County Food Policy Coalition (CCCFPC), founded in 2007, focuses on improving access to affordable, nutritious food and reducing food waste, in order to enhance public health, boost the local food economy, and lessen environmental impacts. Other key efforts include the Circular Cleveland Roadmap and the Climate Action Plan both of which prioritise minimising food loss, enhancing the resilience of local food networks, and fostering sustainable practices throughout the city.

In January 2023, the city undertook a pilot project to reduce and rescue food waste at the West Side Market, in collaboration with Hunger Network; a community food rescue organisation, and Rid-All Green Partnership and Rust Belt Riders, the local composting partners. The project conducted a waste audit and found that most of the food waste was compostable. Over its duration, the West Side Market rescued 2,269 pounds of food for distribution to 12 organisations and composted almost 40,000 pounds of food [42]. Following this, the city developed recommendations for food waste and food recovery, including the installation of on-site refrigerators and rolling carts for food safety and flexibility. In January 2024, the U.S. Department of Agriculture (USDA) committed $11.5 million toward innovative and scalable waste management initiatives aimed at reducing and diverting food waste from landfills across the country. As part of this initiative, Cleveland has been awarded $340,961 to enhance its waste management efforts. This funding will enable the city to expand residential composting drop-off sites, increase overall waste diversion, and broaden access to composting services. Additionally, it will provide subsidised monthly composting service subscriptions to SNAP-eligible households, ensuring that low-income residents can participate in sustainable waste management practices [43].

RESULTS AND LESSONS LEARNED

Cleveland's collaboration with local partners underscores the effectiveness of community-based initiatives. Adopting approaches that involve multiple stakeholders, conducting waste audits to understand specific needs, and implementing targeted solutions that engage local organisations and residents are proving important in combating food waste in markets. In addition, Cleveland's proactive stance in securing USDA funding to support residential composting and expand access to low-income households underscores the value of federal partnerships and financial support in expanding waste management efforts.

Curitiba, Brazil

1,773,000 inhabitants

434.8 km² city's surface

MOST IMPORTANT ECONOMIC SECTORS

- Food processing and manufacturing
- Services

DID YOU KNOW?

In Curitiba's fairs, you can find capybara-shaped pastries called "*capistel*," a fun tribute to the capybaras that roam the city's parks and attract visitors worldwide.

Photo: Fresh food stall inside Cajuru Market. ©Collection of the Municipal City Hall of Curitiba

GOVERNANCE AND MARKET CONTEXT

The Municipality of Curitiba has a 30-year track record in food policy and, since 2019, has strategically strengthened its role in the public sphere to uphold Food and Nutritional Security and the Human Right to Adequate Food. These efforts are led by the Municipal Secretariat of Food and Nutritional Security SMSAN which coordinates an integrated urban food agenda guided by three strategic lines of action: Food Access, Metropolitan Common Market, and Urban Agriculture. It supports the city's diverse market ecosystem, which includes Curitiba Municipal Market, the Canjuru Regional Market, 79 fairs[5] of different categories (organic markets, cooperative markets), and 11 *Sacolões da Família*, food markets selling fruit and vegetables.

The Curitiba Municipal Market, spanning across 16,800m², houses 359 commercial units selling over 72,000 products, including an exclusive section for organic products. This section, a pioneer in Brazil, celebrated its 15th anniversary in 2024 and includes 13 establishments offering everything from food to cosmetics and clothing. Aiming to become the country's first zero-waste market, the Curitiba Municipal Market also participates in the Food Bank program, collecting tons of food from vendors to supplement diets of people in need.

CHALLENGES

Local challenges that SMSAN aims to tackle include combating food loss and waste, reducing the overweight rate among the population, decreasing consumption of ultra-processed foods, empowering socially vulnerable populations, and promoting food production based on sustainable agri-food models.

POLICIES AND INITIATIVES

The City of Curitiba uses an innovative integrated approach to improve food and nutrition security while combating food waste:

5 The fairs are organised by the Municipal Department, with each vendor responsible for setting up their stall and managing the sale of their products. The city's role is limited to managing and organising the space, without direct involvement in commercial activities.

- **The Family Warehouse Programme** (Programa Armazém da Família) benefits over 388,000 families by providing access to food at prices lower than conventional markets. Management of the program's 50 units falls under the responsibility of SMSAN and through agreements with the Curitiba Social Action Foundation, electronic vouchers are distributed to vulnerable families for purchasing food at Family Warehouses.
- **The Family Markets Programme** (Programa Sacolão da Família) offers various high-quality fruits and vegetables in areas identified as food deserts, through fixed stores with prices lower than traditional retail. The programme addresses the lack of accessible alternative sources in some city neighbourhoods for low income groups. They are located near bus terminals and Family Warehouses, making them easily accessible to residents.
- **Farmers' Markets** are set up in locations determined by demographic density, food availability, socioeconomic characteristics, and the local population's interest. There are 79 market locations in the city, with 982 commercial points and 378 permit holders.

Food waste and food access for vulnerable residents has been tackled in the above markets and public facilities managed by SMSAN through the Food Waste Reduction Project. Following an assessment that identified usable organic waste from public markets and fairs, social institutions were mapped and registered to establish a Food Bank and Solidarity Table initiatives, which aims to direct edible food rescued from public facilities to provide free,and safe food to socially vulnerable people. As such, edible food from the Curitiba Municipal Market, Canjuru Regional Market and Family Warehouses is donated to Food Bank and Solidarity Table initiatives, and Family Markets permit holders are trained to separate food that is not commercially viable, but suitable for human consumption. Through the Solidarity Market Project, vendors at Farmers' Markets are also capacitated by SMSAN on separation, and donation of foods to social institutions that collect the supplies at the end of each market.

Beneficiaries of the Food Bank and Solidarity Table are also supported by the Food and Nutritional Security Schools Project, which offers professional training courses to the most vulnerable residents and utilises SMSAN's commercial facilities as a social incubator. Through the establishment of five Food and Nutritional Security Schools, residents are able to access professional training courses and job opportunities in collaboration with educational institutions, commerce, and industry to achieve social emancipation.

