Chapter 10
Sustainable Food Policies in Cities Milan Urban Food Policy Pact and Practices from Türkiye

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ABSTRACT

This study examines the role of urban areas in developing sustainable food systems. Current global challenges, including the rapid increase in urban populations, climate change, food security issues, and food waste, involve the development of sustainable food policies by local governments. This paper analyzes the Milan Urban Food Policy Pact (MUFPP) as a key initiative in the development of sustainable food systems and policies and evaluates the suggested approaches created at both global and local levels. It investigates the actions taken by the member cities of MUFPP concerning sustainable food production, distribution, and consumption and examines the impact of these actions. This study analyzes Türkiye's sustainable food policies, national strategies, and MUFPP member municipalities' projects. By examining Mezitli, Istanbul, Nilufer, Balıkesir, Efeler, Eregli, and Muratpasa it reveals the current state of sustainable food policies. The study highlights local government efforts, successful practices, and future improvement plans.

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INTRODUCTION

Climate change and the negative impacts it brings with it are becoming more evident at the urban level. The rapid growth of cities and population increases make them more vulnerable to the effects of climate change. In this context, food security, sustainable production and consumption, and access to food in cities have become more important than ever. National strategies and policies and international cooperation play an important role in mitigating the impacts of climate change at the urban level. National governments determine road maps for food systems, and global collaboration supports this process. Local administration is one of the key actors in implementing policies related to food systems.

Local governments are the first-line management units that provide services in line with the needs of the society. In particular, they can develop policies that directly affect the basic processes of the food system, such as food production, distribution, consumption, and waste management. In addition, they can offer locally specific solutions for environmental sustainability, food safety, and healthy nutrition. As the main actors of the food system, local governments implement a wide range of practices, such as supporting local producers, reducing food waste and loss, promoting healthy nutrition, increasing food access for disadvantaged groups, and promoting environmentally friendly agricultural methods.

Climate change affects all levels, from local to global. International cooperation that unites cities and local governments is increasingly essential to mitigate these effects. Cities facing analogous challenges exchange the strategies they have formulated with other municipalities and local authorities through these cooperation, facilitating the dissemination of advantageous methods. The Milan Urban Food Policy Pact (MUFPP) is a significant international organization established to enhance sustainable food policies in urban areas. Initiated in 2015, this program seeks to enable local governments to establish shared objectives and exchange implementation experiences to improve sustainable food systems. It guides local governments' policy formulation in crucial areas involving food governance, sustainable nutrition and food equity, food production, supply and distribution, and food waste management. Currently, numerous cities participate in the MUFPP, enacting sustainable food policies and cultivating creative, locally customized approaches for improving the adaptability of their food systems. In this context, it separates itself from other international organizations by providing accessible and practical alternatives for urban food policies, encouraging collaboration among cities, and connecting with sustainable development goals. This study includes it because it provides relevant policy tools adapted for local government circumstances rather than a global context.

This study analyzes the role of local governments in creating sustainable food systems and specifically evaluates the policies developed within the Milan Urban Food Policy Pact (MUFPP) framework. The study analyzes the policies and actions implemented by local governments that signed the Milan Urban Food Pact (MUFPP) in Türkiye to support healthy and environmentally sustainable food. In this context, the Milan Urban Food Pact and national and international reports, legal regulations regarding local governments, strategic plans, and activity reports have been evaluated in detail.

The study consists of four basic sections. In the first part, sustainable food systems and the role of local methods are discussed, and the literature on this field is included. The second part examines examples of food policies and good practices implemented globally within the framework of MUFPP. The third section evaluates national policies and strategies for creating sustainable food systems in Türkiye. The last section includes the projects, practices, and strategies implemented by the municipalities that signed the MUFPP in Türkiye to create sustainable food systems.

LITERATURE REVIEW

Sustainable Food Systems and the Role of Local Governments

Local governments play a crucial role in supporting social, economic, and environmental sustainability. They are an essential component, especially for developing healthy and sustainable food systems. Local governments are the units closest to the local community and develop food policies appropriate to their needs. Thanekar et al. (2024) emphasizes the importance of policy coherence in aligning climate change actions with healthy eating behaviors at the municipal level. This coherence is crucial for developing an integrated approach to food systems that simultaneously addresses multiple issues. The research shows how local governments can use their distinct positions to establish policies that improve public health and minimize the effects of climate change, thus supporting a sustainable food environment.

