Sustainable and Responsible Management

The Journal of Sustainable Business

ISSN *2724-4466*

Volume No. 6, Issue No. 2 - 2025

Abruzzese Salute ETS

sustainable-and-responsible-management.org

Journal Information

Scientific Director
Michele Samuele Borgia

Managing and Responsible Editor
Maurizio Cirillo

Copy Editors
Stefano Cesinaro
Katia Di Tommaso
Chiara Mancini

ISSN
2724-4466

Online since 18th November, 2020
With authorization from the Court of Pescara no. 1 year 2020

Classification by Italian National Agency for the Evaluation of Universities and Research Institutes (ANVUR)
Scientific Journal
Governing Board Resolution nr. 184 of 27th July, 2023

Classification in the Journal Ranking AIDEA
AIDEA Governing Board Resolution of 15th October, 2024

DOI Prefix by Multilingual European DOI Registration Agency (mEDRA)
10.61013

Sustainable Urban Food Policies: Financial Approaches for Lasting Impact

Fjona Zeneli
Department of Environmental Science and Policy
University of Milan, Milan
E-mail: fjona.zeneli@unimi.it

Abstract

Urban Food Policies (UFPs) play a key role in promoting public health, social inclusion, sustainability, and resilience in cities. Despite their increasing adoption and implementation on a global scale, many UFPs remain reliant on short-term, project-based funding, limiting in this way their long-term impact and institutional stability. This study addresses the overlooked issue of sustainable financing of UFPs by analysing how cities can secure long-term, resilient funding, closing a notable gap in the field of research. Using a qualitative comparative case study approach, followed by a normative one, based on five different evaluation criteria, this article analyses five cities (Milan, Toronto, Paris, Belo Horizonte, and Barcelona) drawing on policy documents, budget reports, and literature. The analysis identifies five main financing models: internal municipal funding, cross-departmental integration, green/climate funding and EU support, donor and philanthropic dependence and transition risks, and participatory and procurement-based models. Key enabling factors include early integration of food goals in cities' food policy, cross-sectoral coalitions, and an adaptive governance model, opting for a blended financing model as the most sustainable one. The findings underline that sustainable financing is inherently political; it does require strategic alliances and institutional reforms to include food policies within lasting urban governance structures, and in this way, to advance food justice.

Keywords – Urban Food Governance; Financial Sustainability; Normative Analysis

Paper type – Academic Research Paper

Sommario

Politiche alimentari urbane sostenibili: strumenti finanziari per effetti a lungo termine – Le politiche alimentari urbane (*Urban Food Policies*, UFPs) svolgono un ruolo fondamentale nella promozione della salute pubblica, dell'inclusione sociale, della sostenibilità e della resilienza nelle città. Nonostante la loro crescente adozione e implementazione su scala globale, molte UFPs restano dipendenti da finanziamenti a breve termine e basati su progetti, il che ne limita l'impatto di lungo periodo e la stabilità istituzionale.
Questo studio affronta il tema, finora poco considerato, del finanziamento sostenibile delle UFPs, analizzando come le città possano garantire risorse resilienti e di lungo periodo, colmando così una lacuna rilevante nella letteratura. Utilizzando un approccio qualitativo di ricerca comparata per casi di

studio, seguito da un'analisi normativa basata su cinque diversi criteri di valutazione, l'articolo prende in esame cinque città (Milano, Toronto, Parigi, Belo Horizonte e Barcellona), basandosi su documenti di *policy*, bilanci e letteratura scientifica.
L'analisi individua cinque principali modelli di finanziamento: finanziamento municipale interno; integrazione interdipartimentale; fondi verdi/climatici e supporto UE; dipendenza da donatori e filantropia con rischi di transizione; modelli partecipativi e basati sugli appalti pubblici. Tra i principali fattori abilitanti emergono: l'integrazione precoce degli obiettivi alimentari nelle politiche urbane, le coalizioni intersettoriali e un modello di governance adattivo, orientato verso un finanziamento ibrido come quello più sostenibile. I risultati evidenziano come il finanziamento sostenibile sia intrinsecamente politico: esso richiede alleanze strategiche e riforme istituzionali per includere le politiche alimentari all'interno di strutture di governance urbana stabili e durature, avanzando così il principio di *food justice*.

Article history:
Received 31 August 2025
Received in revised form 22 September 2025
Accepted 24 September 2025
Available online
DOI link https://doi.org/10.61013/2724-4466/6.2.153-175

1 Introduction

Urban Food Policies (UFPs) have emerged as important and coherent tools for modern cities to foster sustainable development, promote public health, ensure social inclusion, and enhance urban resilience. As urbanisation increases, cities increasingly recognise the importance of formulation, design and governance of their food systems, to potentially address multiple overlapping challenges, regarding inequality, environmental degradation, and public health crises (Moragues-Faus & Morgan, 2015; Morgan & Sonnino, 2010). Food, once seen as a peripheral issue to urban planning and governance, is now considered and located at the intersection of sustainability transitions, social justice movements, and climate action strategies (Ilieva, 2016).

The increasing implementation of UFPs worldwide reflects a strategic and needed shift also in municipal governance, whereby cities are not only addressing food security but are also leveraging food policies as levers for broader systemic change (Sonnino, 2016). Initiatives such as the Milan Urban Food Policy Pact, which now has over 260 signatory cities globally, are an example of the expanding commitment to integrating food policy within urban governance frameworks (MUFPP, 2025). However, what comes after UFPs reflects a persistent fragility in their institutionalisation, particularly regarding their financial sustainability.

Despite their strategic importance, many urban food initiatives remain precariously dependent on project-based, short-term, or donor-driven funding models (Barling, 2008; Carey, Caraher, Lawrence, & Friel, 2016). This reliance on unstable financial resources constrains the ability of UFPs to achieve systemic impacts or to be included as an organic component within municipal governance structures. As a result, UFPs often risk remaining marginal, vulnerable to political cycles, funding fluctuations, and shifting priorities (Morgan, 2015).

The long-term financing of UFPs poses both technical and political challenges. Technically, integrating food initiatives into municipal budgets requires navigating complex administrative and fiscal systems not originally designed to accommodate cross-sectoral food policies. Politically, securing continuous financial support demands coalition-building, strategic framing of food policy benefits, and sometimes, confrontation with complex sectoral interests (Hawkes & Halliday, 2017). Without durable funding mechanisms, the transformative potential of UFPs is compromised, and their contribution to urban sustainability transitions is weakened.