The Metropolitan Region Food Development Programme (PRODAM) provides technical and institutional support to enhance the production of the green belt formed by family farmers in the Metropolitan Region of Curitiba. This initiative aims to facilitate access to public procurement and conventional markets.

RESULTS AND LESSONS LEARNED

Key learnings from Curitiba's experience include the importance of collaboration among various sectors, which can enhance resources and expertise, creating a more conducive environment for agricultural development and professional training. With financial support from the Brazilian Development Bank, the Curitiba Food Supply Fund has been administered by SMSAN to support Curitiba's Food and Nutritional Security programs, projects, and actions. This enabled the expansion of the Family Warehouse and Family Markets Programmes to all regions of Curitiba, boosting private sector entrepreneurship in previously underdeveloped areas while regulating consumer prices and promoting sustainable economic development. Due to the evident benefits to residents and popular acceptance, municipalities in the Curitiba Metropolitan Region have signed agreements with the Municipality to implement Family Warehouse units in their territories.

Dar es Salaam, Tanzania

~8,000,000 inhabitants

1,393 km² city's surface

MOST IMPORTANT ECONOMIC SECTORS

- Tourism
- Fishing and marine resources
- Trade and commerce
- Transportation and logistics

DID YOU KNOW?

Dar es Salaam has a youthful population and is projected to be one of five African megacities with more than 10 million residents by 2029 [44].

Photo: Buguruni Market. ©GAIN

GOVERNANCE AND MARKET CONTEXT

Food is sold through direct farmer-to-consumer channels, to supermarkets and via middlemen who facilitate sales in local markets. There are 13 public local food markets under city government mandate, spread across the city's five municipalities of Temeke, Ilala, Kinondoni, Ubungo, and Kigamboni. Municipalities are overseen by the Dar es Salaam City Council and the Regional Commissioner's Office and each municipality is managed by a municipal council.

Market management by municipalities is conducted by appointed personnel or out-sourced contractors who have responsibilities such as revenue collection and waste management. Municipal councils are tasked with reinvestment of market revenues into WASH infrastructure, business compliance, and training for small-scale entrepreneurs. However, implementation is inconsistent. Market vendors pay fees on a daily or monthly basis [45]. The day-to-day internal market management is carried out by market committees, which typically comprise elected vendors and business owners from the respective market. An exception is the largest market, Kariakoo Market, in Ilala District, which is managed by the Kariakoo Market Corporation (KMC). KMC reports directly to the central (national) government via the Ministry of State for the President's Office - Regional Administration and Local Government [46].

Informal markets, typically located along roadsides and at traffic lights, comprise movable stalls, allowing vendors to operate without regulation or payment of fees. These are especially prevalent in areas distant from formal markets, such as Kunduchi ward in Kinondoni Municipality. Small-scale stalls known as "*genge*" also operate in neighbourhoods, selling fresh foods to households [46].

CHALLENGES

Dar es Salaam is vulnerable to flooding, sea level rise, water scarcity, and disease outbreaks. [47]. There is limited coordination between the city and different levels of government, as well as stakeholders like local universities, who gather data on food systems to address

climate change and urban planning, including Urban-Peri Urban (UPU) agriculture [45]. The need for proper drainage systems in markets and elsewhere is pressing as existing systems are unable to handle the volume of rainwater, causing flooding. Vulnerability is heightened by the location of homes and urban agriculture in unzoned, unplanned areas near rivers [45]. Lack of adequate infrastructure and waste management services impacts the availability and accessibility of affordable, safe, and nutritious food from markets. Market access is constrained by inadequate public transport, which further hinders efficient food distribution [45].

POLICIES AND INITIATIVES

Nationally, policies governing markets often fall under the Department of Agriculture, with specific stipulations for cultivation, farmer access to markets, post-harvest protocols, and storage requirements. Examples include the Ministry of Agriculture Food Security and Cooperatives' National Agriculture Plan (2013) [48], which aims to support farmer access to both international and local markets, as well as the Ministry of Industry, Trade, and Marketing also administers the Agricultural Marketing Policy (2008) [49], which has a provision for managing the quality of agricultural products reaching domestic, regional and international markets. Interestingly, agricultural extension officers have a close advisory relationship with UPU formal and informal food producers.

The city is committed to food systems goals, including supporting small-scale farmers. Formalising centrally located informal markets via introducing Wamachinga identity cards for informal vendors is in progress. Such formalised vendors can operate without the risk of police removing their stalls [50]. Through the city network C40's Inclusive Climate Action Fund, the city is acting to reduce organic waste, especially in informal settlements, by engaging and training informal waste sector workers [51].

RESULTS AND LESSONS LEARNED

Poverty reduction, enhancing urban availability and access to safe, nutritious food, climate resilience, and land and settlement management are viewed as priorities by the city [45]. Additionally, the Transforming Urban-Rural Food Systems (TURFS) consortium is conducting an exploratory study with the City of Dar es Salaam to inform a scalable city roadmap to a climate-smart, regenerative, circular food system that is also inclusive, equitable and just [52]. This study focuses on a better understanding of local and urban agriculture, supermarkets, and public and informal markets and governance, reducing barriers and spotlighting opportunities for systemic transformation of the city's food environment.

Lilongwe, Malawi

989,318 inhabitants

393 km² city's surface

MOST IMPORTANT ECONOMIC SECTORS

- Public administration
- Retail and wholesale
- Light manufacturing
- Transport
- Banking and tourism-related industries

DID YOU KNOW?

Using the inter-cropping technique, food is grown on a small scale in most open spaces within the city.

Photo: Lizulu Horticulture Market, Lilongwe. ©ICLEI Africa

GOVERNANCE AND MARKET CONTEXT

Lilongwe City has 27 wards, divided into four sectors (Old Town, Capital Hill, Kanengo, and Lumbadzi). Across the city, there are 43 municipally owned and operated markets, of which five are off-street, with each ward having at least one local market. A number of informal markets also exist. While various national ministries (Trade, Health, Agriculture) participate in setting regulations to govern different aspects of the market, the day-to-day management sits with the local government's Department of Commerce, Trade and Industry. Each market is overseen by a market master/mistress employed by the said department, cooperating closely with the Department of Health, which is responsible for market cleanliness, waste collection, disease prevention, and management, as well as the Engineering Department, which is responsible for the lighting, fire management, and the construction and cleaning of drainage systems.