In addition, the development of tools such as the Local Food Systems Policy Index (Local Food-EPI+) emphasize the importance of local governments thoroughly assessing their food policies. Ruffini et. al. (2024) evaluates how this tool improves the involvement of local governments with various departments and stakeholders in the development of policies, thus promoting collaboration and knowledge sharing. By evaluating local regulations against best practices, policymakers can identify gaps and opportunities for improvement, ultimately resulting in improved and equitable food systems. Cohen (2022) defined the roles of local governments in developing urban food policy as in Table 1.

Table 1. Urban Food Policy Types by Municipal Agency

City Agencies	Types of food policies
Economic development	Subsidies for food retail Ownership of public food markets Food sector business development
Education	K-12 food education (wellness education, school gardens) School feeding programs Higher education culinary training
Government operations	Food procurement Public feeding programs Food marketing restrictions
Parks and recreation	Sites and resources for urban agriculture
Public health	Food safety regulations Nutrition regulations and ingredient bans Informational regulations to promote healthy eating Healthy food discounts and promotions
Sanitation	Organic (food) waste management Food packaging regulations
Social services	Support for emergency feeding programs/congregate meals Management of federal food benefit programs
Transportation	Food transportation infrastructure planning and development
Urban planning	Planning and zoning to support food systems Resilience planning for food distribution infrastructure

Source: (Cohen, 2022)

This table shows how city agencies contribute to food systems (Cohen, 2022, p. 422). Food policies are addressed across a wide range, from economic development to education and social services, public health to urban planning. The aim is to create a healthy and sustainable food system, ensure food security, and improve public access to food.

The role of local governments in promoting urban food resilience is also underscored in the literature. Kamil and Romadhan (2020) explore how local governments can harness geographical and political conditions to establish food security initiatives, such as food security villages and urban farming programs. These programs develop resilience and community involvement and provide food access. Local governments may create strategies that address specific issues their populations face by relating local policy to community needs.

Barbour et al. (2021) offer that the requirement for local governments to promote sustainable development and healthy diets. Their research points out a variety of initiatives that, particularly in urban settings, have the potential to transform the food system. They propose that regulations that reduce the consumption of foods derived from animals and encourage plant-based diets, which have been demonstrated to have significant beneficial impacts both on the environment and human health,

should be assigned top priority by local governments. Consequently, this is in line with the more general objective of reaching an environment that is beneficial for environmental sustainability and public health.

According to Galli et al. (2020), European municipalities should reduce obstacles to sustainable food systems. They argue that communities can support sustainable ecosystems by supporting market access, assisting regional producers, and furthering research on sustainable food practices. By such governance processes, municipalities may establish a more pluralistic food system that reflects (Galli et al., 2020).This kind of involvement is crucial for maintaining fair and sustainable food policies.

Incorporating food policies into entire sustainability frameworks is shown by projects in cities such as New York and those participating in the Milan Urban Food Policy Pact. Issac et al. (2022) show that New York City has built food policies into its sustainability framework, promoting urban agriculture and improving food access with community gardens and farms. The Milan Urban Food Policy Pact also supports cities in creating food policies that focus on social justice and food equity, showing the potential of municipal governments to effect reform in food systems (Barbour et al., 2023).

Candel's assessment of food strategies in MUFPP signatory cities indicates that local food policies often focus on sustainable diets, social equity, and food production (Candel, 2020). However, food production and distribution receive insufficient attention, which results in a lack of ensuring that all community members access sustainable food practices. This emphasizes the importance of local governments executing a comprehensive plan that involves every aspect of the food system, from production to consumption.

Thomas et al. (2020) argue that community-based organizations (CBOs) may be vital platforms to encourage collective impact and promote systemic change in food production and consumption layouts. Local governance structures are vital in assisting these groups, fostering and ensuring that food policies align with local needs and goals.