Addressing the financial sustainability of UFPs is therefore an important, yet underexplored, dimension of urban food governance. While substantial scholarship has documented the emergence and evolution of UFPs (e.g., Ilieva, 2016; Moragues-Faus & Morgan, 2015; Morgan & Sonnino, 2010),

relatively little attention has been paid to the concrete financial mechanisms that support or hinder their long-term viability.

This study seeks to fill this gap by investigating how cities can finance UFPs sustainably over the long term. The main research question guiding this work is:

RQ1: How can cities finance Urban Food Policies sustainably over the long term?

Two complementary sub-questions support the main research line:

RQ1a: How are UFPs currently financed across different global cities?
RQ1b: What mechanisms and strategies enable the transition from short-term, project-based funding to sustainable, institutionalised financial models?

The study aims to advance both conceptual and practical understanding of sustainable financing for UFPs, highlighting innovative approaches, typologies of financing models, and enabling strategic principles. By doing so, it contributes to broader debates on urban sustainability transitions, fiscal innovation, and food justice. The objective is not limited to a descriptive one, but also normative: to extract lessons that can support cities in including food policies within durable budgetary and governance frameworks, ensuring that food systems transformation is sustained over time.

The paper proceeds as follows. Section 2 reviews the conceptual framework on urban food governance, public finance mechanisms, and sustainability transitions, highlighting gaps related to the financing dimension. Section 3 presents the methodology, detailing the comparative case study approach, the normative analysis of five chosen cities: Milan, Toronto, Paris, Barcelona, and Belo Horizonte. Section 4 discusses the results, identifying the main types of financing models and the strategic principles observed across successful cases. Conclusions conclude the article.

2 Conceptual framing

2.1 Urban food governance and local public finance

Urban food governance has emerged as a critical domain within urban policy, reflecting the growing recognition of cities' roles in shaping sustainable food systems. Traditionally, food policy was considered the purview of national governments; however, the increasing urbanisation of populations and the localised nature of food-related challenges have positioned municipalities as an important actor

in food system governance (Morgan & Sonnino, 2010). This shift acknowledges that urban areas are not merely consumption hubs but also sites of innovation and intervention in food policy.

The governance of urban food systems includes a range of activities (i.e., the development of food strategies, the establishment of food councils, and the implementation of programs aimed at improving food access and sustainability). These initiatives often require coordination across various sectors and levels of government, as well as engagement with civil society and private stakeholders (Moragues-Faus & Morgan, 2015). The complexity of urban food governance necessitates robust institutional frameworks capable of managing cross-cutting issues such as health, environment, and social equity.

A central challenge in the implementation of UFPs is securing sustainable financing. Many urban food initiatives rely on short-term funding sources, such as grants or pilot project funds, which can hinder their long-term viability and integration into municipal budgets (Carey, Caraher, Lawrence, & Friel, 2016). The lack of stable financial mechanisms often results in fragmented efforts and limits the scalability of successful programs. Integrating food policies into existing municipal financial structures requires navigating bureaucratic processes and competing budgetary priorities, underscoring the need for innovative financing approaches that align with the goals of urban food governance (Barling, 2008).

2.2 Sustainability transitions and institutional lock-in

The concept of sustainability transitions provides a valuable framework for understanding the systemic changes required to achieve sustainable urban food systems. Sustainability transitions refer to long-term, multi-dimensional, and fundamental transformation processes through which established socio-technical systems shift to more sustainable modes of production and consumption (Geels, 2002). In the context of urban food systems, this translates into reconfiguring existing practices, infrastructures, and institutional arrangements to support sustainable food production, distribution, and consumption.

A significant barrier to sustainability transitions is institutional lock-in, a condition where existing institutions, policies, and practices become entrenched, making it difficult to implement transformative changes. Lock-in can result from various factors, including path dependency, vested interests, and the high costs associated with changing established systems (Unruh, 2000). In urban food systems, institutional lock-in may manifest in the persistence of industrial food supply chains, regulatory frameworks favouring large-scale producers, or cultural norms that resist dietary changes.

Addressing institutional lock-in requires deliberate strategies to disrupt existing systems and foster innovation. Transition management, a governance approach that emphasises participatory processes and

long-term visioning, offers a pathway to overcome lock-in by engaging diverse stakeholders in the co-creation of sustainable futures (Loorbach, 2007). This approach involves iterative cycles of experimentation, learning, and adaptation, enabling cities to navigate the complexities of sustainability transitions in their food systems.

Recent studies have highlighted the importance of multi-level governance in facilitating sustainability transitions. The multi-level perspective conceptualises transitions as interactions between three analytical levels: niches (spaces for radical innovation), regimes (dominant practices and rules), and landscapes (broader socio-economic and political contexts) (Geels & Schot, 2007). In urban food systems, niches may include community-supported agriculture or urban farming initiatives, regimes encompass conventional food supply chains, and landscapes involve global trends such as climate change or economic globalisation. Effective transition strategies must consider dynamics across these levels to identify leverage points for change.

Moreover, the role of local governments is crucial in enabling or constraining sustainability transitions. Municipalities can act as intermediaries, facilitating connections between grassroots innovations and broader policy frameworks. They can also implement policies that create supportive environments for sustainable practices, such as zoning regulations that permit urban agriculture or procurement policies that favour local food producers (Sonnino, 2016). However, local governments may also face constraints due to limited authority, resources, or political will, highlighting the need for capacity-building and institutional support.

In conclusion, the integration of urban food governance with local public finance is essential for the sustainability and scalability of food policies. Understanding the dynamics of sustainability transitions and institutional lock-in provides insights into the challenges and opportunities for transforming urban food systems. By adopting governance approaches that promote innovation, stakeholder engagement, and systemic thinking, cities can advance toward more sustainable and equitable food futures.

3 Methodology

This research employs a qualitative, comparative case study methodology to explore how Urban Food Policies (UFPs) are financed across different city contexts over time. Given the complexity and institutional structure of urban food governance, a qualitative design was considered the most appropriate approach to identify the contextual nuances, path dependencies, and political-economy dynamics that shape financing strategies in practice.