Lilongwe has two regulations (Lilongwe Market and Vending by-law and Lilongwe City Council Business Permits Licence) that allow cooperatives or individuals to run private markets.

CHALLENGES

One of the key governance challenges Lilongwe City Council faces is the management and regulation of street vendors in the city. There has been a rise in street vending in the city as the existing markets are mostly overcrowded, disrupting service provision. Further, the vendors respond to their customers, who seek convenience and purchase produce along the road instead of entering a market space. While street vending provides key livelihood opportunities, it is deemed illegal under the Market and Vending by-law. It is considered problematic as it compromises food safety, causes road congestion, and negatively impacts the fees-paying vendors' revenues in the markets. There is also a perception that street

vendors do not fit the image of a modern city. This contributes to commercial retailers' lack of investor interest, such as the supermarket chain Shoprite.

POLICIES AND INITIATIVES

The City Council has adopted a two-tiered approach to eliminating street vending. Firstly, the Department of Commerce, Trade and Industry is working with the Planning Department to formally zone certain roadside areas as 'off-street markets,' of which five have been established. These markets are designed to accommodate street vendors seeking better visibility and foot traffic. The off-street markets allow vendors to build trading stalls organised and safely, following predefined design specifications. The off-street market pilots have been established in low-density, high-income areas close to the supermarket, making them desirable trading locations.

Where possible, the Lilongwe City Council is using off-street markets to make provision for street vendors safely. However, the sheer number of street vendors poses a problem.

To curb street vending, the City Council has established a municipal police force whose primary responsibility is to manage and control street vending. This hard view is not always politically favourable, but is deemed a necessary action to ensure food safety and manage the sale of fresh foods in the city.

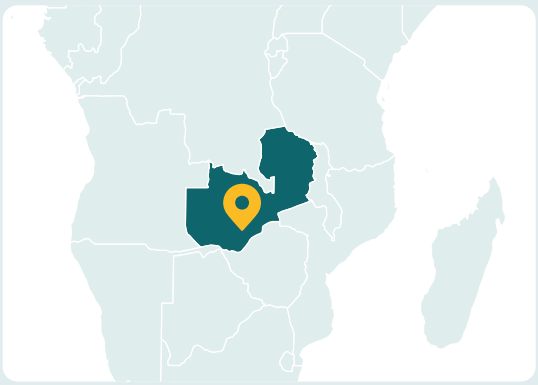
RESULTS AND LESSONS LEARNED

The off-street markets have proved successful thus far. The serviced vendors are content in terms of visibility and accessibility to customers. They mostly respect the design guidelines, their stalls are neatly presented, and they do not block the traffic. They have also been registered with the City Council and pay monthly fees.

However, there are challenges, such as the lack of proper infrastructure to address storage and the perishability of fresh foods. The attractiveness of stalls could also be improved if the vendors had access to more funds or if the City Council could build them uniformly. Additionally, the absence of sanitary facilities such as toilets and water is an inconvenience to the vendors and presents a health and safety risk.

Regarding the rest of the street vendors, the challenge remains to include them safely in the retail sector. Every day, vendors are chased off the street by police, and every day, they return. If the vendors are caught, their items are confiscated, and in line with the Market and Vending by-law, the police are allowed to dispose of the confiscated items. Sometimes, these interactions lead to violence, and street vendors have very few rights in this situation. Although the off-street markets have been a success, for impacts to be visible, off-street markets need further expansion.

Lusaka, Zambia



3,079,964 inhabitants

360 km² city's surface

MOST IMPORTANT ECONOMIC SECTORS

- Commercial manufacturing
- Financial services
- Transportation/storage
- Hospitality
- Construction
- Wholesale/retail trade
- Food processing

DID YOU KNOW?

Soweto Food Market, located near Lusaka's Central Business District, is Zambia's largest formal urban market. It plays a vital role in distributing fresh produce to cooperative and city council markets through wholesale and retail channels [53].

Photo: Mtendere Market. ©ICLEI Africa

GOVERNANCE AND MARKET CONTEXT

Lusaka City has 32 markets overseen by the Lusaka City Council (LCC), 60 independent cooperative markets across seven constituencies, and 33 wards, mainly in densely populated, unplanned, low-income residential areas. More than 30% of fresh food originates from nearby rural and food-producing districts, supporting an informal food sector serving about 80% of the population through market stalls, mobile and street vendors, and kiosks [54].

The Markets and Bus Stations Act recognises council-established markets, managed by market managers (for large markets) or market masters (for small markets) and Market Advisory Committees, and independent cooperative markets governed by market committees. Other relevant legislation includes the Public Health Act, Solid Waste Regulation and Management Act, Food Safety Act, and Local Government (Street Vending and Nuisances) Regulations (SI No. 12 of 2018).

LCC's Department of Housing and Social Services works with Public Health, Planning, Finance, and the Lusaka Integrated Solid Waste Management Company (LISWMC) to oversee market management. The Ministry of Local Government and Rural Development provides Council oversight. Council-operated markets often include independent producer associations offering trading rights and occasional storage facilities.

For consistent water supply, LCC provides market services such as infrastructure maintenance, solid waste management, lighting, sanitation, cleaning, and water boreholes. Vendors pay market levies to LCC, which cover utility bills. LCC licenses cooperative shop owners, and services are managed through the collection of the levies by the cooperatives. The Council is developing a levy-sharing mechanism aligned with the Markets Act to collect market levies, while waste management and ablution block fees will be shared with cooperatives.

CHALLENGES

Lusaka's markets lack adequate infrastructure and amenities such as storage facilities. The Council is responding by modernising markets and building multi-storey facilities with local and national government funding. With assistance from the Disaster Management and Mitigation Unit (DMMU), a multi-storey market was constructed in the Central Business District (CBD) to relocate street vendors and expand trading space. LCC is utilising Public Private Partnerships (PPPs), including build-operate-transfer agreements to develop markets, and leasing services like ablution facilities and provision of storage, and recently approved a private company to offer solar-powered cold storage in a CBD market.

