



# Milan Pact Awards 2025 Report







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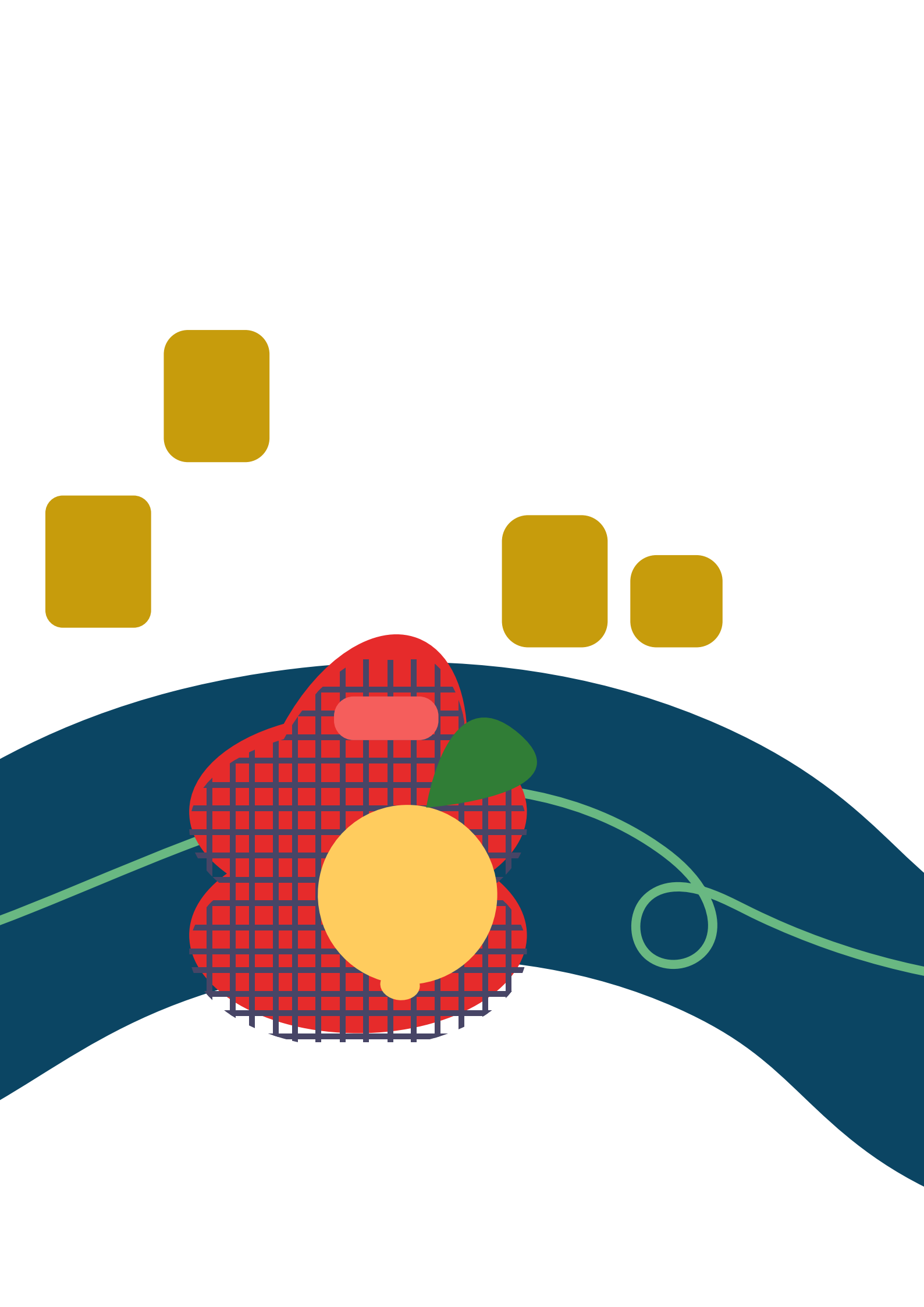
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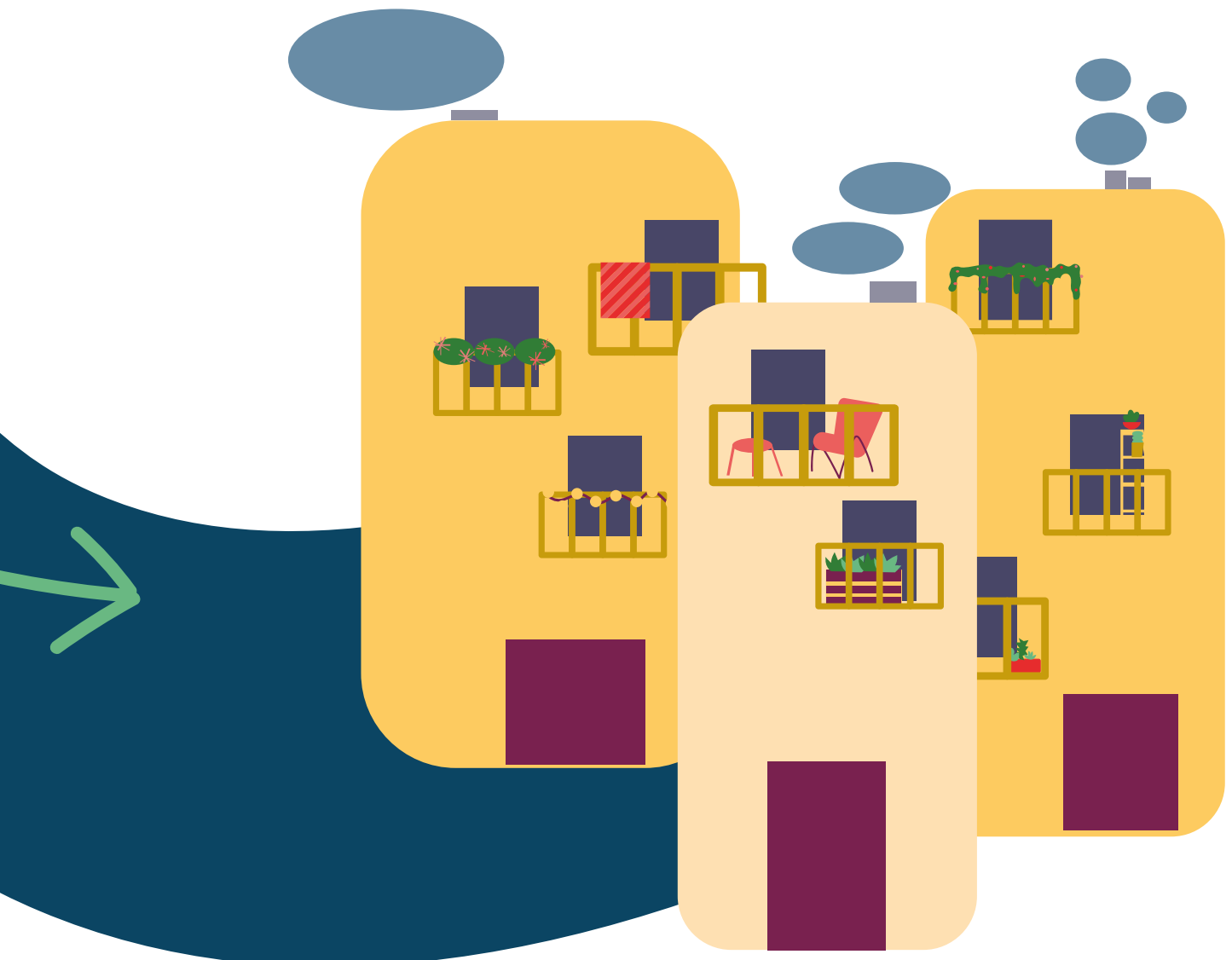
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# Foreword



Anna Scavuzzo  
Vice Mayor of Milan,  
in charge of Food Policy



The Milan Pact Awards (MPA) represent one of the main pillars of the MUFPP, as well as one of the most meaningful moments of each MUFPP Global Forum. The MPA celebrate the **commitment, creativity, and determination of Milan Pact cities** worldwide in advancing sustainable, inclusive, and resilient urban food systems.

Launched in 2016 by the Municipality of Milan together with Fondazione Cariplo, the Milan Pact Awards were conceived as a collective knowledge-sharing initiative among MUFPP signatory cities, aimed at gathering and disseminating innovative urban food policy practices. Year after year, this initiative has grown into a unique global platform, showcasing urban food practices that translate policy commitments into concrete actions. **Today, the MPA can be seen as a living library of experiences, featuring almost 1,000 practices, from over 330 cities from 99 different countries:** a source of inspiration designed to foster dialogue, peer learning, and the dissemination of innovative solutions.

**For the 2025 edition of the Milan Pact Awards we collected 347 practices from 173 cities.** This result confirms the **paramount importance of food policies in the political agenda of mayors** and local governments. The increasing number of submissions and the strong engagement of cities reflect a shared awareness: **urban food systems are key to addressing the multiple shocks and urban challenges that have affected our communities in recent years**, from social inequalities to environmental and economic pressures.

**This report presents the results of the Milan Pact Awards 2025**, offering an overview of the global trends shaping urban food policies and of the ways in which cities are responding to shared food system challenges. It also combines a reflection on a decade of learning through the Awards with an analysis of the urban initiatives submitted, highlighting policy approaches and implementation mechanisms that have proven to be effective and replicable. Lastly, the report looks ahead, identifying emerging trends and future challenges to support continued innovation, knowledge exchange and collective action among cities.

I would like to express my sincere gratitude to the members of the **Evaluation Committee**, whose expertise and dedication were essential in assessing the practices and in recognizing the progress achieved by cities over the last ten years. I also wish to thank the **MUFPP signatory cities** for their enthusiastic participation and dedication. My thanks also go to our institutional partners – **Fondazione Cariplo and AICS** – the Italian Agency for Development Cooperation – for their continued commitment and support. My sincere appreciation goes to the **Piccolo Teatro Studio Melato**, the exceptional venue that hosted the 2025 Milan Pact Awards Ceremony, and to the **MUFPP Secretariat** for having organised the 2025 MPA edition.

I invite readers to explore this report as both a reflection of where we stand today and a source of inspiration for the road ahead.



Marco Riccardo Rusconi  
**Director,**  
**Italian Agency for Development Cooperation**



Since 2023, the Italian Agency for Development Cooperation (AICS) has been collaborating closely with the Milan Urban Food Policy Pact, contributing to the development of healthier, more inclusive, and sustainable urban food systems.

Today, cities are not only at the forefront of major development challenges, but also serve as laboratories of innovation, where effective solutions emerge – as demonstrated by the Milan Pact Awards initiative.

**The collaboration with the MUFPP aims to strengthen the Milan Pact's capacity to support urban food policies in countries that are strategically important for Italian Cooperation, while enhancing the skills of its signatory cities.** AICS recognises MUFPP's outstanding achievements over the past decade, its central role in shaping the international food agenda, and considers this partnership key, particularly in supporting cities to improve **food security**. At the same time, the MUFPP acknowledges AICS as a strategic partner, thanks to its global presence, technical expertise, and established relationships with partner countries.

The fruitful AICS-MUFPP collaboration culminated in a **new partnership agreement** announced during the Global Forum in Milan, highlighting the shared commitment of the Italian Development Cooperation, through AICS, and MUFPP to advancing sustainable and inclusive urban food policies over the next three years.

AICS is proud to have contributed to the Milan Pact Awards 2025, including through its participation in the Evaluation Committee. This engagement has allowed AICS to gain a deeper understanding of the challenges involved in transforming food systems and to appreciate the tangible impact and significance of initiatives implemented by MUFPP cities worldwide. The MUFPP continues to serve as a dynamic platform for learning, knowledge exchange, and sharing innovative solutions to complex challenges.

**The insights in this report offer a comprehensive overview of innovative urban food policies, highlighting emerging trends and challenges,** and provide practical examples that can support Italian Cooperation's future initiatives and partnerships supporting sustainable and inclusive urban food systems.



Claudia Sorlini  
Vice President,  
Fondazione Cariplo



This 2025 edition of the Milan Pact Awards, held in conjunction with the tenth anniversary of the Milan Urban Food Policy Pact, offered an important opportunity not only to celebrate a significant milestone, but also to **reflect on how much the Milan Pact has grown and expanded, reaching an increasing number of cities across the world and strengthening its role as a global reference for urban food policies.**

Fondazione Cariplo has collaborated with the Municipality of Milan since the very beginning of the Milan Urban Food Policy Pact. This long-standing cooperation represents a concrete example of how strong partnerships between public and private actors can generate meaningful and lasting impact. **Over the past ten years, Fondazione Cariplo and the Municipality of Milan have shared research, vision, methods and actions, contributing to the development of innovative approaches to urban food policy.** The results of this collaboration have also been recognised internationally, as demonstrated by prestigious awards such as the Earthshot Prize, and can serve as an inspiration for other actors.

To support municipalities within the MUFPP network, Fondazione Cariplo has backed the Milan Pact Awards since their first edition in 2016. Initially conceived with only two awards (two monetary prizes and six special mentions), **the initiative has progressively evolved, expanding year after year to include six awards and multiple special mentions for each category of the MUFPP Framework for Action. This evolution reflects the natural growth of the network and the increasing number of submitted practices, as well as the desire to recognise the most significant achievements in terms of innovation, inclusion, and impact.**

The Milan Pact Awards offer cities a valuable opportunity to share, collect, disseminate and exchange innovative ideas and practices. Thanks to this initiative, nearly **one thousand examples of urban food policies have been gathered over the years, contributing to the creation of the world's largest repository of knowledge in this field.**

Today, the responsibilities of municipalities and mayors are increasingly complex. As they are the institutions closest to citizens and local communities, they are called upon to listen to people's needs, respond to growing challenges and provide concrete solutions at the local level. In this context, **the alliances built within the Milan Urban Food Policy Pact play a crucial role in supporting cities in their efforts to become fairer, healthier, and more sustainable, while strengthening social cohesion and inclusion.**

**Fondazione Cariplo remains fully committed to this shared mission and will continue to stand alongside MUFPP cities and partners in advancing sustainable urban food systems worldwide.**

By documenting the achievements and challenges of cities within the MUFPP network, this report offers concrete insights that are directly relevant to Fondazione Cariplo's mission and can inspire future projects and partnerships.





# Evaluation Committee & Evaluation process

The Evaluation Committee of the MPA 2025 was composed of representatives from several MUFPP partners, including international organisations, NGOs, foundations and academia. This diverse and multidisciplinary composition ensured a **high level of technical expertise and balanced geographical representation**.

Committee members evaluated practices within specific MUFPP categories according to their respective areas of expertise. The assessment was conducted on the basis of three core criteria: **impact, innovation, and inclusion**.

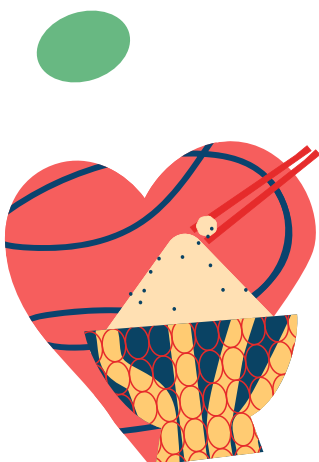
**Impact:** the extent to which the practice delivers concrete and measurable social, environmental and/or economic results for the food system over the medium and long term.

**Innovation:** the degree to which the practice introduces new or pioneering approaches to food policy development, whether at local, regional or global level.

**Inclusion:** the capacity of the practice to adopt a holistic approach, engaging diverse stakeholders and integrating multiple dimensions of the food system.

Following this evaluation process, the **six highest-scoring practices** — one for each MUFPP category — **were awarded at the MPA Ceremony** during the MUFPP Global Forum in Milan. Each winning city received a prize of €20,000 to further develop its practice or to establish an exchange with another city of its choice.

In addition, **four Special Mentions were assigned in each category, recognising equally outstanding and impactful practices** among the over 300 submissions from MUFPP cities.



The Milan Pact Awards Evaluation Committee 2025 was composed of 13 members, each of them assigned to a specific MUFPP category.

### Co-chairs



**Carlo Mango**  
Cariplo Foundation,  
Vice Chief  
Philanthropic Officer



**Andrea Magarini**  
Municipality of Milan,  
Food Policy Director



### The Milan Pact Awards 2025 Evaluation Committee



**Becca Jablonski**  
Cornell University,  
Visiting Associate  
Professor



**Lawrence Haddad**  
GAIN,  
Executive Director



**Carmen Burbano**  
WFP, Director, School  
Meals and Social  
Protection Service



**Gunhild Stordalen**  
EAT, Founder and  
Executive Chair



**Thom Achterbosch**  
Wageningen  
Economic Research,  
Senior Researcher



**Daniel Moss**  
Agroecology Fund,  
Co-Director



**Marco Riccardo  
Rusconi**  
AICS, Director



**Richard McCarthy**  
World Farmers Market  
Coalition, President



**Valérie Vion**  
World Union of  
Wholesale Markets,  
Secretary General



**Corinna Hawkes**  
FAO, Director, Agrifood  
Systems and Food  
Safety Division



**Alessandro Banterle**  
University of Milan,  
Full Professor and  
Vice-Rector





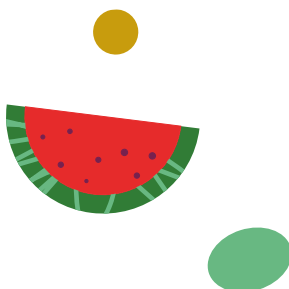
**The Milan Team:**  
**Anna Scavuzzo**  
 (Vice Mayor of Milan),  
**Beatrice Arcari**  
 (Director of Education  
 Division),  
**Andrea Magarini**  
 (Director of Food Policy  
 Department),  
**Filippo Gavazzeni**  
 (Director of MUFPP) with  
**the MUFPP Secretariat**  
 during the MPA Ceremony  
 on October, 15, 2025.

## Winning Cities and Special Mentions

- **Governance: AUSTIN (United States)** –  
 “Austin/Travis County Food Plan”
- **Sustainable Diets & Nutrition: SEOUL (Republic of Korea)** –  
 “Safeguarding the Food of Future Generations”
- **Social & Economic Equity: MEDELLÍN (Colombia)** –  
 “Sustainable Food Canteens”
- **Food Production: JERICHO (Palestine)** –  
 “Renewed Water for Sustainable Agriculture”
- **Food Supply & Distribution: OUAGADOUGOU (Burkina Faso)** –  
 “Relaunch Urban Food Markets”
- **Food Waste: VANTAA (Finland)** –  
 “Vantaa Shared Table – Food Waste Ecosystems”

The Special Mentions of the Milan Pact Awards 2025:

- **Governance: Copenhagen** (Denmark), **Grenoble** (France),  
**Jangseong** (Republic of Korea), and **Kisumu** (Kenya)
- **Sustainable Diets & Nutrition: Baltimore** (United States),  
**Berlin** (Germany), **Quezon City** (Philippines), and **Turin** (Italy)
- **Social & Economic Equity: Bangkok** (Thailand), **La Paz** (Bolivia),  
**Nairobi** (Kenya) and **Nilufer** (Türkiye)
- **Food Production: Belo Horizonte** (Brazil), **Chone** (Ecuador),  
**Nantes** (France), and **Sukabumi** (Indonesia)
- **Food Supply & Distribution: Liège** (Belgium), **Mbale** (Uganda),  
**Paris** (France), and **Tandil** (Argentina)
- **Food Waste: Bandung** (Indonesia), **Barcelona** (Spain),  
**Bogotá** (Colombia) and **Columbus** (United States)





Governance:  
AUSTIN (United States)



Sustainable Diets & Nutrition:  
SEOUL (Republic of Korea)



Social & Economic Equity:  
MEDELLÍN (Colombia)



Food Production:  
JERICHO (Palestine)



Food Supply & Distribution:  
OUAGADOUGOU (Burkina Faso)



Food Waste:  
VANTAA (Finland)



# 1

## **Why a global network for urban food policies matters**

This chapter explains why **cities have become central actors in the governance of food systems worldwide**. It outlines the major global trends shaping urban food systems, including the climate crisis, demographic dynamics, urbanisation and socio-economic pressures, and examines how these forces increasingly converge at the city level. By highlighting the role of cities as key arenas for food policy design and implementation, the chapter clarifies the rationale for creating a global network of cities to address shared challenges and scale effective urban food policies.

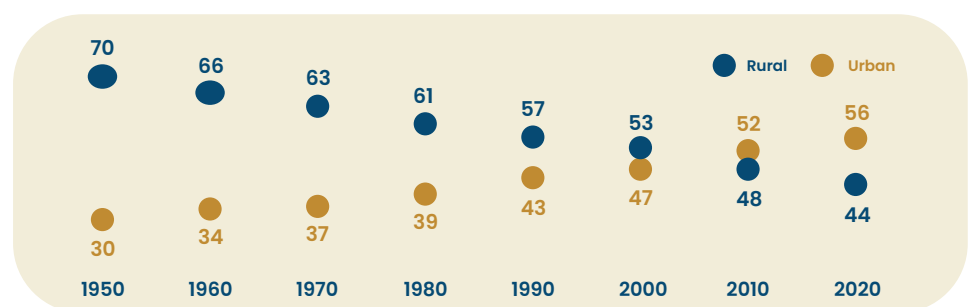


# Cities at the centre of global food system

Cities have become the structural nodes of contemporary food systems. As population, consumption, infrastructure, and governance increasingly concentrate in urban areas, food systems are progressively shaped by urban dynamics rather than solely by rural production patterns. Today, cities are not only the primary centres of food demand, but also strategic arenas where access, affordability, logistics, sustainability, and resilience are managed and negotiated.

Urbanisation represents one of the most profound structural transformations shaping global food systems. In 2007, for the first time in history, **the global population living in urban areas surpassed that residing in rural areas**<sup>1</sup>, marking a turning point in the spatial distribution of people and consumption worldwide. Today, approximately **58.3% of the world’s population lives in urban areas**, and this share is projected to increase further, reaching close to 70% by 2050<sup>1</sup>. This long-term shift reflects sustained demographic trends and is occurring across all world regions, albeit at different speeds and starting points.

**Figure 1.** Global population living in urban and rural areas (percentage of global population), 1950–2025. Source: TEHA Group elaboration based on United Nations data, 2026.



The pace and scale of urbanisation vary significantly across regions. North America, Europe and South America already display high levels of urbanisation, while Asia and Africa are experiencing the most rapid increases in urban population shares. In Asia, urbanisation is progressing alongside continued population growth on an already very large demographic base, reshaping food demand at scale.

<sup>1</sup> United Nations, Department of Economic and Social Affairs, Population Division, World Urbanisation Prospects 2025: Summary of Results, 2025.



In Africa, by contrast, the rapid expansion of urban populations is intensifying pressures on food systems, infrastructure and access to basic services.

These trajectories are reshaping the geography of food demand, concentrating consumption in urban areas and increasing reliance on complex supply chains to ensure continuous access to food for growing urban populations.

Urban growth is also increasingly characterised by the **expansion of very large metropolitan areas**. Today, there are 44 megacities worldwide with more than 10 million inhabitants, of which 25 located in Asia<sup>2</sup>. Together, these megacities are home to approximately 800 million people, representing close to 10% of the global population. Projections suggest that the number of **megacities could rise to between 60 and 70 by 2050**<sup>10</sup>, further increasing the concentration of population, consumption and resource demand in a limited number of urban areas. This concentration amplifies both opportunities for scale and efficiency and vulnerabilities related to food access, infrastructure capacity and exposure to shocks.

As urban populations grow, cities become the primary arenas where multiple food system pressures converge. Rising urban demand for food, water and energy intersects with constraints related to infrastructure, logistics, land availability and environmental sustainability. At the same time, urban consumers increasingly shape dietary patterns, food preferences and waste generation, influencing upstream agricultural production and downstream distribution systems. **The growing predominance of cities in global demographic dynamics therefore has far-reaching implications for food security, affordability and resilience.**

Taken together, these urban dynamics position **cities at the frontline of global food system challenges**. The concentration of population, demand and vulnerabilities within urban areas make cities critical nodes for understanding how global pressures materialise locally. At the same time, their scale, governance capacity and proximity to citizens place cities in a unique position to experiment with and implement integrated responses to food system challenges, reinforcing the importance of urban action within a broader global framework.

If cities represent the structural nodes of contemporary food systems, the next step is to examine the major global pressures that increasingly converge within urban environments and shape their capacity to ensure food security, resilience, and equity.

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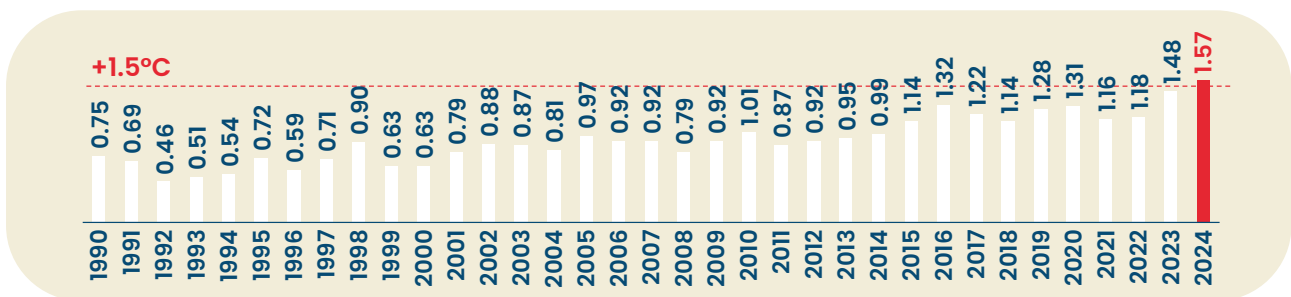
2. United Nations, Department of Economic and Social Affairs, Population Division, World Urbanisation Prospects 2025: Summary of Results, 2025.



# Climate crisis: a systemic pressure on food systems

For urban food systems, the climate crisis represents one of the most pervasive and destabilising pressures. While its drivers are global, its impacts increasingly materialise within cities through disruptions in supply chains, food price volatility, infrastructure stress, and heightened exposure to extreme weather events. In 2024, for the first time in the observational record, **the annual global average temperature exceeded 1.5 °C above pre-industrial levels<sup>3</sup>**, highlighting the accelerating pace of warming and the narrowing margin for climate resilience without further mitigation efforts. This warming trend is accompanied by persistent increases in ocean surface temperatures, with global sea surface temperatures in 2025 averaging about **+0.40 °C above the 1991–2020 average**, marking **2025 as the 3<sup>rd</sup> highest year on record<sup>3</sup>** and reinforcing the continuing marine warming trend.

**Figure 2.** Trend of global temperature anomalies (°C change vs. pre-industrial period), 1990–2024. Source: TEHA Group elaboration based on Copernicus data, 2026.



Besides ecosystems and local communities, **agriculture is affected by the climate crisis** in its economic dimension. Estimates by the Food and Agriculture Organisation of the United Nations suggest that direct losses attributable to droughts, floods, storms and other climate-induced hazards totaled an estimated **3.8 trillion US dollars** over the past thirty years. When translated into **annual terms, these cumulative costs correspond to an annual average loss in the order of 123 billion US dollars**, the equivalent of **5% of annual global agricultural gross domestic product<sup>4</sup>**.

3. Copernicus Data Space Ecosystem, European Union, accessed via Copernicus Data Space Ecosystem in February 2026. 4. FAO, The Impact of Disasters on Agriculture and Food Security – Avoiding and reducing losses through investment in resilience, Rome, Food and Agriculture Organisation of the United Nations, 2023.

The documented link between rising average temperatures and the intensified occurrence of extreme climatic events, such as droughts and floods, is reflected in their increasing frequency and intensity. Data reported under the UNDRR's Sendai Framework Monitor indicate that **floods are the most frequently reported climate-related disaster, accounting for around 9% of total agricultural losses, while droughts, despite being less frequent, are responsible for nearly 50% of total losses<sup>4</sup>**, underscoring their disproportionate impact on agricultural productivity and food supply stability.



These global loss estimates underscore the systemic nature of climate-driven risks within agricultural and food systems: with cascading effects on urban food availability, affordability and supply chain stability.

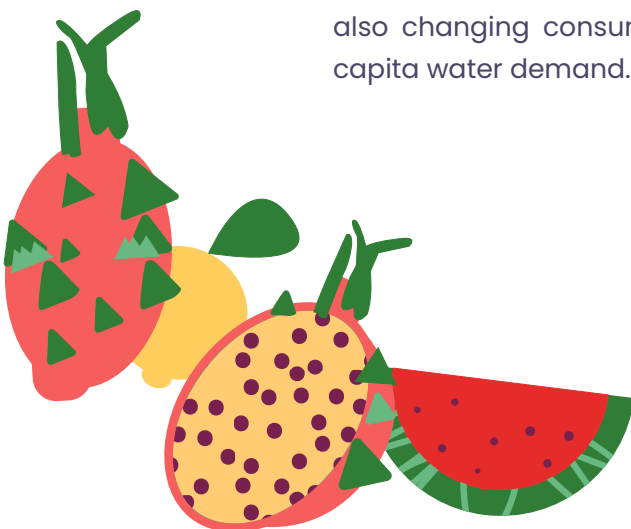
As agriculture increasingly bears the effects of climate variability, these pressures interact with rapid urban population growth, which is expanding food demand and placing additional strain on agricultural productivity and supply chains. The magnitude of these impacts on agricultural markets, livelihoods and food supply chains highlights the **need for coordinated, multilevel responses that go beyond national or local action**, reinforcing the imperative for collaboration across cities and regions in adapting food systems to a rapidly changing climate.



# Population dynamics and the rising demand for resources

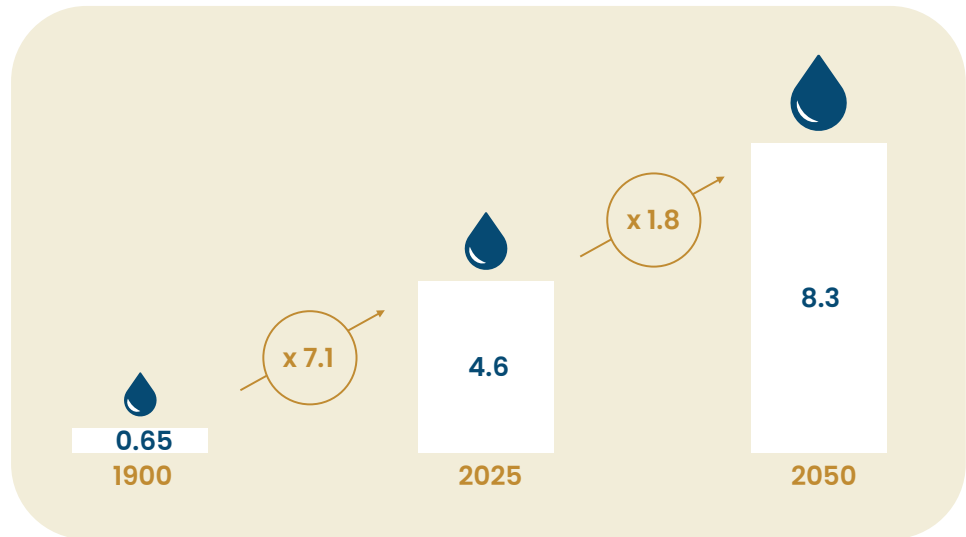
Demographic dynamics further intensify pressures on urban food systems. With the world's population growing ever larger and urbanisation accelerating, cities are absorbing an increasing share of food demand, water consumption, and infrastructure stress. **The world's population reached around 8.3 billion people in 2025** and United Nations projections indicate that it will approach nearly **10 billion by 2050**, corresponding to an increase of around 20%, with growth rates remaining higher than in previous decades<sup>5</sup>.