3.1 Case study selection

Case study methodology is particularly well-suited to policy domains like food governance, where multi-scalar interactions, institutional diversity, and cross-sectoral objectives converge (Yin, 2014). The study focuses on five cities – Milan, Toronto, Paris, Barcelona, and Belo Horizonte – each of which has demonstrated a longstanding commitment to developing, implementing, and evolving UFPs. These cities were purposively selected based on three main criteria: (i) their international recognition as frontrunners in food policy innovation (e.g., Milan through the Milan Urban Food Policy Pact); (ii) evidence of sustained institutionalisation efforts beyond short-term project cycles; and (iii) the availability of relevant documentation and scholarly analysis.

Importantly, the five cities represent a diverse spectrum of governance typologies, political histories, and welfare regimes, spanning Southern and Western Europe, North America, and Latin America. This geographic and institutional variation allows for cross-contextual learning and the identification of generalisable mechanisms and constraints in financing urban food governance.

3.2 Data sources

The study draws on secondary data sources, emphasising publicly available and verifiable documentation:

- scholarly publications from urban governance, food systems, and public finance disciplines;
- evaluative reports from international organisations (C40 Cities, 2024; FAO, 2024);
- case studies from peer networks such as the Milan Urban Food Policy Pact and the Urban Food Futures platform (MUFPP, 2025; School of International Futures, 2025).

3.3 Analytical strategy

The analysis proceeds along two complementary methodological dimensions: a comparative analytical approach and a normative evaluative one.

Comparative Approach. Data from each city was analysed. Common themes were then synthesised into a typology of financing models across the five case studies. The typology includes models based on internal municipal funding, interdepartmental integration, climate and green finance channels, reliance on philanthropic and donor support, and participatory financing mechanisms. The models are not mutually exclusive and often appear in hybrid forms within single cities, which is accounted for.

Normative Approach. The second analytical lens evaluates the cases based on normative principles derived from food justice, fiscal resilience, and urban sustainability transition literature. This involves

assessing whether the financing models facilitate long-term, system-wide transformation or reinforce fragmented and short-lived interventions.

Five guiding criteria were developed to assess the depth and durability of financing arrangements:

(1) Stability and duration of funding streams (e.g., single-year grants vs. multi-year municipal allocations).

(2) Level of institutional inclusion, such as whether food governance bodies are housed in core departments or remain peripheral.

(3) Degree of cross-sectoral integration, translated into collaborative budgeting or shared mandates between health, environment, education, and food departments.

(4) Transparency and stakeholder involvement in decision-making over resource allocation.

(5) Alignment with overarching municipal strategies, including climate action plans, social inclusion frameworks, and economic development programs.

Each city's financing model was assessed against these criteria to identify enabling factors and barriers achieving financially sustainable urban food systems.

3.4 Methodological considerations and limitations

Given the qualitative and exploratory nature of the study, the aim is not statistical generalisability but rather analytical generalisation (Flyvbjerg, 2006). The intention is to extract lessons and insights that can inform other cities facing similar fiscal and institutional challenges, while acknowledging that specific configurations will vary by context. One limitation of the study is the reliance on publicly available documents, which may underrepresent informal practices, political negotiations, or internal administrative dynamics. Moreover, cities' food policies often intersect with regional or national funding programs in complex ways that are not always transparent. Future research could benefit from elite interviews with policymakers and budget officials, as well as participatory methods that include civil society actors involved in food governance.

3.5 Contribution of the methodology

The dual methodological framework – comparative and normative – enables a rich and situated understanding of how UFPs are not only designed but financially sustained. By tracing the role of funding mechanisms, institutional embedding, and political economy dynamics, the study contributes to recent calls in urban studies and food systems literature to move beyond "plans and visions" toward an analysis of what makes urban food governance truly durable (Moragues-Faus & Morgan, 2015) Through its in-depth focus on five city-level experiences, the study also advances methodological

innovation in the comparative analysis of policy implementation and fiscal embedding, offering a guide for other scholars and practitioners interested in financial sustainability within complex, cross-cutting urban agendas.

4 Results

4.1 Comparative case analysis: city-by-city insights on long-term financing

4.1.1 Milan (Italy) – A model of institutionalised urban food governance

Milan represents a pioneering example in the European Urban Food Policies landscape, thanks to its Milan Urban Food Policy Strategy, launched in 2015 under the leadership of the city administration and in parallel with the Milan Urban Food Policy Pact (MUFPP). The city's strategy has since evolved into a structured, multi-year policy agenda aimed at making the local food system more sustainable, equitable, and resilient (City of Milan, 2025). Two major programs are the essence of the Milan Food strategy:

(1) Public procurement reform for sustainable school meals, which promotes healthy eating and environmental sustainability across public schools. The policy emphasises organic food, seasonal menus, and reduction of meat consumption, contributing to both health and climate goals (Mazzocchi et al., 2024).

(2) A robust food waste reduction program, implemented in collaboration with NGOs and third-sector partners. The program includes "Food Waste Hubs" that collect surplus food from supermarkets, school canteens, and companies, redirecting it to people in need through a local circular system (Arcuri, 2019; The Earthshot Prize, 2021).

What sets Milan apart is the institutionalisation and stability of its financing model. Unlike project-based or ad hoc urban food initiatives, Milan ensures continuity through: (i) a dedicated budget line within the municipal budget, making food policy a structural part of city governance (Monciardini & De Melo Cartaxo, 2023); (ii) active leveraging of European Union funding, including programs like URBACT and Horizon (2020), which support innovation, pilot projects, and international knowledge exchange (Food Trails, 2025); (iii) the creation of a Food Policy Office, embedded within the city administration and directly reporting to the Deputy Mayor for Food Policy. This institutional structure guarantees coordination across departments (e.g., education, environment, health) and long-term strategic planning (Monciardini & De Melo Cartaxo, 2023).

Milan's case illustrates the importance of institutional inclusion and cross-departmental integration in financing sustainable urban food systems. By aggregating internal municipal resources with external project-based funds, Milan has been able to implement multi-year planning and resilient partnerships. Moreover, the city acts as a trans-national policy entrepreneur, hosting international events and sharing good practices through the MUFPP, thus scaling local innovation globally (Moragues-Faus & Morgan, 2015).