Solid waste management, especially food waste, is a significant challenge, with 38% of fresh market produce wasted. In 2018, LCC established LISWMC to manage solid waste, enforcing the Polluter Pays Principle to hold vendors accountable for their waste. The Council collaborates with private entities to implement waste separation in markets. With the support of the Japan International Cooperation Agency, the Chunga dumpsite was transformed into a well-managed facility where waste is processed and repurposed.

Competition among marketeers, commercial establishments and home shops exacerbates street vending, a complex political issue. Nevertheless, street vendors through the Vendors Association are being engaged to relocate to designated areas.

POLICIES AND INITIATIVES

The Markets Act and related legislation ensure well-managed markets by regulating marketeer behaviour. The 2018 SI that prohibited street vending and imposed penalties is pivotal in addressing this issue, promoting trade in designated markets and food safety. The Council's dialoguing with the informal sector represents an improved approach. The establishment of LISWMC in 2018 to oversee solid waste functions, including contracting out to the private sector and introducing bio-digesters in some markets, is significantly improving waste management. Furthermore, the Government's Make Zambia Clean, Green, and Healthy Campaign mandates vendors to clean markets on the last Saturday of each month. Initiatives like the 2020 Lusaka Food Security Initiative and the Lusaka Food Policy Council, led by the Mayor's office, promote a collaborative approach to enhancing an integrated food system.

RESULTS AND LESSONS LEARNED

Regulating markets and enhancing infrastructure, sanitary conditions, and food safety are crucial steps requiring vendors' and consumers' enforcement and responsibility. Redesigning food systems based on circular economy principles is essential to tackle food waste effectively. Public-private partnerships hold promise in significantly enhancing market environments. Governance improvements will also involve regulating market middlemen who influence food pricing. Key drivers of change include bolstering political commitment, enhancing the Council's capacity for regulation and market management, raising awareness among vendors and consumers, and fostering partnerships.

Machakos, Kenya

250,000 [55, 56] inhabitants

307 km² city's surface

MOST IMPORTANT ECONOMIC SECTORS

- Agriculture
- Manufacturing and industrial activities
- Trade and commerce
- Tourism
- Transport and logistics

DID YOU KNOW?

Machakos' traditional food markets thrive on fresh produce from neighbouring counties, including the agriculturally rich Kiambu, and even through cross-border trade with Tanzania [57].

Photo: Marikiti Market. ©GAIN

GOVERNANCE AND MARKET CONTEXT

In Machakos, market management is the mandate of the County Department of Trade, Industry, Tourism, and Innovation. This includes collecting revenue, ensuring that scales are calibrated, and overseeing elections of vendor-constituted market committees. Fees are collected daily by the market manager and Department of Trade revenue officers using digital tech hand units and vendor-unique number codes. Other county departments' mandates intersect with market operations. The Decentralized Unit has a directorate of waste management tasked with market waste collection and inspectorate services to ensure security. The Department of Water, Irrigation, Environment, Sanitation and Climate Change provides WASH infrastructure and services, while the Department of Agriculture, Food Security and Cooperative Development focuses on the formulation, implementation, and monitoring of agricultural legislation, regulations, and policies that influence food supply, quality, and affordability. Under the Department of Health, the public health mandate covers the health and safety of markets and compliance overseen by inspectors. The nutrition mandate under this department oversees messaging and educational campaigns that aim to influence the markets and broader food environment [55].

CHALLENGES

The hot, arid climate, reliance on long food supply chains, and double taxation of food as it is transported across county boundaries present challenges for local markets, e.g., in maintaining year-round availability of safe, fresh fruits and vegetables [58]. This has a knock-on effect on prices and the volume of food loss en route to the markets. Infrastructure is often lacking, such as roofing, raised stall surfaces, cold rooms, and adequate washroom facilities for both men and women, and basic service provision, such as emptying markets' trash bins and water, is unreliable [58]. Such investments are challenged by lack of investor confidence which tends to be informed by classic, cost-benefit profit and risk models that are unsuited to local and traditional publicly managed food markets.

The absence of a robust intergovernmental coordination mechanism creates challenges for the transformation of locally-led food systems. This affects the role of publicly managed markets as transformation hubs, limits investment in market infrastructure, and hinders the capacity building and engagement of vendors and market committees as key partners. According to the market stakeholders, insufficient coordination between county governments, market committees, and vendors as well as national and county-level governance result in inefficiencies, including overlapping market design projects and unclear responsibilities [58].

POLICIES AND INITIATIVES

The Markets Development and Management Guide aims to standardise the development of markets in Kenya with guidelines for planning, design and management [59]. Responsibility for food systems has devolved to county governments via the County Governments Act (2012). Machakos County has enacted several laws, including the Food Safety Act (2022) and the Machakos County Public Market and Stalls Act (2016), which designates vendor operation areas and market governance structures [60].

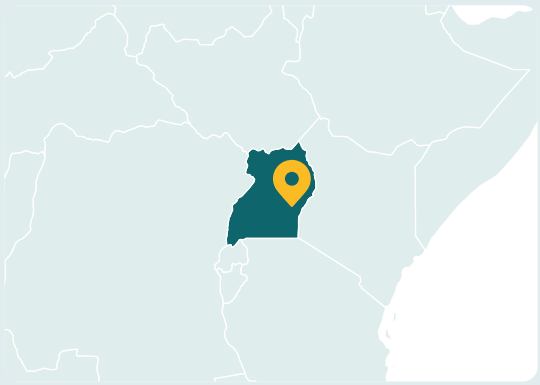
Machakos County collaborates with local and global private sector, non-government, and research partners to better support its food systems transformation. Since 2020, the county has worked with GAIN and Marikiti Market in Machakos town to co-design an inclusive governance market action plan and improve county and market committee and vendor management, nutrition, and food safety capacities. This collaboration has invested in incremental infrastructure improvements, starting with WASH facilities and later expanding to roofing and a dual-powered cold storage room, primarily for storing vendors' vegetable stocks.

Thanks to GAIN, county and market stakeholders now benefit from step-by-step de-risked infrastructure investment, are capacitated in systems thinking, nutrition, food safety, and waste reduction, and are effectively leveraging their leadership and food system relationships. In 2024, GAIN further connected stakeholders with four other county governments and markets through the sub-Saharan African Kongamano workshop, co-hosted by the Kenyan government, to facilitate knowledge-sharing, networking, and inspiration among county representatives alongside partners and donors.