Population growth translates directly into rising demand for essential resources, most notably water and food, amplifying pressures on already constrained natural systems. In line with demographic trends, global freshwater withdrawals have increased over the past century, rising from approximately 0.65 trillion cubic meters at the beginning of the twentieth century to about **4.6 trillion cubic meters** in recent years. According to United Nations estimates, this trajectory is expected to continue, with total freshwater withdrawals projected to reach approximately **8.3 trillion cubic meters by 2050**<sup>6</sup>. Global water withdrawals are estimated to grow faster than population, reflecting not only demographic expansion but also changing consumption patterns, urbanisation and a higher per capita water demand.



5. United Nations Department of Economic and Social Affairs (UNDESA), World Population Prospects 2024, Population Division, United Nations, 2024. 6. UN-Water, Sustainable Development Goal 6 Synthesis Report 2018 on Water and Sanitation, United Nations, 2018

**Figure 3.**  
Global freshwater withdrawals (billion m<sup>3</sup>), 1900–2050e.  
Source: TEHA Group elaboration based on United Nations and UNESCO data, 2026.



Rising water demand is closely intertwined with increasing food needs. In 2024, an estimated 673 million people experienced hunger worldwide, underscoring persistent structural challenges in ensuring adequate access to food across regions<sup>7</sup>. These pressures are expected to intensify as the global population continues to grow, requiring the **agricultural sector to produce approximately 50% more food** to meet future demand<sup>8</sup>.

Demographic growth, however, is not evenly distributed across regions. **Asia currently remains home to the largest share of the global population** and is expected to maintain a central role in shaping global food demand, while Africa is projected to experience the fastest growth, with its population reaching 2.5 billion by 2050<sup>9</sup>. By mid-century, **Africa alone is expected to account for approximately one quarter of the world's population**<sup>6</sup>, significantly increasing demand for food in a context often characterised by structural vulnerabilities, limited infrastructure and high exposure to climate risks. At the same time, population growth in other regions, including parts of South America, continues to contribute to the expansion of food demand, highlighting the need for a communal local yet generalised response to food system pressures. Europe is the only region projected to experience a population decline, with a contraction of around 6%, leading to stabilisation of just over 700 million inhabitants<sup>10</sup>.

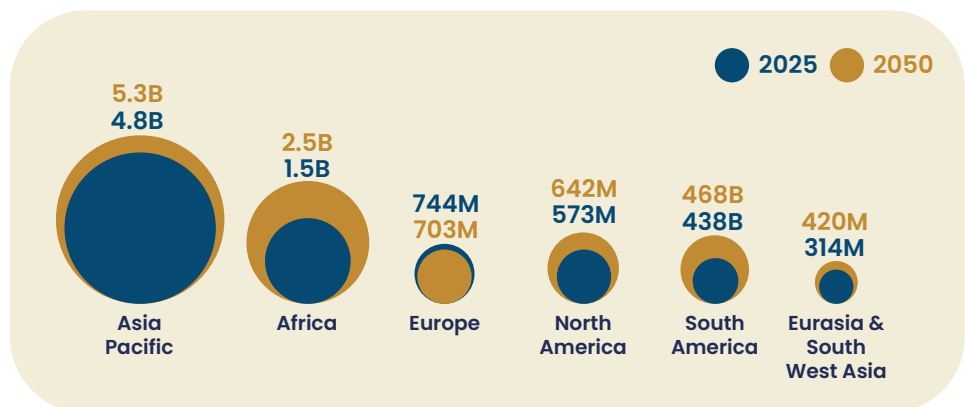
7. FAO, The State of Food Security and Nutrition in the World 2025, Food and Agriculture Organisation of the United Nations, Rome, 2025. 8. FAO, The State of the World's Land and Water Resources for Food and Agriculture 2025 – The potential to produce more and better. Rome, Food and Agriculture Organisation of the United Nations, 2025. 9. United Nations Department of Economic and Social Affairs (UNDESA), World Population Prospects 2024, Population Division, United Nations, 2024. 10. United Nations Department of Economic and Social Affairs (UNDESA), World Population Prospects 2024, Population Division, United Nations, 2024.

Beyond population size, demographic dynamics are also shaped by profound changes in age structure and fertility patterns. **In many high-income economies, declining fertility rates and population ageing** are reshaping food demand, consumption patterns and labor availability along the food value chain. Conversely, several **emerging and developing regions continue to display younger population profiles**, which translate into growing demand for food, employment and social services, particularly in urban areas.

At the global level, demographic progress has been accompanied by significant improvements in key human development indicators. **Infant mortality rates have declined by more than sixfold** over the past seventy-five years, while **global life expectancy has increased by more than 40%** since the 1960s<sup>11</sup>. These long-term improvements reflect advances in healthcare, nutrition and living conditions, but they also contribute to rising food demand and changing dietary needs, including increased attention to nutritional quality, food safety and public health.

Taken together, these population dynamics highlight a dual challenge for global food systems. On the one hand, continued population growth and urbanisation **increase the quantitative demand for food**, while also exacerbating existing challenges of misallocation and uneven distribution of food resources, particularly in regions already facing structural constraints. On the other hand, demographic transitions related to ageing, longevity and changing household structures are **reshaping the qualitative dimensions of food demand**, driving the emergence of new consumption habits and a higher awareness regarding the connection between nutrition, health and sustainability. Addressing these intertwined challenges requires food policies capable of responding to diverse demographic trajectories, reinforcing the importance of coordinated approaches and shared learning among cities operating at the frontline of these transformations.

**Figure 4.**  
Current and projected population (absolute value), 2025–2050e.  
Source: TEHA Group elaboration based on United Nations data, 2026.



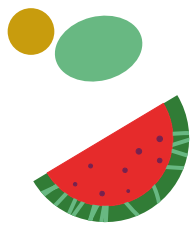
11. World Bank, World Development Indicators, World Bank Open Data, Washington, 2026.



## Socio-economic pressures across world regions

While the structural drivers shaping global food systems are shared, socio-economic pressures manifest differently across world regions, reflecting diverse economic conditions, demographic trajectories and institutional capacities. These regional dynamics influence how global challenges translate into local food system vulnerabilities, particularly in urban contexts.

In Europe, food systems are increasingly shaped by inflationary dynamics, with **food price inflation exceeding 19% at its peak in 2023<sup>12</sup>**, and by rising energy costs, as **energy prices increased by more than 40% between 2021 and 2022** and remain consistently higher compared to previous years<sup>13</sup>. These pressures intersect with long-term demographic trends, as **over 21% of the EU population is currently aged 65 or over<sup>14</sup>**, influencing food access and consumption patterns.



In South America, economic volatility and persistent social inequalities continue to shape food access and price stability. Fluctuating macroeconomic conditions have resulted in **inflation rates consistently above the global average, reaching 14.4% in 2023<sup>15</sup>**, with some countries experiencing episodes of three-digit inflation. At the same time, South America remains among the regions with the highest levels of income inequality worldwide, with an **average Gini coefficient close to 45<sup>16</sup>**, significantly higher than that observed in OECD countries. As a result, around **25.2% of the population experienced moderate or severe food insecurity in 2024<sup>17</sup>**, highlighting the structural vulnerability of food access, particularly in urban contexts.



<sup>12</sup>. Eurostat, Food Price Monitoring: interactive tool and data on food price inflation in the European Union, accessed in February 2026. <sup>13</sup>. Eurostat, Electricity price statistics, accessed in February 2026. <sup>14</sup>. Eurostat, Population structure and ageing, accessed in February 2026. <sup>15</sup>. Statista, South America - inflation rate by country, accessed in February 2026. <sup>16</sup>. World Population Review, Gini Coefficient by Country 2026, accessed in February 2026. <sup>17</sup>. FAO, IFAD, PAHO, UNICEF e WFP, Regional Overview of Food Security and Nutrition in Latin America and the Caribbean 2024, 2024.



In North America, growing **political polarisation** and **policy uncertainty** represent key socio-economic pressures, with implications for food prices, trade relations and social cohesion. Between 2021 and 2023, food prices **increased cumulatively by more than 20%**<sup>18</sup>, reflecting one of the sharpest inflationary shocks in recent decades and disproportionately affecting urban households. Despite high average income levels, around **14% of the population continues to experience food insecurity**<sup>19</sup>. At the same time, policy implementation and geopolitical tensions have influenced trade relations, as reflected in the introduction of multiple tariff and trade measures affecting agri-food supply chains, with implications for price stability and market integration.

In Africa, **rapid population growth** and **accelerated urbanisation** are occurring in the context of structural poverty, limited infrastructure and constrained institutional capacity. The continent's **population is growing at an average annual rate of around 2.3% and is projected to reach 2.5 billion by 2050**<sup>20</sup>. At the same time, Africa is experiencing one of the most rapid urban transitions worldwide, with the **urban population expected to more than double by mid-century**, from 700 to 1.4 billion, increasing pressure on cities and infrastructure. These conditions exacerbate food insecurity risks and place increasing pressure on urban food systems to meet rising demand amid economic and environmental vulnerabilities.

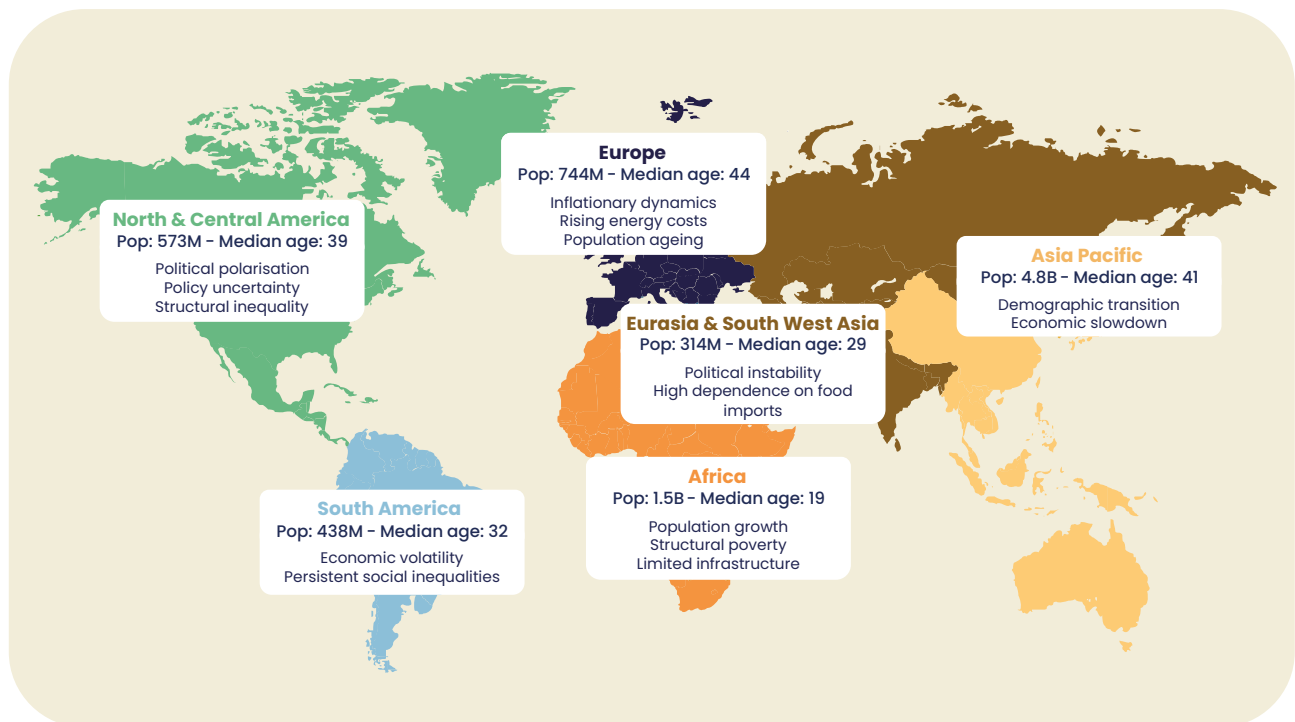
In Eurasia & South West Asia, ongoing **conflict, political instability** and high dependence on food imports heighten exposure to food insecurity and price shocks. Many countries in the region rely on **imports for more than 40% of their food supply, with some of them reaching levels as high as 70%**<sup>21</sup> which increase vulnerability to external market disruptions. These structural dependencies are compounded by severe water scarcity, as **West Asia hosts less than 2% of global renewable freshwater resources while supporting around 6% of the world's population**<sup>22</sup>, severely constraining domestic food production capacity.

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<sup>18</sup>. U.S. Bureau of Labor Statistics, Databases, accessed in February 2026. <sup>19</sup>. USDA Economic Research Service, Food Security in the U.S. – Key Statistics & Graphics, accessed in February 2026. <sup>20</sup>. United Nations Department of Economic and Social Affairs (UNDESA), World Population Prospects 2024, Population Division, United Nations, 2024. <sup>21</sup>. Le Mouél C, Forsslund A, Marty P, Manceron S, Marajo-Petizon E, Caillaud MA, Dumas P, Schmitt B. Can the Middle East-North Africa region mitigate the rise of its food import dependency under climate change? Reg Environ Change, 2023. <sup>22</sup>. Unicef, Water doesn't come from a tap, 2024.

In Asia, **demographic transition** and **economic slowdown** are reshaping food demand and consumption patterns. Population ageing is accelerating across the region, with **people aged 65 and over accounting for more than 18% of the population in 2025 and projected to exceed 25% by 2050** in several East Asian countries<sup>23</sup>. At the same time, economic growth has slowed compared to pre-2015 levels, with average **GDP growth rates in East Asia declining from above 6% in the early 2010s to around 3–4% in recent years**<sup>24</sup>, affecting household consumption patterns and food demand dynamics. **Southeast Asia is also highly exposed to climate disasters**, with recent 2025 floods alone causing over \$20 billion in damage across the region, affecting millions and underscoring rising risks. Projections warn of even greater threats ahead: **ASEAN nations could lose more than 35% of their GDP by 2050 due to intensified climate hazards**<sup>25</sup>. Flood losses per event, once \$1–2 billion, are set to soar tenfold to over \$10 billion.

**Figure 5.** Population, median age and socio-economic pressures influencing urban food systems by world region.  
Source: TEHA Group elaboration, 2026.



These regional socio-economic pressures highlight the differentiated ways in which global food system challenges materialise across contexts. At the same time, they underscore the **shared need for cities to develop adaptive, resilient and inclusive food policies capable of responding to complex and evolving socio-economic conditions.**

23. United Nations, Department of Economic and Social Affairs, Population Division, World Urbanisation Prospects 2025: Summary of Results, 2025. 24. World Bank, East Asia and Pacific Economic Update, 2025. 25. Renaud, F.G., Chardot, L., Hamel, P., Cremin, E., Ng, D.K.S., Balke, T., Lallemand, D., Friend, R., Shi, X., Lee, J.S.H., Ng, L.Y., Andiappan, V., Le, H., Djalante, R., Tortajada, C., Ebeler, L., Horton, B.P. (2021) Adaptation and Resilience in ASEAN: Managing Disaster Risks from Natural Hazards (p30). UK Government, UK-Singapore COP26 ASEAN Climate Policy Report Series, 2021.



# 2

## A decade of learning through the Milan Pact Awards

Building on the dynamics outlined in Chapter 1, the **Milan Urban Food Policy Pact (MUFPP)** responds to the growing role of cities in addressing food system challenges. As climate pressures, demographic change, urbanisation, and socio-economic inequalities increasingly converge at the city level, the MUFPP provides a shared framework for coordinated action, knowledge exchange, and the development of integrated urban food policies.

This Chapter outlines the **evolution of the Milan Pact Awards (MPA) within the broader Milan Urban Food Policy Pact ecosystem**, highlighting their role in supporting the implementation of urban food policies and fostering peer-learning among cities. It shows how, over time, the MPA have expanded in reach and thematic scope, engaging cities across regions and policy areas. By documenting and recognising concrete initiatives, the MPA contribute to strengthening collaboration, knowledge exchange, and evidence-based action in support of more sustainable and inclusive urban food systems.

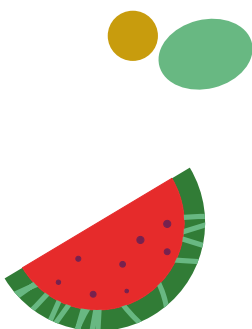


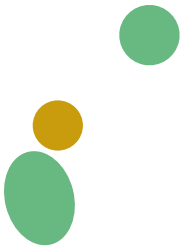
# The Milan Urban Food Policy Pact

The **Milan Urban Food Policy Pact** was signed in October 2015 by more than 100 cities and by 2025 the **number of signatory cities has risen to 330 cities**, from 99 countries across 6 regions, involving over half a billion inhabitants. This network represents one of the most important legacies of Milan EXPO 2015 “Feeding the Planet, Energy for Life.” From its inception, the Milan Pact has represented more than a mere political declaration, positioning itself as a practical and action-oriented framework to support cities in addressing food system challenges.

The MUFPP is structured around a preamble and a Framework for Action that outlines **37 recommended actions**, grouped into **6 thematic categories: Governance, Sustainable Diets & Nutrition, Social & Economic Equity, Food Production, Food Supply & Distribution and Food Waste**. For the next MPA editions, the Framework for Action will be integrated and reach 44 recommended actions. Each recommended action is accompanied by specific indicators designed to help cities monitor progress and assess the implementation of the MUFPP over time. As such, the Milan Pact has become a key global reference for cities and international stakeholders engaged in the development of innovative urban food policies, recognising food as a strategic entry point for the sustainable development of rapidly growing urban areas.

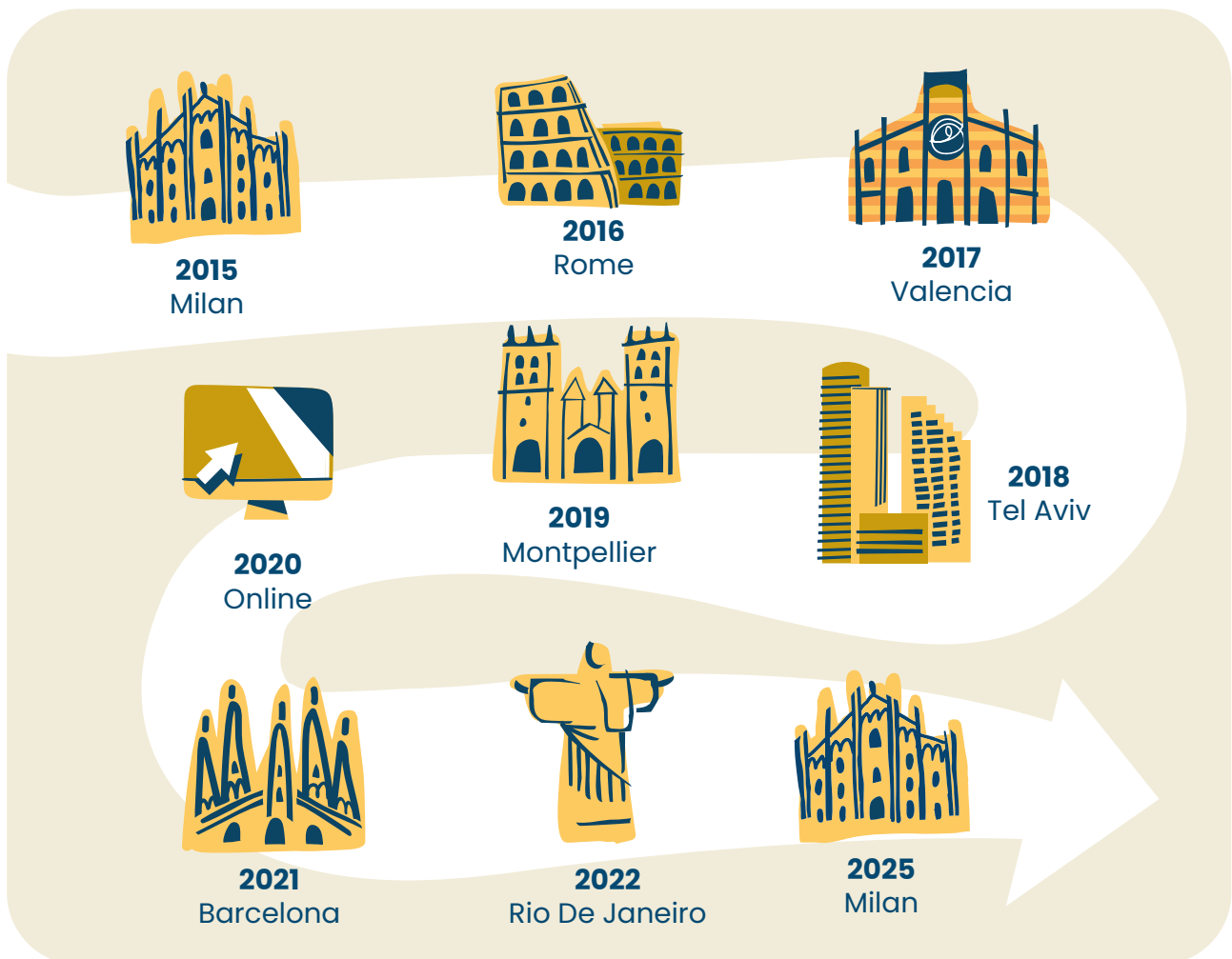
Within this framework, **in 2016 the Milan Pact Awards (MPA) were launched by the Municipality of Milan and the Cariplo Foundation, as an operational extension of the Milan Urban Food Policy Pact**, with the purpose of translating the principles of the Milan Pact into concrete actions, and practices were collected for the first time in 2016. The MPA highlight real-world examples of food policies and initiatives implemented by cities across the six categories, showcasing how local governments are operationalising the Milan Pact’s recommendations. By giving visibility to these experiences, the MPA strengthen peer-learning, foster connections among cities, and reinforce the Milan Pact as a dynamic platform for collective action and knowledge exchange in urban food systems governance.





This role is further amplified through the **MUFPP Global Fora**, international events, organised primarily by cities for cities, offering a unique opportunity to exchange knowledge, build partnerships and celebrate their progress in the implementation of their food policies through the **Milan Pact Awards**. Dialogue and technical exchange among signatories are enriched by the participation of relevant international organisations and institutions. Rather than being anchored to a single location, the Fora are **hosted by different signatory cities**, reinforcing the city-led nature of the Milan Pact and giving visibility to diverse urban contexts. Beginning in Milan in 2015, the Global Fora took place in Rome (2016), Valencia (2017), Tel Aviv (2018), Montpellier (2019), Barcelona (2021) and Rio de Janeiro (2022), with one edition held online in 2020 due to the COVID-19 pandemic. In **2025**, the Forum took place once again in **Milan**, on 13-17 October with the theme “**Building on a decade of joint success**”. **Envisioning the future of urban food systems**”.

**Figure 1.**  
MUFPP Global Fora,  
2015-2025.  
Source: TEHA Group  
elaboration on MUFPP  
Data, 2026



In addition, given the specific geographical and socio-economic contexts in which cities operate, the MUFPP progressively introduced **Regional Fora** to complement the global dialogue with more context-sensitive exchanges. The 1<sup>st</sup> MUFPP Regional Forum was held in **Africa** in 2016, in Dakar. Since then, the African Fora have convened on five additional occasions<sup>1</sup>, most recently in Addis Ababa in 2024. The **European Regional Fora** were also initiated in 2016 and have since been held thirteen times<sup>2</sup>. In **South America**, the 1<sup>st</sup> Regional Forum took place in Rio de Janeiro in 2019, followed by the first **Eurasian Forum** in Kazan, Russia, in 2021. The regional process was further expanded in 2022 with the organisation of the 1<sup>st</sup> MUFPP **Asia Pacific Regional Forum** in Bandung, Indonesia, and the second edition was held in Bangkok, Thailand, in 2024. The expansion continued in 2026 with the 1<sup>st</sup> **MUFPP North & Central America Regional Forum**, hosted in Austin, United States, on March 10–11 2026.

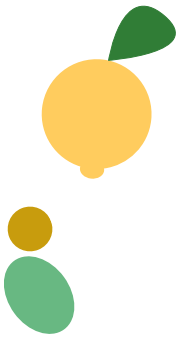
In conclusion, the **Milan Pact** establishes commitment and direction, the **MPA** highlight and validate implementation, and the **Fora** enable continuous exchange, learning, and adaptation. This integrated approach has strengthened the MUFPP community over time, supporting cities not only in committing to change, but also in learning from one another as they advance towards more sustainable, resilient, and inclusive food systems.



1. Dakar, Senegal (2016); Brazzaville, Congo (2018); Niamey, Niger (2019); Ouagadougou, Burkina Faso (2021); Dakar, Senegal (2023); Addis Abeba, Ethiopia (2024). 2. Bruxelles, Belgium (2016); Birmingham, UK (2017); Valencia, Spain (2017); Amsterdam, Netherlands (2018); Lyon, France (2018); Ghent, Belgium (2019); Montpellier, France (2019); Almere, Netherlands (2022); Bordeaux, France (2023); Warsaw, Poland (2024).



# Growth and geographic expansion of the Milan Pact Awards



In **2025**, the 7<sup>th</sup> edition of the Milan Pact Awards marked **ten years since the launch of the Milan Urban Food Policy Pact**, offering an opportunity to reflect on the evolution and geographic expansion of the community. Over the decade, the MPA have grown significantly in scale and reach, becoming a key platform for cities to share concrete experiences in urban food policy. Between 2016 and 2025, a total of **968 practices** were submitted, demonstrating a steady increase in participation over successive editions.

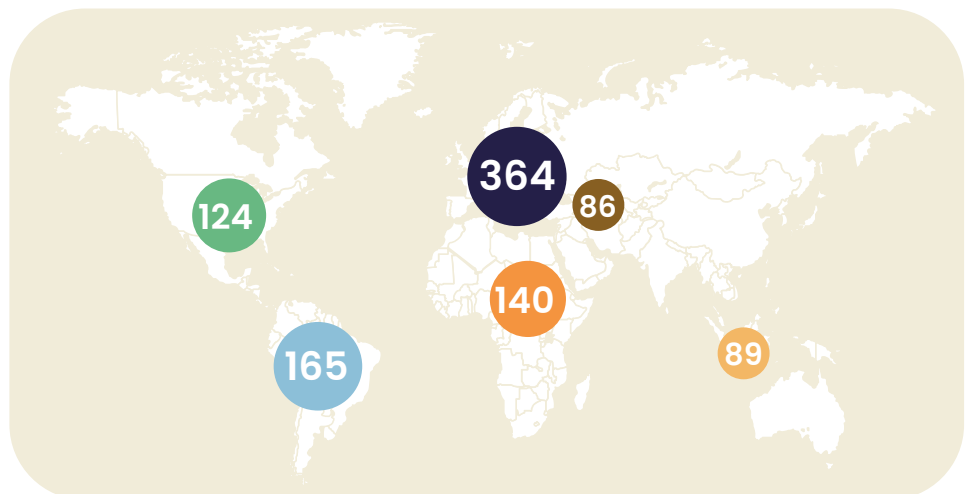
This expansion is particularly evident in the **2025 edition**, which alone accounted for **347 practices** from **173 cities** in **63 countries**, underscoring the MPA consolidation as a global reference for urban food systems action. Compared to the first edition in 2016, the number of submitted practices increased by more than six times, rising from 53 to 347 in 2025, while the number of participating cities grew over fourfold, from 33 to 173.





**Figure 2.**  
Expansion of the Milan Pact Awards, 2016–2025.  
Source: TEHA Group elaboration on MUFPP data, 2026.

**Country representation in the Milan Pact Awards has more than doubled since the first edition** and now extends across all MUFPP Regions. While European countries accounted for over half of the participating countries in the first edition, in the most recent edition the geographical distribution was more evenly balanced. At the same time, participation from previously less represented regions, notably Asia Pacific and Eurasia & South West Asia, increased substantially. Overall, submissions now cover all major world areas, with Europe accounting for the largest number of practices (364), followed by South America (165), Africa (140), North & Central America (124), Asia Pacific (89), and Eurasia & South West Asia (86). So far, all regions show positive participation trends with numbers rising all over the globe.



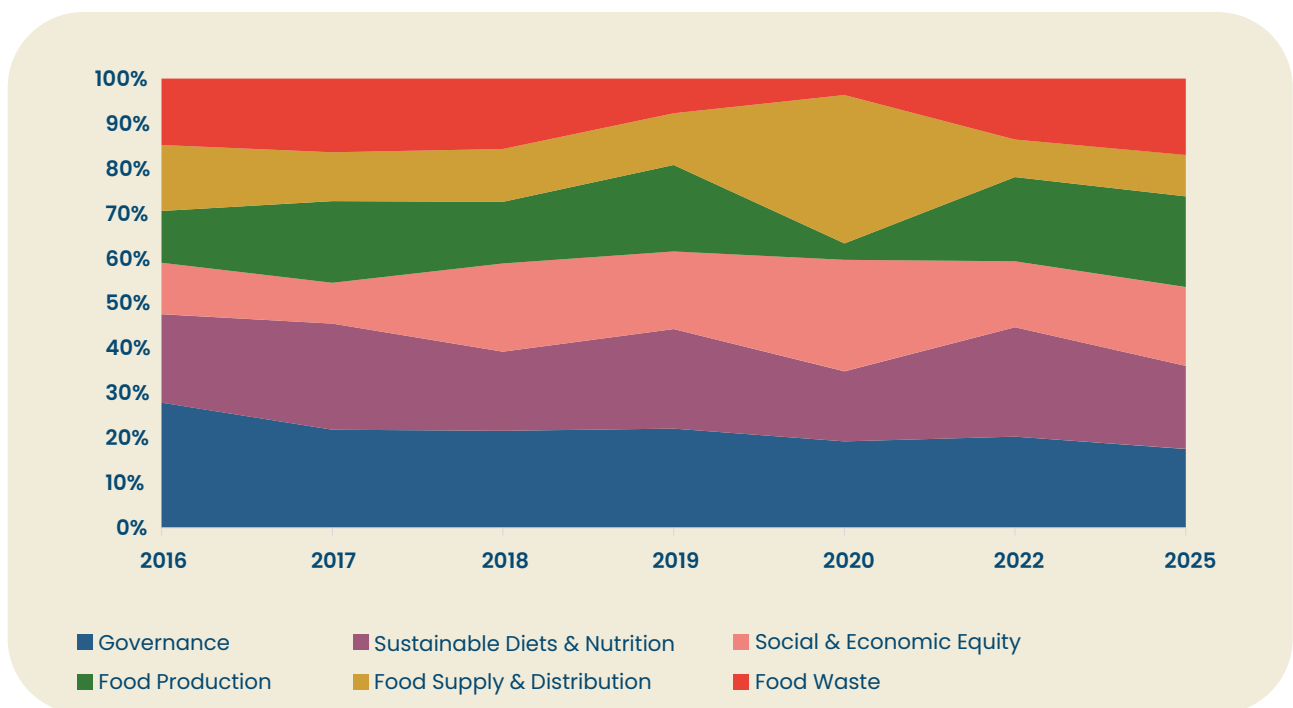
**Figure 3.**  
The Geographical coverage of the Milan Pact Awards.  
Source: TEHA Group elaboration on MUFPP data, 2026.