4.1.2 Toronto (Canada) – A hybrid governance model through public health integration

Toronto stands out as one of the earliest North American cities to adopt a structured food policy approach through its Toronto Food Strategy, initiated in 2010 under the guidance of Toronto Public Health. Unlike many food policies driven by environmental or agricultural departments, Toronto's approach uniquely situates food as a determinant of health, aligning it with social equity, public well-being, and community resilience (Mah & Thang, 2013). The Toronto Food Strategy is centred on creating an equitable and sustainable food system that addresses both access and health. Among its most significant interventions are:

- the development of Community Food Hubs, which provide integrated services including food education, local food production, distribution of affordable fresh food, and social programming (Rideout, Riches, Ostry, Buckingham, & MacRae, 2007);
- support for urban agriculture initiatives, particularly in marginalised neighbourhoods, helping communities grow their food, build social cohesion, and increase environmental awareness (Andrée, Clark, Levkoe, & Lowitt, 2020);
- food access programs, such as the Mobile Good Food Markets and subsidies for healthy food in underserved areas, further enhance food security and combat nutrition-related diseases.

Toronto's food strategy illustrates a hybrid financing approach, combining public sector support and private philanthropy:

(1) Partially embedded within the budget of Toronto Public Health, the strategy benefits from its alignment with health equity objectives. Staff positions and baseline programming are funded through the municipal health budget, ensuring continuity and institutional legitimacy (City of Toronto, 2015; Toronto Public Health, 2010).

(2) Additional funding is secured through foundations and philanthropic partnerships, including collaborations with organisations like the Metcalf Foundation (Metcalf Foundation, 2010) and the United Way. These sources allow for piloting innovative programs and extending services beyond what is covered by public budgets.

(3) Cross-departmental collaboration, particularly with planning, housing, and community services departments, provides support and policy coherence across different city units.

This blend of funding sources provides both flexibility and stability, allowing the city to test new models while embedding core activities into a permanent governance framework (Fridman & Lenters, 2013; MacRae & Donohue, 2013). Toronto's case is instructive for cities aiming to advance food systems change within a public health frame, especially in contexts with limited standalone food policy offices. The co-location within a health department facilitates integrated approaches to nutrition, social equity, and chronic disease prevention. Moreover, the reliance on philanthropic co-financing encourages innovation but also requires strategic planning to avoid over-dependence on external actors (Blay-Palmer, Santini, Dubbeling, Renting, Taguchi, & Giordano, 2018). The resilience of Toronto's model lies in its cross-sectoral governance, allowing food policy to remain adaptive and politically durable across administrations.

4.1.3 Paris (France) – Institutionalising sustainable food through public procurement

Paris has emerged as a leader in including food sustainability goals into its municipal governance framework, particularly through its Plan Alimentation Durable (Sustainable Food Plan), adopted as part of the city's broader climate and health strategies. Introduced in 2015 and revised in subsequent years, this plan focuses on transforming the city's food system by leveraging public procurement and long-term institutional commitments (Ville de Paris, 2019; 2024). The Plan Alimentation Durable is anchored in two main commitments:

(1) Achieving 100% sustainable food in school canteens by 2027, including 50% organic and 100% seasonal and local ingredients (Ville de Paris, 2024). This goal is implemented through progressive targets and supplier criteria that favour agroecological practices and food quality certifications.

(2) Supporting peri-urban agriculture by facilitating land access, technical assistance, and infrastructure development for farmers operating within and around the Île-de-France region. This initiative aims to re-localise food supply chains, reduce carbon footprints, and boost economic resilience in nearby rural areas (Tornaghi & Dehaene, 2020)

Paris's approach is distinctive for its integration of food spending into core municipal service budgets, rather than relying on short-term projects or donor funds:

- a significant portion of the municipal education budget is allocated to school meals, enabling long-term investments in food quality, kitchen equipment, and staff training;

- the city has restructured its public procurement system to support its sustainability goals. Through multi-year contracts with producers and food service providers, Paris ensures stable demand for organic and agroecological products, thereby fostering supply-side transformation;
- this approach is enabled by the city's commitment to "green budgeting", aligning food-related spending with environmental and social performance metrics.

Paris demonstrates how cities can use existing service delivery infrastructure – such as school canteens – to institutionalise sustainable food systems. By embedding food goals into education and environmental policy, the city achieves policy coherence and budgetary stability. The reliance on long-term procurement tools reduces vulnerability to political cycles and supports the transformation of regional food economies. Moreover, the integration of sustainability indicators into procurement evaluations ensures ongoing accountability and performance tracking (Blay-Palmer, Santini, Dubbeling, Renting, Taguchi, & Giordano, 2018).

Paris's case underscores that UFPs can be a lever for systemic change when linked with durable municipal functions and funding flows. The city's experience provides a model for institutionalising food sustainability within broader public service and climate agendas.

4.1.4 Belo Horizonte (Brazil) – Institutional pioneering in urban food security

Belo Horizonte has long been considered a global pioneer in local food governance. Since the 1990s, the city has demonstrated a proactive and holistic approach to tackling food insecurity, creating one of the earliest examples of an institutionalised UFPs framework. The cornerstone of its strategy was the establishment of the Municipal Secretariat for Food and Nutritional Security (SMASAN), which integrated food policy across multiple domains, including social protection, public health, and rural development (Rocha & Lessa, 2009).

Belo Horizonte's approach combined diverse mechanisms to improve access to food while supporting local producers:

(1) Price-regulated markets and public retail outlets (Sacolões Populares), which sold fruits, vegetables, and staple items at government-subsidised prices, making nutritious food more affordable for low-income residents.

(2) Subsidised public restaurants (Restaurantes Populares) providing balanced meals at a low cost to vulnerable populations, with a strong emphasis on dignity and nutrition.

(3) Support to smallholder farmers, especially from the surrounding rural areas, through public procurement contracts, technical assistance, and infrastructure development. These measures helped

ensure stable markets and prices for producers, encouraging local agroecological transitions (Grisa & Schneider, 2014).

Belo Horizonte's food policy was predominantly financed through municipal budget allocations, with key support from federal programs in its early years, particularly under the broader national framework of Fome Zero (Zero Hunger). Funding covered infrastructure (e.g., food distribution centres, kitchens), staffing, and procurement contracts:

- the institutionalisation of SMASAN ensured that food policy had a permanent home within city governance, which allowed it to coordinate across sectors and programs;
- early alignment with national policies, including conditional cash transfer programs and rural development schemes, facilitated intergovernmental co-financing during the 2000s.