RESULTS AND LESSONS LEARNED

Recognising food hygiene and safety as a local and global challenge, the Kenyan national government, Nigeria, and Bolivia have led efforts to develop the Codex Alimentarius "Guidelines for Food Hygiene Control Measures in Traditional Markets" since 2022. These were officially adopted in November 2024. Moving forward, Machakos County and market committees will focus on implementing and operationalizing these guidelines.

Mbale, Uganda



~650,000 inhabitants

518.6 km² city's surface

MOST IMPORTANT ECONOMIC SECTORS

- Agriculture
- Tourism
- Trade

DID YOU KNOW?

83.6% of Mbale's territory is dedicated to subsistence agriculture—bringing farm-fresh produce straight to your plate.

Photo: Mbale Central Market. ©Peter Businda, Rikolto

GOVERNANCE AND MARKET CONTEXT

In Mbale City, roughly 90% of the urban population purchase their fresh produce from fresh food markets. The city has seven municipally owned markets. Mbale Central Market (MCM) is the main hub where produce is aggregated and sold to small-scale vendors or directly to consumers. On the outskirts, several smaller, unregistered markets operate. While these lack proper infrastructure and essential services, they play a crucial role in ensuring residents' access to fresh food.

The overarching governance of food markets sits with the Mbale City Council (MCC). The Commercial Department is in charge of the daily market operation within the MCC. At the same time, the Food Department is responsible for ensuring food safety standards are adhered to in the market. Each municipal market is managed by a market master/mistress, who is employed by the MCC, and a market executive elected by the vendors every two years. Notably, the MCC has partnered with Rikolto, Global Consumer Centre (CONSENT), and the Food Rights Alliance (FRA) on the Good Food for Cities (GF4C) programme, which aims to improve market infrastructure and food safety and hygiene practices in the market.

CHALLENGES

One of the biggest challenges in Mbale City is post-harvest food loss and waste. Key drivers of food loss include a lack of awareness around safe food handling practices, bad road networks and inappropriate transport solutions, a lack of proper trading stands and the absence of cold storage infrastructure. Food loss across the supply chain is affecting food security in the city, as well as directly impacting the livelihoods of small-scale farmers and market vendors.

The MCC is taking a value-chain approach to address this challenge. At the farmer level, they provide training and extension services to improve skills and knowledge of modern agricultural practices, timely harvesting, safe food handling practices, and appropriate storage methods. At the market level, the GF4C programme has worked to co-design and build

70 new attractive trading stalls at the Mbale Central Market that promote food safety and preservation.

To further improve food safety practices, the GF4C programme facilitated a food safety training programme at MCM and invited the vendors to practice what they had learned by participating in a competition. The contest awarded vendors prizes based on personal hygiene, stand cleanliness, product safety, customer service, market hygiene, and sanitary conditions. Even those who did not win reported that they enjoyed participating in the competition as they saw increased customers in response to the positive changes they had made to their stalls.

POLICIES AND INITIATIVES

One of MCC's most successful initiatives, in collaboration with Rikolto, CONSENT, and FRA, is the establishment of the Good Food Council (GFC) and the Good Food Parliament (GFP). These councils serve as mechanisms for consultation, dialogue, co-production, and review among food system actors. Originally created to address food safety in markets, they have since expanded their scope to tackle broader market-related challenges.

The GFC is made up of 19 members who represent a diverse set of food system actors, such as political and technical officials from MCC, vendors, farmers, business representatives, media, researchers and cultural institutions. The Council makes decisions and develops action plans for food system interventions, which are put forward for consideration by the GFP. Once implemented, the Council reviews the interventions monthly to assess their success and adapt plans as needed. Progress is shared and discussed with the Parliament to foster transparency, inclusivity and accountability.

The GFP is a wider multi-stakeholder platform consisting of over 70 food system actors, including those who sit on the Council. The Parliament helps to strengthen coordination and implementation of the interventions by sharing experience and knowledge, exploring different viewpoints and building momentum towards a shared goal. All proceedings are relayed to the public through the media, and the Parliament posts its resolutions to the relevant MCC offices for implementation.

RESULTS AND LESSONS LEARNED

Taking a holistic approach to addressing food safety by implementing market upgrades, training programs, and innovative activations, such as the competition held at MCM, has shown to be effective in shifting the mindsets of consumers and vendors towards improved food safety and hygiene practices. The vendors at the market have experienced an increase in sales in response to the positive changes they have made. With this buy-in, the market management committee can better regulate food safety. This intervention has proved truly successful, as other non-beneficiary vendors have since improvised their own upgrades in line with the beneficiary stalls, as they saw the benefits to the vendors' businesses.

The GFC and GFP have successfully elevated urban food issues on the city's agenda, enabling more coordinated discussions and decision-making. A key outcome has been the development of a Food Ordinance aimed at addressing food safety issues in the markets. Further, dialogue and accountability mechanisms have been established through these platforms, and the regular interactions between food system actors have created the space for a more unified response to food system challenges in the city.

Pemba, Mozambique

243,295 [61] inhabitants

100 km² city's surface

MOST IMPORTANT ECONOMIC SECTORS

- Agriculture and forestry
- Fisheries
- Transport and communication
- Financial services
- Tourism

DID YOU KNOW?

In Pemba, 100 street vendors, especially those selling fish, have received NutriBikes, equipped with cool boxes to keep food fresher for longer while reaching more customers faster.

Photo: Female vegetable vendor at the Alto Gingone Market. ©GAIN

GOVERNANCE AND MARKET CONTEXT

At the national level, the Ministry of Agriculture oversees food supply and pricing, while the Ministry of Industry and Trade develops policies to support industrial production, trade, and agricultural marketing. The Department of Food Security manages the food supply chain [62]. While these national bodies regulate food availability and affordability, the management of Pemba's markets falls under the Municipal Economic Activities Department. Mandated responsibilities include registering public markets, provision of basic services like WASH and waste management, infrastructure maintenance, health and food safety compliance, and vendor regulation [62]. They do so by collaborating with other departments, such as the Planning and Finance, Urbanization, Health, Transport and Sanitation departments.