The literature underlines that stakeholders' participation has an important role in developing sustainable food systems. Ulug et al. (2021) suggest that efficient food security approaches require collaboration among many stakeholders, including municipal governments, community organizations, and citizens. This cooperative approach is essential for solving the complex problems associated with food systems and ensuring that policies adapt to the local environment.

The literature additionally investigates the concept of resilience in local food systems, focusing on the principles and criteria that promote sustainable food practices. Campbell et al. (2022) offer an audit tool for local governments to assess the resilience of their food systems, including issues such as agricultural sustainability, community health, and fair food supply. Accordingly, local governments may identify

areas for improvement and adopt policies that support the overall resilience of their food systems (Campbell et al., 2022).

In conclusion, the literature indicates that local governments play many roles in making food systems more sustainable. However, it is important that these efforts expand beyond the local level, encouraging broader impact through partnership and the sharing of experiences between cities. The success of sustainable food policy increases when towns facing similar social, economic, and environmental difficulties formulate shared solutions and exchange best practices. The Milan Urban Food Policy Pact (MUFPP), which supports international cooperation among cities, is a important project that helps local governments in achieving sustainability objectives (Barbour et al., 2023).

MILAN URBAN FOOD POLICY PACT (MUFPP): A GLOBAL APPROACH FOR SUSTAINABLE FOOD SYSTEMS

Globalization encourages cities and local governments to develop relationships within their regions or countries and globally. This process empowers local governments from various locations to work together and design global policies that focus on solving climate change (UN-HABITAT, 2024). Although their distinct economic, social, and environmental features, cities have similar challenges (FAO et al., 2024) . Thus, networking between cities is generally seen as the most effective way to strengthen cities' capacity to solve major environmental and social problems, deliver urban services to its residents, and develop effective urban governance and management structures (Keiner & Kim, 2007, p. 1371). In this context, there are various city networks (Resilience cities, ICLEI-Local Governments for Sustainability, URBACT, etc.) that encompass cities/local governments, civil society organizations, scientific institutions/universities, companies/private sector, and individual memberships (Keiner & Kim, 2007, p. 1381). The Milan Urban Food Policy Pact is a global agreement signed on October 15, 2015, during the Expo 2015: Feeding the Planet, Energy for Life event in Milan (MUFPP, 2023, p. 16). The pact focuses on cities that play an important role in creating sustainable food systems. Accordingly, it is important to encourage local governments to adopt healthy, accessible, and environmentally friendly food policies. This pact has further encouraged local authorities to identify and implement public actions and regulatory mechanisms to increase people's Access to food such as, for example, the harmonization of urban development with the development of small local food producers, with particular emphasis on the joint venture of the food supply system with agro-food production (Nicolescu et al., 2017, p. 349). In this context, the Pact, which was opened for

signature in 2015, has been signed by 290 cities today. The Pact is structured within the framework of 6 categories and 37 action policies. (MUFPP, 2015).

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

There are six action proposals in the governance category. These are: collaboration among actors in urban governance and stakeholder participation; identification and mapping of local initiatives; development of urban food policies and plans; creation of data for the urban food system, establishment of an information system for institutions to share data; and the creation of a disaster risk reduction strategy to enhance the resilience of the urban food system. (MUFPP, 2015).

There are seven action proposals in the category of sustainable diets and nutrition. These include promoting sustainable nutrition; addressing diseases caused by malnutrition and obesity; creating sustainable nutrition guidelines; establishing standards related to sustainable nutrition and access to clean water; increasing the participation of the private sector and public institutions to promote sustainable nutrition; encouraging the health and food sectors to spread healthy eating habits; and investing in access to clean and safe drinking water (MUFPP, 2015).

There are six proposals for action in the Social and Economic Equity category. This includes promoting sustainable nutritional practices by considering various community beliefs, cultures, traditions, and dietary habits; integrating healthy, seasonal, and sustainable food production and consumption into school nutrition efforts, thus using local and regional resources; focusing on the employment of women within the food and agriculture sectors; executing programs that encourage sustainable livelihoods and guarantee food accessibility in both urban and rural environments; improving access to nutritious food for disadvantaged populations and improving social solidarity; and promoting for education, vocational training, and research to ensure universal access to healthy food (MUFPP, 2015).