However, political turnover at both municipal and national levels in the 2010s exposed the vulnerability of this model. As federal support weakened and priorities shifted, the continuity and scale of Belo Horizonte's food programs were significantly challenged (FAO, IFAD, WFP, 2014).

Belo Horizonte illustrates the potential of including food policy within a dedicated city department to coordinate and sustain food systems interventions. It is one of the first cities to treat food security as a public good, rather than solely a welfare issue, and to connect it explicitly with urban planning and citizenship. At the same time, the Belo Horizonte experience highlights that even the most institutionally advanced models remain dependent on political will, fiscal stability, and multilevel governance support. Resilience in UFPs requires not only local leadership but also institutional safeguards and adaptable funding mechanisms.

4.1.5 Barcelona (Spain) – Leveraging climate innovation for UFPs

Barcelona stands out as a European city that has strategically aligned its UFPs with broader agendas on sustainability, climate innovation, and the circular economy. With the launch of its City Food Strategy 2030, Barcelona formalised a long-term vision focused on promoting an agroecological transition, fostering healthy and sustainable school meals, and embedding food circularity into urban metabolism (Ajuntament de Barcelona, 2020).

The City Food Strategy emphasises five pillars: food justice, sustainable production and distribution, health and culture, governance, and resilience. Notable initiatives include:

(1) Agroecological transition programs that support local, small-scale producers and aim to reduce the city's ecological footprint from imported and industrial food.

(2) School meal reforms that introduce seasonal, organic, and locally sourced ingredients, implemented through public procurement guidelines.

(3) Food circularity and waste reduction, via composting programs and partnerships with food recovery networks, which promote re-use and low-emissions systems.

Barcelona's leadership during its tenure as the World Capital of Sustainable Food in 2021, under the Milan Urban Food Policy Pact (MUFPP), catalysed to consolidate these actions and gain international visibility and institutional momentum (MUFPP, 2021).

Barcelona adopts a blended financing model, combining resources from:

- EU Green Deal and Horizon Europe funds, particularly those targeting climate innovation and urban resilience;
- municipal budget allocations, coordinated through the Climate Emergency and Food Policy units within the City Council;
- climate innovation funding mechanisms, including collaborations with the Barcelona Institute for Global Health and urban innovation platforms.

Barcelona also capitalised on its 2021 global role to attract international funding and stimulate co-investment from public-private partnerships. This has enabled the city to scale up pilots and institutionalise food policy within climate adaptation frameworks.

Barcelona exemplifies the introduction of food into climate and innovation agendas, demonstrating how food can be leveraged not only for health and equity but also for climate mitigation and economic transformation. The city shows how EU-level funding instruments can be harnessed to embed food systems within long-term urban planning and governance.

Barcelona's case also illustrates the importance of political framing: food is not treated as a niche welfare issue, but rather as a strategic lever for cross-cutting urban transitions – from environmental sustainability to education and economic innovation.

4.2 Normative case analysis (five criteria)

This normative evaluation applies five criteria to assess the depth, durability, and institutional coherence of UFPs financing in five global cities: Milan, Toronto, Paris, Belo Horizonte, and Barcelona (Table 1).

These criteria are:

Stability and duration of funding streams:

- Milan (strong) offers a stable multi-source funding model, combining a dedicated budget line with multi-year EU project funding (like Horizon 2020, URBACT). The balance between local and EU funds reduces dependency on political cycles.

- Toronto (moderate): Toronto shows a hybrid model, with core municipal health funding, but dependency on philanthropic sources (e.g., foundations like United Way) makes funding partially unstable and subject to external donor priorities.
- Paris (strong): Paris is highly stable, including food policy in public service budgets (especially through school canteens), secured by multi-year procurement contracts and green budgeting, ensuring long-term durability.
- Belo Horizonte (declining): Belo Horizonte pioneered stable funding with municipal and federal support, but recent political shifts risked stability, showing how governance turnover can threaten financial continuity.
- Barcelona (strong): Barcelona combines municipal funding with EU climate funds (e.g., Horizon Europe), achieving resilience but with some dependency on external European funds, which could fluctuate in future cycles.

Level of institutional inclusion:

- Milan (strong): It features a dedicated Food Policy Office reporting to the Deputy Mayor, showing deep institutional integration at a high political level.
- Toronto (moderate): Food policy is included in Toronto Public Health, offering legitimacy and stability, though a lack of a separate food unit could limit visibility and scope.
- Paris (strong): Paris avoids fragmentation by integrating food policy into core city services, especially education and environment, enhancing operational coherence.
- Belo Horizonte (strong): It pioneered a model via SMASAN, a dedicated secretariat coordinating food governance across sectors like social welfare and rural development.
- Barcelona (moderate): Includes food within the Climate Emergency and Food Policy units, aligning thematically but without a unified, autonomous food department, which could limit authority.

Degree of cross-sectoral integration:

- Milan (strong): Cross-sector integration ranges from education, health, environment, to social inclusion, ensuring food policies contribute to multiple urban objectives.
- Toronto (strong): Toronto excels at budgetary and programmatic integration across housing, planning, and public health, fostering whole-city approaches.
- Paris (strong): It uses public procurement strategically to link food with climate, health, and education, making food policy a lever for systemic change.

- Belo Horizonte (declining): Historically strong with public health and rural linkages, but cuts in recent years weakened cross-sector coordination.
- Barcelona (strong): It integrates food with climate action, circular economy (urban metabolism), and education, leveraging food policy for broader urban sustainability goals.

Transparency and stakeholder involvement:

- Milan (moderate): Engages NGOs in delivery (e.g., Food Waste Hubs) but lacks detailed participatory governance mechanisms, making citizen involvement less structured.
- Toronto (strong): It promotes structured civil society partnerships, blending public-philanthropic collaborations, offering inclusive, multi-stakeholder governance.
- Paris (moderate): It focuses on contractual relationships with suppliers and uses sustainability metrics, but co-governance and community engagement appear limited.
- Belo Horizonte (declining): Early participatory success (e.g., food councils) has declined, reducing civil society's formal role in governance.
- Barcelona (strong): It combines international leadership, local co-investment platforms, and network mobilisation, fostering a strong participatory environment.