# Distribution of submitted practices across categories and recognition of excellence

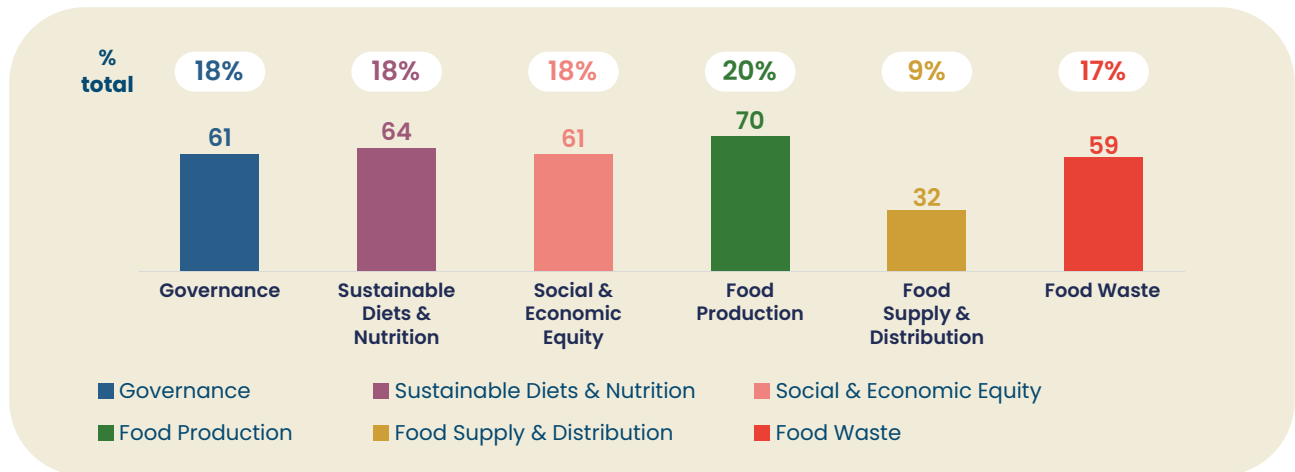
The distribution of practices submitted to the Milan Pact Awards across the six thematic categories highlights both continuity and evolving priorities in urban food policy over time. **Governance**-related initiatives consistently represent a significant share of submissions in all editions, confirming the central role of institutional coordination, policy frameworks, and participatory mechanisms in advancing urban food systems. **Sustainable Diets & Nutrition** and **Social & Economic Equity** also show steady engagement, reflecting cities' sustained focus on health, inclusion, and access to food. Over time, notable variations emerge across categories, with peaks in **Food Supply & Distribution** and **Social & Economic Equity** in specific years, particularly in 2020, likely associated with the COVID-19 pandemic, during which cities prioritised emergency food access, logistics, and distribution mechanisms to respond to disruptions in food supply chains and rising food insecurity. More recent editions show renewed growth in **Food Production** and **Food Waste** initiatives, indicating increasing attention to local food systems, circular approaches, and resource efficiency.

**Figure 4.** Overtime distribution of submitted practices by category (%), 2016-2025. Source: TEHA Group elaboration on MUFPP data, 2026



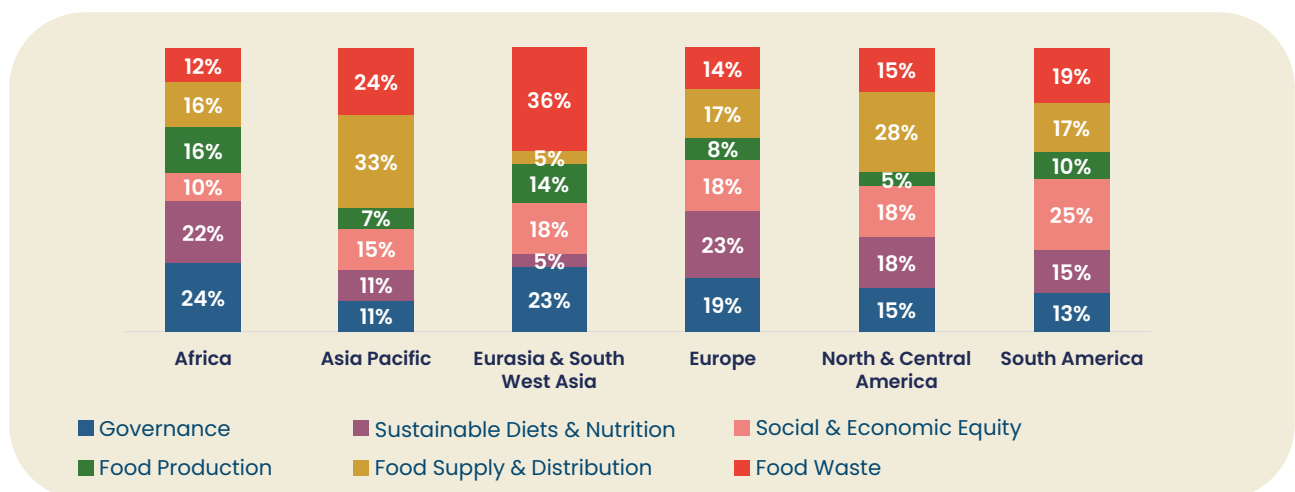
**Figure 5.** Distribution of submitted practices by category (number of practices and %), 2025.  
Source: TEHA Group elaboration on MUFPP data, 2026.

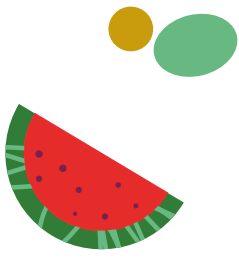
In the 2025 edition, the 347 submitted practices are distributed across all six categories in a relatively balanced manner. Food Production represents the largest share, with 70 practices (20%), followed by Governance with 61 practices (18%), Sustainable Diets & Nutrition with 64 practices (18%), and Social & Economic Equity with 61 practices (18%). Food Waste accounts for 59 practices (17%), while Food Supply & Distribution includes 32 practices (9%).



**Across regions, the distribution of practices by category shows differentiated policy priorities reflecting local contexts.** Asia Pacific and South America place greater emphasis on Food Supply & Distribution and Social & Economic Equity, while North & Central America shows higher shares in Sustainable Diets & Nutrition. Africa and Europe show comparatively higher shares in Governance and Sustainable Diets & Nutrition. Eurasia & South West Asia stands out for the high share of Food Waste initiatives, alongside continued engagement in governance and dietary policies. Overall, the regional patterns highlight how cities apply the Milan Pact’s categories in context-specific ways, while maintaining comprehensive coverage across thematic areas.

**Figure 6.** Distribution of each macro-area’s submitted practices by category (number of practices and %), 2025.  
Source: TEHA Group elaboration on MUFPP data, 2026.



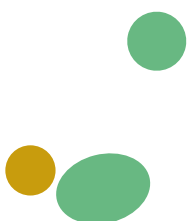


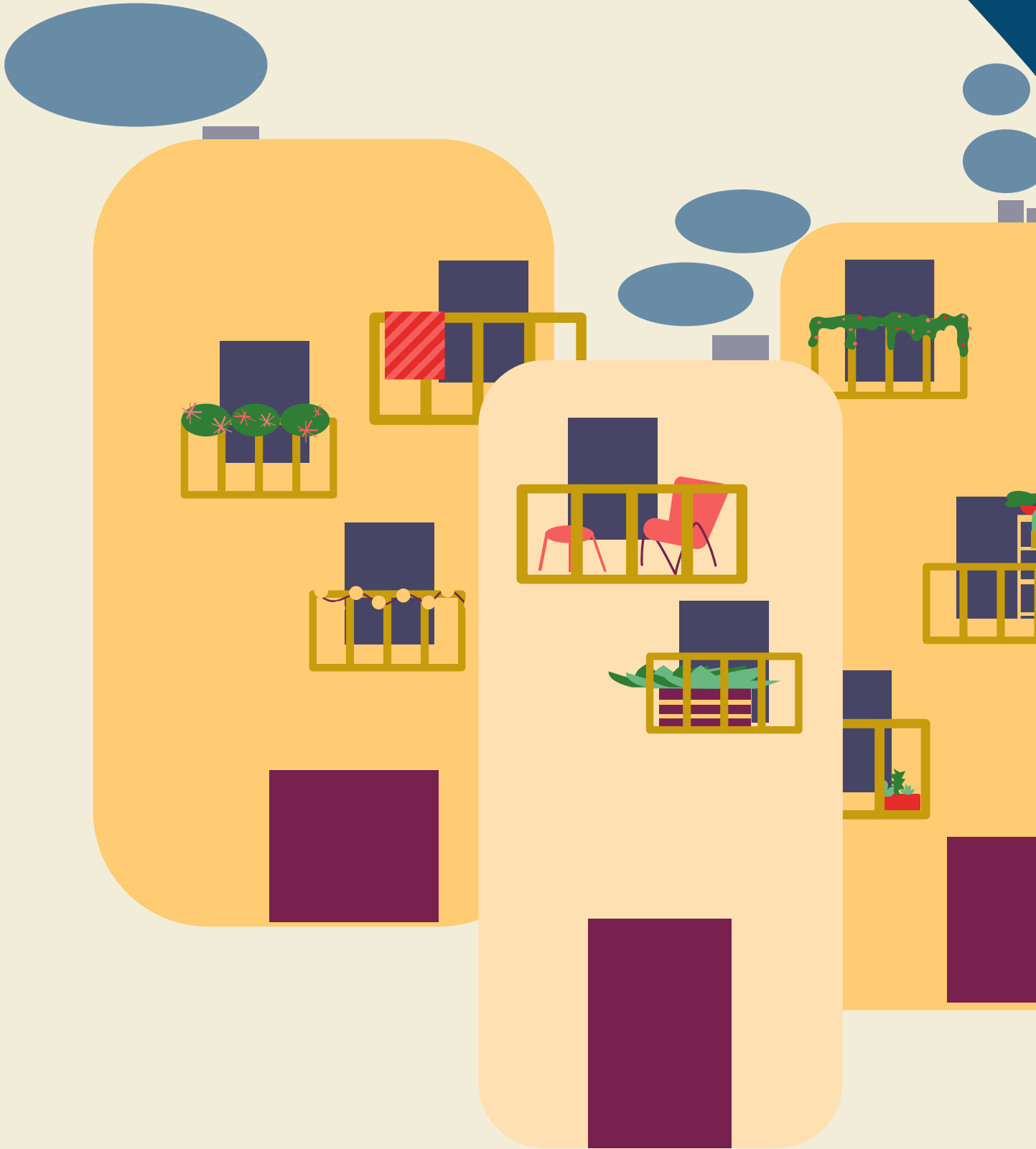
Beyond the overall distribution of submissions, the geographic allocation of Winning cities and Special Mentions further illustrates how excellence in urban food policy has emerged across regions and thematic areas. **Nominations are assessed by an international Evaluation Committee composed of experts from academia, international organisations, and non-governmental organisations**, which selected one winning city for each category. Given the high number and outstanding quality of submissions, the Committee also awards Special Mentions for each category. Between 2016 and 2025, a total of **20 Winning cities** were selected, representing all major world regions. **North & Central America** account for the highest number of winners (4), all in the Governance category, reinforcing the strong alignment between institutional innovation and recognition outcomes.

In parallel, Special Mentions have increasingly complemented the main Awards by recognising innovative and promising initiatives, with a total of **66 Special Mentions** granted over the period. **Europe** received the largest share (22), followed by North & Central America and South America (10 each), Asia Pacific (9), Africa (6), and Eurasia & South West Asia (3).

Overall, the Milan Pact Awards have evolved into a **key tool for documenting and promoting urban food policy actions at the global level**. The growth in participation, the increasing diversity of submitted practices, and the broad geographic coverage show the Awards' capacity to engage cities and support peer-learning. By making implementation visible across contexts and policy areas, the **MPA contribute to strengthening a shared evidence base for advancing sustainable and inclusive urban food systems**. In this respect, the Awards also constitute a unique policy-oriented library of knowledge of urban food initiatives, as each submitted practice is formally endorsed by the city administration, with mayors guaranteeing the accuracy and institutional ownership of the information provided.

Moreover, edition after edition, the MUFPP has used the MPA not only as a tool for exchanging good practices, but also **as a way to organise subsequent capacity-building activities**. By submitting their best practices, cities are in fact able to highlight their learning needs, enabling the MUFPP to further support them through targeted capacity-building initiatives.

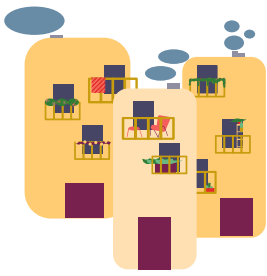




# 3

## **Global trends shaping urban food policies**

Building on the global dynamics outlined in Chapter 1 and the evolution of the Milan Pact Awards presented in Chapter 2, this chapter moves from contextual framing to analytical interpretation. The growing number and diversity of submitted practices provide a unique evidence base to explore how cities are responding to food system challenges across regions and policy areas. By highlighting recurring implementation mechanisms, such as the creation of multi-stakeholder platforms, the utilisation of digital infrastructure, and the strengthening of urban-rural linkages, this section illustrates how cities are primary actors in the global transition towards sustainable food systems



## Methodological note

A **structured text analysis** was conducted on the **347 submitted practices** in order to systematically examine recurring themes, priorities and policy approaches emerging from cities' initiatives. This methodology involved the systematic review and coding of qualitative content contained in project descriptions, objectives and reported outcomes, allowing key concepts and policy orientations to be identified through a combination of keyword mapping, thematic clustering and comparative interpretation.

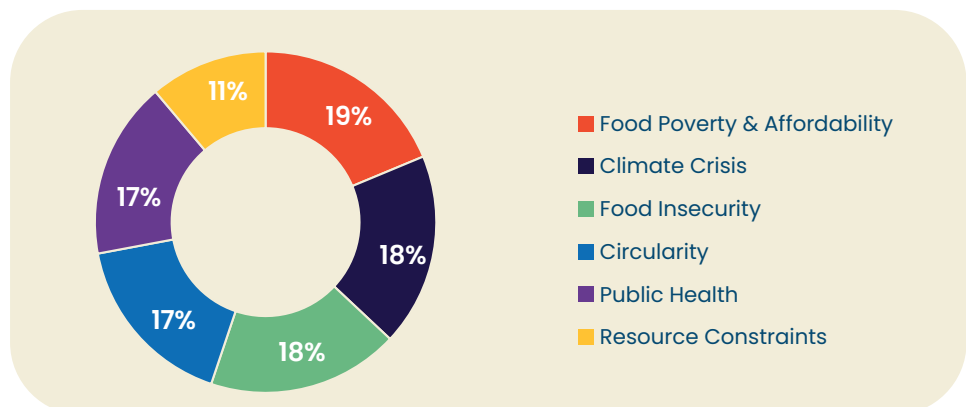
This analytical process enabled the **identification of the main trends currently shaping global urban food policies**. Specifically, the analysis led to the identification of **six interconnected key trends** shaping the policies:

- **Food Poverty & Affordability<sup>1</sup> (19%);**
- **Food Insecurity<sup>1</sup> (18%);**
- **Climate Crisis (18%);**
- **Resource Constraint (11%);**
- **Circularity (17%);**
- **Public Health (17%).**

This distribution highlights how cities are simultaneously addressing social, environmental and governance-related pressures. The practices were also analysed clustered by MUFPP region and city dimension.



**Figure 1.**  
Distribution of submitted urban food system practices across macro-trends (%), 2025.  
Source: TEHA Group elaboration based on MUFPP data, 2026.



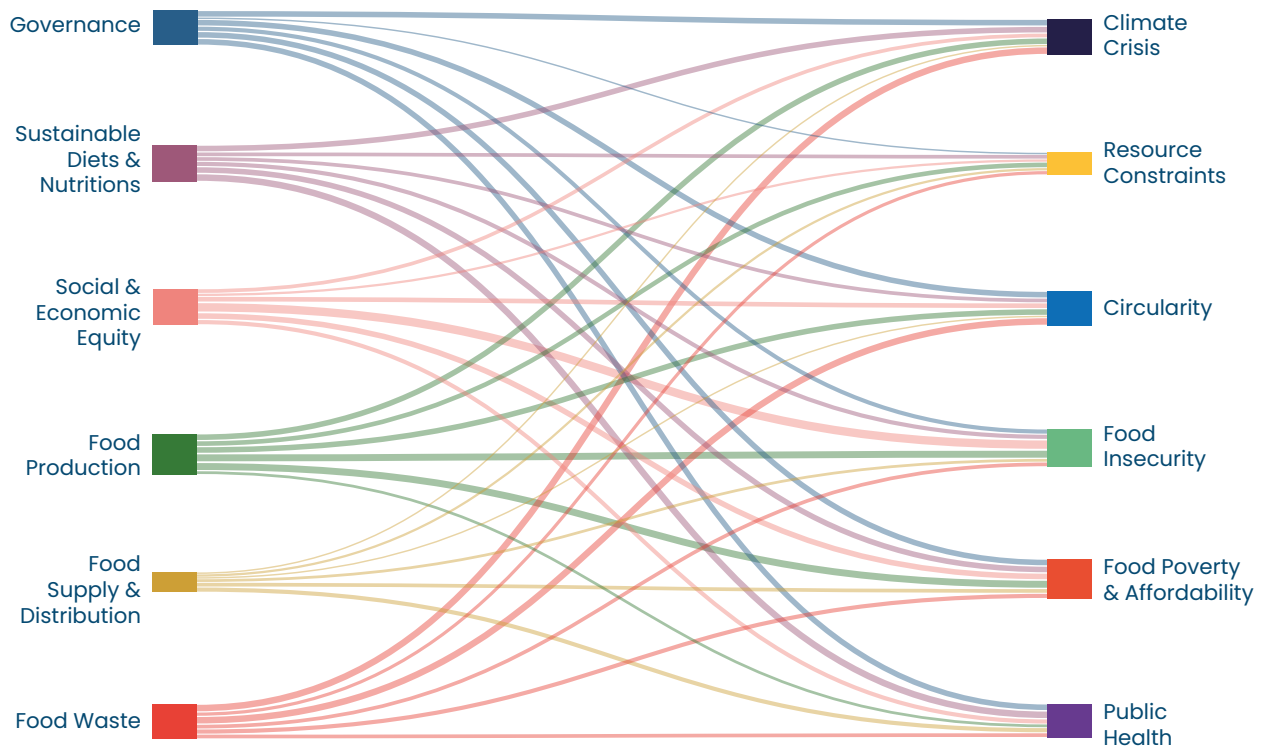
1. While affordability primarily concerns the economic capacity of households, food insecurity encompasses **disruptions in supply chains, territorial inequalities in food access and systemic fragilities** that undermine reliable food availability.



In addition to thematic classification, the text analysis also enabled the identification of the **primary target groups addressed by the submitted practices**. Initiatives were categorised according to the populations they primarily aim to support, including women, students, children, elderly people and other vulnerable groups. This additional layer of analysis provides further insight into how cities are tailoring food policies to specific social needs. Furthermore, the analytical framework incorporated a mapping of the submitted practices in relation to the Sustainable Development Goals (SDGs), allowing each initiative to be associated with its primary contribution to the global sustainability agenda.

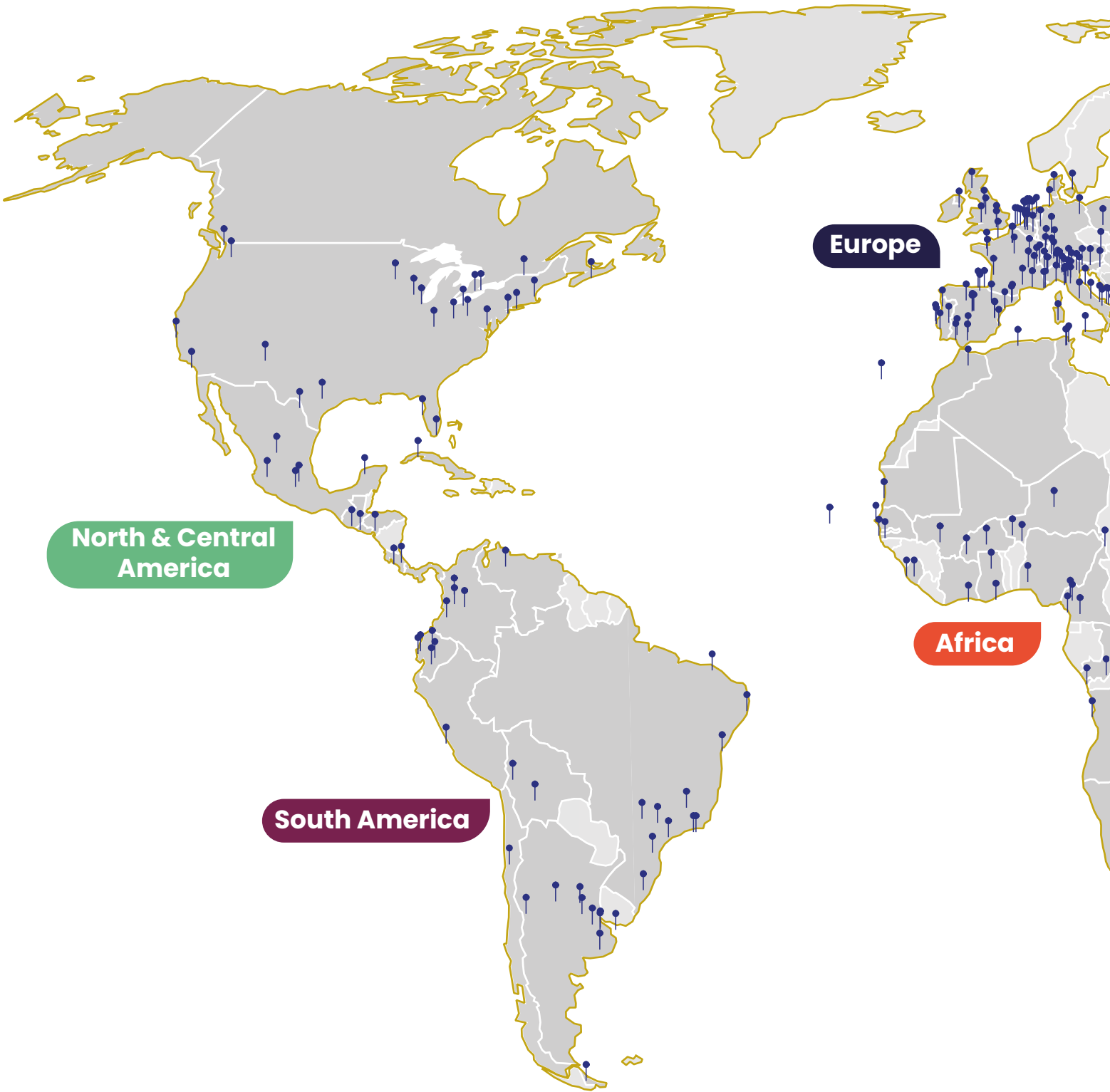
The rest of this chapter is organised according to the 6 global trends identified. For each trend, data referring to global and regional scenarios are provided, together with a broad spectrum of practices. Particular attention is given to the **Winning Cities** and **Special Mentions**, presented as examples of how signatory cities address the identified challenges.

## MUFPP submitted practices by category and main global trends addressed

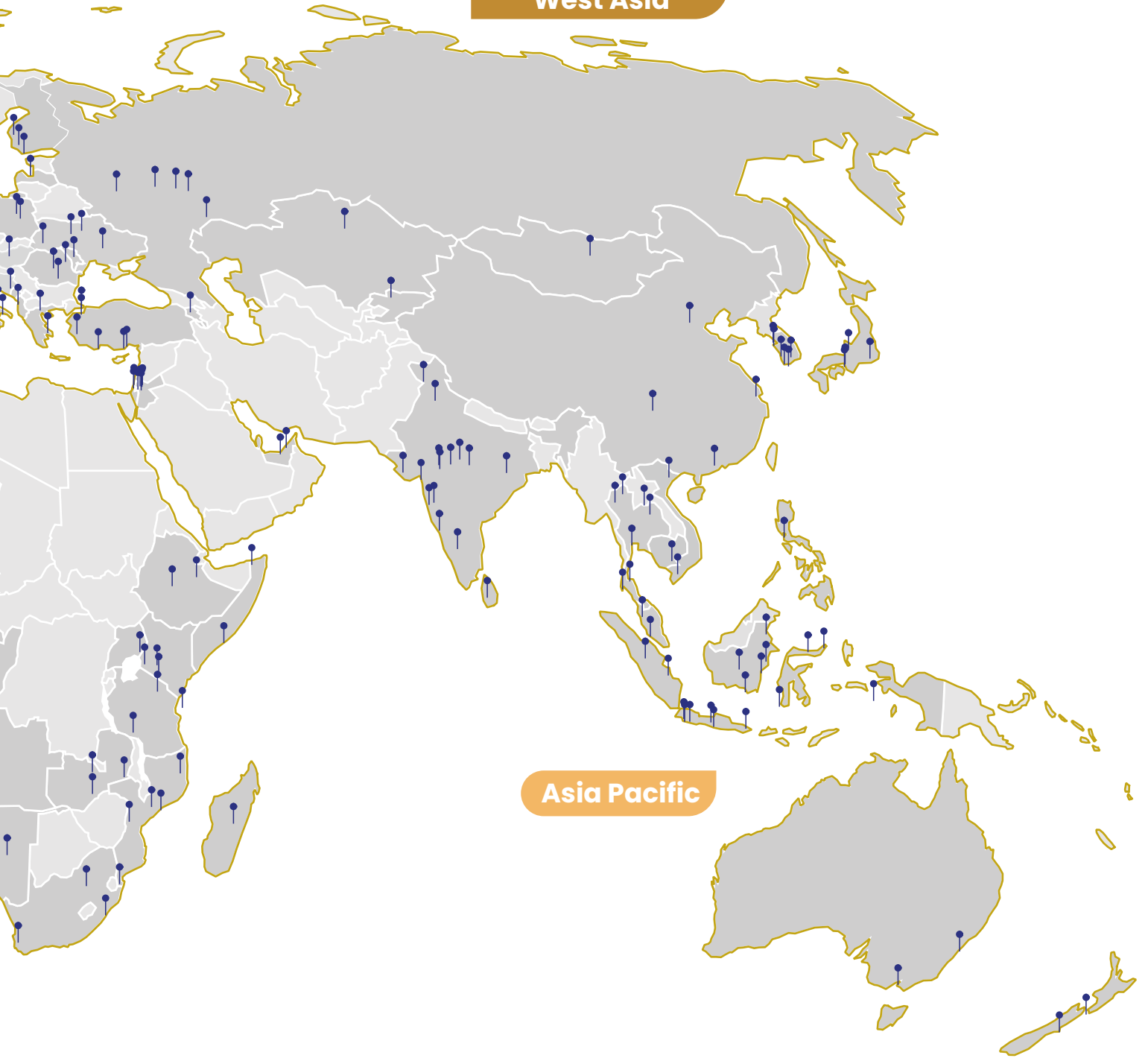


This figure represents the submitted practices by MUFPP category distributed according to the main global trend addressed

# MUFPP Signatory Cities, February 2026

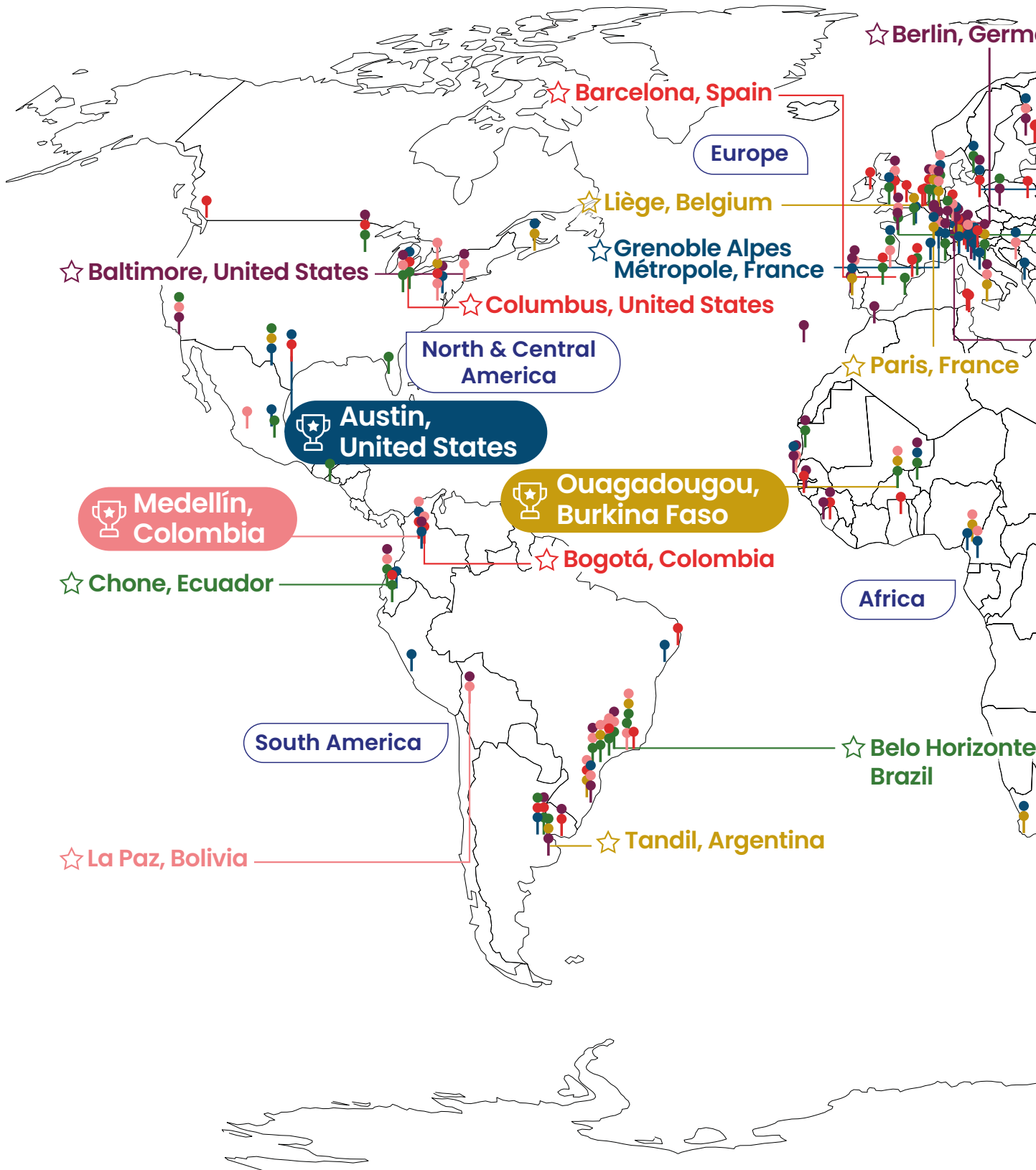


**Eurasia & South  
West Asia**



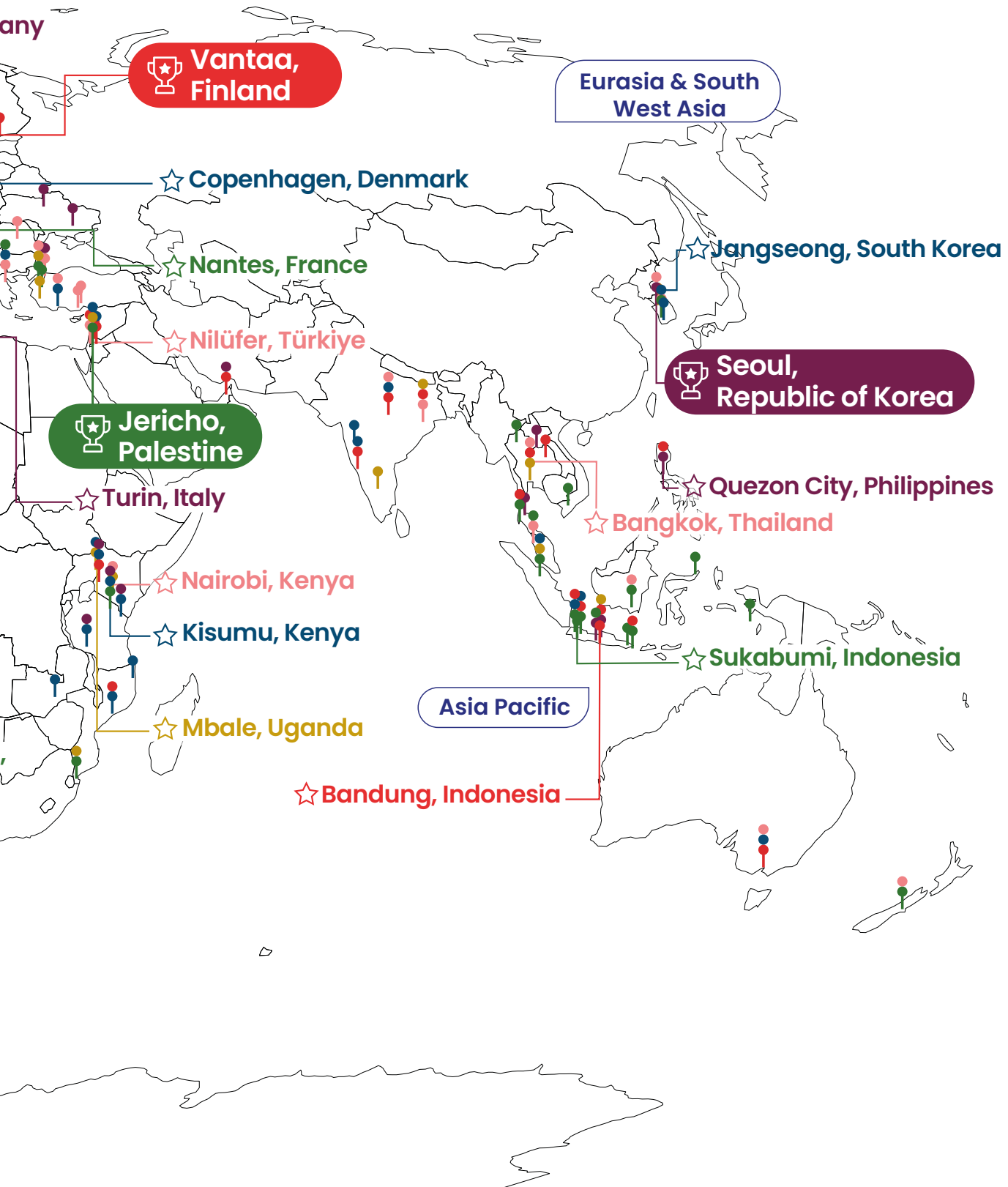
**Asia Pacific**

# Milan Pact Awards 2025



- Governance
- Sustainable Diets & Nutrition
- Social & Economic Equity
- Food Production
- Food Supply & Distribution
- Food Waste

The map shows the MUFPP signatory cities that submitted practices to the Milan Pact Awards 2025 according to their geographical area. The colours of the dots indicate the MUFPP category in which a city has submitted practices.