Seven action plans exist within the Food Production area. Promoting food production within the city and its surrounds, highlighting small-scale producers and family-owned businesses to improve and maintain the relationship between urban and rural food systems; creating comprehensive and integrated land use strategies aimed at biodiversity safeguarding; creating policies and plans that support agricultural production by local governments for sustainable food production in urban and nearby areas; providing financial and technical support to producers to promote

sustainable food production in the city and its surroundings; strengthening the food supply chain between urban and rural regions to promote local and sustainable food production; facilitating the reuse of wastewater in agriculture and food production; and reorganizing public procurement and trade policies to improve access to healthy and sustainable food (MUFPP, 2015).

There are 7 action proposals in the Food Supply and Distribution category. These include increasing access to healthy and affordable food in low-income neighborhoods and creating an environmentally friendly food supply system; supporting infrastructure that connects urban areas with nearby rural areas through improved food storage, processing, transportation, and distribution technologies to reduce food waste; strengthening food control systems by implementing local food safety legislation and regulations; supporting various market systems to strengthen the food supply chain by local governments and developing solutions suitable for the economic, social, and cultural conditions of different cities; improving and expanding the infrastructure of market systems to establish a stronger connection between urban consumers and producers in rural and semi-urban areas; and recognizing and supporting the informal sector (street vendors, small-scale producers, etc.) that plays a significant role in urban food systems (MUFPP, 2015).

Four action proposals are included in the Food Waste category. These are ensuring the reduction of food loss and waste at all stages of the food supply chain and making holistic plans; organizing events and campaigns to raise awareness about food loss and waste; developing municipal policies and regulations to prevent waste and ensure the sustainability of food; and creating redistribution mechanisms for sustainable food production and consumption (MUFPP, 2015).

One of MUFPP's main objectives is to share best practices and experiences among the cities that have signed the pact and to promote cooperation. The learning between cities has become a primary legacy of the Milan Pact in three ways (FAO, 2018, p. 5):

1. Through national, regional and international city networks use of the Milan Pact as a framework for city-to-city exchanges and collaborations;
2. Through developing indicators to measure progress of cities' food practices implementing the Framework of action; and
3. Through submissions of food policy and practice in the Milan Pact Awards.

Cities that fulfill the commitments of the Pact and implement creative practices are being rewarded. Thus, it promotes sustainable food production and consumption at the local level and contributes to its feasibility. With the award program launched 2016, 621 applications have been collected in 290 cities across 84 countries.

The 6th Milan Pact Awards, held in 2022, saw participation from 251 initiatives across 133 cities (MUFPP, 2023). The six cities that scored the highest in each category of the Milan Pact were awarded. The table includes the categories and examples of practices for the cities.

Table 2. Milan Pact Awards 2022 city practice and category

Category	Country	City	Title Of Practice
Governance	US	New York	A New York City framework for good food purchasing
Sustainable Diets&Nutrition	Ethiopia	Addis Ababa	Addis Ababa school feeding programme
Socıal&Economic Equity	India	Rourkela	E-Cool Mandi
Food Production	Argentina	Rosario	Agro-ecological food production in Rosaio
Food Supply&Distribution	South Korea	Yeosu	Strategy for securing our talents and small farms
Food Waste	UK	London	London's food waste reduction programme

Source: MUPFF, 2023.

The "A New York City framework for good purchasing" project of New York City, selected in the Governance category, has been implemented since 2017. The project aims to create a fair and sustainable food system with public resources. In this context, the project has been associated with reducing inequalities, partnerships for goals, responsible production and consumption, and sustainable development goals. It is developing innovative methods to support small producers, reduce the carbon footprint, and enhance social value criteria in public procurement (Milan Pact Awards 2022 New York, 2022). The actors participating in the project include 15 municipal departments, 24 NGOs, a research center, and the private sector.