Alignment with priority municipal strategies:

- Milan (strong): Aligns food with climate action, equity, and global commitments (e.g., Milan Urban Food Policy Pact), promoting international leadership.
- Toronto (strong): It integrates food policy with public health (chronic disease prevention) and social equity agendas, embedding food in health-driven policy frameworks.
- Paris (strong): it includes food policy in the Sustainable Food Plan, tightly connected to climate, health, and social goals, reinforcing inter-sectoral alignment.
- Belo Horizonte (strong): Historically aligned with Fome Zero (Zero Hunger) and poverty alleviation programs, tying local food policy to national development goals.
- Barcelona (Strong): It links food initiatives with the EU Green Deal, climate emergency responses, and urban innovation policies, ensuring food policy supports city-wide transformations.

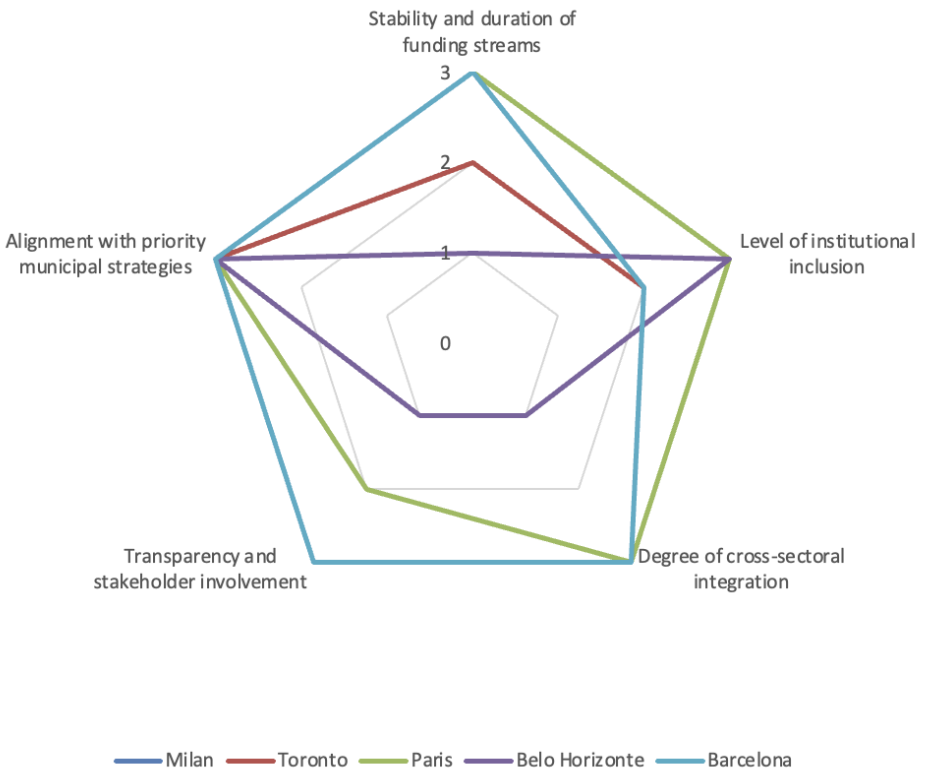
Summarised, these results are represented graphically in Figure 1.

Table 1 – Results of the normative case analysis

Criteria	Milan	Toronto	Paris	Belo Horizonte	Barcelona
Stability and duration of funding streams	**S – strong** It demonstrates a highly stable financing model, combining a dedicated municipal budget line with multi-year EU funds (e.g., Horizon 2020, URBACT).	**M – moderate** It adopts a hybrid model: core funding is embedded in the municipal health budget, but significant reliance on philanthropic grants introduces some instability.	**S – strong** It excels by integrating food into long-term public service budgets (notably school canteens), backed by multi-year procurement contracts and green budgeting practices.	**D – declining** It relied on municipal and federal funds during its peak years, but political turnover weakened funding continuity, highlighting the model's vulnerability.	**S – strong** It blends local funding with strategic EU climate financing (e.g., Horizon Europe), offering a resilient yet somewhat externally contingent structure.
Level of institutional inclusion	**S – strong** It features a Food Policy Office directly reporting to the Deputy Mayor, indicating full integration within city governance.	**M – moderate** It embeds food governance in Toronto Public Health, ensuring legitimacy but lacking a standalone food department.	**S – strong** It integrates food into core municipal units, notably education and environmental services, avoiding fragmentation.	**S – strong** It pioneered this model with SMASAN, a dedicated secretariat coordinating across social and rural domains.	**M – moderate** It coordinates through the Climate Emergency and Food Policy units within the City Council, ensuring thematic alignment but not a unified food department.
Degree of cross-sectoral integration	**S – strong** It coordinates food with education, health, environment, and social sectors coordinates food with education, health, environment, and social sectors.	**S – strong** It exemplifies integrated budgeting and program delivery across housing, planning, and public health.	**S – strong** It uses procurement to align food with climate, health, and education goals.	**D – declining** It connected food to public health and rural development, though recent cutbacks reduced integration.	**S – strong** It explicitly links food with climate, urban metabolism, and education.
Transparency and stakeholder involvement	**M – moderate** It involves NGOs in implementation (e.g., Food Waste Hubs), but governance processes are less detailed.	**S – strong** It features structured partnerships with civil society and philanthropy (e.g., United Way), encouraging participation.	**M – moderate** It employs supplier contracts and sustainability metrics, though community co-governance is less emphasised.	**D – declining** It initially enabled civil society engagement but has seen declines in participatory mechanisms.	**S – strong** It mobilises networks through international leadership and aligns programs with co-investment platforms.
Alignment with priority municipal strategies	**S – strong** It aligns food policy with climate, equity, and international diplomacy (MUFPP).	**S – strong** It integrates food into chronic disease prevention and social equity.	**S – strong** It embeds food into its Sustainable Food Plan, part of its broader climate and health agenda.	**S – strong** It aligned with Fome Zero and national poverty reduction plans.	**S – strong** It links food policy with the EU Green Deal, climate emergency, and innovation.

Source: Author's elaboration

Figure 1 – Graphic representation of normative case analysis results



Source: Author's elaboration

Paris looks quite strong and consistent. It reaches the outer edge (3) across most axes and has strong, balanced performance. Belo Horizonte has shorter lines towards the centre (closer to 1), showing weaker or declining performance on most criteria. Toronto seems moderate in most areas, peaking in cross-sector integration but falling short in institutional embedding and funding stability. Milan and Barcelona are strong across most dimensions, with some specific dips (e.g., Milan in stakeholder involvement, Barcelona in institutional embedding). More generally, Southern European cities (Milan, Barcelona) show strong political and financial embedding, but Barcelona has more external dependence. Toronto performs well on social equity and participation, but funding volatility remains a weakness. Paris demonstrates systemic institutionalisation, especially via public procurement. Belo Horizonte represents a declining case, illustrating risks when political changes disrupt food governance.