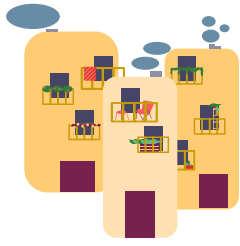
1 or more practices



Winning City



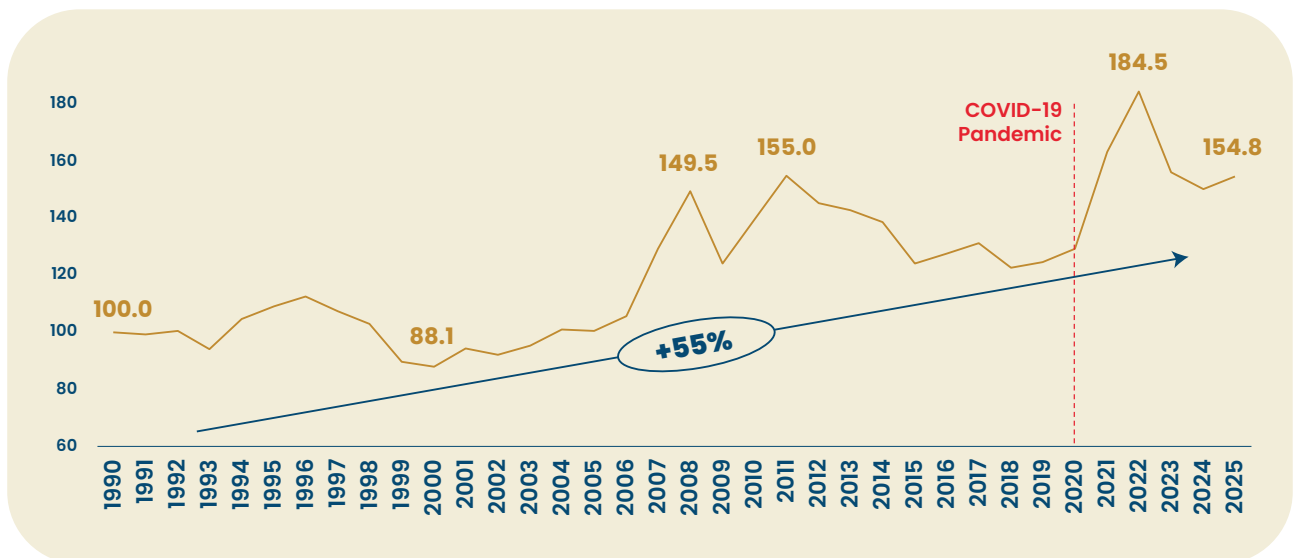
Special Mention



# Food poverty and affordability

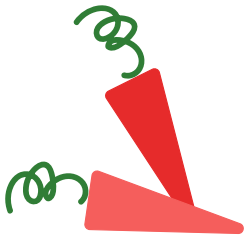
Food poverty and affordability have increasingly become central challenges for urban food systems, reflecting the long-term rise in global food prices and its impact on household purchasing power. Over the past three decades, international food prices have followed a sustained upward trajectory, with the **global Food Price Index reaching levels approximately 55% higher in 2025 compared to 1990**<sup>2</sup>. Although prices have moderated after the inflationary peak observed during the COVID-19 period, they remain significantly above historical averages, contributing to persistent pressure on the cost of living in many cities.

**Figure 2.**  
Global Food Price Index (index base 100 = 1990), 1990–2025.  
Source: TEHA Group elaboration based on FAO data, 2026.



This structural increase in food costs disproportionately affects low-income urban populations, amplifying risks of food insecurity and dietary inequalities. Reflecting these dynamics, **many of the policies addressing food poverty and access to sustainable and healthy food explicitly target population groups that are more exposed to economic vulnerability**. Among the analysed practices, 15% focus on the elderly, who often face fixed incomes and increased risk of social isolation, while 17% specifically

2. FAO, World Food Situation, World Food Price Index, 2025



address **women**, acknowledging persistent gender inequalities in income, access to resources and caregiving responsibilities.

A concrete example is provided by the practice implemented by the County of **Jangseong (Republic of Korea)**, which, by linking rural production directly to vulnerable urban groups, has provided healthy meals to 3,400 vulnerable residents, including low-income households, pregnant women and the elderly, and has created 585 jobs for women and elderly farmers and 40 jobs for vulnerable groups.



GOVERNANCE

☆ SPECIAL MENTION

## Jangseong, Republic of Korea – The AULOLA Project (From Today, Local Food Life)

Asia Pacific

The AULOLA Project (Auneulbuteo Local Food Life – “From Today, Local Food Life”) is a county-led initiative launched in Jangseong County to **address structural challenges such as population ageing, declining farm incomes and climate pressures, while strengthening social equity and local sustainability**. Built around a comprehensive local food plan adopted in 2020, the project integrates production, distribution and consumption through the establishment of a **Local Food Integrated Support Centre** and a participatory governance model involving public authorities, producers, consumers, schools and experts. By treating food as a public good and prioritising vulnerable groups—including children, women, the elderly and soldiers—the initiative promotes a **health-oriented local food system anchored in strong producer-consumer relationships and food education**.

### Impact

The AULOLA Project has delivered significant social, environmental and economic impacts. It has **improved food security for vulnerable groups** by supplying healthy local food to schools, kindergartens, military bases and welfare programmes, reaching over 3,400 vulnerable individuals, 4,000 students and 20,000 soldiers, while supporting women and elderly farmers through job creation. Economically, **the initiative mobilises more than 1,300 farms, involves 300,000 residents and generates a local food market valued at approximately €24.7 million**, with sustained public investment and strong public-private partnerships. Environmentally, the project **reduces food miles, promotes carbon-neutral food management and limits waste through local sourcing and food bank activities**. Through its integrated governance model and rights-based approach to food, Jangseong has gained national and international recognition as a scalable model for resilient and inclusive local food systems.





The increase in global food prices is driven by a combination of structural shocks, including armed conflicts, the climate crisis and growing instability in international relations. These factors have had significant **impact on the prices of main agricultural inputs**, such as energy, animal feed and fertilisers, and therefore caused an increase in prices of important commodities traded at the global level. Notable increases were recorded for oil crops (+7.4%) and vegetables (+14.1%)<sup>3</sup>.

In response to these price pressures, some cities have implemented targeted measures to stabilise food supply and protect affordability at the local level. An illustrative example is provided by the Pak Rahman programme, implemented by the Municipality of **Semarang (Indonesia)**, which addresses rising food inflation through connecting producers, distributors and traders through a penta-helix collaboration model, involving local government, the private sector, community groups and academia.



FOOD SUPPLY  
& DISTRIBUTION

## Semarang, Indonesia – Pak Rahman – Affordable and Safe Food Market Asia Pacific

Semarang’s Pak Rahman programme strengthens food affordability and supply stability through a **penta-helix collaboration model involving government, private sector, community groups and academics**. Created in response to rising food inflation, it connects producers, distributors and traders into a mobile community network that distributes strategic food items across neighbourhoods, public institutions and community events. In 2025, the initiative had been implemented 403 times, distributing more than 1,198 tonnes of food and operating food distribution cars and sub district food kiosks. Its distinctive feature lies in combining **mobile market access, coordinated supply from producing areas, and on-site food safety supervision** to ensure affordable and safe food for the city’s population.



3. FAO, “Agriculture producer prices indices 2020–2024”, 2025

At the same time, reduced access to affordable food stands is in stark contrast to the persistent issue of global food waste. According to the FAO, approximately **1.3 billion tonnes of food are wasted annually worldwide**. In response to this imbalance, the City of **Ostend (Belgium)** has developed a programme aimed at redistributing food surpluses, thereby providing more than 8,000 people living in poverty with access to affordable and diverse food options.



FOOD WASTE

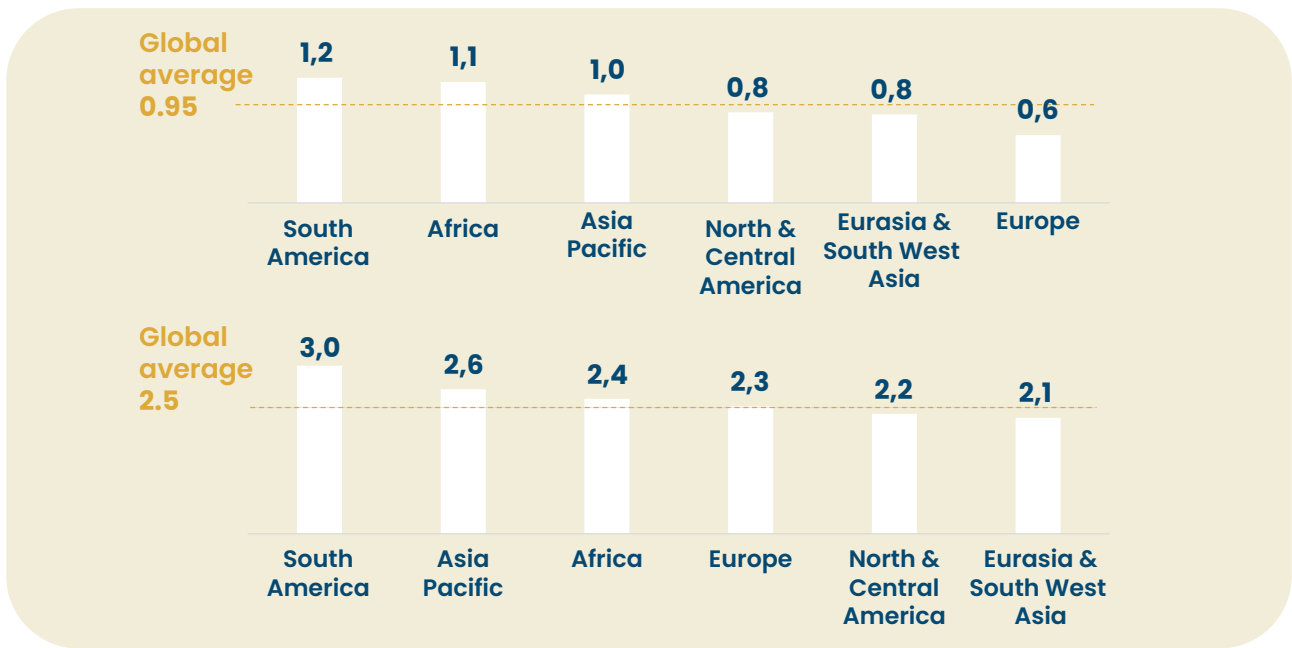
## Ostend, Belgium – Ostend Food Hub: 130 Partners for Food Justice Europe

Since 2022, the City of Ostend has developed the Ostend Food Hub, an integrated and innovative urban food strategy designed to tackle food insecurity while reducing food waste and strengthening local solidarity networks. The initiative connects **surplus food recovery, social grocery services, community kitchens and employment pathways within a coordinated multi-actor ecosystem** involving over 130 partners. Through daily collection and redistribution of high-quality surplus food from retailers, producers and catering services, the Food Hub supplies social organisations and vulnerable residents with affordable, nutritious products. In 2024 alone, more than **540 tons of surplus food were redistributed**, generating an estimated market value of €3.67 million and significantly lowering CO<sub>2</sub> emissions linked to food waste.



Practices primarily addressing food poverty and affordability are more prevalent in South America (22%) than the overall average (19%), reflecting the higher economic barriers to accessing adequate diets across the region. South America records the **highest costs for both an energy-sufficient diet and a nutrient-adequate diet**, estimated at approximately 1.2 and 3.0 Purchasing Power Parity (PPP)<sup>5</sup> Dollars respectively, compared to global averages of 0.95 and 2.5 PPP Dollars<sup>4</sup>.

4. Purchasing Power Parity (PPP) is a currency conversion method that adjusts monetary values to account for differences in price levels across countries, allowing economic indicators to be compared in terms of equivalent purchasing power. 5. FAO, Food Prices for Nutrition 4.0, 2025.



**Figure 3.**  
 Above – Cost of energy sufficient diet  
 Below – Cost of a nutrient adequate diet (PPP Dollars), 2024.  
 Source: TEHA Group elaboration based on FAO data, 2026.

In this framework, the city of **Osasco, Brazil** has implemented the programme<sup>6</sup> which supports 32,000 families per month to achieve food access and financial independence.



**SOCIAL & ECONOMIC EQUITY**

## Osasco, Brazil – Our Future Card South America

Since 2021, Osasco has implemented the “Our Future Card” as an **integrated social protection programme, combining a dedicated food assistance card with intersectoral support across social assistance, health and education**. The card ensures regular access to adequate and nutritious meals, while respecting household choice and dignity. Conditionalities such as school attendance and updated vaccination schedules reinforce human development outcomes alongside food security. The programme supports around **32,000 families per month**, reaching **56,000 children and young people aged 0 to 18**. It prioritises single mother households and families with persons with disabilities, improving equity in access to food and social services.



In general, the practices submitted reveal a shift in addressing **food poverty**, moving away from traditional charity-based models towards sophisticated “**architectures of care**” that prioritise human dignity, autonomy and the fundamental right to food. Cities in **South America and Africa**, such as **Medellín (Colombia)**<sup>7</sup> and **Nairobi (Kenya)**<sup>8</sup>, are institutionalizing large-scale school meals programmes as a primary social safety net, using these platforms not only to combat hunger, but also to improve educational retention and support local smallholder producers.



SOCIAL &  
ECONOMIC EQUITY



WINNING CITY

## Medellín, Colombia – Sustainable School Canteens South America

Since 2022, Medellín has strengthened social protection and food access through a **large-scale school meals programme** that provides daily meals to children and adolescents in urban and rural public schools. The programme delivers food on every school day through multiple modalities, including on-site preparation, transported meals, industrialised rations and milk portions. The initiative integrates sustainability into operations, including water reuse and circular practices within school canteens, while maintaining reliability at scale.

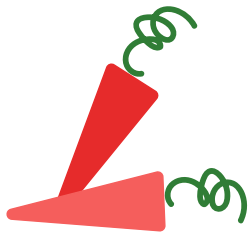
### Impact

The programme supports **232,251 students**, covering **from 20 to 30% of daily nutritional needs** depending on the modality, and prioritises children and adolescents from **low-income households, indigenous communities, migrants, victims of armed conflict and people with disabilities**. By guaranteeing regular, dignified access to food within schools, it contributes to retention, wellbeing and educational inclusion. The programme also involves teachers, food handlers, nutritionists and school communities through shared governance mechanisms, reinforcing local responsibility and ensuring that food assistance operates as a rights-based pillar of social protection rather than emergency relief.



6. Our Future Card.

7. Sustainable School Canteens: feeding the future, innovation and tradition in sustainable school canteen strategy. 8. Nairobi City County School Feeding Programme: enhancing Nutrition, growth and development for improved learning outcomes through a Sustainable School Feeding Programme.



Meanwhile, in Eurasia & South West Asia, cities like **Nilüfer (Türkiye)**<sup>9</sup> are pioneering **digital assistance through pre-paid cards** and “suspended meal” systems that enable vulnerable residents to purchase food in local markets anonymously, effectively eliminating the social stigma often associated with receiving aid.



**SOCIAL &  
ECONOMIC EQUITY**

☆ **SPECIAL MENTION**

## **Nilüfer, Türkiye – Nilüfer’s Table of Solidarity**

**Eurasia & South West Asia**

Since 2024, Nilüfer Municipality has strengthened food related social protection through a **multi-channel solidarity system** that provides affordable meals and food support while preserving dignity. The initiative integrates a City Restaurant, soup kitchen, budget friendly cafés, a suspended meal system, a food aid card and mobile food distribution, combining physical services with digital platforms to ensure transparency and human centred access. Locally produced food is prioritised, resources are used efficiently and food waste is reduced through centralised preparation and coordinated distribution.

### **Impact**

The initiative serves 1,250 families through the food aid card and provides affordable meals to **low-income residents, older people, people with disabilities, students and unemployed individuals**. The suspended meal system connects donors and recipients anonymously, reducing stigma and reinforcing solidarity. By offering dignified access to meals in public settings and combining in-person and digital tools, **the programme strengthens social inclusion, trust and access to food as a basic right**.



9. Nilufer’s Table of Solidarity: setting the table for all, affordable meals and mobile food solidarity.

A prevalent pattern across diverse urban contexts is the integration of **digital infrastructure** to enhance transparency and efficiency in social protection. From the **Tap2Eat** NFC technology in **Nairobi (Kenya)**<sup>10</sup> to **Bangkok's (Thailand)**<sup>11</sup> **real-time digital monitoring** of school meal quality, cities are leveraging data to ensure that resources reach those most in need, while fostering parental trust and public accountability.



SOCIAL &  
ECONOMIC EQUITY

☆ SPECIAL MENTION

## Nairobi, Kenya – Nairobi City County School Feeding Programme

Africa

Since 2023, Nairobi has strengthened social protection through a countywide school feeding programme delivering hot, nutritious meals to learners in public schools, with a focus on informal settlements where food insecurity is most acute. The programme uses a **hub and spoke model** with centralised kitchens and integrates **real-time tracking through the Tap2Eat system** to ensure reliable delivery and accountability. Food is sourced from local smallholder farmers and entrepreneurs, linking nutrition support with local livelihoods, while ensuring standardised portions and food safety.

### Impact

The programme reaches **318,751 learners** with daily meals, contributing to a **34% increase in school enrolment** and a **20% reduction in absenteeism**. It prioritises vulnerable children from informal settlements, with fee waivers for learners from extremely poor households, ensuring dignified access to food within the school setting. The value chain supports local farmers and SMEs and creates jobs, particularly for women and youth involved in food preparation and logistics, reinforcing food access, educational inclusion and household nutrition security.



10. Nairobi City County School Feeding Programme: enhancing Nutrition, growth and development for improved learning outcomes through a Sustainable School Feeding Programme. 11. Breakfast and Lunch Programme for BMA Schools: Thai school lunch for BMA and Thai school lunch for catering.



SOCIAL &  
ECONOMIC EQUITY

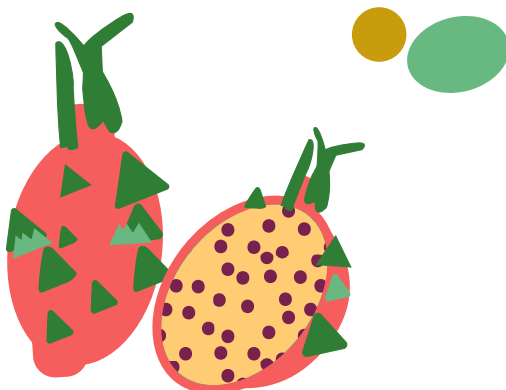
★ SPECIAL MENTION

## Bangkok, Thailand – Breakfast and Lunch Programme for BMA Schools Asia Pacific

Since 2022, Bangkok Metropolitan Administration has strengthened social protection through a **citywide school breakfast and lunch programme**, delivering two nutritious meals per day in **437 public schools**. The programme targets all children, while being especially beneficial for those from low-income households, for whom school meals often represent the main daily source of nutrition. Through the digital “Thai School Lunch for BMA” system, schools plan menus, manage ingredients and publicly track meal delivery and quality, reinforcing transparency, food safety and accountability across the system.

### Impact

The programme benefits over **250,000 students** and their families, ensuring dignified and reliable access to nutritious food, while supporting learning outcomes and long-term health. By guaranteeing **two daily meals**, it reduces food insecurity among children from vulnerable households and builds trust between families and public institutions. Caregiving and food service roles are largely held by women, strengthening gender inclusion within the school meals system, while parental access to information through the digital platform reinforces participation, confidence and social oversight.





Across all regions, the overarching trend is the institutionalisation of food as a fundamental human right, with cities like **Bologna (Italy)**<sup>12</sup> even amending their City statute to ensure that food security remains a permanent public responsibility rather than a temporary emergency response. Another example of this rights-based approach to food access is provided by the City of **Ereğli (Türkiye)**<sup>13</sup>, which provides affordable, nutritious daily lunches to all residents, with particular attention to retirees, students, low-income households and individuals at risk of poverty.



SOCIAL &  
ECONOMIC EQUITY

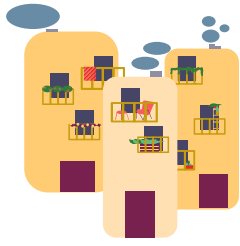
## Ereğli, Türkiye - Municipality City Restaurant

Eurasia & South West Asia

Since 2025, the **Ereğli Municipality City Restaurant** represents a rights-based and dignity-centred approach to food assistance in a medium-sized city. The restaurant operates as a public social service open to everyone, eliminating documentation requirements and stigma. The initiative is fully funded by the municipality and integrates a “**Hanging Meal**” solidarity system, allowing citizens to donate meals anonymously for those in need. The initiative **serves an average of 350–400 people per day**, providing stable and dignified access to healthy meals at affordable prices. It improves food security and social inclusion for vulnerable groups while fostering social cohesion through shared dining spaces. Through planned portioning and daily production, food waste is minimised, and the model contributes to local economic circulation by purchasing from regional producers.



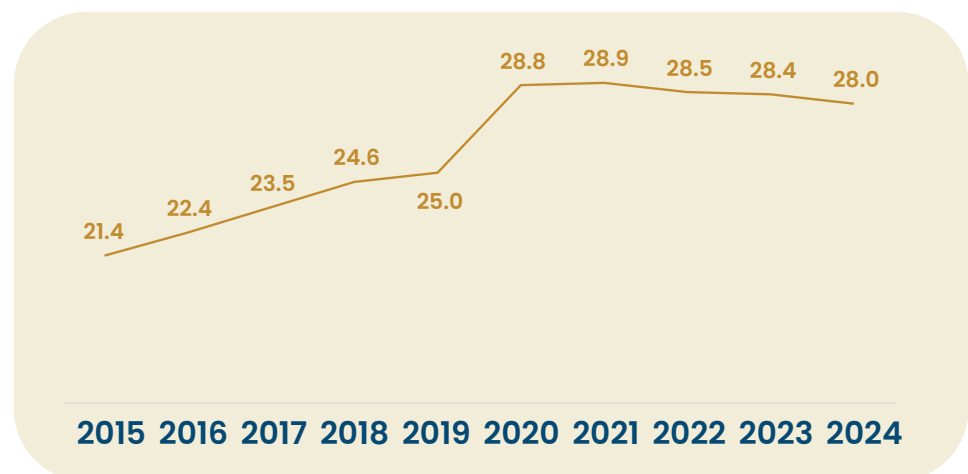
<sup>12</sup>. The Right to Food in the City Statute: Bologna formally recognises the right to food as a fundamental human right by including it in the City Statute. <sup>13</sup>. Municipality City Restaurant.



# Food insecurity: Strengthening Local Supply and Infrastructure

The second most frequently addressed issue emerging from the analysis is **food insecurity**. While affordability primarily concerns the economic capacity of households, food insecurity encompasses **disruptions in supply chains, territorial inequalities in food access and systemic fragilities** that undermine reliable food availability.

In 2025, an estimated **318 million** people across 68 countries have experienced acute **food insecurity**<sup>14</sup>, where acute food insecurity is defined as **a condition in which a person's inability to consume adequate food places their life or livelihood in immediate danger**. Such number has been reached in a context in which the share of global population in **moderate or severe food insecurity has** shown a marked **upward trend** over the past decade, increasing from **21.4%** in 2015 to **28.0%** in 2024<sup>15</sup>, with a pronounced peak of 28.8% recorded around 2020, during the Covid-19 pandemic. Although the indicator has slightly declined from its highest level, it remains significantly above pre-pandemic values, suggesting that structural vulnerabilities in global food systems persist beyond temporary shocks.



**Figure 4.**  
Share of global population  
in moderate or severe food  
insecurity (% value).  
Source: TEHA Group  
elaboration based on FAO  
data, 2026.

14. World Food Programme, "Acute Food Insecurity in 2025", 2025. 15. United Nation, "SDG Indicators Database", 2025.



Moreover, **over 75% of food-insecure people in the world live in urban and peri-urban areas**, underscoring the critical importance of urban food policy interventions. The rapid urbanisation and fragmented logistics often hinder reliable access to safe and affordable food. In this context, the practice implemented by the City of **Kisumu (Kenya)**<sup>16</sup> provides a relevant example of how urban food policies can address structural barriers to food access. Through the foundation of the **Food Liaison Advisory Council of Kisumu**, a platform for collaboration, transparency, and inclusive participation, the Municipality of Kisumu has managed to **reduce the city's reliance on food imports and improving food security for urban residents**.



GOVERNANCE

☆ SPECIAL MENTION

## Kisumu, Kenya – Enhance stakeholder participation Africa

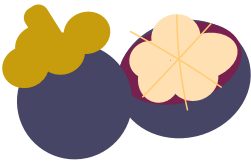
Kisumu established the **Food Liaison Advisory Council (FLACK)** in 2019 to address fragmented food governance affecting food security, nutrition and public health. FLACK functions as a multi-stakeholder platform bringing together farmers, traders, processors, civil society, researchers, youth, women and municipal departments to improve coordination across food production, distribution and consumption. Particular attention is given to the **inclusion of marginalised groups, especially women and youth, in food governance processes**. FLACK strengthened social inclusion by increasing participation of vulnerable groups in food system decision-making and improving access to information on nutrition and food safety.

### Impact

The initiative promoted urban agriculture, organic farming, waste to compost initiatives and climate smart practices, contributing to **reduced food waste and improved urban health conditions**. Small scale farmers and vendors supported through FLACK reported a 15% increase in income and a 10% reduction in post-harvest losses over two years.



16. Enhance stakeholder participation.



**Shortening the distance between producers and consumers** and upgrading urban food production and distribution infrastructures appears to be a common strategy among signatory cities. Focusing on the production side, an example is provided by the **Public bank for Native and Agroecological Seeds** practice, developed by the Municipality of **Belo Horizonte (Brazil)** to promote agrobiodiversity in urban areas, fostering urban food production and thence food security.



FOOD PRODUCTION

☆ SPECIAL MENTION

## **Belo Horizonte, Brazil – Public bank for Native and Agroecological Seeds**

### **South America**

Belo Horizonte's **Public Bank for Native and Agroecological Seeds** strengthens food security by **preserving and redistributing traditional seed varieties to support urban and peri-urban farming**. Seeds are conserved both in the Botanical Garden, with documentation and viability testing, and on-farm through agroecological properties. The programme values the knowledge of family and urban farmers, who produce around 70% of the food consumed in Brazil and promotes seed exchange, agroecological training and farmer autonomy.