Local food markets in Pemba are the primary source of food for urban residents and important socio-economic hubs [62]. Pemba has 12 public (formal) markets and at least 16 informal markets [62]. Informal markets are often located on roadsides and vacant lots, especially in the neighbourhoods of Alto Gingone, Josina Machel, Chuiba, Maranganhe, Eduardo Mondlane, and Machara. Several public and informal markets' locations intersect, with some vendors selling their products in both formal and informal spaces, depending on the time of day, demand, or vendors' needs [62]. Typically, women sell fruits and vegetables, while male vendors sell eggs, dairy, and packaged foods [62].

CHALLENGES

Pemba faces significant challenges regarding the availability and access to affordable, safe, and nutritious food for residents, as well as food loss and waste [62, 63, 64]. Soils and other conditions in Pemba are unsuited to urban agriculture. Food value chains extend from local sea-fresh caught produce to a few hydroponically grown urban and local fresh vegetables sourced 1- 2 hours drive outside the city to longer value chains spanning multiple provinces and cross-border with Zimbabwe and South Africa. Two main supermarkets and several

local food markets are key to food accessibility and livelihoods in Pemba. However, municipal (public) market management is complicated by budget constraints, fragmented administrative activities and responsibilities, vendor skills gaps, and entrenched unfavorable practices [62]. In markets, WASH facilities, waste management services, and cold storage are unavailable or poor [62].

POLICIES AND INITIATIVES

A key initiative is a hybrid market, a wholesale-retail public food market built in Pemba between 2023-24, with funding from the Norwegian government and technical implementation by GAIN. This is a novel, innovative design based on best practices, guidance from World Union of Wholesale Markets members such as SIMAB, technical requirements, co-design inputs from Pemba Municipality, vendors, and other market leaders from markets in the city [65]. The market is designed to promote a sense of community and food place, as evident in markets throughout the city and country. It also aimed to provide conditions including skills and financial payment mechanisms, to make accessible safe, diverse, nutritious foods, to support on-going maintenance of climate resilient infrastructure (including cold room), ensure robust management and facilitate efficiency in food systems relationships for a resilient and future fit market.

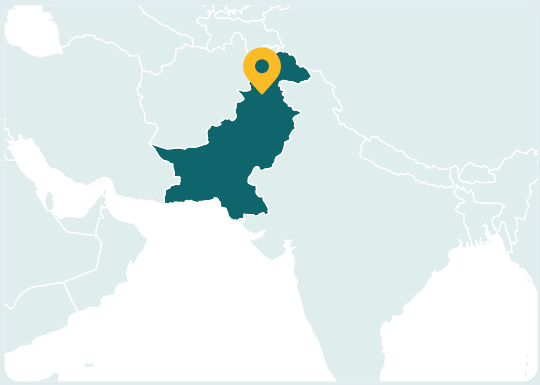
The land on which the market is built is owned by the municipality, and the site was selected based on the city's development plan with a view to growth of the community, public transport and road infrastructure as well as distribution relationships with other local markets and last mile vendors. Recently opened in mid-2024 and supported by contracts, the market promises to illustrate how such a market design, with and for low-income communities, can be financially viable and robust, even if not making large profits. It also serves to promote locally-led ownership of activities, such as the reduction of food waste, food hygiene, and progress towards social, health, gender equity, livelihoods, food security and nutritional well-being goals, while also being environmentally sensitive.

RESULTS AND LESSONS LEARNED

Pemba's municipal government has identified several goals for improving food systems, including supporting short food supply chains, building resilience, and reducing food waste in the markets [62]. The municipality is committed to food and nutrition security e.g., designing zoning regulations which aim to more evenly distribute markets throughout the city [62]. There are also local environmental policies, which focus on promoting recycling and the use of eco-friendly materials, while financial and capacity-building support for Small and Medium Enterprises within markets aim to help vendors maintain and grow businesses. Leadership programmes run by the city help train market managers and vendors on best practices for market and financial management, quality control and customer service. Vendors are also required to be licensed and subject to health and food safety regulations [62].

Public and Private partnerships, including with local and international non-profit organisations, are encouraged through municipal government policy. Partnerships are on a voluntary and incentive-based programmatic arrangement with benefits including provision of technical assistance, training and resources. Furthermore, under the recently elected new Mayor, Pemba intends to reinvigorate its city to city learning and best practices network and resource access benefits via the Milan Urban Food Policy Pact of which it is a signatory [34].

Peshawar, Pakistan



4,758,763 inhabitants

1,275 km² city's surface

MOST IMPORTANT ECONOMIC SECTORS

- Agriculture
- Manufacturing
- Food processing
- Services
- Pharmaceuticals

DID YOU KNOW?

Peshawar boasts a dynamic and youthful population, with 30% under the age of 15. Its rich cultural diversity continues to grow, fueled by people from surrounding areas and from Afghanistan.

Photo: Food vendor in Peshawar food market. ©GAIN

GOVERNANCE AND MARKET CONTEXT

The Capital Metropolitan Government Peshawar governs the city. As a part of this governing body, the Municipal Corporations, which oversee smaller areas of the city, are responsible for the regulation of 'formal' (public) markets. This includes market location zones, vendor operating permits, WASH infrastructure and services, and solid waste management [66]. Day-to-day market governance is led by market committees reporting to the Capital Metropolitan Government. Like elsewhere in Pakistan, Peshawar's markets tend to be produce-specific. Presently, there are seven main public markets within Peshawar: fruit and vegetable markets (Kala Mandi, Chamkani Subzi Mandi, and Dalazak Road), meat and fish markets (Hashtnagri, Ghanta Ghar and Chargano Chowk respectively), and an egg market (Firdus) [67]. About one-third of the city is under the jurisdiction of the nearby military base and thus managed as cantonments. These areas have separate governance structures, including cantonment boards comprised of appointed and elected members. Some markets fall within the cantonment bounds [66, 67].