4.3 Typology of financing models

Urban Food Policies (UFPs) face persistent challenges in achieving long-term financial sustainability. Their implementation often begins with small pilot projects or time-bound programs, dependent on soft money and external donors. This section lists typologies of financing models observed across cities of this analysis.

4.3.1 Internal municipal funding

A growing number of cities have succeeded in including food policy into their core municipal operations, allocating dedicated resources within departmental budgets. Milan is one of the leading examples in this category. Since launching its food policy in 2015, the city has progressively integrated food-related activities into the budgets of departments such as environment, education, and social services. In Paris, the Department of Clean Water (Direction de la propreté et de l'eau) contributes budget lines to the food strategy.

4.3.2 Cross-departmental integration

Toronto represents a sophisticated case of cross-departmental integration. The Toronto Food Strategy is housed within Toronto Public Health, reflecting the city's framing of food as a determinant of health. Rather than functioning as a standalone unit, the food strategy coordinates programs across health, social services, and community development, and leverages budget allocations from these departments.

4.3.3 Green/climate funding and EU support

With the increasing alignment between food systems and environmental policy, some cities have tapped into climate-related or EU sustainability funding streams to support food initiatives. Barcelona has leveraged climate adaptation funding to promote agroecology and local supply chains through its municipal action plan. Similarly, Milan has accessed EU Green Deal and cohesion policy funds to support school food procurement reform and urban agriculture initiatives.

4.3.4 Donor and philanthropic dependence and transition risks

In many global South cities, UFPs have emerged with the strong support of international donors and philanthropic actors. While these efforts created a positive start, cities often face difficulties sustaining activities once the initial funding ends.

4.3.5 Participatory and procurement-based models

Some cities are pioneering participatory models that align food policy financing with community engagement and procurement reforms. Paris has launched multi-year procurement contracts that favour local, organic producers and create stable markets for agroecological food. These contracts are not only financial instruments but also tools for advancing social and environmental objectives. Participatory budgeting initiatives have enabled communities to allocate small but meaningful resources toward food projects.

The typology presented above illustrates the range of financing pathways available for UFPs. Each model offers distinct advantages and trade-offs, influenced by local political economy, institutional maturity, and the framing of food in urban governance. Cities may adopt hybrid approaches, combining internal funding, external grants, and participatory tools to build resilient financing architectures.

5 Conclusions

Urban Food Policies have emerged as important tools for cities aiming to address intersecting challenges of sustainability, health, equity, and resilience. The experiences of Milan, Toronto, Paris, Belo Horizonte, and Barcelona provide rich empirical insights into the enabling conditions that allow these policies to mature and scale. Across all cases, three institutional features – strong political sponsorship, legal formalisation, and competent administrative structures – are consistently associated with more stable and sustainable food policy financing. These features allow cities to leverage hybrid funding models that combine municipal budgets with external funds (e.g., EU or philanthropic support), while including food governance in long-term urban planning.

Milan, Paris, and Barcelona are examples of how internal budget lines and legal structures can create durable frameworks, while Toronto and Belo Horizonte demonstrate the risks and adaptive potential of less formal or more decentralised models. The comparative lesson is clear: financial

sustainability in UFPs is not just about where money comes from, but about how institutional structures shape the capacity to attract, allocate, and sustain it over time.

References

Ajuntament de Barcelona (2020). *The 2030 Barcelona Healthy and Sustainable Food Strategy: A Road Map for Transforming the City's Food System*. https://ajuntament.barcelona.cat/participacio ciutadana/en/noticia/the-2030-barcelona-healthy-and-sustainable-food-strategy-a-road-map-for-tran sforming-the-citys-food-system_1233964

Andrée, P., Clark, J. K., Levkoe, Ch. Z., & Lowitt, K. (Eds.) (2020). *Civil Society and Social Movements in Food System Governance*. Routledge.

Arcuri, S. (2019). Food poverty, food waste and the consensus frame on charitable food redistribution in Italy. *Agriculture and Human Values*, *36*(2), 263-275. https://doi.org/10.1007/s10460-019-09918-1

Barling, D. (2008). Governing and Governance in the Agri-Food Sector and Traceability. In C. Coff, D. Barling, M. Korthals, & T. Nielsen (Eds.), *Ethical Traceability and Communicating Food* (pp. 43-62). Springer. https://doi.org/10.1007/978-1-4020-8524-6_3

Blay-Palmer, A., Santini, G., Dubbeling, M., Renting, H., Taguchi, M., & Giordano, T. (2018). Validating the City Region Food System Approach: Enacting Inclusive, Transformational City Region Food Systems. *Sustainability*, *10*(5). https://doi.org/10.3390/su10051680

C40 Cities (2024). *Sustainable Finance Action and Advocacy: A Roadmap for Global South Cities*. https://www.c40.org/news/sustainable-finance-roadmap/

Carey, R., Caraher, M., Lawrence, M., & Friel, S. (2016). Opportunities and challenges in developing a whole-of-government national food and nutrition policy: Lessons from Australia's National Food Plan. *Public Health Nutrition*, *19*(1), 3-14. https://doi.org/10.1017/S1368980015001834

City of Milan (2025). *Food Policy*. https://www.comune.milano.it/aree-tematiche/food_policy

City of Toronto (2015). *Toronto Food Strategy: 2015 Update*. https://www.toronto.ca/legdocs/mmis/ 2015/hl/bgrd/backgroundfile-80219.pdf

FAO (2024). *Financing Urban and City Region Food System Actions*. https://www.fao.org/in-action/ food-for-cities-programme/news/detail/en/c/1678425/

FAO, IFAD, WFP (2014). *The State of Food Insecurity in the World 2014. Strengthening the Enabling Environment for Food Security and Nutrition*. https://openknowledge.fao.org/server/api/core/ bitstreams/ad888f5b-a590-43d9-b066- 9a852b95777e/content