### **Impact**

The initiative directly **supports urban and family farmers** by increasing access to locally adapted seeds and **strengthening agroecological production systems**. Training of seed guardians enhances farmers' skills in seed selection, multiplication and exchange, fostering community networks and food sovereignty. Environmentally, the replacement of transgenic seeds with traditional varieties contributes to biodiversity conservation, reduced use of chemical inputs and improved soil and water management in urban and peri-urban areas.





On the other hand, concrete examples of food logistics and distribution upgrading are provided by the cities of **Liège (Belgium)**<sup>17</sup> and **Tandil (Argentina)**<sup>18</sup>. In Liège, access to nutritious food for children has been strengthened through the establishment of a **short-chain Agrifood Hub linked to the Marché Matinal**, reinforcing local supply chains and shortening distribution channels.



FOOD SUPPLY  
& DISTRIBUTION

☆ SPECIAL MENTION

## Liège, Belgium – Short-chain Hub Europe

Since 2022, Liège has strengthened local food security by developing a **short chain agri-food hub starting from the Marché Matinal**, turning it into shared logistics infrastructure for storage, aggregation and distribution. The hub connects local producers and cooperatives to public demand, concentrating offices, order preparation and delivery functions to stabilise supply to schools, nurseries and other institutions. A second building is planned to host vegetable processing and canning, further reinforcing year-round availability of local, seasonal products. By organizing short supply chains through shared infrastructure, the initiative reduces fragmentation, improves efficiency and supports reliable access to nutritious food.

### Impact

The hub **supplies the municipal kitchen with around 4,000 meals per day for schools and nurseries**, improving access to healthy food for children. It supports over 25 direct jobs and strengthens socio-professional integration through the involvement of local cooperatives and social-purpose organisations. Shared logistics reduce transport distances and food losses, while neighbourhood-based facilities anchor benefits locally and contribute to a more resilient and inclusive urban food supply system.



17. Short-chain Hub. 18. Tandil Gondola.

In **Tandil (Argentina)**, municipal action has focused on encouraging the availability of locally produced food on retail shelves, supporting local producers while improving consumer access to fresh and affordable products.



FOOD SUPPLY  
& DISTRIBUTION

☆ SPECIAL MENTION

## Tandil, Argentina – Tandil Gondola

### South America

The Tandil Gondola programme was created in 2019 to **promote the production and commercialisation of locally manufactured food products within the Department of Tandil**. The initiative requires wholesale and retail commercial establishments to allocate a clearly identified shelf space for products made in Tandil, marked with the label “Made in Tandil,” both on physical shelves and through signage and graphic materials. The programme supports local producers by facilitating access to medium sized stores, supermarkets and hypermarkets, increasing the visibility of locally produced goods and encouraging consumers to choose products manufactured within the territory.

### Impact

The Tandil Gondola programme has **supported more than 100 local businesses** by enabling their products to reach retail shelves, fostering direct relationships between producers and retailers and strengthening small scale production. By promoting short supply chains and reducing the distance between production sites and points of sale, the initiative contributes to lowering transportation needs and associated environmental impacts. The programme has supported local economic development by expanding market access for Tandil based producers and entrepreneurs, improving product visibility and facilitating the sale of locally manufactured goods at affordable prices for residents.



A further example is provided by the City of **Bethlehem (Palestine)**, where a community-based initiative launched in 2024 fosters local food production by women, a group particularly exposed to economic vulnerability.

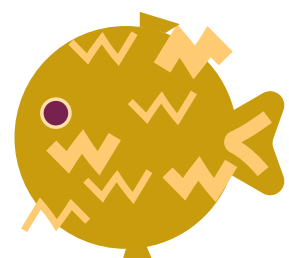
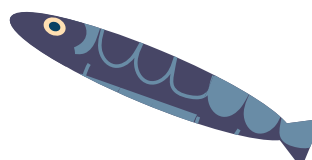


SOCIAL &  
ECONOMIC EQUITY

## Bethlehem, Palestine – The Homemade Products Market

Eurasia & South West Asia

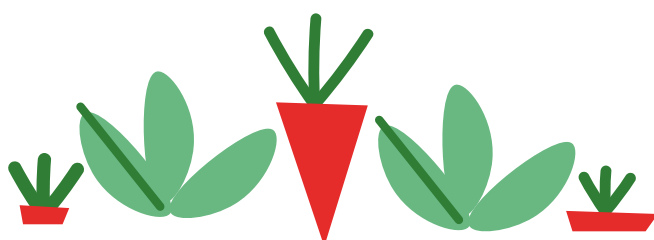
Since 2024, in a context marked by prolonged conflict, economic instability and restricted mobility, Bethlehem launched the **Homemade Products Market** as a low-cost, community-based response to food insecurity and economic marginalisation. The weekly Women's Market, held at the Bethlehem Peace Centre, provides a **structured platform for women to sell homemade, locally sourced food products and traditional goods**. The initiative shortens the distance between producers and consumers by facilitating direct market access, reducing dependence on intermediaries and strengthening local food circulation. The initiative empowers approximately **40 women** from Bethlehem and surrounding villages, many of whom are economically vulnerable or primary caregivers. By providing recurring selling opportunities, the market enhances **women's financial autonomy and strengthens their visibility in the local economy**. Operating on a minimal budget (around \$500 per month for materials and stipends), the initiative demonstrates cost-effective food system resilience. It increases household incomes, supports local agricultural producers and reduces transport-related emissions through localised supply chains.



In terms of food insecurity, regional disparities remain particularly evident, in **Africa the share of population in moderate or severe food insecurity reaches levels close to 59% in 2024<sup>19</sup>**, the highest concentration globally. Consistent with this pattern, food insecurity emerges as the issue most frequently addressed by practices submitted by African cities. For example, a recurring approach observed in cities such as **Ouagadougou (Burkina Faso)<sup>20</sup>**, **Mbale (Uganda)<sup>21</sup>** and **Bafoussam (Cameroon)<sup>22</sup>**, involves the physical rehabilitation of traditional markets, transforming them into modernised hubs that integrate improved hygiene standards with localised distribution networks to safeguard consumer health and vendor livelihoods. Crucially, these interventions are designed with an awareness of the predominantly informal nature of many African markets, seeking to upgrade infrastructure and safety conditions without undermining existing trading practices and socio-economic dynamics.



*Bafoussam (Cameroon) - "Improve and expand the commercial facilities of the city of Bafoussam"*



19. United Nation, "SDG Indicators Database", 2025 20. Relaunch urban food markets: rehabilitation and strengthening of local market infrastructure in Ouagadougou to support inclusive and resilient food systems. 21. Food Access through Infrastructure Improvements in wet markets: access of safe and nutritious food through improved market infrastructure in traditional markets. 22. Improve and expand the commercial facilities of the city of Bafoussam.



FOOD SUPPLY & DISTRIBUTION



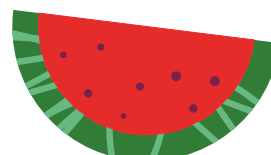
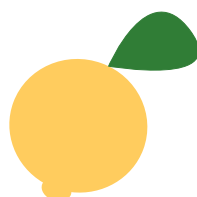
WINNING CITY

## Ouagadougou, Burkina Faso – Relaunch urban food markets Africa

Ouagadougou faces the combined pressures of rapid urbanisation, informal market dominance and inadequate health regulations. The **“Relaunch Urban Food Markets”** initiative focuses on the strategic rehabilitation of local market infrastructure, starting with a pilot at the Naabi Yaar market. The city has moved beyond simple infrastructure repair to a participatory design model. It created “Golden Restaurants” and sustainable vegetable stalls that are certified for hygiene standards. Crucially, these vendors are linked directly to agroecological producers in the city’s Green Belt (CVO), transforming informal street food into a recognised, safe and resilient supply chain. The initiative has been developed within the framework of **the AfriFOODlinks project, which supports inclusive, multi-stakeholder experimentation and governance platforms aimed at transforming urban food environments**. The governance of the project is managed through a Multistakeholder Platform that brings together producers, traders and civil society, ensuring that all the needs are considered in decision-making.

### Impact

The project targets **50 vendors and over 50,000 consumers**, with a projected 30% increase in vendor income through improved storage and hygiene. By formalizing the participation of vendors through microcredit and equipment subsidies, the city is building a sustainable municipal food systems service that serves as a model for other cities.



This focus on infrastructure is often paired with a push for traceability, ensuring that fresh produce remains safe as it moves from rural and peri-urban production zones to the urban centres.



FOOD SUPPLY  
& DISTRIBUTION

☆ SPECIAL MENTION

## Mbale, Uganda – Food Access through Infrastructure Improvements in Wet Markets

Africa

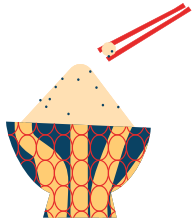
Since 2025, Mbale has strengthened food security by **upgrading infrastructure and food safety practices in traditional wet markets**, which serve as the main access point to food for a large share of the population. Building on food safety assessments that identified contamination risks in fresh fruits and vegetables, the city is developing traceable supply chains linking peri-urban and rural producers to markets, improving preservation, storage and commerce. Infrastructure upgrades are combined with training for farmers and vendors in good agricultural and handling practices, aiming to **ensure continuous access to safe, nutritious food**, while stabilizing market operations and reducing losses along the supply chain.

### Impact

The initiative improves public health and nutrition by reducing foodborne illnesses and malnutrition risks for urban consumers. It strengthens livelihoods by securing market access for smallholder farmers and traders, supporting income stability and job creation across production, distribution and retail. **Women benefit through improved social inclusion and economic independence, while consumer awareness activities promote safer food choices.** By reinforcing trust in traditional markets and connecting them more effectively to local producers, the initiative enhances inclusive access to food and resilience of the urban food system.



Addressing food insecurity is also a prominent policy priority in the **Asia-Pacific Region**, where a distinct strategic shift can be observed towards cities assuming a more active role as market facilitators. In this context, municipal governments are increasingly intervening to bridge the gap between urban consumption and nearby food production.



Cities like **Sukabumi (Indonesia)**<sup>23</sup> and **Naju (Republic of Korea)**<sup>24</sup> are implementing innovative models that eliminate exploitative intermediaries, ensuring fair prices for smallholder farmers while stabilizing food costs for residents through community-based solutions and public procurement systems.



FOOD PRODUCTION

☆ SPECIAL MENTION

## Sukabumi, Indonesia – One Roof (One Region One Offtaker) Asia Pacific

The One Roof (One Region One Offtaker) programme was developed by the City of Sukabumi to address food insecurity among smallholder rice farmers caused by dependence on middlemen and price volatility. The city established a **municipally supported off taker system that links farmer cooperatives directly to stable markets, ensuring fair and transparent access to rice sales**. The initiative combines farmer capacity building, post-harvest handling support and institutional market access, including links with public procurement such as school meals programmes. By integrating food policy with land-use planning, the programme supports the protection of agricultural land and the preservation of local rice production.

### Impact

The programme directly benefits over 300 smallholder farmers and vulnerable, low-income households, who have experienced rice price increases of 10–20% compared to middlemen rates. It strengthens farmer–buyer relationships through contract-based procurement, reducing dependence on informal credit. The initiative has **helped stabilise 47 hectares of agricultural land** and contributes to the city’s objective of securing 425 hectares of protected food land by 2040. By shortening supply chains and embedding food access within local governance, the programme enhances food availability, farmer livelihoods and urban food security.



23. One Roof (one region one offtaker): Strengthening farmer welfare and preserving farmland through a fair and transparent local rice off taker network. 24. Naju Food Plan benefits both producers and consumers: establishing a sustainable food system by realizing a public food supply support system for universal and equal food security for all Naju citizens.



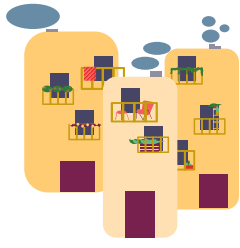
GOVERNANCE

## Naju, Republic of Korea – Naju Food Plan benefits both producers and consumers

Asia Pacific

Naju's initiative establishes a city public food supply system to restore the local food ecosystem and balance urban and rural interests. Since 2018, the city has created a **dedicated regional food plan department and governance structure**, organised around 1,600 farm households and implemented a **public procurement model linking local producers with public institutions**. The programme supplies 11 small rural schools, supports 338 female farmers, 371 elderly farmers and 320 small-scale farmers. Its distinctive feature lies in embedding public institutions at the core of a cooperative, short distance food system that strengthens social inclusion, reduces food mileage and promotes a sustainable local food ecosystem.



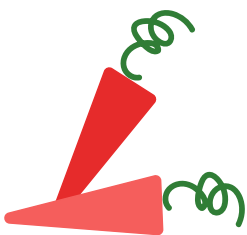


# The climate crisis and its impacts

The existing food insecurity patterns are exacerbated by the climate crisis. Climate-related hazards such as droughts, floods and extreme temperature events are increasingly affecting agricultural productivity, reducing food availability and amplifying volatility across food supply chains. Over the past three decades, climate-related hazards have generated substantial losses across global food production systems, significantly affecting the availability and stability of key commodities. According to the United Nations, in the past 30 years, disasters accounted for the **loss of 4.6 billion tonnes of cereals, 2.8 billion tonnes of fruits and vegetables, and 900 million tonnes of meat and dairy**<sup>25</sup>. As mentioned in Chapter 1, these impacts correspond to cumulative economic losses estimated at around **3.3 trillion US Dollars** over the same period. Nonetheless, beyond their economic dimension, such disruptions have also translated into measurable nutritional consequences, corresponding to an estimated **reduction of around 320 kilocalories intake per person per day, equivalent to 13–16% of average dietary energy requirements**.<sup>45</sup>

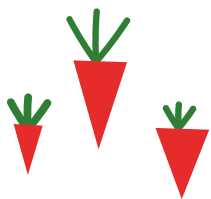
Evidence from the World Food Programme further suggests that these pressures are likely to intensify as global temperatures rise, with projections indicating that a 1°C increase in average temperature could lead to an additional 4.8 percentage point rise in the share of the global population experiencing food insecurity.<sup>26</sup>

At a regional level, the impacts of climate-related disruptions are unevenly distributed, with **Africa projected to bear the highest relative burden** despite experiencing lower absolute losses. Estimated damages amount to approximately 611 billion US Dollars, corresponding to around 7.4% of the region's agricultural gross domestic product (GDP), the highest proportional impact globally. Considering that in many African economies agriculture represents a major source of employment,



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25. FAO, "The Impact of Disasters on Agriculture and Food Security", 2025. 26. World Food Programme, "Impact of Global Warming on Food Security", 2025.



income and food provision, the impact of such losses extends beyond the agricultural sector, contributing to heightened food insecurity, increased vulnerability of rural livelihoods and broader socio-economic instability.

The climate crisis **emerges as the most frequently addressed issue in the practices analysed among European cities** (21% vs. 18% average), reflecting a broader policy shift that has gained momentum over recent years. This growing attention is closely aligned with the strategic direction set by the European Union through initiatives such as the European Green Deal and related regulatory frameworks.

Within this policy context, the **Plastic Exit Plan** issued by the Municipality of **Paris (France)**<sup>27</sup> provides a concrete example of how European cities are translating climate objectives into food-system action.



FOOD SUPPLY  
& DISTRIBUTION

☆ SPECIAL MENTION

## Paris, France – In Paris, plastic comes off the table! Europe

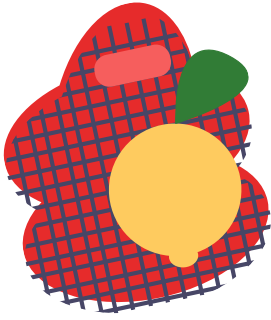
To reduce pollution and environmental pressures, Paris has identified plastic use in food systems as a key priority. Since 2018, the city has progressively strengthened its commitments, culminating in the adoption of a **Plastic Exit Plan** for collective catering in 2021. This plan sets ambitious targets that go beyond national and European regulatory requirements, mandating that **by 2026 no plastic materials will come into contact with food and all single-use plastic items will be eliminated**.

### Impact

The initiative **applies to more than 30 million meals served annually**. The phase-out of single-use plastics has reduced plastic waste, limited pollution and lowered greenhouse gas emissions associated with waste management and disposal. The initiative has also contributed to food waste reduction by promoting reusable and compartmented stainless-steel trays.



27. In Paris, plastic comes off the table!



For what concerns the agricultural and food sector specifically, **the European Commission shared a Vision for Agriculture and Food with a 2040 horizon**. This strategic framework outlines a long-term pathway towards a resilient, competitive and sustainable European agri-food system, positioning **agriculture and food policies as central to achieving climate neutrality while safeguarding economic viability and food security**. The Vision emphasises innovation, resource efficiency, biodiversity protection and generational renewal, while promoting fairer value chains and stronger resilience to environmental and geopolitical shocks. By framing food systems as a key lever for both environmental transition and rural development, the initiative provides a policy reference that increasingly influences how European cities integrate climate objectives into local food strategies, aligning urban action with broader continental priorities.<sup>28</sup>

Urban food systems are both a major contributor to and a primary victim of the climate crisis. Cities are responding by transitioning to **territorial resilience strategies** that address the carbon and water footprints of production and logistics. The practices shared reveal **clear geographic differences in climate responses**. While cities in the Global South primarily focus on adaptation to extreme environmental pressures, initiatives in the Global North lean towards mitigation and systemic governance, prioritizing carbon sequestration through carbon farming or protecting agricultural land to decarbonise food logistics.



28. European Commission, "A Vision for Agriculture and Food", 2025.



In South America, **Chone (Ecuador)**<sup>29</sup> addresses land degradation through a data-driven agroforestry model, which exploits digitalisation to enhance its climate adaptability.



FOOD PRODUCTION

☆ SPECIAL MENTION

## Chone, Ecuador – Productive Reforestation using Cacao South America

Chone addresses land degradation caused by intensive livestock farming through an agroforestry model. The initiative **restores degraded landscapes by combining fine-flavour national cocoa with native fruit and forest species**. A key technological innovation is the use of the KoboToolbox digital tool to map 216 communities and track production data from distribution to harvest, enabling informed decision-making for climate adaptation. The project aims to **reforest 5,000 hectares by 2027**, strengthening the local food system's resilience against the frequent floods and droughts common in the region.

### Impact

The initiative strengthens rural livelihoods and promotes inclusive territorial development. Since its launch, it has **engaged over 2,000 producers**, with targeted participation of rural youth, women, older adults and children across multiple rural communities. Capacity building and technical support improve producers' skills and long-term income opportunities, while the expansion of agroforestry systems contributes to job creation throughout the value chain, with an estimated 3,000 jobs created by 2027. By restoring agricultural productivity in degraded areas, the initiative supports food security and economic stability for farming households, reducing vulnerability to poverty and climate shocks.



<sup>29</sup>. Productive Reforestation using Cacao: Reforestation to Achieve Economic and Environmental Resilience in the Cacao Sector of Chone Canton.



**Grenoble Metropolitan Area (France)**<sup>30</sup>, brings an example of **systemic governance** from the Global North. The Municipality developed a Strategic Vision, shared with Grenoble Greater Metropolitan Area, to ensure a common strategy for the sustainable transition of the local food sector.



GOVERNANCE

☆ SPECIAL MENTION

## Grenoble, France – Inter-Territorial Food Project (PAiT)

Europe

The Inter-Territorial Food Project addresses climate change and food system resilience through structured cooperation between urban and rural areas within the Grenoble metropolitan area. The initiative brings together several inter-municipal authorities, covering both densely populated urban centres and surrounding rural territories, to implement a shared agricultural and food transition strategy. Its innovative approach lies in the creation of a **common long-term strategic vision for 2050**, jointly defined by institutional, professional and community stakeholders, and translated into coordinated collective actions. The initiative promotes low-input, healthy and sustainable food systems, preservation of agricultural land, support for mountain livestock farming, adaptation of agricultural practices to ecological and climate challenges and increased farm autonomy in the context of resource scarcity and climate change. Quantified targets and a dedicated food system observatory allow for **systematic monitoring of progress across more than 90 indicators**, strengthening accountability and policy effectiveness.

### Impact

By promoting access to high-quality, sustainable food for all and reinforcing local food self-sufficiency, the project contributes to food security across both urban and rural communities. Training initiatives and collective actions, such as the Food Transition Month and professional training activities, support skills development and workforce engagement within the food system. The emphasis on shared decision-making through **the Inter-Territorial Food Council enhances stakeholder participation, social cohesion and long-term territorial alignment**, ensuring that the food transition reflects the needs and capacities of diverse local actors across the area.



<sup>30</sup>. Inter-Territorial Food Project (PAiT): cooperation between urban and rural areas to implement the agricultural and food transition in the Greater Grenoble region.

A key example of systemic governance from the Global North is offered by the City of **Austin (United States)** through the Austin–Travis County Food Plan, a community-driven roadmap developed to address food access disparities, climate challenges and regional coordination gaps.



GOVERNANCE



WINNING CITY

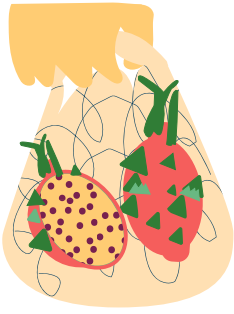
## Austin, United States – Austin/Travis County Food Plan North & Central America

The Austin/Travis County Food Plan is a community-powered roadmap that centres climate resilience and social equity. Unlike traditional top-down planning, Austin utilised a **“compensated leadership model,”** **paying historically excluded community members for their expertise in identifying climate vulnerabilities.** The plan incorporates the region’s first supply chain vulnerability assessment, identifying how climate shocks could disrupt food access. It sets a **goal to reduce food waste by 20% by 2030** to mitigate methane emissions and promote regenerative agriculture to protect local farmland from urban sprawl and heat-related degradation. This governance model proves that climate resilience must be co-authored by the most impacted residents to be truly effective.

### Impact

The initiative generates strong social impact by centring equity, inclusion and community empowerment. Over **3,625 residents participated in the planning process,** with a particular focus on low-income communities, migrants and BIPOC populations historically excluded from food policy decision-making. Equity measures such as childcare provision, transportation support, language access and compensated participation enabled broad and meaningful engagement. The Plan **strengthens food access** through community food hubs, farmers markets and culturally appropriate food retail, while supporting **workforce development, leadership opportunities and entrepreneurship within the local food system.** It also benefits farmers, small food businesses, nonprofits, health and education institutions and neighbourhood organisations, contributing to job creation, improved food security and stronger community cohesion across both urban and rural areas.





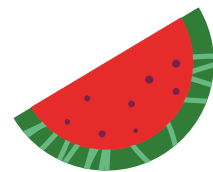
A distinct pattern also emerges based on **city scale**, where large metropolises, such as **Cape Town (South Africa)**<sup>31</sup>, with its Food System Programme, leverage their institutional capacity to develop comprehensive resilience roadmaps and data-driven scenario planning to anticipate food system shocks.

In contrast, smaller cities like **Mouans-Sartoux (France)**<sup>32</sup> often serve as specialised innovation laboratories, implementing replicable technical solutions like municipal organic farms that are more easily tested at the local level.

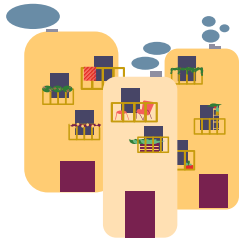


*Mouans-Sartoux (France) - "Creation of a National Network of Public Farms"*

Across these diverse contexts, a unifying trend is the transition from isolated environmental projects towards integrated territorial strategies that view food policy as a fundamental strategic lever for addressing climate crisis.













**31.** Cape Town's Food System Programme: mainstreaming Food Systems through networks of people and action. **32.** Creation of a National Network of Public Farms: document and develop municipal, intermunicipal and regional public farms through the creation of a national network.



## Resource Constraint

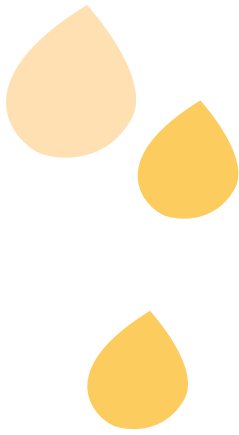
Beyond its direct impacts on agricultural productivity and food security, the climate crisis is progressively reshaping the availability of key natural resources, intensifying structural constraints on land and water. This growing pressure on land and water availability is already evident today, as **global consumption patterns continue to exceed the planet’s regenerative capacity**. The “Earth Overshoot Day” is a measure of pressure on resources which refers to the date each year when humanity’s demand for ecological resources and services surpasses what Earth can regenerate within that same year. 1971 was the first year in which humanity consumed more natural resources than the Earth could regenerate within a single year. Since then, this threshold has moved progressively earlier in the calendar and in 2025 it reached July 24<sup>th</sup>, meaning that, **last year, humanity consumed the resources of 1.8 “Earths”**<sup>33</sup>.

**Figure 5.** Earth Overshoot Day and number of Earths consumed (date and absolute value), 1971–2025. Source: TEHA Group elaboration based on Global Footprint Network data, 2026.

Earth Overshoot Day 1971–2025		
1971		1 (December 25)
1980		1.1 (November 16)
1990		1.2 (October 18)
1995		1.3 (October 9)
2000		1.4 (September 17)
2005		1.5 (August 27)
2010		1.6 (August 10)
2015		1.7 (August 7)
2024		1.7 (August 1)
2025		1.8 (July 24)

Such pressures will be further amplified by **demographic growth**, which continues to increase **global food demand** while reducing the amount of arable land and natural resources available per capita. As mentioned in Chapter 1, as global population reached around 8.3 billion people in 2025 and it is expected to rise up to 10 billion by 2050<sup>34</sup>, global freshwater withdrawals, approximately 4.6 trillion cubic meters in 2025, are projected to 8.3 trillion cubic meters by 2050<sup>35</sup>, reflecting growing competition for **limited water resources** across sectors. In this context, in 2026, the

33. Global Footprint Network, “Earth Overshoot Day”, 2026. 34. United Nations Department of Economic and Social Affairs (UNDESA), World Population. 35. UN-Water, Sustainable Development Goal 6 Synthesis Report 2018 on Water and Sanitation, United Nations, 2018.



**United Nation declared a “global water bankruptcy”<sup>36</sup>**, indicating that a concerning number of strategic water systems have crossed thresholds beyond which they can no longer be restored to previous conditions.

These dynamics are particularly critical for **agriculture**, which currently accounts for about 72% of global freshwater withdrawals and remains highly vulnerable to water scarcity, with direct implications for food production and supply stability.

These pressures are particularly acute in **water-stressed regions**, where chronic scarcity directly threatens agricultural production and food system stability. In this context, the City of **Jericho (Palestine)** provides a relevant example of local adaptation, having implemented **wastewater reuse** solutions to sustain agricultural activities and mitigate the impacts of long-term water scarcity in an arid environment.



FOOD PRODUCTION



WINNING CITY

## Jericho, Palestine – Renewed Water for Sustainable Agriculture

Eurasia & South West Asia

Jericho faces extreme water scarcity in an arid zone, a challenge exacerbated by climate-driven desertification. The initiative represents a breakthrough in circular resource management by **transforming municipal wastewater**, previously a pollutant and a waste product, **into a high-quality resource** specifically treated for the date palm sector. The most significant innovation is the facility's power source: a 2-megawatt solar energy system. This integration makes the entire treatment and irrigation cycle carbon-neutral, reducing the greenhouse gas footprint. The project supports the 16.5 km<sup>2</sup> green belt that acts as a buffer against desertification and improves local air quality. The date palms also sequester between 92,400 and 93,225 tonnes of CO<sub>2</sub> equivalent annually.

### Impact

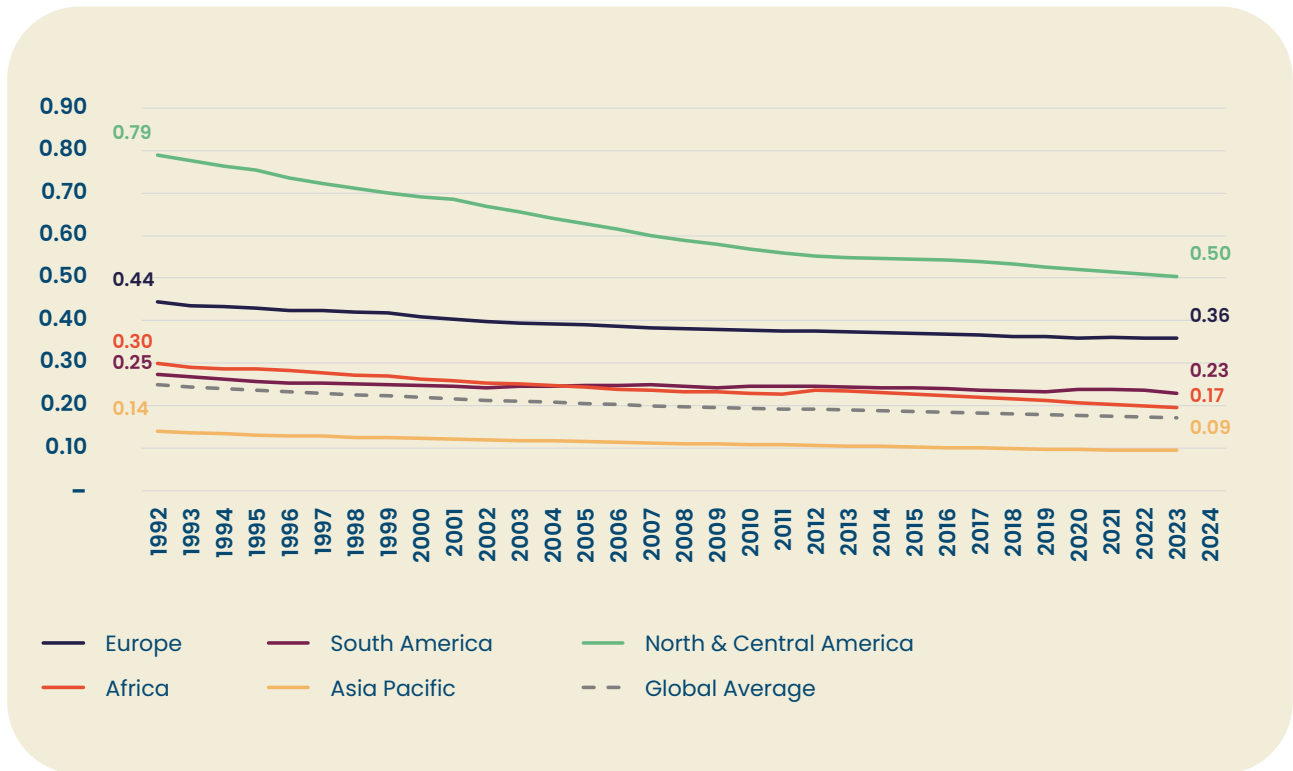
The practice generates significant social benefits by strengthening agricultural livelihoods and improving food security at the community level. A stable and affordable water supply supports approximately **6,000 agricultural jobs, with a notable involvement of women**, who represent around 40% of the workforce in processing and packaging activities. Improved agricultural productivity enhances household incomes and contributes to community stability, while reliable access to treated water reduces health risks.



36. United Nations Institute for Water, Environment and Health, “Global Water Bankruptcy”, 2026.

Moreover, the agricultural sector is expected to increase output by nearly 50% to meet future global demand<sup>37</sup>, further intensifying pressure on already stressed ecosystems. These challenges unfold within a context in which **arable land per capita has been steadily declining at the global level**. The trend is particularly evident in North & Central America, which experienced the steepest decrease, however, it appears to be more concerning in Africa, where the largest increase in population is expected.