Typical for Pakistan, Peshawar's food outlet sector is diverse, reflecting strong cultural preferences for food types and ways of selling, as well as routines of buying small quantities daily and larger quantities on the weekends [68]. Meat-based diets, mainly including lamb and beef, are favoured by Peshawar residents. Food is sold in the spazi mandis, specialist markets like meat markets and small shops. Market 'stalls' are usually owner-operated by vendors, who are mostly male because of inheritance practices [68, 69]. Last mile vendors (informal sector) vitally distribute food from urban and peri-urban markets to households, often selling directly to women and vulnerable households at this interface.

CHALLENGES

Food safety is a challenge, including the use of pesticides by suppliers, adulteration of milk, handling practices, and consistent enforcement of compliance [68]. Food loss significantly

impacts the availability of fruits and vegetables from long food supply chains. Food waste in the markets largely results from inadequate WASH infrastructure, the absence of cold storage facilities, and poor food hygiene and handling. Inconsistencies in solid waste disposal in markets further exacerbate food safety concerns [68].

POLICIES AND INITIATIVES

Addressing WASH awareness and the implementation of routine associated practices is a cornerstone to achieving local ownership of hygiene and food safety concerning food in the markets. Similarly important is creating a market vendor culture of awareness and asking questions regarding suppliers and transporters, even if there are challenges in enforcing regulations regarding the late use of pesticides and adulteration of milk. Together, these can have a beneficial knock-on effect of reducing food waste in the markets and facilitating accessibility of quality, safe, and nutritious foods.

The Municipal Corporation collaborates with various actors at the national and district level, including the Pakistan Standard and Quality Control Authority – Peshawar and Khyber Pakhtunkhwa Food Safety and Halal Food Authority who operationalise both the Khyber Pakhtunkhwa Food Safety and Halal Food Authority Act (2014) and the Khyber Pakhtunkhwa Local Government Act (2019) [70, 71]. The latter aims to improve local capacities for providing services and infrastructure, including those related to markets like WASH [67]. Peshawar's policy option toolkit, co-designed during COVID-19, also illustrates how the markets and Peshawar government can address challenges for WASH, food hygiene and safety, and food waste [72].

Several policies and partnerships aim to address the Peshawar Government's objectives for shortening food supply chains, targeting improving food security and nutrition, and zoning for markets. Sectors coordinate across food groups to stabilise food market prices, set guaranteed minimum prices, and facilitate affordability. The federal government subsidies basic commodities, which the Utility Stores Corporation provides to the public at lower-than-market prices [67].

RESULTS AND LESSONS LEARNED

In Peshawar, the implementation of the Local Governments Act (Act no. XXV, 2019) [72] has been successful in encouraging inclusive food systems management involving a diversity of local actors, such as representative authorities, regulators, and private companies [72]. Coordination among these actors is viewed as crucial. The government recognises that all actors need further capacitation on food safety, nutrition, and market management, and co-designed management solutions are needed for informal food markets. In Peshawar, charity-based food distribution networks like The Saylani Welfare International Trust further support food security and nutrition for vulnerable communities.

Recife, Brazil

1,488,920 inhabitants

218 km² city's surface

MOST IMPORTANT ECONOMIC SECTORS

- Tourism
- Tertiary Services

DID YOU KNOW?

Recife can be seen as the "capital of markets," as there are more than 40 bustling hubs showcasing the city's rich culture, history, and vibrant cuisine.

Photo: Boa Vista Market. ©Divulgação CONVIVA/PCR

GOVERNANCE AND MARKET CONTEXT

The City of Recife boasts 42 market units comprising fairs, markets, and fairgrounds. Fairs have seasonal event schedules, while fairgrounds and markets are permanent, enclosed spaces where vendors have fixed stalls operating throughout the year, providing a consistent venue for regional products and interaction. The management, maintenance, and day-to-day operations of public fairs and markets in Recife are the responsibility of the municipal authority CONVIVA Mercados e Feiras (CONVIVA). The authority also implements initiatives to preserve traditional practices while integrating modern amenities, ensuring these hubs remain relevant and accessible to locals and visitors. As a result, Recife's markets not only facilitate the sale of goods but also serve as vibrant centres of culture, preserving and promoting the rich regional heritage, traditions, and cuisine while fostering community engagement and supporting local economies.

CHALLENGES

Despite Brazil being one of the world's largest food producers, the lack of regular access to adequate and healthy food represents fundamental challenges for building a more just and sustainable society, a challenge that Recife also faces. Food waste, especially in organic solids, remains high due to the absence of effective policies to address the issue. Additionally, inadequate management of organic waste contributes to a cycle of waste and missed opportunities for resource utilisation.

POLICIES AND INITIATIVES

The Recolheita Project, developed by Caisan – the Intersectoral Chamber for Food Security and Nutrition, in collaboration with city departments and agencies in Recife, aims to tackle these challenges by reusing food that is still fit for consumption and adequately disposing of organic waste. The central goal is to combat hunger by connecting donors to the Recife Food Bank and promoting access to adequate and healthy food. Furthermore, the project seeks to reduce waste and promote the composting of organic solid waste generated in public markets and fairs, transforming this waste into valuable ecological resources. The pilot project,

conducted at the Encruzilhada Market, showed positive results by collecting 2.2 tons of compost between December and March 2023. After processing, this resulted in approximately 6 tons of compost used by the municipal composting facility. This initial success reinforced the decision to expand the project to other facilities managed by CONVIVA, with target beneficiaries to include individuals assisted by the Recife Food Bank, from the social assistance network, and those in food and nutritional insecurity situations.

Recife's public markets also serve as meeting points for tradition, culture, cuisine, bohemian life, and celebrations that capture the collective imagination of Recife's residents in these spaces. The city's greatest cultural asset is Carnival, known not only for its multicultural nature but also for preserving lyrical blocks and Frevo de Bloco. During the Carnival season, markets gain even more prominence, hosting decentralised events that attract tourists and locals. This also happens during the region's traditional festival of São João in June, when CONVIVA-managed facilities join the artistic grid with itinerant performances.