Flyvbjerg, B. (2006). Five Misunderstandings About Case-Study Research. *Qualitative Inquiry*, *12*(2), 219-245. https://doi.org/10.1177/1077800405284363

Food Trails (2025). *Food Trails Urban Food Policies. 11 Official Municipal Acts for Urban Food Policy Approval*. https://www.milanurbanfoodpolicypact.org/wp-content/uploads/2024/11/D-3.1.pdf

Fridman, J., & Lenters, L. (2013). Kitchen as food hub: Adaptive food systems governance in the City of Toronto. *Local Environment*, *18*(5), 543-556. https://doi.org/10.1080/13549839.2013.788487

Geels, F. W. (2002). Technological transitions as evolutionary reconfiguration processes: A multi-level perspective and a case-study. *Research Policy*, *31*(8-9), 1257-1274. https://doi.org/10.1016/S0048-7333(02)00062-8

Geels, F. W., & Schot, J. (2007). Typology of sociotechnical transition pathways. *Research Policy*, *36*(3), 399-417. https://doi.org/10.1016/j.respol.2007.01.003

Grisa, C., & Schneider, S. (2014). Três gerações de políticas públicas para a agricultura familiar e formas de interação entre sociedade e estado no Brasil. *Revista de Economia e Sociologia Rural*, *52*(suppl. 1), 125-146. http://dx.doi.org/10.1590/S0103-20032014000600007

Hawkes, C., & Halliday, J. (2017). *What makes urban food policy happen? Insights from five case studies*. IPES Food (International Panel of Experts on Sustainable Food Systems).

Ilieva, R. T. (2016). *Urban Food Planning* (1st ed.). Routledge. https://doi.org/10.4324/9781315658650

Loorbach, D. (2007). *Transition Management: New mode of governance for sustainable development = Transitiemanagement: nieuwe vorm van governance voor duurzame ontwikkeling*. International Books.

MacRae, R., & Donohue, K. (2013). *Municipal Food Policy Entrepreneurs: A preliminary analysis of how Canadian cities and regional districts are involved in food system change*. Toronto Food Policy Council, Vancouver Food Policy Council, and Canadian Agri-Food Policy Institute.

Mah, C. L., & Thang, H. (2013). Cultivating Food Connections: The Toronto Food Strategy and Municipal Deliberation on Food. *International Planning Studies*, *18*(1), 96-110. https://doi.org/10.1080/13563475.2013.750941

Mazzocchi, G., Giarè, F., Sardone, R., Manetti, I., Henke, R., Giuca, S., et al. (2024). Food (di)lemmas: Disentangling the Italian Local Food Policy narratives. *Rivista di Economia Agraria*, *78*(3), 19-34. https://doi.org/10.36253/rea-14511

Metcalf Foundation (2010). *In Every Community a Place for Food: The Role of the Community Food Centre in Building a Local, Sustainable, and Just Food System*. https://metcalffoundation.com/publication/in-every-community-a-place-for-food-the-role-of-the-community-food-centre-in-building-a-local-sustainable-and-just-food-system/

Monciardini, D., & De Melo Cartaxo, T. (2023). The Milan Food Policy: Six Lessons for Local Food Strategies. *SSRN Electronic Journal*. https://doi.org/10.2139/ssrn.4596638

Moragues-Faus, A., & Morgan, K. (2015). Reframing the foodscape: The emergent world of urban food policy. *Environment and Planning A: Economy and Space*, *47*(7), 1558-1573. https://doi.org/10.1177/0308518X15595754

Morgan, K. (2015). Nourishing the city: The rise of the urban food question in the Global North. *Urban Studies*, *52*(8) 1379-1394. https://doi.org/10.1177/0042098014534902

Morgan, K., & Sonnino, R. (2010). The urban foodscape: World cities and the new food equation. *Cambridge Journal of Regions, Economy and Society*, *3*(2), 209-224. https://doi.org/10.1093/cjres/rsq007

MUFPP (2021). *Barcelona World Sustainable Food Capital*. https://www.milanurbanfoodpolicypact.org/projects/barcelona-world-sustainable-food-capital/

MUFPP (2025). *Milan Urban Food Policy Pact*. https://www.milanurbanfoodpolicypact.org/

Rideout, K., Riches, G., Ostry, A., Buckingham, D., & MacRae, R. (2007). Bringing home the right to food in Canada: Challenges and possibilities for achieving food security. *Public Health Nutrition*, *10*(6), 566-573. https://doi.org/10.1017/S1368980007246622

Rocha, C., & Lessa, I. (2009). Urban Governance for Food Security: The Alternative Food System in Belo Horizonte, Brazil. *International Planning Studies*, *14*(4), 389-400. https://doi.org/10.1080/13563471003642787

School of International Futures (2025). *Urban Food Futures*. https://soif.org.uk/blog/food-urban-futures-report-soif/

Sonnino, R. (2016). The new geography of food security: Exploring the potential of urban food strategies. *The Geographical Journal*, *182*(2), 190-200. https://doi.org/10.1111/geoj.12129

The Earthshot Prize (2021). *The City of Milan Food Waste Hubs*. https://earthshotprize.org/winners-finalists/city-of-milan/

Tornaghi, C., & Dehaene, M. (2020). The prefigurative power of urban political agroecology: Rethinking the urbanisms of agroecological transitions for food system transformation. *Agroecology and Sustainable Food Systems*, *44*(5), 594-610. https://doi.org/10.1080/21683565.2019.1680593

Toronto Public Health (2010). *Cultivating Food Connections: Toward a Healthy and Sustainable Food System for Toronto*. https://www.toronto.ca/legdocs/mmis/2010/hl/bgrd/backgroundfile-30483.pdf

Unruh, G. C. (2000). Understanding carbon lock-in. *Energy Policy*, *28*(12), 817-830. https://doi.org/10.1016/S0301-4215(00)00070-7

Ville de Paris (2019). *Plan Alimentation Durable 2015-2020*. https://cdn.paris.fr/paris/2022/06/14/1f20f4e68632483600d92ee41783ee06.pdf

Ville de Paris (2024). *Plan Alimentation Durable 2022-2027*. https://cdn.paris.fr/paris/2023/02/16/plan-alimentation-durable-2022-2027-version-finale-7-fevrier-2023-bd96dpi-PPo0.pdf

Yin, R. K. (2014). *Case study research: Design and methods* (5th ed.). Sage.