**Figure 6.** Arable land per capita (hectares per person), 1992–2023.  
Source: TEHA Group elaboration based on United Nations, 2026.



37. FAO, The State of the World's Land and Water Resources for Food and Agriculture 2025 – The potential to produce more and better. Rome, Food and Agriculture Organisation of the United Nations, 2025.



Moreover, nearly **40% of global arable land is already affected by aridity and soil degradation**<sup>38</sup>, limiting agricultural productivity and increasing the vulnerability of food systems to climate variability.

In response to these long-term pressures on land availability and soil quality, the Metropolitan Area of **Nantes (France)** provides a relevant example of strategic agricultural policy that protects peri-urban farmland from development pressures to strengthen long-term food system resilience.



FOOD PRODUCTION

☆ SPECIAL MENTION

## Nantes, France – Metropolitan agricultural land strategy Europe

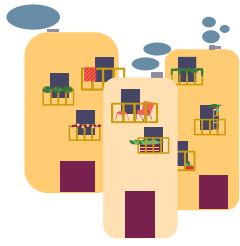
The Metropolitan agricultural land strategy addresses climate change and long-term food system resilience by protecting and structuring agricultural land use in peri-urban areas under increasing development pressure. The initiative responds to land consumption, farm fragmentation and competition between agricultural and non-agricultural uses by introducing a **metropolitan framework to guide land acquisition, protection and reuse for food production**. Its innovative value lies in the strategic mobilisation of land governance tools, including direct land acquisition, reclamation of abandoned agricultural land and the permanent protection of agricultural and natural areas through dedicated zoning mechanisms. It contributes to the preservation of soils, biodiversity and natural ecosystems and supports sustainable and organic farming practices.

### Impact

By securing land tenure and access to land, it **supports farmers**, including new entrants without an agricultural background, and **contributes to employment stability** in the local food system. The strategy also strengthens cooperation among municipalities, farmers' organisations and chambers of agriculture, fostering shared governance and collective responsibility for land resources. The initiative has proved its effectiveness, with the number of farms with organic certification being 30%, compared with 18% in 2016.



38. JRC, "Land degradation in global arable lands", 2021.



# Circularity: From Waste to Resource

Within this evolving policy landscape, **circularity is emerging as a systemic response to both climate pressures and resource constraints.** As environmental impacts and demographic demand place additional strain on food systems, **cities are adopting circular approaches** designed to reduce waste, extend the life cycle of resources and strengthen local food loops.

The urgency of this transition is highlighted by global statistics: nearly **one-third of all food produced worldwide is lost or wasted along the value chain**, with approximately 13% lost before reaching retail and a further 19% wasted at the consumer level<sup>39</sup>.

For example, with the aim of reducing retail losses, the City of **Milan (Italy)** has developed a “Food Aid Hub” which in 2024 has recovered food from 47 retailers and redistributed it to 126,000 people, including 3,800 children, and supporting 176 non-profit organisations across the city.



39. UNEP, “UNEP Food Waste Index Report 2024”, 2025.



FOOD WASTE

## Milan, Italy – Food Aid Hub: an architecture of care Europe

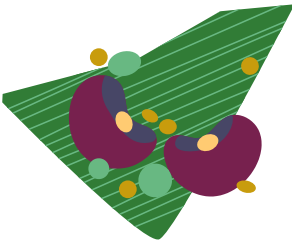
Since 2019, Milan has developed a citywide network of Food Aid Hubs to address food waste and food insecurity through a place-based, circular and solidarity driven model. The hubs recover surplus food from supermarkets, school canteens, fresh markets and local businesses and redistribute it to third sector organisations supporting vulnerable residents. In 2023, the city launched a large scale co-designing process involving more than 30 civil society organisations and 12 municipal departments, leading to the opening of three new hubs in 2024. In 2024, nearly **800 tonnes of surplus food were recovered and redistributed, reaching about 126,000 people, including 3,800 children, through 176 non-profit organisations across the city.** The Food Aid Hubs improve access to food for low-income families, migrants and older people, while strengthening community bonds and proximity-based welfare.



Beyond representing a major inefficiency in resource use, **food waste is estimated to account for around 8–10% of global greenhouse gas emissions and to utilise 28% of agricultural land** (approximately 1.4 billion hectares). Overall, the direct economic consequences to producers of food wastage is estimated around **750 billion US dollar per year**<sup>40</sup>.



40. UN Environmental Programme, 2026.



In this context, urban food policies can address food losses through a combination of complementary approaches. These include **education and community based initiatives** aimed at fostering awareness and behavioural change, **redistribution of surplus food** to prevent edible products from becoming waste and **preventive measures** targeting food losses along the supply chain.

The City of **Columbus (United States)** represents a strong example of a community-based approach to food loss and waste reduction, combining city-wide education, of students, residents and businesses, with the set-up of free food scraps drop-off sites.



FOOD WASTE

☆ SPECIAL MENTION

## Columbus, United States – City of Columbus Food Waste Reduction Strategy North & Central America

Since 2023, Columbus has implemented a citywide food waste reduction strategy combining prevention, rescue, composting and education, aligned with climate and equity goals. The city updated its refuse code to support residential composting, expanded food rescue through Columbus Food Rescue and launched food scraps drop off sites and Waste and Reuse Convenience Centres. In 2024, more than **84 tonnes of food were diverted from landfills, while over 1,000,000 pounds of edible food were redistributed**. By 2025, 185,919 pounds of food scraps were composted, avoiding 158,905 metric tonnes of CO<sub>2</sub> emissions.

### Impact

The initiative benefits nearly 1 million residents by improving food access and reducing environmental health burdens. Food rescue operations engage over 100 regular donor locations and supply more than 80 receiving agencies, including food pantries, shelters and child and family service organisations. Education campaigns reach residents, students and businesses, while savings from diverted food, valued at over €540,000, support food insecure households and community organisations, strengthening local food security and social resilience.



Another relevant programme for the education of the local community to reduce food waste is brought by the City of **Bogotá (Colombia)**, with the organisation of its annual **Food Loss and Waste Reduction Week**, which mobilises citizens, institutions and local stakeholders to foster awareness and behavioural change across the food system.



FOOD WASTE

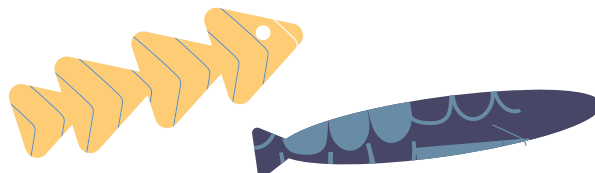
☆ SPECIAL MENTION

## Bogotá, Colombia – FLW Reduction Week South America

The Bogotá **Food Loss and Waste Reduction Week**, launched in 2020 by the Secretariat of Economic Development, is a multi-sector initiative designed **to raise awareness and mobilise action across the food supply chain to prevent and reduce food loss and waste**. The initiative engages public institutions, private companies, universities, research centres, civil society organisations and international partners through in-person, virtual and hybrid activities including hackathons, fairs, forums, competitions, donations and educational challenges. Each edition focuses on promoting responsible consumption, improving food handling practices and strengthening coordination among actors involved in production, distribution, retail and consumption.

### Impact

Between 2020 and 2024, the Food Loss and Waste Reduction Week reached over 800,000 citizens, with participation expanding **from 15,000 participants** in its first edition to over 350,000 by 2022. The initiative supported more than 80 activities in 2023 and over 360,000 students across 2023 and 2024, while facilitating the recovery and redistribution of food, including more than 1 tonnes collected through donation points in 2024. Circular economy practices promoted through the initiative led to the recovery of 43,118 tonnes of food and savings of 105,025 tonnes of CO<sub>2</sub> equivalent emissions, while generating economic value for farmers and reducing waste across multiple stages of the food system.



For what concern redistribution of food surplus, concrete examples are brought by the cities of Barcelona (Spain), Vantaa (Finland) and Panaji (India). **Vantaa (Finland)**<sup>41</sup>, tackles specifically **food surplus generated by school serving lines**, and has developed a systemic model that safely redistributes cooked surplus food through a network of NGOs while converting unavoidable biowaste into renewable energy.



FOOD WASTE



WINNING CITY

## Vantaa, Finland – Shared Table – Food Waste Ecosystems Europe

Vantaa's initiative tackles one of the most challenging segments of food waste: "serving waste", which refers to cooked food left on serving lines in schools, institutional kitchens and private restaurants. Vantaa developed a systemic model that uses cold chains, allergen documentation and real-time coordination to safely redistribute this food through a network of over 80 NGOs. A key technological breakthrough in the programme is the pilot of a smart biogas system. This system **converts just 10kg of biowaste per day into enough energy to power over 10 households for a year**, demonstrating how circularity can enhance local energy self-sufficiency. The project **redistributes 10-20 tonnes of surplus food weekly**, supporting 10,000 low-income residents and effectively linking climate action with social welfare.

### Impact

The initiative improves food security for vulnerable groups such as low-income families and migrants, offering regular access to nutritious cooked meals and reducing loneliness through shared meal gatherings. Reported outcomes from participant surveys include 82% feeling a sense of belonging, 71% making friends, 56% experiencing continuity and security and 32% reporting reduced need for other forms of assistance.



41. Shared Table – Food Waste Ecosystem.

The **Foodback** programme implemented by the Municipality of **Barcelona (Spain)** is aimed at giving a second life to the surplus of fruit and vegetables that are not marketable but are still suitable for human consumption, generated within the Food Unit of the **Barcelona Wholesale Market**.



FOOD WASTE

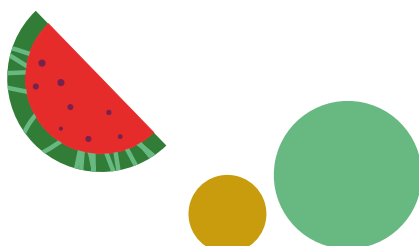
☆ SPECIAL MENTION

## Barcelona, Spain – Foodback Europe

FOODBACK is a food utilisation centre operating within Mercabarna, Barcelona's wholesale market, aimed at preventing food loss and waste by recovering surplus fruit and vegetables that are not marketable but still suitable for human consumption. Products are assessed from a food safety perspective, sorted and either redistributed to social entities or processed to extend shelf life. The initiative is fully integrated into Mercabarna's organic waste management system, where participation is compulsory and wholesalers must assess surplus for recovery before disposal. **In 2024, 838 tonnes of products were recovered and distributed for social purposes, while 9 tonnes were processed by social enterprises into 14,200 units of transformed products.**

### Impact

The initiative supports people in vulnerable situations by redistributing recovered food to 305 social entities and community kitchens. In 2024, 92 companies actively contributed surplus products to the system. The initiative promotes employment and social inclusion through collaboration with social enterprises and training and work foundations involved in food processing and redistribution activities.



The city of **Panaji (India)** has targeted the bulk food waste generated specifically by the **hospitality sector** and implemented a system to distinguish between edible surplus, which is redistributed to those in need, and organic waste, which is treated through decentralised composting and bio-methanation systems.



FOOD WASTE

## Panaji, India – Surplus Food Management and Redistribution

Eurasia & South West Asia

Since 2024, the City of Panaji has implemented a structured surplus food management and redistribution system targeting bulk waste generators, particularly in the hospitality and tourism sectors. Recognizing the challenge posed by high food waste levels linked to fluctuating tourist populations, the municipality partnered with offshore casinos, businesses and food establishments to promote behavioural change and responsible food handling practices. The initiative **combines awareness campaigns, regulatory engagement and operational redistribution mechanisms** under the “Save Food, Share Food” approach.

### Impact

The collaboration between the City of Panaji and food establishments has reduced food waste through demand-driven preparation practices and strengthened accountability in surplus management. Edible surplus is redistributed to those in need, while organic waste is treated through decentralised composting and bio-methanation systems. In 2023 and 2024, over **24,500 tons of organic waste were processed into compost and biogas, supporting soil enrichment and renewable energy generation.**





In relation to preventive measures as an important option to address food losses, the Metropolitan Area of **Amman (Jordan)** offers an example with its Smart Central Market Reform & Food Loss Waste Policy, which allowed to identify the key supply chain food loss points, specifically in wholesale markets, and developed logistic and infrastructural solutions to the issues.



FOOD WASTE

## Amman, Jordan – Smart Central Market Reform & FLW Policy Eurasia & South West Asia

Since 2024, the Greater Amman Municipality (GAM) launched a dual initiative combining infrastructure modernisation and food loss and waste (FLW) governance reform. The programme includes a feasibility study for the modernisation of the Central Fruit and Vegetable Market and the development of a comprehensive FLW **Reduction Strategy addressing inefficiencies across the urban food supply chain.**

The Central Market study identified structural bottlenecks in wholesale distribution, cold storage, packaging and vendor practices, revealing that up **to 32% of produce was lost before reaching consumers.** In response, GAM initiated cold storage upgrades, vendor training, packaging reforms and the establishment of food crate bank systems to reduce damage and spoilage. Simultaneously, the FLW Strategy integrates composting, surplus redistribution and supply chain monitoring, aligning behavioural change with structural transformation.





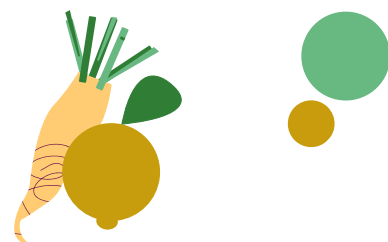
In addition, in **Europe** and **Eurasia & South West Asia**, cities are increasingly relying on high-tech digital solutions to track and reduce food losses and food waste throughout supply chain. An example in this direction is brought by the city of **Ghent (Belgium)**, which has been using artificial intelligence to combat waste in the restaurant sector.



FOOD WASTE

## Ghent, Belgium – Food Waste Monitors in Hospitality Europe

Ghent utilises **artificial intelligence to combat waste in the restaurant sector**. The city provides restaurants with smart scales equipped with **cameras that automatically identify and quantify the types of food being thrown away**. The scale generates a personalised dashboard for each restaurant, allowing owners to identify exactly where losses are occurring, whether in the kitchen or on the plates. This data-driven approach, supported by coaching from experts, provides the insights necessary to drive structural waste reduction in the hospitality industry.



Another aspect of food waste management, that is increasingly integrated into urban food governance frameworks, is **nutrient recycling and composting**. Focusing on closing the loop between urban waste and local production, **circular food policies aim to mitigate environmental impacts** while simultaneously improving efficiency and resilience, positioning urban food systems as key arenas for implementing broader circular economy principles in response to climate-driven and demographic pressures.



Following this approach, the Municipality of **Bissau (Guinea-Bissau)** has built a local processing site which transform food waste in certified compost that is returned to farmers to improve soil health.



FOOD WASTE

## Bissau, Guinea-Bissau – Bissau Limpu Africa

Launched in 2025, the initiative combines door to door selective collection, market waste recovery and the creation of a local processing site to transform organic waste into compost for urban gardens. By treating organic waste locally, the initiative reduces uncontrolled dumping and methane emissions, while **producing organic fertilizer to support urban food production and soil fertility**. The initiative supports social inclusion and livelihoods by linking waste management with urban gardening and compost use, providing food and income opportunities, particularly for women involved in garden activities. **Education and community engagement activities target more than 300 school students** and residents in 5 neighbourhoods, strengthening awareness and participation.



Moreover, a strong and innovative example in this direction, is provided by the City of **Bandung (Indonesia)**, which has developed an **innovative approach** which empowers urban communities to manage their waste and contribute to local food production. It constitutes an organic method that transforms organic matter into high-protein animal feed, tackling urban organic waste while simultaneously addressing the need for sustainable animal feed.



FOOD WASTE

☆ SPECIAL MENTION

## Bandung, Indonesia – Circular Economy of Buruan SAE Asia Pacific

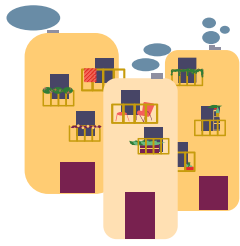
The initiative addresses food waste by integrating maggot cultivation into the Buruan SAE urban agriculture programme as a circular economy solution. In response to high volumes of organic waste, the city promotes maggot culture to **transform organic waste into high protein animal feed and organic planting material**. The initiative is implemented through municipally-supported facilities, creating a closed loop system where organic waste becomes an input for food and agricultural production. The initiative helps reduce organic waste sent to landfills, lowers methane emissions and substitutes chemical fertilizers. It also reduces municipal waste management costs and generates value through the production of fresh and dry maggots, while supporting local livestock and fish cultivation.

### Impact

The initiative strengthens **community empowerment** by engaging Buruan SAE community groups in organic waste processing and maggot cultivation, **fostering local skills and shared responsibility** for waste management. It supports local urban farmers, livestock and fish cultivators by providing access to affordable feed, contributing to food production and security. The practice involves municipal departments, community groups, NGOs, research centres, private actors and international organisations, ensuring broad stakeholder participation and territorial inclusion.



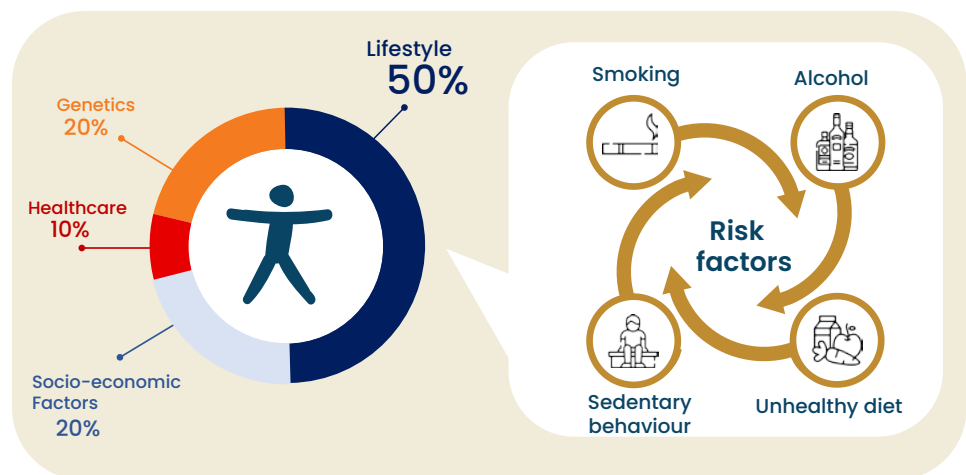
Overall, a **strong emphasis on circular approaches has been observed among cities in Asia Pacific**, where geographic isolation, high dependence on imported goods and increasing environmental pressures have accelerated the adoption of efficiency-oriented food policies. Limited land availability, vulnerability to climate impacts and the need to reduce waste in resource-constrained island contexts have encouraged municipalities across the region to prioritise strategies that minimise losses, recover nutrients and strengthen localised food systems.



# Nourishing food as a strategic lever for public health

Growing awareness of **the strong relationship between nutrition and health** has increasingly positioned diets as a central determinant of population well-being.

Scientific research has shown that **50% of individual health is determined by lifestyle**, of which diet and nutrition constitute one of the main risk factors.



**Figure 7.** Determinants of individual health (%), 2020. Source: TEHA Group elaboration based on Centre for Disease Control and Prevention data, 2026.



Evidence further shows that **the foundations of lifelong health are largely established in early childhood, particularly during the first 1,000 days of life**: from pregnancy to a child’s second birthday. According to the World Health Organisation and UNICEF, adequate nutrition during this critical window is essential for healthy physical growth, cognitive development and immune function, while poor early-life diets are associated with irreversible outcomes such as stunting, impaired brain development and a higher risk of non-communicable diseases later in life<sup>42</sup>. **Investing in healthy, age-appropriate diets in early childhood is one of the most effective preventive strategies to reduce future health burdens** and associated economic costs.

42. World Health Organisation: “Essential Nutrition Actions”, 2013.

This approach is reflected in the City of **Santa Ana (Costa Rica)**, where the First 1000 Days Nutrition Programme promotes maternal nutrition and breastfeeding to improve early-life health outcomes while advancing social inclusion and sustainability.



SUSTAINABLE DIETS  
& NUTRITION

## Santa Ana, Costa Rica – Nutrition in the First 1000 Days Programme North & Central America

The First 1000 Days Nutrition Programme, launched by the City of Santa Ana in 2020, is an innovative, municipality-led initiative that **promotes maternal nutrition and breastfeeding as key levers for public health**, social inclusion, and sustainability. The programme provides free, ongoing support to pregnant women and families with young children through trained professionals in nutrition, pediatrics, and perinatal psychology, with a strong focus on exclusive breastfeeding in the first six months and continued breastfeeding up to two years. By positioning the local government as both a permanent service provider and, since 2023, the country's first municipal sentinel **institution for human milk donation to public hospitals**, Santa Ana has expanded equitable access to care while actively supporting neonatal health. The initiative has generated measurable social benefits for vulnerable groups, reduced healthcare and household costs, and delivered significant environmental gains by lowering reliance on infant formula, thereby reducing waste, water use, and carbon emissions, while strengthening food security and resilient urban food systems.





In **Istanbul (Türkiye)**, the **Public Milk programme** advances children's right to healthy nutrition by providing free milk to young children from low-income households, combining large-scale distribution with digital monitoring, support for local dairy cooperatives and a child-development approach that links nutrition, equity and territorial resilience.



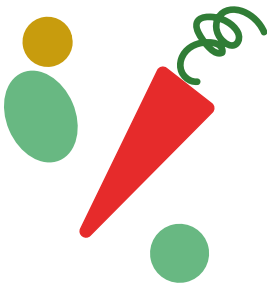
SUSTAINABLE DIETS  
& NUTRITION

## Istanbul, Türkiye – Public Milk

Eurasia & South West Asia

Launched in 2019 by the Istanbul Metropolitan Municipality, the Public Milk programme is a rights-based social policy ensuring equitable access to basic nutrition for children from low-income households. The initiative **distributes free milk to children aged 3 to 6** whose families are identified through objective social assessments. Beyond nutritional support, the programme promotes healthy growth, bone development and improved cognitive outcomes, embedding food access within a broader child development strategy. The programme reaches approximately 100,000 households per month, benefiting around 120,000 children across the city. Through structured distribution networks and digital monitoring systems, the initiative minimises operational inefficiencies and ensures transparent allocation. By supporting small-scale dairy cooperatives and guaranteeing stable demand, Public Milk contributes to rural economic resilience while safeguarding children's nutritional rights.





It is important to foster healthier relationships with food from an early stage and supporting long-term improvements in dietary habits. Support for healthy child nutrition shall also be reinforced once children enter the school system, as illustrated by the **Nutrition Centres for Childcare Facilities** instituted by the Metropolitan Area of **Seoul (Republic of Korea)**, which institutionalise nutrition, food safety and education within early childhood education settings, ensuring continuity between health, care and learning environments.



**SUSTAINABLE DIETS  
& NUTRITION**



**WINNING CITY**

## **Seoul, Republic of Korea – Safeguarding the Food of Future Generations**

### **Asia Pacific**

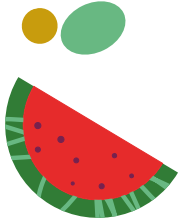
Launched in 2011, Seoul’s Nutrition Centres for Childcare Facilities is a publicly-led programme designed to ensure that young children receive safe, nutritious and age-appropriate meals, regardless of the size or resources of their childcare facility. The initiative targets **small daycare centres and kindergartens without in-house nutritionists** and operates through a citywide network of centres active in all 25 districts. The centres provide on-site support by qualified nutritionists, standardised meal plans and recipes, hygiene and nutrition training for staff, educational activities for children, and information materials for families. Developed in partnership with universities and national authorities, the programme relies on standardised and digitalised tools and adopts a preventive, education-oriented approach to nutrition and food safety.

### **Impact**

The programme currently supports **4,980 childcare facilities, covering 99% of all eligible sites and reaching around 150,000 children under the age of six**. Its impacts include healthier eating habits, increased vegetable intake, reduced salt consumption and significantly lower rates of foodborne illness compared to the national average. The initiative also strengthens equity by providing free services to small and low-resource facilities, creates qualified employment opportunities—predominantly for women—and enhances parental trust in meal quality. Beyond health outcomes, the programme contributes to food waste reduction, increased use of local food and long-term public health prevention, positioning it as a comprehensive model for nutrition equity and sustainable urban food governance.



Nonetheless, in 2017, at global level, **11 million deaths and 255 million Disability-Adjusted Life Years (DALYs) were attributable to dietary risk factors**.<sup>43</sup> The Food and Agriculture Organisation of the United Nations has estimated that unhealthy dietary patterns are responsible for **8.1 trillion US dollars of hidden costs for the global agrifood system** and are linked to alarming non-communicable diseases such as cardiovascular diseases and diabetes.



In this context, the conceptualisation of “food as medicine” has emerged as an instrument to integrate nutrition directly into healthcare delivery, especially in the North & Central America region. The **City of Baltimore (United States)** exemplifies this approach by embedding medically tailored food access within health systems as a therapeutic tool to prevent and manage diet-related chronic diseases.



SUSTAINABLE DIETS  
& NUTRITION

☆ SPECIAL MENTION

## Baltimore, United States – Food is Medicine North & Central America

Launched in 2021, Food is Medicine is a clinical nutrition programme implemented by MedStar Health across four hospitals in Baltimore, where 18% of residents face food insecurity and diet-related diseases are widespread. Through a Food Prescription model, **healthcare providers prescribe medically tailored meals and fresh food to patients at high risk or living with diet-related conditions**. Participants receive bi-weekly food deliveries, nutrition education, cooking tools and support for physical activity. The initiative integrates food access directly into healthcare pathways, targeting patients whose health outcomes are closely linked to food insecurity.

### Impact

By 2024, the programme enrolled 451 low-income patients, many aged 45 to 70, including individuals with disabilities and immigrant backgrounds. Since 2021, more than **91,000 meals have been distributed**. Clinical outcomes proved the effectiveness of the initiative, with significant progress shown by the patients. The programme also reduced food insecurity and improved fruit and vegetable intake.



43. Afshin, Ashkan et al., “Health effects of dietary risks in 195 countries, 1990–2017: a systematic analysis for the Global Burden of Disease Study 2017”, 2021.

Following a similar approach, the City of **Cincinnati** (United States) has developed a **Produce Prescription programme**, which is embedded within hospital systems, screening patients for food insecurity and providing fresh produce prescriptions.



SUSTAINABLE DIETS  
& NUTRITION

## Cincinnati, United States – Providing Healthy Food for Vulnerable Populations North & Central America

Since 2022, the City of Cincinnati has implemented a **multi-sector strategy addressing high poverty (25.4%) and food insecurity (31%)** through an integrated “food as health infrastructure” model. The initiative aligns healthcare providers, food rescue organisations, public institutions and community-based actors to improve access to nutritious food for low-income households, families with children, seniors and residents in food deserts. Key components include Produce Prescription (PPM) programmes embedded within hospital systems, screening patients for food insecurity and providing fresh produce prescriptions.



Death and diseases attributable to dietary risks contain a profound **global nutrition paradox**: while over 800 million people still suffer from hunger and undernutrition, more than **2 billion individuals are affected by overweight or obesity**, and over three billion cannot access an adequate and healthy nutrient intake. The coexistence of food deprivation, excessive calorie consumption and poor dietary quality highlights the **need for raising awareness on the food–health nexus and the importance of nutrition education**.



**Figure 8.**  
Global dietary overview, 2025.  
Source: TEHA Group elaboration based on FAO WHO and UN data, 2026.



With the purpose of shaping a coherent public discourse on nutrition the City of **Copenhagen (Denmark)** has designed a cross-departmental governance model that treats food as a core public health lever and has allowed to grant healthier diets and improved meal quality served by public kitchens.



GOVERNANCE

☆ SPECIAL MENTION

## Copenhagen, Denmark – Implementing Food Policies

Europe

Since 2019, Copenhagen’s Food Strategy (MMS) has shifted the city from fragmented food initiatives to a fully integrated, **cross-departmental governance model that treats food as a core public health lever**. The strategy **coordinates more than 1,000 public kitchens serving around 115,000 daily meals**, using public procurement, staff training and menu reform to promote healthy, sustainable diets across schools, childcare facilities and social services. A strong focus is placed on nutritional quality, organic sourcing, seasonal menus and food literacy, supported by continuous monitoring and regular reporting to the City Council. Citizens are engaged through community events and open-kitchen initiatives, reinforcing food’s role in health, education and social inclusion.

### Impact

The strategy has delivered measurable health and environmental outcomes. Public kitchens now **reach an average of 87.8% organic food, with several exceeding 90%, supporting healthier diets and improved meal quality**. Menu reforms and procurement criteria have contributed to a 32% reduction in CO<sub>2</sub> emissions citywide, alongside the decision to remove red meat from daycare meals. More than 900 climate-friendly, nutritionally balanced recipes are used across facilities and 750 tailored training courses have strengthened staff capacity in nutrition and sustainable food preparation. Pilot actions in 20 schools and daycare centres reduced food waste by 30%, with daily waste per child decreasing from about 90 g to 60 g. Together, these results demonstrate how integrated food policy can simultaneously improve public health, reduce environmental impacts, and normalise healthy eating habits at population scale.



Globally, nearly **466 million children receive school meals every day**<sup>44</sup>, making school meals programmes one of the most powerful public health levers for promoting sustainable diets, food education and fostering positive behavioural change from an early age. Reflecting this growing recognition, urban initiatives are increasingly prioritizing school-based food actions: in the 2025 edition of the Milan Pact Awards, **73 submitted practices focused on school meals programmes, reaching millions of students every day**. These initiatives not only support children’s nutritional needs but also strengthen awareness of healthy dietary habits, enhance educational outcomes, and contribute to the development of more resilient and health-oriented urban food systems.



Approximately **40%** of the practices promoting school meals programmes were submitted by European cities, where concerns over rising childhood overweight and obesity are driving stronger policy attention. Across the European Union, an average of **29% of children aged 6 to 9 are overweight or obese**<sup>45</sup>, prompting initiatives that increasingly focus on early prevention.

School meals programmes can be implemented through distinct and complementary instruments, reflecting diverse policy objectives. These include **regulatory actions**, such as nutritional standards and public procurement criteria that directly shape meal composition, **educational measures** that embed food literacy and nutrition education within school environments and **personalised approaches** that adapt menus to age-specific needs, health conditions or cultural backgrounds, enhancing both effectiveness and inclusiveness.



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44. School Meals Coalition, Children Receiving School Meals, 2025. 45. World Health Organisation , “European Health Report 2024”, 2025.



Example of the regulatory approach are offered by Quezon City (Philippines) and Turin (Italy). **Quezon (Philippines)** has implemented a **Healthy Public Food Procurement Policy**, that mandates nutrition standards for all public food procurement, targeting meals served not only in elementary and high schools, but also hospitals and shelters.