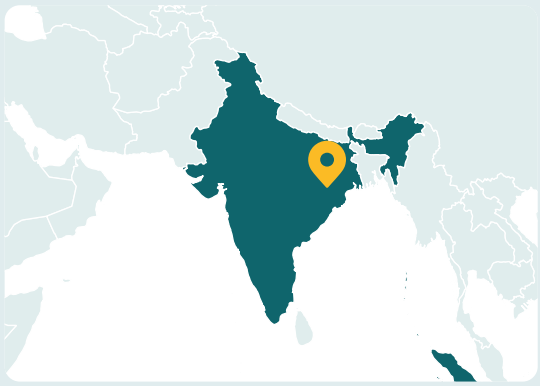
RESULTS AND LESSONS LEARNED

In recent years, significant investments have been made in structural interventions across the facilities the authority manages. This investment includes the construction of new spaces to accommodate vendors and visitors, as well as refurbishments that have enhanced existing facilities, making them more prominent for residents, tourists, and collaborators.

Despite these significant investments, further progress is needed in various areas to improve public spaces. Public procurement calls have been promoted since 2021 to establish public-private partnerships to strengthen furnishing, service utensils, graphic standardisation, and visual layout in the city's markets and fairs. Today, some markets have benefited from these initiatives, ensuring better equipment for permit holders and visitors while relieving the municipal budget. The counterpart for the private sector is that there will be exclusivity in the display of the winning brand.

Further efforts will focus on fostering public-private partnerships and developing sustainable and responsible production cycles for food reuse and composting, which will alleviate urban cleaning challenges and integrate these initiatives into public management policies. Additionally, there will be a continued emphasis on supporting entrepreneurship among vendors who have long been integral to the city's public markets and fairs.

Rourkela, India



536,450 [73] inhabitants

259 km² city's surface

MOST IMPORTANT ECONOMIC SECTORS

- Agriculture
- Manufacturing
- Trade

DID YOU KNOW?

Rourkela was selected for the Nurturing Neighbourhoods programme and won the "EatSmart cities" challenge by the Indian Ministry of Housing and Urban Affairs. It helped the city establish the economic approach to food system transformation, empowering street vendors and small farmers.

Photo: Rourkela Local Action is providing capacity-building training for women on the use and maintenance of cold rooms. ©Bewin Tom, Project Supervisor, UNDP

GOVERNANCE AND MARKET CONTEXT

Through smart solutions, Rourkela aims to achieve a healthy, safe, and sustainable food environment strengthened by strong institutional, social, and economic infrastructure. Rourkela has made significant strides in various food-related initiatives, such as reshaping markets to prevent distress sales by farmers, ensuring food security for all, and promoting community participation in food intervention planning. Furthermore, the city has improved early childhood nutrition and redeveloped the food infrastructure through the Purnanjali Program. The Rourkela Municipal Corporation (RMC) plays a crucial role in food market management in the city [74].

CHALLENGES

Rourkela's fresh food markets face significant challenges due to inadequate vegetable storage facilities. This has led to high rates of food wastage, with 34% of fruits and 44.6% of vegetables wasted annually, at the same time fueling distress sales, food contamination, and increased water, energy, and soil consumption to produce the same amount of food, resulting in losses for farmers and vendors and adverse economic and environmental impacts. A pilot survey indicated that 83% of farmers and vendors cited the lack of storage options as the primary reason for distress selling. The COVID-19 pandemic aggravated these food waste issues by reducing consumer demand, emphasising the need for effective and sustainable solutions to support the local food market and reduce the waste in the city [75].

POLICIES AND INITIATIVES

To address these challenges, the RMC, in collaboration with the District Horticulture Department, NGOs, Farmer Producer Organizations, and Koel Fresh Pvt Ltd., launched the "E-cool Mandi" project in 2021. This initiative, funded by Bloomberg Philanthropies and managed by UNDP, involved the installation of five solar energy-based decentralized cold

storage facilities at various market locations, designed to benefit about 1,650 vendors and nearly one million residents, with plans to scale up city-wide by 2025. The project began with a pilot at the VSS market in Chhend. The vendors can store their produce at a minimal cost of INR 0.20 per day per kg.

The project also has a gender focus. Each e-cool mandi is managed by 5-7 women, including digital inventory management operations. This initiative was initially started with a 5MT cold room operated by Maa Tarini Self Help Group with support from Koel Fresh Pvt. Ltd, a startup venture from the city. Subsequently, an additional 4 nos of SHGs participated in the project, namely Jai Mata Di SHG, Maa Mangala SHG, Sukanya SHG, and Binapani SHG, operating a cumulative 115 MT cold room capacity in the city. As a supporting activity, an Information, Education, and Communication (IEC) programme titled "Cold Room Ambassadors" has been conducted to create awareness and promote the e-cool mandis, intended to serve 1650 farmers and small vendors. Around six EVs are deployed in the city to distribute items to consumers and bulk institutions like hostels, hospitals, hotels, events, and others. After implementing the cold room, small and marginal vendors residing in Rourkela saw a 10-30% increase in revenue growth [76].

RESULTS AND LESSONS LEARNED

The "E-cool Mandi" project has significantly reduced vegetable wastage and improved vendors' livelihoods. Looking ahead, the city council plans to extend the project across all markets in Rourkela, further promoting clean energy through the "Solarization Rourkela programme."

The introduction of refrigerated storage tools has reduced vegetable product waste, leading to a decrease in distressed selling and an increase in vendors' gains by up to 30%. The project has empowered women by involving them in managing the vegetable bank and the online delivery services, opening new opportunities for meaningful livelihoods. The city council's holistic approach includes long-term plans to secure and enrich the livelihoods of small and marginal vendors and create meaningful opportunities for women federations under the Mission Shakti Programme. This involves technical and non-technical training, stakeholder engagement, and scaling up the project across all markets in Rourkela. Initial challenges included onboarding vendors and women federations, which were overcome through participatory discussions and co-creations with stakeholders. Demonstrating tangible outputs through pilot projects was essential in gaining the support and participation of core users like farmers and vendors. However, by fostering trust through participatory discussions and demonstrating the project's value via pilot initiatives, the team successfully onboarded 1400 vendors. The Women's Federation was crucial in mobilisation, utilising local networks and culturally sensitive approaches. The experience underscored the need for effective communication, resource allocation, and the value of demonstrating tangible outcomes to gain stakeholder buy-in.

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