SUSTAINABLE DIETS  
& NUTRITION

☆ SPECIAL MENTION

## Quezon City, Philippines – Cultivating a Sustainable Plate

Asia Pacific

In 2019, Quezon City signed the C40 Good Food Cities Declaration, committing to promoting healthy, sustainable diets by reducing processed foods high in fat, sugar and salt, while ensuring meals are healthy and sustainably sourced. Building on this commitment, **the City adopted the Healthy Public Food Procurement (HPPF) Policy** in 2021 to address diet-related health risks, which account for 69% of deaths in the Philippines. The policy **mandates nutrition standards for all public food procurement, targeting meals served in public elementary and high schools, hospitals and shelters**. By sourcing food from sustainable agriculture and applying nutrition standards across procurement processes, the policy aims to reshape the urban food environment and influence dietary choices at scale. The City formalised the principle that **no public funds should be spent on unhealthy food, embedding health objectives directly into procurement rules**.

### Impact

Following implementation, procurement documents show that 60% of food items are wholefoods such as fish, meat, vegetables, and fruits, while only 5% are processed foods. City departments, including the City Council and procurement offices, aligned nutrition-oriented purchasing with their annual budgets. Monitoring of hospitals and shelters showed high compliance, with 93.3% satisfaction rates reported among hospital patients regarding meal quality. Nutritional quality improved measurably, with a 100% increase in fruit servings, 100% inclusion of vegetables in all meals and more consistent portion sizes.



Similarly, the City of **Turin (Italy)** through a EU-wide procurement, has revised its school meals system to **place public health at the centre of food provision**, granting healthy, seasonal and appealing meals to over 300 schools.



SUSTAINABLE DIETS  
& NUTRITION

☆ SPECIAL MENTION

## Turin, Italy – Turin school feeding programme

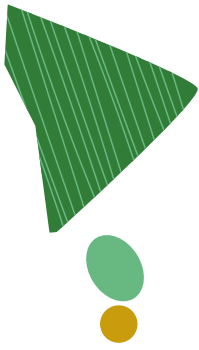
Europe

Through an EU-wide procurement procedure, the City of Turin revised its school meal system to place public health at the centre of food provision. The programme delivers **healthy, seasonal and appealing meals across all municipal schools**, combining nutritional quality with ethical and environmental criteria. Menus are differentiated by age and developmental stage and include medically-prescribed diets and meals adapted to religious or cultural needs. Each year, the service provides over 6 million meals, covering 335 schools and serving an average of 40,000 meals per day. The supply chain involves more than 3,000 tonnes of food annually and employs over 1,500 workers, spanning farmers, livestock breeders, transporters and catering staff.

### Impact

The programme improves diet quality by **prioritizing fresh, seasonal and minimally processed foods**, with menus adapted to children's nutritional needs at different ages. It delivers 1,200 individualised medical diets and over 5,000 meals for religious or cultural preferences, ensuring equitable access to safe and appropriate nutrition. Socially, the programme safeguards decent working conditions across the catering supply chain, supported by mandatory certifications and safety management systems, reinforcing health protection not only for students but also for workers involved in food provision.





Food education initiatives represent a proactive dimension of school food related policies, shifting the focus from nutritional provision alone to the early formation of knowledge, preferences and behaviours related to healthy diets. In this framework the Municipality of **Berlin (Germany)** has promoted a **multidisciplinary programme of food education among adolescents**, which aims not only at raising awareness on the relationship between food and health, but also at reconnecting young people with how organic food is produced, processed and delivered along regional value chains.



SUSTAINABLE DIETS  
& NUTRITION

☆ SPECIAL MENTION

## Berlin, Germany - Know what tastes good! Europe

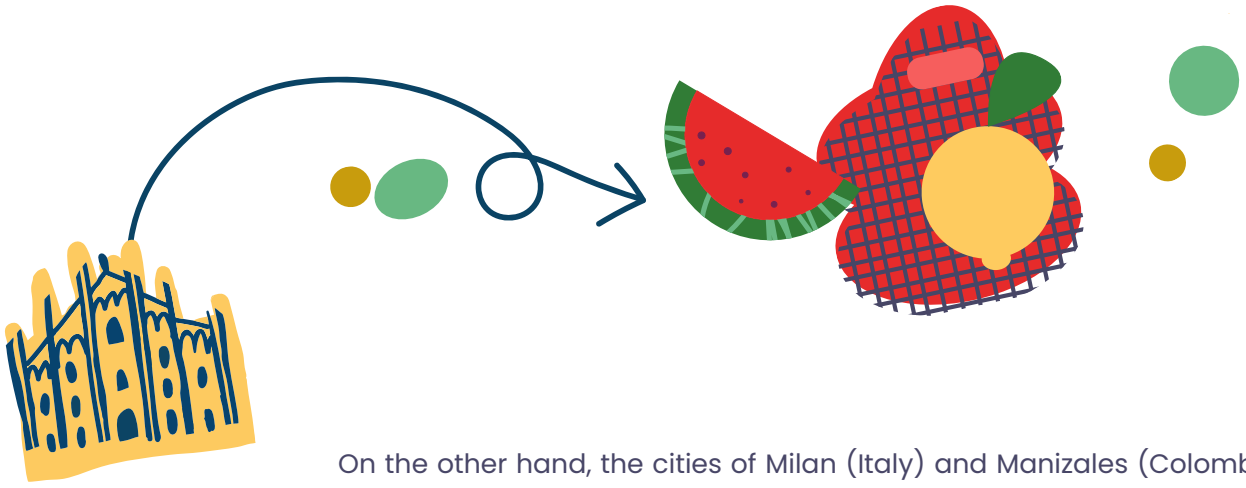
“Know what tastes good!” is an educational initiative in Berlin that uses **food as a public-health lever by strengthening nutrition literacy among adolescents**. The programme targets students in grades 8–9, a critical phase for the formation of eating habits, and focuses on **reconnecting young people with how organic food is produced, processed and delivered along regional value chains**.

The initiative combines **classroom modules, cooking workshops and guided excursions** to organic farms, processors, markets and suppliers in and around Berlin. Students engage directly with food professionals and participate in **hands-on learning activities**, while teachers receive **dedicated training and teaching materials to integrate nutrition education into school curricula**. The programme addresses both healthy diets and sustainable food systems, linking everyday food choices with environmental and regional economic dimensions.

### Impact

Through excursions and cooking activities, students learn to plan meals, use leftovers, and reduce food waste, with particular relevance to school meals where over-ordering and plate waste are common. By exposing students to organic production and regional value chains, the programme supports healthier dietary behaviours and informed consumption choices. The focus on adolescents helps address a vulnerable transition phase in dietary autonomy, contributing to long-term public-health outcomes through improved nutrition knowledge, responsible food behaviours and greater awareness of sustainable diets.





On the other hand, the cities of Milan (Italy) and Manizales (Colombia) have experimented on the role of physical spaces to positively influence food consumption habits.



The Municipality of **Milan (Italy)** has re-designed the dining areas of selected primary schools, with the purpose of promoting well-being and healthy eating habits while reducing food waste.



SUSTAINABLE DIETS  
& NUTRITION

## Milan, Italy – Reframing the School Meals Dining Areas

Europe

The Municipality of Milan and Milano Ristorazione identified school canteens as strategic environments for behavioural change, given their educational value despite being constrained-choice settings. The pilot project **redesigned the physical dining spaces of selected primary schools to enhance children's well-being, promote healthier eating habits and reduce food waste.** Following an initial system-wide assessment and co-creation process, seven integrated interventions were implemented across a representative sample of schools. Waste monitoring through detailed weighing showed a reduction in edible food waste of 6.10%, confirming the effectiveness of the environmental and behavioural approach. The initiative generated measurable social, environmental and operational outcomes. Daily waste weighing recorded an average 4.95% reduction in treated schools, compared to a 1.16 percentage point increase in control schools, with some schools exceeding 10% reduction.



**Manizales (Colombia)**, developed a Healthy Educational Environments Plan, which aims at transforming school into spaces that promote healthy eating and physical activity, for example by introducing School Gardens.

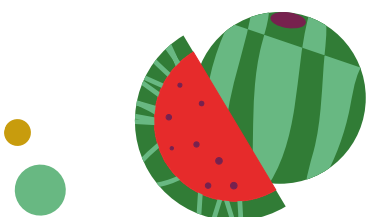


SUSTAINABLE DIETS  
& NUTRITION

## Manizales, Colombia – Fighting non-communicable diseases

South America

Manizales' Healthy Educational Environments Plan addresses non-communicable diseases linked to poor diets and obesity by **transforming schools into spaces that promote healthy eating and physical activity**. Implemented through programmes such as Healthy School Stores and School Gardens, the strategy has certified 12 institutions, established 27 school gardens and impacted approximately 9,462 students and 720 educators. Results include increased consumption of fruits and vegetables, reduced intake of processed foods and sugary drinks and improved knowledge on healthy living, contributing to lower risks of overweight, obesity and chronic diseases through coordinated action across health, education and agriculture sectors.



Lastly, the City of **La Paz (Bolivia)** has provided over 100,000 students with **personalised menus**, tailored by age, educational level and specific nutritional needs. Moreover, the programme links school nutrition with local production systems, supporting Amazonian and Andean products.



**SOCIAL & ECONOMIC EQUITY**

☆ **SPECIAL MENTION**

## **La Paz, Bolivia – New Model for Complementary School Nutrition**

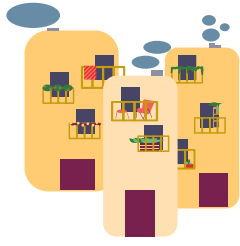
### **South America**

La Paz redesigned its school meals programme in 2024 following local health studies identifying 33% of students overweight or obese, 10% undernourished and 34% at cardiometabolic risk. The municipality increased funding and introduced **differentiated school menus tailored by age, educational level and specific nutritional needs**, including dedicated options for students with disabilities. The programme integrates standardised recipes, strengthened procurement rules and nutritional oversight to ensure food safety, quality and consistency across the system.

### **Impact**

The programme benefits 122,448 students across 368 educational units. Nutritional diversification expanded menus from 24 to 34 food varieties, improving dietary balance and acceptance. Public health impacts include improved nutritional adequacy through the inclusion of Amazonian and Andean products, with approximately 2,100 tonnes of raw materials distributed via the school meals system. The initiative also **supports territorial resilience by engaging over 5,000 rural families in the supply chain, linking school nutrition outcomes with local food systems.**





## Conclusion: a new standard for urban food governance

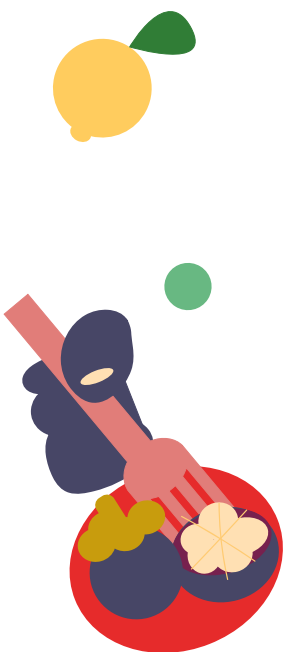
The analysis of the practices submitted to the **Milan Pact Awards 2025** confirms an ongoing shift in the strategic landscape of urban food policy. As cities move away from the management of isolated projects, they are increasingly focusing on the **systemic institutionalisation of policies**.

A defining shift in urban governance is the transition from considering food security as a temporary welfare service to establishing it as a **permanent statutory obligation**. Cities are moving towards legal grounding to ensure that food policies are resilient to shifting political cycles and economic volatility.

Such an example is **Bologna (Italy)**<sup>46</sup>, which pioneered this trend by amending its City Statute to formally recognise the Right to Food as a fundamental principle, providing a legal basis to guide all future public funding, partnerships and urban projects.

This legal anchoring is mirrored by a revolution in social protection models that **prioritise user autonomy and dignity**. Instead of standardised food parcels, metropolises like **Istanbul (Türkiye)**<sup>47</sup> and **Seoul (Republic of Korea)**<sup>48</sup> are implementing rights-based cash and card assistance schemes, enabling vulnerable residents to make autonomous choices based on their own cultural and dietary needs.

Furthermore, cities are shifting towards a **lifecycle approach of food security**, where customised food packages, vouchers and community meals are provided as statutory public services across different life stages, from infants to the elderly.



46. The Right to Food in the City Statute. 47. Social support Istanbul card. 48. Food for All: Seoul's life-cycle food policy for equity and inclusion.



As urban food systems grow in complexity, cities are also increasingly **identifying the “data gap” as a primary hurdle** to effective policy making. The next generation of food policy is characterised by **precision governance**, which utilises artificial intelligence, blockchain and real-time digital tools to manage resource flows with quantitative precision. **Ghent (Belgium)**<sup>49</sup> is advancing the **integration of AI** by deploying smart scales equipped with cameras in the hospitality sector to automatically identify and calculate types of food waste, turning raw data into actionable financial insights for business owners. Similarly, **Bangkok (Thailand)**<sup>50</sup> has implemented a **centralised digital platform** that uses nutrient databases to plan school menus and allows parents to track meals through real-time updates.

This digitalisation extends to **monitoring and evaluation**, with cities like **Columbus (US)**<sup>51</sup> and **Groningen (Netherlands)**<sup>52</sup> developing sophisticated scorecards and dashboards to track the long-term impact of their food plans through the lenses of health and racial equity.

The initiative uses digital dashboards to monitor long-term systemic impacts. The system aggregates data to showcase social, environmental, and economic impacts. This data-driven approach aims to raise public awareness and provide policymakers with solid evidence to promote a more equitable and sustainable local food system.

In fragile contexts, technology is also being used to enhance food sovereignty, for example, **Jericho (Palestine)**<sup>53</sup> is pioneering **blockchain tracking** to ensure the traceability of its date production, increasing efficiency and transparency for local producers.

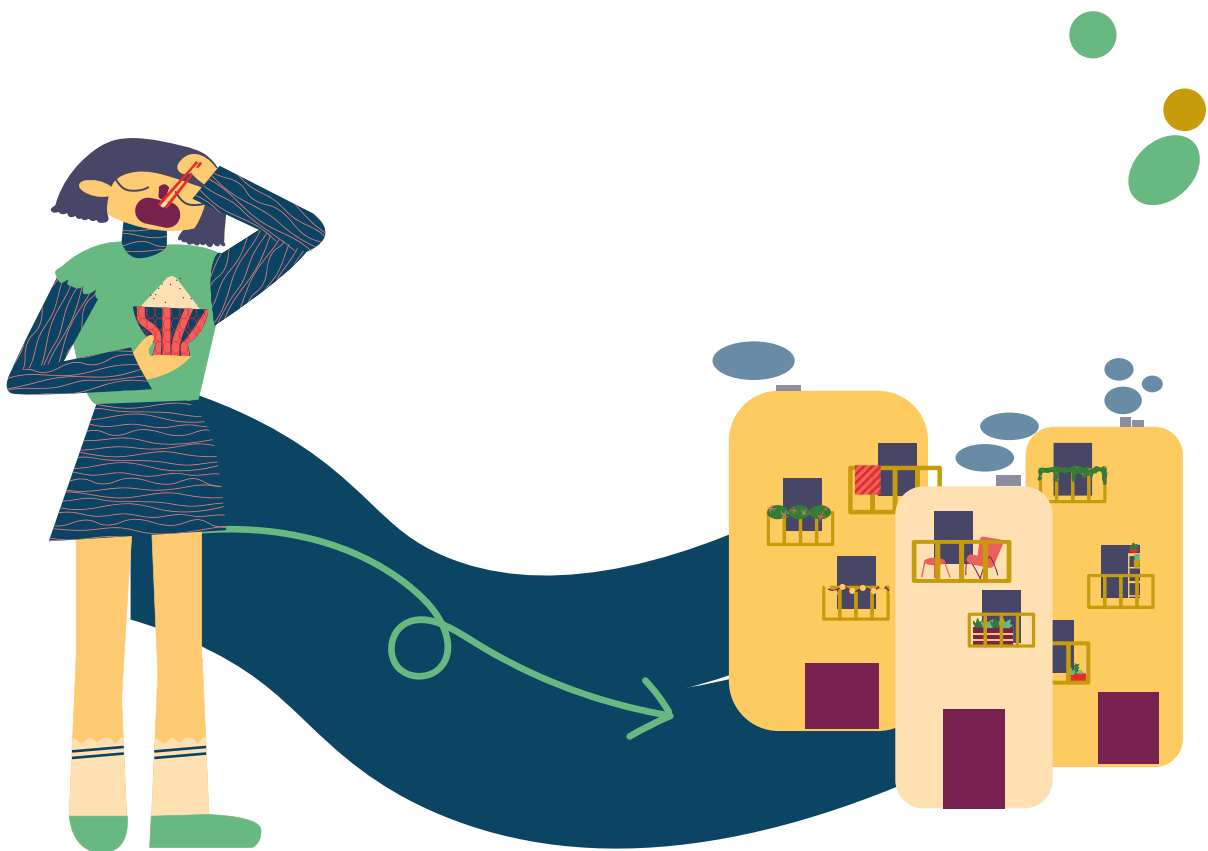
At the same time, **urban food policy is increasingly intersecting with public health infrastructure**, treating nutrition as a therapeutic component of clinical care rather than merely a social issue. This “food as medicine” paradigm is exemplified by **Palermo’s “Hospital Chef” initiative (Italy)**<sup>54</sup>, which integrates Mediterranean nutrition into hospital care through collaboration between chefs, physicians and biologists to create medically tailored meals that lead to faster recovery times.

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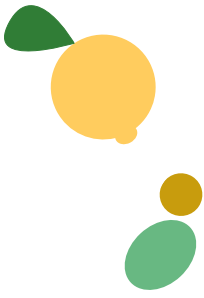
49. Food waste monitors in hospitality in Ghent: using technology to combat food waste. 50. Breakfast and Lunch Programme for BMA Schools: Thai school lunch for BMA and Thai School lunch for catering. 51. City of Columbus Local Food Board Governance: a coordinated implementation of the Local Food Action Plan. 52. What gets measures, gets managed: monitoring food transition in the municipality of Groningen. 53. AKLI BALADI+ (Eat Local): local food policies for Italian and Palestinian cities. 54. Hospital Chef: good food in a healthcare environment.

Beyond the hospital setting, cities are reorienting school meals programmes to combat childhood obesity and cardiometabolic risk. **La Paz (Bolivia)**<sup>55</sup> is leveraging local biodiversity, including Amazonian and Andean raw materials like quinoa and acai, to **redesign school meals**, while simultaneously restricting ultra-processed items within educational environments. This trend highlights a shift towards proactive, intersectoral strategies that use nutrition principles as behavioural science tools to reshape the urban food environment and reduce systemic health inequalities.

Cities also shifted paradigm regarding waste management, with the transition towards **circularity no longer viewed as a peripheral waste management duty but as a core strategy** for resource independence and energy resilience, shifting from linear disposal models to decentralised recovery networks that integrate biological cycles directly into the local economy. In **Bo City (Sierra Leone)**<sup>56</sup>, for example, the establishment of **decentralised composting hubs** managed collaboratively by municipal services and youth associations allows for the transformation of organic market waste into bio-fertilizer, which is then redistributed to community gardens to improve soil health and urban sanitation.



55. New Model for Complementary School Nutrition: school meals to students in the municipality of La Paz. 56. Bo City food waste initiative: go circular in food waste.



This emphasis on the economic value of waste is mirrored in **Irbid (Jordan)**<sup>57</sup>, where the “Arabella” fertilizer initiative has successfully branded **compost derived from vegetable waste** as a high-quality product that meets international standards, providing a sustainable alternative to chemical fertilizers while creating new employment opportunities.

Even industrial byproducts are being reclaimed through upcycling, as demonstrated in **Araraquara (Brazil)**<sup>58</sup>, where “okara”, a byproduct of soymilk production, is reintegrated into municipal bakery operations to produce bread for social programmes, **turning an environmental liability into a nutritional asset**.

Finally, the evolution, both technical and in scope, of **food policies critically depends on a workforce which is trained and ready to implement future initiatives**. This human capital evolution focuses on bridging the gap between high-level food strategies and the daily operations of those who are part of the projects.

In **Braşov (Romania)**<sup>59</sup>, the “Food Educators” initiative **empowers teachers as strategic multipliers by providing them with scientific resources** to integrate food sustainability directly into school curricula, aiming to inspire a new generation of leaders in agrifood innovation.

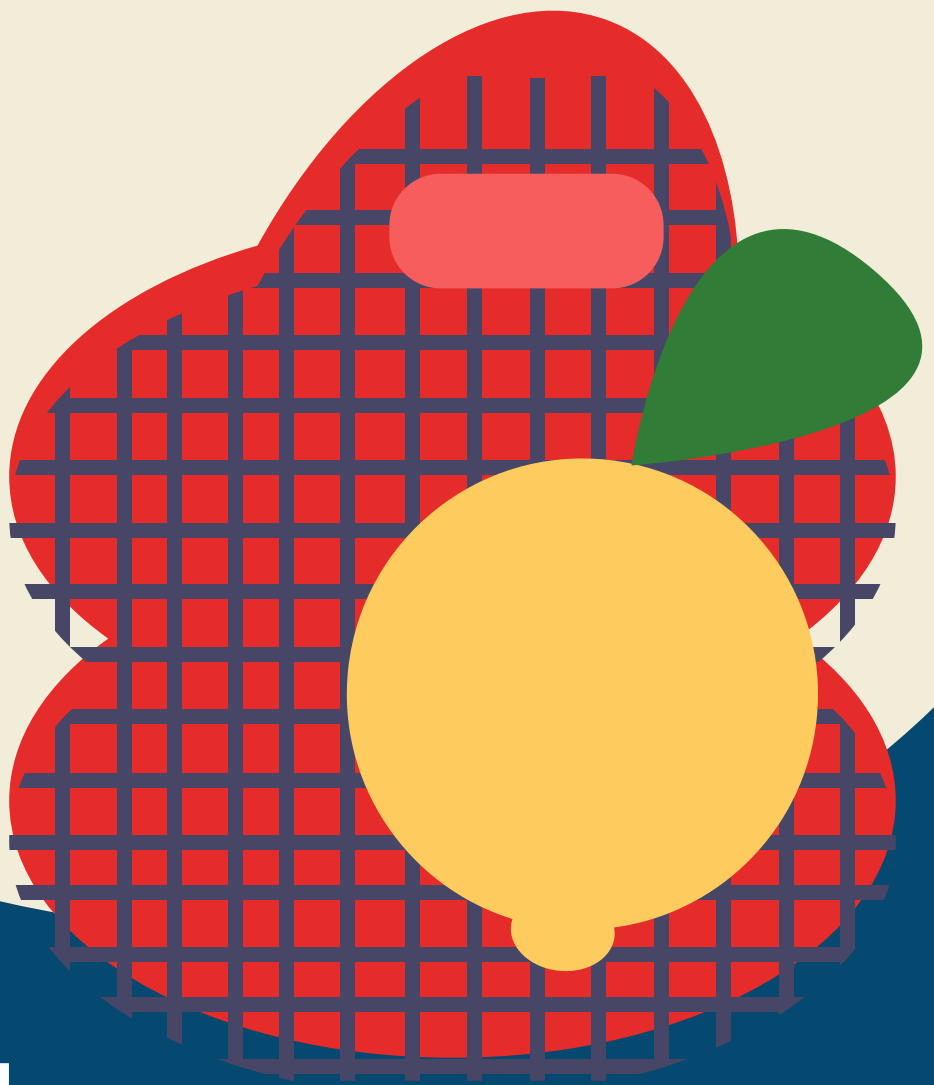
This focus on vocational dignity is particularly evident in the support for local entrepreneurship seen in **Bafoussam (Cameroon)**<sup>60</sup>, where the city provides specialised **training and “honour loans” to young farmers** to ensure the long-term viability of production and processing in an environment with high barriers to land access.

This professionalisation also extends to the informal sector, with cities like **Ziguinchor (Senegal)**<sup>61</sup> working to **formally recognise and train street food vendors** in hygiene and safety standards, effectively transforming informal actors into certified and respected contributors to the urban food system.

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57. Compost Facility: Arabella Compost. 58. Solidary bakery: innovation in combatting food waste and hunger. 59. FoodEducators – Education for food sustainability. 60. Support the food production: promote and reinforce the urban and peri-urban food production and transformation. 61. Promotion of street food: sustainable food system and street food supply.





# 4

## Future trends shaping the evolution of urban food systems

As the global urban landscape approaches the threshold of 2030, cities are no longer operating within stable or predictable environments, but are instead navigating a **polycrisis**, a convergence of overlapping systemic pressures (mentioned in Chapter 1) that include the **climate crisis, socio-economic pressures and demographic dynamics**. These interlocking challenges are fundamentally reshaping the design of

urban food policies, forcing municipal governments to look beyond immediate emergency responses towards **longer strategic horizons**.

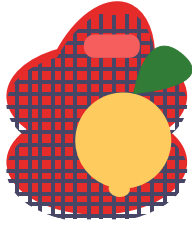
The **climate emergency** has evolved into a daily operational disruption, with cities reporting that extreme weather events, such as **floods, droughts and intensifying heatwaves** are directly compromising local food production and distribution infrastructure. Simultaneously, active conflicts have introduced severe movement restrictions and supply chain vulnerabilities, requiring cities to prioritise **food sovereignty and resilience** as core components of urban security.

On the socio-economic front, cities are facing a **dual demographic pressure**: while some regions struggle with rapid population growth, others are navigating a profound **population ageing** that alters nutritional demands and labour availability. These dynamics are further exacerbated by **inflationary pressures** and macroeconomic instability, which have made the procurement of healthy, safe food a persistent struggle for municipal budgets.

In response to this complex landscape, urban food governance is undergoing a structural shift. Cities are increasingly integrating food policy into **long-term resilience frameworks**, such as **Genoa**<sup>1</sup> (Italy) or **Grenoble**<sup>2</sup> (France), to ensure that food systems can absorb future shocks. This section identifies the **emerging trends** and **regional trajectories** that will define the **next decade of the Milan Urban Food Policy Pact**, highlighting how cities are preparing to survive and thrive in an age of continuous disruption.

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1. C-City Genoa Circular City: Circularity in the food field. 2. Inter-Territorial Food Project (PAiT): Cooperation between urban and rural areas to implement the agricultural and food transition in the Greater Grenoble region.



# Exploration of regional specific future challenges and learning needs

The **global transition towards resilient urban food systems is characterised by differentiated trajectories**, where the path forward is dictated by specific levels of governance maturity, infrastructure availability and socio-economic stability. By analysing the reported challenges and learning needs of cities within the Milan Pact network, this section explores the **unique regional hurdles that municipal administrations must navigate over the near future**.

The systematic analysis of the submitted practices has led to the identification of **seven macro-learning needs** that cities consider critical to address to further consolidate their food systems: lack of **funding**, inadequate **infrastructure**, **institutional instability**, **lack of technology adoption**, **skilled labour shortages**, **coordination difficulties** and **measuring gap**.

While the lack of **funding and the difficulty in coordinating multiple stakeholders emerge as the most widespread challenges globally**, a deeper regional analysis highlights distinct patterns, underscoring how different regions are navigating **specific structural constraints and responding to diverse contextual challenges**.



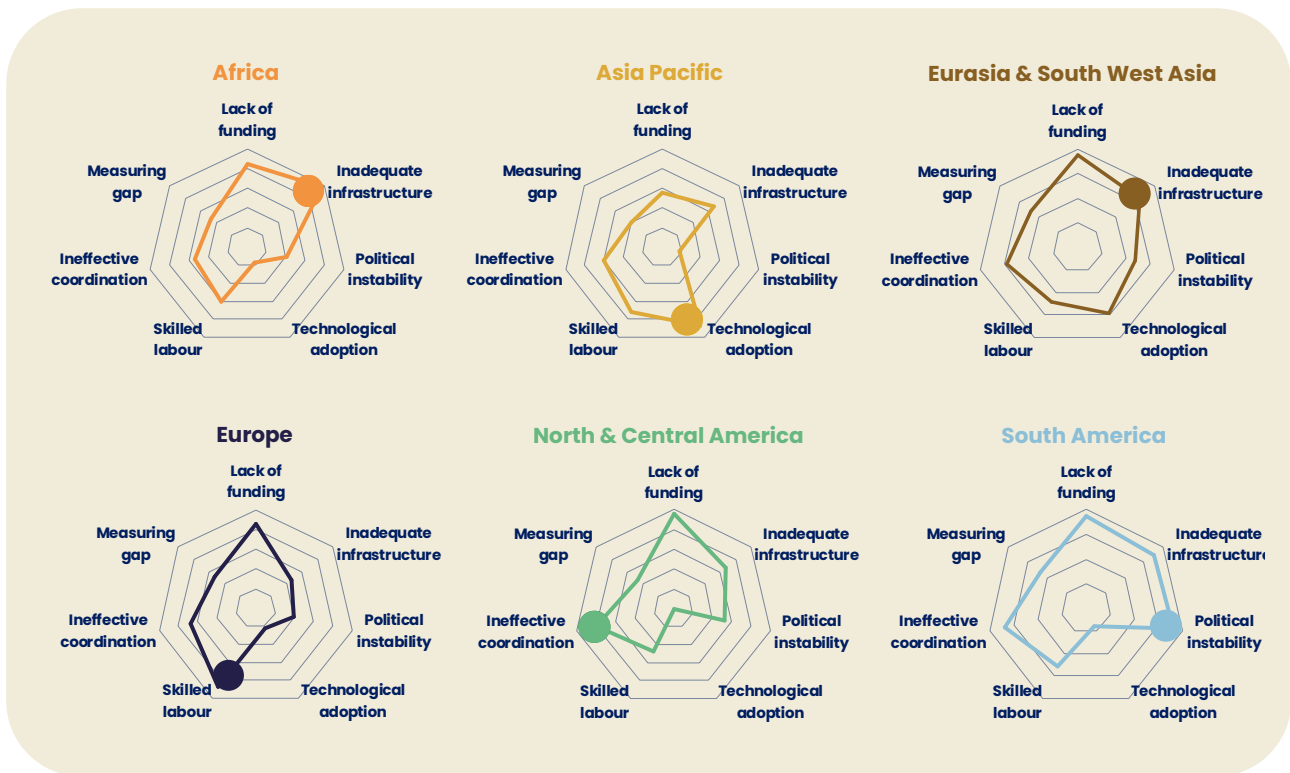


Figure 1. Regional distribution of perceived learning needs. The dot represents the most pressing need for each region. Source: TEHA Group elaboration on MUFPP data, 2026.

## 1. Africa: reforming informal infrastructure and strengthening institutional capacity

For many African cities, the **physical infrastructure deficit** represents the most significant structural barrier to urban food system resilience and safety across the region. From the analysis of the practices, it emerges as a clear structural barrier to progress across the region. In particular, trends highlight that inadequate market infrastructure, poor storage facilities, temperature control and lack of reliable water and energy systems are the primary threat to food safety and management, together with safe handling and hygiene practices of vendors. These deficiencies are often exacerbated by **unreliable access to energy and clean water**, which are essential not only for maintaining hygiene standards in densely populated urban markets but also for ensuring the viability of urban production sites and school gardens during prolonged dry seasons.

Beyond these physical barriers, the region also faces a critical institutional challenge as they move from informal, project-based efforts towards permanent administrative mandates. A primary challenge is the **institutional gap**, with cities reporting that the absence of dedicated food policy departments, structured budgets and formal policy mandates limits their ability to institutionalise food pathways into cities' development plans. This governance constraint often leads to a **reliance on external funding**, which creates significant uncertainty regarding long-term operational continuity.

## 2. Asia Pacific: balancing rapid urbanisation with technological adoption

In the rapidly-expanding urban landscapes of the Asia Pacific region, the defining future challenge is the **intense competition for urban space** and the **need for digital literacy**. The continued conversion of arable land is identified as a primary threat to long-term food security, necessitating stronger urban and rural land-use planning.

While there is a strong regional trend towards adopting smart farming technologies to maximise production in limited spaces, a significant **technological adoption gap** persists. Many cities highlight that the lack of technical facilities and low digital literacy among traditional farmers cooperatives prevent the adoption of sustainable and resilient agricultural models.

Furthermore, managing **price volatility** remains a complex regional hurdle due to a high reliance on external food supplies in some areas, pushing cities to look towards mobile distribution networks to protect vulnerable groups from inflationary shocks.



## 3. Eurasia & South West Asia: financial constraints, logistical bottlenecks and the burden of regional instability

Cities across Eurasia & South West Asia identify the **scarcity of sustainable funding** as a primary barrier to long-term food policy implementation. The lack of dedicated financial resources often hinders the development of necessary digital infrastructure and restricts the expansion of successful pilot programmes beyond their initial stages. Furthermore, without long-term funding commitments, many urban food initiatives remain in a state of uncertainty, struggling to move beyond temporary project cycles.

In addition to financial constraints, the region faces **significant logistical and physical infrastructure gaps**. Outdated market facilities and inadequate cold storage systems represent structural hurdles that compromise the efficiency of food supply chains and the safety of perishable goods. In large metropolitan environments, heavy traffic and complex urban layouts further complicate the distribution of essential products, while limited storage and transport capacity restrict the scalability of the projects. These physical barriers are often mirrored by difficulties in stakeholder coordination, where fragmented communication between municipal departments and different levels of government slows down the integration and implementation of food policies.

Finally, these structural challenges are frequently compounded by a **complex geopolitical context**. Political instability and severe movement restrictions in certain areas profoundly disrupt logistics and long-term planning, forcing municipal governments to prioritise locally anchored resilience strategies to ensure food security independently of wider networks.



## 4. Europe: financial sustainability and labour crises in the post-grant era

High-income European municipalities are entering a phase where the primary challenge is no longer the design of food policies, but their **long-term financial and operational sustainability** within permanent municipal structures. There is widespread concern over the “funding cliff” that follows the expiration of large-scale grants, which currently fund the staff and coordination of many projects.

This financial uncertainty is exacerbated by a **growing labour crisis** in the agricultural sector. A **severe shortage of skilled workers** is identified as a major bottleneck that prevents businesses and public programmes from expanding, while prioritizing the ecological transition.

**Regulatory friction also remains a persistent barrier**, as rigid national health and safety laws often act as a barrier to innovative surplus redistribution and urban farming projects.

## 5. North & Central America: coordination difficulties and data sustainability

The future trajectory for North & Central American cities is defined by the struggle to maintain momentum amid **shifting funding landscapes** and **fragmented institutional coordination**. Despite being resource-rich, many metropolises find themselves “coordination-poor,” where multiple agencies apply for overlapping funding due to a lack of shared communication and integrated governance.

The **sustainability of data systems** represents another critical regional challenge. The end of key research partnerships can leave cities without the staffing or funding necessary to continue detailed food system mapping and impact evaluation.

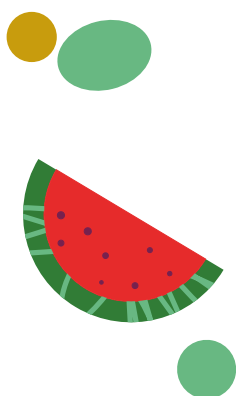
Furthermore, there is a foundational **need to rebuild trust with historically marginalised communities**, who may be hesitant to engage in municipal planning without clear evidence of long-term institutional accountability and equity.

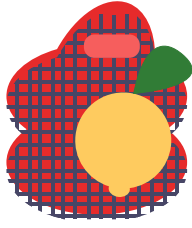
## 6. South America: administrative volatility and financial dependency

The analysis of the challenges expressed across the region reveals that political and administrative volatility remains a critical hurdle, with cities reporting that high turnover among municipal delegates and shifting political mandates disrupt the continuity of projects. In the South American context, this persistent volatility ultimately shapes the future trajectory of urban food systems, posing significant challenges to their stability and development over the long term.

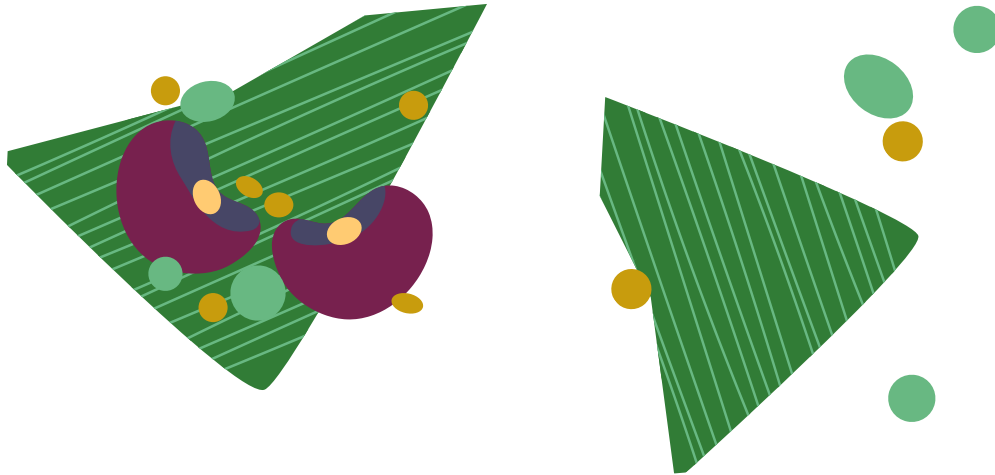
The challenge of institutionalizing food policy is compounded by a profound **lack of municipal financial autonomy**. Many cities in the region report a heavy reliance on economic transfers from national or provincial governments that are often inconsistent or affected by macroeconomic instability.

Consequently, **innovative financing models**, such as public-private-community and the development of state-owned enterprises for food distribution, become increasingly important to build a more autonomous economic framework for food security.





# A Policy Agenda for the future: bridging the implementation gaps



The comprehensive review of the submitted practices, alongside the reported future learning needs and challenges from signatory cities, reveals a set of critical **policy gaps**. These gaps represent the distance between the successful food policies of the last decade and the systemic requirements of the era ahead.

It is important to note that while this agenda focuses on four primary pillars of action, it is designed to address the six macro-challenges identified by cities. Specifically, themes such as **political instability** and **technological adoption** are treated as **transversal priorities** that underpin all proposals.

For instance, the drive towards the **institutionalisation of food as a permanent urban service** (Scalability Gap) and the creation of **dedicated departments** (Coordination Gap) are direct responses to political volatility, aiming to shield food policies from shifting political cycles and administrative turnover.

Similarly, **technological adoption** is addressed not as an isolated goal, but as a functional requirement for **precision governance** (Monitoring Gap) and as a core subject for the **upskilling of the municipal workforce** (Competence Gap).

By addressing these four implementation gaps, cities can indirectly mitigate the pressures of instability and technological adoption, moving towards more coordinated and resilient urban food system.



**Figure 2.** Vision, policies and learning needs shaping the future policy agenda of the MUFPP. Source: TEHA Group elaboration on MUFPP data, 2026.

By offering a common framework and a global network of peer cities, the Milan Pact helps translate **individual experiences into collective progress**. This function is essential to support cities in consolidating governance structures, strengthening technical capacities and ensuring the continuity and effectiveness of food policies over time, ultimately enabling the transition towards more coordinated and resilient urban food systems.



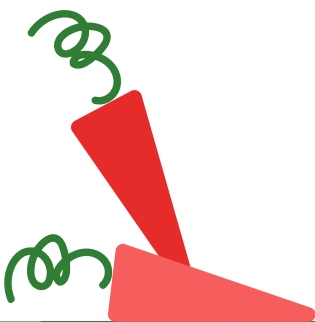
## 1. The scalability gap: from time-limited pilots to universal urban services

A defining necessity for the future is the ability to close the **scalability gap**, where cities struggle to transition from successful initiatives to universal urban services that are able to reach the entire metropolitan population. Many initiatives remain confined to specific neighbourhoods or target groups, often limited by logistical complexities or a lack of adequate funding.

For instance, several cities report that while growing interest from diverse organisations signals the success of their food programmes, the process of **scaling up** is often hindered by the practical difficulties of managing increasingly larger stakeholder groups and maintaining effective interaction.

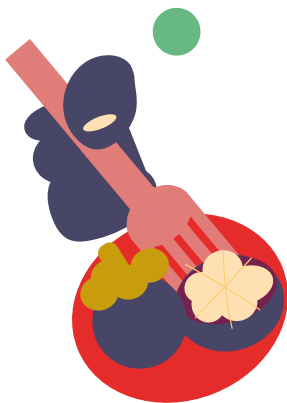
Another recurring and critical challenge in this transition is the so-called “**funding cliff**”: many high-impact initiatives were initially established and convened through **time-bound international or external project grants**. As these specific project cycles reach their conclusion, municipal administrations face the significant hurdle of ensuring the **continuity of coordination** and the long-term survival of the policy framework without the dedicated external resources that originally drove its progress.

The transition to city-wide implementation is also frequently stalled by fiscal limitations, even when political support is strong. In **Berlin (Germany)**, the initiative “**District Food Strategies & Nutrition Coaches**” was designed to expand pilot projects to every district, but the city reports that despite clear political will, financial resources are currently too limited to achieve this universal coverage. Similarly, **Lima (Peru)**, in its “**Food Powerhouse**” strategy, identifies that the expansion of the initiative across all 43 districts is significantly constrained by limited financial resources and inadequate infrastructure for recovering and distributing perishable goods at scale. **Montevideo (Uruguay)** notes that its “**Uruguayan Cooking Programme**” requires a substantially larger budget and more teaching staff to increase the number of classrooms and reach a wider segment of the population.



Furthermore, the lack of dedicated administrative structures can prevent scaling. **Arusha (Tanzania)** reports that without a dedicated department for food systems coordination and a formal policy mandate, its “**Urban Food Systems Governance**” initiative is limited in its ability to fully institutionalise food pathways into city plans.

To overcome these hurdles, municipal governments should prioritise the **institutionalisation of food as a permanent urban priority** rather than a collection of temporary projects. The primary policy suggestion is to transition towards **Public-Private-Community Partnerships (PPCP)** that move towards integrated service delivery models, **as exemplified by Banyuwangi’s<sup>3</sup> (Indonesia)**. By anchoring food infrastructure, such as food hubs, logistics centres and school kitchens, within **permanent municipal frameworks** and **long-term resilience strategies**, cities can ensure that their food systems remain stable through successive political and budget cycles.



Bridging this gap through **dedicated administrative mandates** allows the municipality to move from voluntary participation to a statutory role where food is integrated into all urban development plans. The benefit of this shift is the creation of a resilient “**architecture of care**”, such as **Milan’s Food Aid Hub (Milan, Italy)**, that guarantees the right to food for the entire population and empowers local economies through stable, predictable procurement and distribution networks.

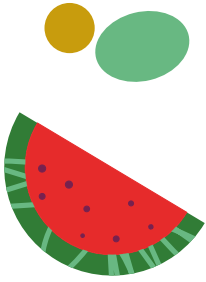
## 2. The monitoring and evaluation gap: the quest for measuring impact

Across the MUFPP network, there is broad recognition of the importance of robust and precise data to design, evaluate and manage food programmes. However, a significant **monitoring and evaluation gap** persists, reflecting a structural deficit in data systems within current urban governance frameworks. While most cities have established systems to track immediate outputs, such as the volume of food recovered or the quantity of meals served, there is a structural lack of tools and expertise to quantify **the systemic outcomes of the initiatives**.

Leading cities such as **Ghent (Belgium)**, through its “**Whole School Food Approach**”, and **Groningen (The Netherlands)**, in its initiative “**What gets measured, gets managed**”, are pioneering this shift by identifying the

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3. Ekosistem Sunwangi: development of biofortified rice ecosystem in Banyuwangi Regency.



need for standardised methodologies to quantify complex phenomena like long-term behavioural change. However, **data is often not available or representative** at a small scale, complicating the process of collecting the required evidence for policy assessment.

This drive for precision is echoed by the city of **Palermo (Italy)**, where the “**Hospital Chef**” project has identified the need for more comprehensive evaluation frameworks that can directly link personalised therapeutic diets to clinical recovery times.

In the realm of social protection, cities are seeking to move beyond simple meal counts towards **precision tracking** of nutritional and socioeconomic indicators. Cities highlight the difficulty of monitoring actual consumption patterns and real-time outcomes beyond the delivery of the service and are actively seeking digital integration and data-sharing protocols with health departments to ensure that food assistance effectively reduces systemic health inequalities.

There is also a recurring demand for **standardised** and **user-friendly tools** to monitor environmental impacts and supply chain efficiency. Cities like **Semarang (Indonesia)**, through its “**GARANGASEM**” initiative, and **Arusha (Tanzania)**, in its “**Food Safety in Urban Markets**” practice, report that the unavailability of easy-to-use tools to monitor food loss and waste across multiple sectors prevents them from documenting the full impact of circularity policies. Addressing this gap is seen as vital for justifying sustained public investment in the face of competing urban priorities.

To bridge this analytical gap, cities must transition towards **precision governance** by building permanent digital and institutional monitoring infrastructures. One possibility is the establishment of centralised **Food Policy Observatories**, such as the model proposed by **Rosario (Argentina)**, to monitor the entire public policy cycle comprehensively and avoid the fragmentation of information. Municipalities should also invest in **integrated digital tools** that allow for the assessment of food actions.

Furthermore, adopting standardised and user-friendly methodologies for complex phenomena, such as the diagnostic kits for food waste developed by **Tunis (Tunisia)**<sup>4</sup> or the AI-driven monitors used in **Ghent (Belgium)**<sup>5</sup>, can provide the necessary evidence base to sustain and promote the implementation of current and future initiatives. By institutionalizing these data systems, cities can transform monitoring from a mere reporting burden into a **strategic asset**. This evolution allows for the continuous refinement of policies and ensures transparency and accountability towards citizens.



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4. Diagnostic process for estimating food loss and waste (FLW). 5. Food waste monitors in hospitality in Ghent.

### 3. The coordination gap: overcoming administrative and multi-actor fragmentation

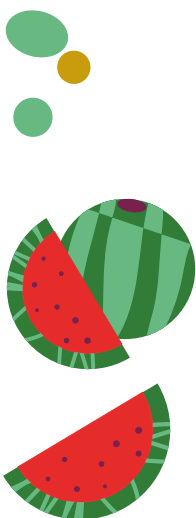


The **coordination gap** is identified as a primary structural hurdle that often leaves cities in a state of being “**resource-rich but coordination-poor**”. Because food is an inherently transversal issue, intersecting with health, education, environment and economic development, it rarely falls under the jurisdiction of a single municipal office. This complexity frequently results in **siloed efforts**, where different municipal agencies may apply for overlapping funding or operate independent programmes that fail to address the food system’s underlying complexities. Closing this gap is essential for the **systemic institutionalisation of food policies**, moving beyond isolated efforts towards integrated administrative frameworks that remain stable across political cycles.

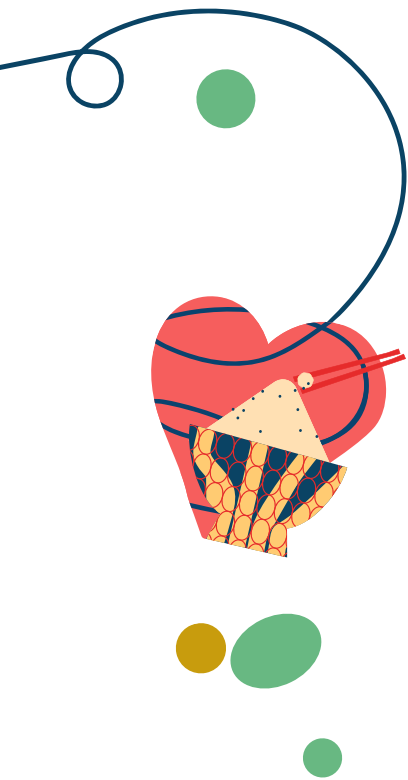
At the internal municipal level, the challenge of fragmentation is highlighted by cities like **Bandung (Indonesia)**<sup>6</sup>, which reports the difficulty of aligning 17 different municipal departments and 32 diverse stakeholders who often operate with **divergent priorities and procedures**. To bridge these internal silos, several cities are experimenting with **integrated governance frameworks** and formalizing technical taskforces. For instance, **Turin (Italy)**<sup>7</sup> established the **GIPA (Interdepartmental Group on Food Policy)**, which functions as a task force to ensure that all administrative processes, from public procurement for school canteens to the management of urban gardens, are technically aligned with the city’s environmental and social sustainability goals.

Similarly, **Copenhagen (Denmark)**<sup>8</sup> has anchored its strategy in a **shared governance structure** composed of a steering committee, a coordination group and thematic working groups to manage the logistics of over 1,000 public kitchens. In **Bogor (Indonesia)**<sup>9</sup>, the city developed a **Standard Operating Procedure (SOP)** for integrated governance as a policy innovation to clarify roles, avoid resource duplication and ensure accountability through shared performance indicators.

The coordination challenge also extends vertically to **multi-level governance**, as municipal strategies often struggle to align with regional or national frameworks. **Lisbon (Portugal)**<sup>10</sup> identifies the coordination of



6. Food security grand design 2025–2030. 7. Interdepartmental group of food policy. 8. Implementing food policies: a holistic approach to food policy implementation. 9. RADPG: managing street food for urban needs. 10. Strategy for food transition in the LMA.



entities across different government tiers as a major strategic constraint, particularly when political interests do not converge. To address this, **Columbus (USA)**<sup>11</sup> operates through a dual city-county governance model with its **Local Food Board**, a publicly-appointed advisory body that serves as the central coordinating mechanism for all local food stakeholders and initiatives across the region. In **Medellín (Colombia)**<sup>12</sup>, the creation of a **Rural District** serves to coordinate 18 public entities around a unified territorial approach that recognises the strategic value of peri-urban and rural areas within urban planning.

Bridging the gap requires managing the complexity of **multi-stakeholder coordination** to foster inclusive and participatory frameworks. Cities often report the difficulty of reaching consensus among a broad range of actors, even when they share common goals, due to conflicting operating views. Overcoming this requires the institutionalisation of platforms like **Kisumu's FLACK (Kenya)**, which function as a platform for collaboration, transparency and inclusive participation through community consultations, ensuring accountability and transparency in all decision-making processes.

## 4. The competence gap: the need for professionalisation

The **competence gap** represents a critical bottleneck that prevents the transition from high-level food strategies to daily operational success. The success and evolution of urban food policies depend on a workforce that is not only sufficient in numbers but also adequately trained to implement complex, multidisciplinary initiatives. This gap manifests as a deficit in both **administrative capacity** within municipal offices and **specialised technical expertise** among those working directly in the food supply chain.

At the institutional level, cities often struggle to translate legal or strategic frameworks into concrete administrative actions. Moving from the formal recognition of food-related rights to operational policies across various departments requires **stronger administrative capacity** and the development of specific monitoring and evaluation tools. As an example, **Jabalpur (India)**<sup>13</sup> reports a critical need for **capacity building in policy translation** to ensure that community feedback and diverse opinions are accurately reflected in actionable frameworks.

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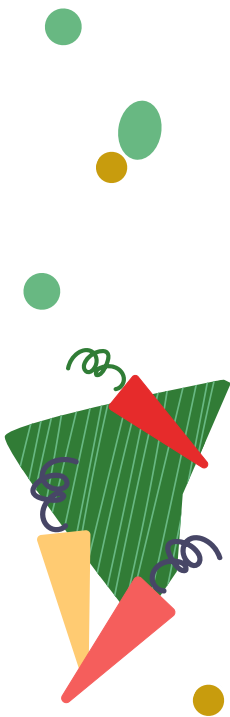
<sup>11</sup>. City of Columbus local food board governance. <sup>12</sup>. Rural district of Medellin: strengthening rural governance in Medellin through institutional articulation, participatory planning and social equity. <sup>13</sup>. Hear Jabalpur eat: policy together.

Similarly in **Lima (Peru)**<sup>14</sup>, the municipality explicitly cites the scarcity of specialised technical staff within local governments as a barrier that delays compliance with food safety and school environment regulations. This shortage is also felt in rural planning, with **Medellín (Colombia)**<sup>15</sup> reporting limited availability of technical staff in rural areas to provide continuous support for its Rural District model.

The gap is equally evident in **specialised technical knowledge** required for specific sectors of the food system. In **Douala (Cameroon)**<sup>16</sup>, stakeholders managing fish markets are reported to lack the necessary skills or knowledge to manage these infrastructures in a sustainable manner. Technical complexity also poses a challenge to new systems: **Bandung (Indonesia)**<sup>17</sup> notes that developing technical skills within the community is vital for the maintenance of hydroponic systems, while **La Paz (Bolivia)**<sup>18</sup> recognises the need to foster specialised skills in STEM and agricultural disciplines to ensure the technical relevance of its smart garden programme and secure the initiative's long-term viability.

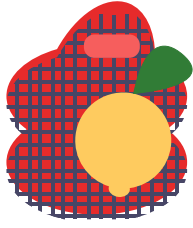
A significant competence gap also exists among the **multipliers** responsible for delivering food education. **Semarang (Indonesia)**<sup>19</sup> points out that the capacity and competence of teacher mentors vary significantly across schools, which can hinder the uniform adoption of healthy dietary programmes. **Trento (Italy)**<sup>20</sup> echoes this concern, noting that many teachers lack awareness or training regarding the importance of food-related issues, which directly impacts their effectiveness in the classroom.

To overcome these hurdles, cities need to shift towards systemic upskilling. This includes programmes such as the large-scale training of kitchen staff through “Catering Guides” in **Lyon (France)**<sup>21</sup> or empowering teachers with scientific resources in **Braşov (Romania)**<sup>22</sup>. Ultimately, closing the competence gap requires treating the food transition as a **new public profession**, necessitating permanent training infrastructures to sustain the resilience of the urban food system.



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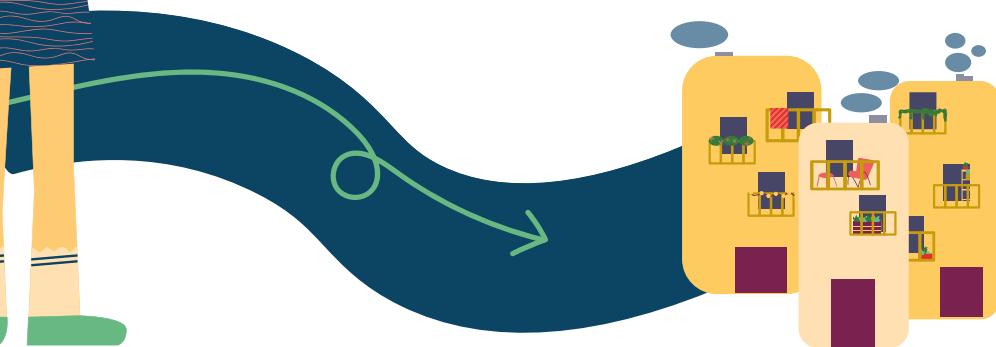
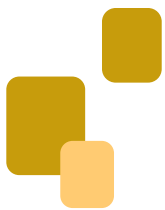
**14.** Lima food powerhouse: sustainable governance. **15.** Rural district of Medellin: strengthening rural governance in Medellin through institutional articulation, participatory planning and social equity. **16.** Food policy on Governance. **17.** Up-scaling Buruan SAE. **18.** School pedagogical gardens programme. **19.** Detektif Pangan: food detective. **20.** Food and healthy lifestyles. **21.** Catering Guide: supporting the transition towards nutritious and sustainable food on the territory with the deployment of the catering guide. **22.** FoodEducators: education for food sustainability.



## Conclusion: a mandate for the next decade

Ten years of the Milan Urban Food Policy Pact and seven editions of the Milan Pact Awards have built the world's most extensive repository of urban food policy actions. The 2025 edition, the most participated in the MPA' history, makes clear that the collective challenge ahead is no longer one of demonstrating what cities can do, but of ensuring that what they build endures. Taken together, they confirm that urban food governance has crossed a threshold: food is no longer treated as a residual policy domain, but as a strategic lever through which cities simultaneously address climate resilience, social protection, public health, and inclusive governance. This shift, visible across 173 cities and 63 countries, is one of the most significant outcomes of the first decade of the Milan Pact. The question the second decade must answer is more demanding: how does the network ensure that this momentum translates into permanent, scalable systems rather than remaining a landscape of exceptional but time-bound initiatives?

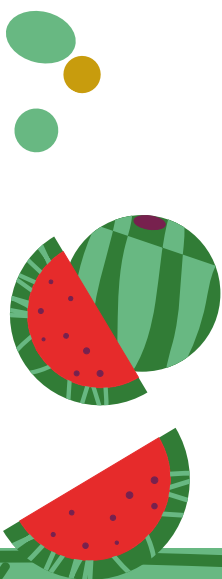
A defining challenge emerging from the analysis is the transition from **project-based to institutionalised innovation**. Across all MUFPP regions, cities identify the collapse of external funding as the primary threat to continuity, a reduction that leaves well-designed programmes without the administrative infrastructure to survive beyond their initial grant cycle. The responses developed by cities across different regional contexts offer a compelling answer to this challenge.



**Bologna (Italy)** amended its City Statute to formally recognise the Right to Food as a permanent institutional obligation. **Seoul (Republic of Korea)** has embedded a lifecycle food policy, covering citizens from early childhood to old age, within the municipal service architecture, moving food from welfare provision to public entitlement. **Jangseong County (Republic of Korea)** built a comprehensive local food plan that integrates production, distribution and consumption through a permanent governance body involving public authorities, producers, schools and civil society. **Kisumu (Kenya)** established the Food Liaison Advisory Council as a statutory multi-stakeholder platform, shifting food governance from informal coordination to institutionalised participation. Taken together, these examples demonstrate that institutionalisation is not the preserve of high-income cities: it is a political choice, available across contexts, that the Milan Pact network can actively support through practical tools, peer exchange, targeted technical assistance, investment in physical and governance infrastructure, and the strengthening of the capacity of urban food policy teams.

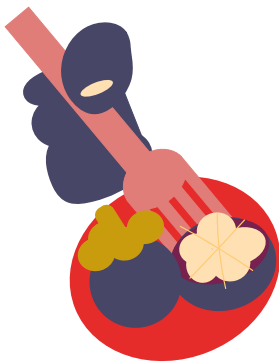
The Final Declaration of the MUFPP Milan Global Forum 2025 commits the network to acknowledge **the deep connection between climate crisis and food systems**, endorsing an updated Framework for Action that integrates climate mitigation and adaptation across all six policy categories. This commitment is grounded in evidence that can no longer be treated as background context. In 2024, for the first time in the observational record, the annual global average temperature exceeded 1.5°C above pre-industrial levels. Climate-related disasters have generated cumulative agricultural losses equivalent to 3.8 trillion US dollars over thirty years, while droughts alone account for nearly half of total agricultural losses globally. Cities are responding with urgency and creativity. **Jericho (Palestine)** has transformed municipal wastewater into a carbon-neutral agricultural resource, powering an entire irrigation cycle through solar energy and sequestering over 93,000 tonnes of CO2 equivalent annually.

**Chone (Ecuador)** is restoring degraded agricultural land through agroforestry, using digital tools to track production across 216 communities and build climate adaptability into the local food system. **Grenoble Alpes Métropole (France)** has developed a shared metropolitan food strategy extending to 2050, monitoring progress across more than 90 indicators in partnership with surrounding rural territories.



The Milan Pact network can make climate-food integration a concrete evaluation lens across all policy categories in future Award editions, rewarding practices that demonstrate measurable co-benefits and supporting cities in connecting local food strategies to national climate commitments.

At the same time, the 2025 practices reveal an accelerating convergence between urban food policy and **the recognition of the right to food**. Cities are moving decisively away from food aid approaches focusing on standardised food parcels and emergency relief towards what this report describes as “architectures of care”: rights-based, dignity-centred systems that treat access to adequate nutrition as a permanent public obligation. **Medellín (Colombia)** reaches hundreds of thousands of students through a school meals programme anchored in shared governance mechanisms involving teachers, nutritionists and community representatives — a social protection pillar, not a charity. **Nairobi (Kenya)** deploys real-time digital tracking to ensure that learners in the city’s most food-insecure settlements receive daily meals with full accountability. **Nilüfer (Türkiye)** enables vulnerable residents to purchase food anonymously in local markets through a suspended meal system that eliminates the social stigma so often associated with food assistance. The Final Declaration of the MUFPP Milan Global Forum 2025 is unambiguous: **hunger can never be used as a weapon**; access to adequate, healthy and safe food is a fundamental human right to be guaranteed under all circumstances.



The Milan Pact network can channel this commitment into concrete support for cities seeking to formalise the right to food in local legislation, and into expanded collaboration with the **School Meals Coalition** through the **Cities Feeding the Future Initiative**, recognising that school meals programmes are among the most strategic levers in this area, as also demonstrated by the number of practices collected in this Milan Pact Award edition.

Finally, the MUFPP network faces a structural deficit that no individual city can resolve in isolation: the **gap between policy ambition and measurable impact**. Cities can report immediate outputs, tonnes of food recovered, meals served, urban gardens planted, but consistently struggle to demonstrate **systemic outcomes**: long-term behavioural change, reductions in diet-related disease, or measurable contributions to climate targets. Without this evidence, food policies remain politically fragile.



The Milan Pact network can invest in standardised, user-friendly monitoring tools aligned with the MUFPP Monitoring Framework; strengthen the capacity of city teams through dedicated training focused on impact evaluation and precision governance; and support the development of physical food infrastructure, from food hubs to market facilities, as permanent assets of the urban food system rather than project-dependent installations. Cities like **Groningen (Netherlands)** and **Ghent (Belgium)**, which are using digital dashboards and AI-driven waste monitors to generate actionable evidence for policymakers, demonstrate that this shift is both achievable and transformative.

Ten years ago, the Milan Urban Food Policy Pact was a shared commitment. Today, it is a global movement that has shown, **across more than 340 cities and all regions**, that food can be a driver of equity, health, sustainability and climate resilience when cities act together with ambition and purpose. **The Final Declaration** of the MUFPP Global Forum 2025 charts the course ahead: **acknowledging the climate-food nexus, investing in people, infrastructures and partnerships, reaffirming the role of research and evidence, acting regionally while connecting globally, placing the right to food at the centre of everything cities do.**

The next decade must translate this momentum into lasting and profound transformation: the agenda set in Milan will both guide the network's future direction and serve as a benchmark to assess its progress over time.





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