The "Addis Ababa school feeding programme," selected in the Sustainable Diets and Nutrition category, was launched as a pilot project in 2019 in Addis Ababa, Ethiopia. The project focuses on the issues of poverty and food insecurity in the city. The main objective of the project is to combat hunger, ensure continuity in education, improve the quality of nutrition, and reduce the financial burden on families. In this context, free breakfast and lunch are provided to schools in 255 primary schools. The participating actors are municipal departments (3), public institutions (6), and a research center. The city administration has integrated school gardens into the nutrition program by promoting vegetable and fruit cultivation in schools; organic fertilizer has been produced from food waste. (Milan Pact Awards 2022 Addis Abba, 2022). It has been pointed out that budget constraints are an obstacle to the program's sustainability.

The "E-Cool Mandi" initiative, started in Rourkela, India in 2021, aims to reduce food waste, improve the financial circumstances of small-scale farmers and vendors, and enhance women's possibilities for employment (Milan Pact Awards 2022 Rourkela, 2022). In India, many fruits and vegetables are wasted due to the lack of proper cold chain infrastructure. The Rourkela Municipality has established solar-powered cold storage facilities in response to this issue. This program promotes sustainable agriculture, energy use, and women's employment.

The project "Agro-ecological food production in Rosario," selected in the food production category, has been implemented in Rosario, Argentina, since 2002 (Milan Pact Awards 2022 Rosaio, 2022). The project aims to promote sustainable food production by utilizing agricultural areas in the city and its surroundings. In this context, seven vegetable gardens were established on 30 hectares of land in the city, providing agricultural production opportunities for 450 poor families. The project is being carried out in collaboration with local governments, universities, research centers, small producers, and non-governmental organizations. In addition, with the "Rosario Green Belt Project" launch in 2016, 800 hectares of rural land have been opened to agroecological production; 286 hectares have completed this transformation. Thanks to agroecological production, carbon emissions are being reduced, and resilience against natural disasters is increasing.

The "Strategy for Securing Our Talents and Small Farms" project, chosen in the food supply and distribution category, was carried out between 2020 – 2022. This project addressed the food supply chain issues encountered during the pandemic. The project participants are municipal departments, public institutions, and the private sector. In the project's first phase, the city administration distributed food packages of ecological agricultural products to all students from kindergarten to high school. In the second phase, families were given online shopping vouchers, allowing small farmers to reach consumers through digital platforms. This project created a sustainable model supporting the local economy and ecological farming during the pandemic. The success of this project has led to similar projects being implemented in eight metropolitan cities and provinces in South Korea (Milan Pact Awards 2022 Yeosu, 2022).

The "London's food waste reduction programme," selected in the food waste category, was implemented in London between 2019 and 2024. The program aimed to reduce food waste and carbon emissions across the city. It aims to minimize waste by intervening at every stage of the food supply chain. The program is being carried out in cooperation with local governments, the private sector, academic institutions, and non-governmental organizations. The municipality aims to reduce losses in the supply chain and promote a circular economy by collaborating with large food companies. The size and demographic diversity of the city of London are restrictive in terms of reducing food waste and financial sustainability. The program has the

potential to develop innovative projects aimed at reducing food waste and to serve as a model for other cities (Milan Pact Awards 2022 London, 2022). In conclusion, the Milan Urban Food Policy Pact promotes the cooperation of local governments globally in building sustainable food systems. Turkey has implemented various policies and practices in line with the United Nations' 2030 Sustainable Development Goals. These policies are transferred to the local level, especially through national development plans and strategic documents. Turkey has given important responsibilities to local governments in the development of sustainable food systems.

ESTABLISHING SUSTAINABLE FOOD SYSTEMS: POLICIES AND PRACTICES IN TÜRKIYE

Various policies and practices have been developed in Türkiye in accordance with the UN's 2030 Agenda for Sustainable Development Goals. As a result, sustainable development goals were specifically included in the 11th Development Plan (2019-2023). In this context, it has been stated that the sustainable development goals will be reflected in sectoral and thematic policy documents in line with national priorities and conditions (Presidency of The Republic of Türkiye Presidency of Strategy and Budget, p. 212). In implementing sustainable development goals, local governments have been designated as stakeholders in the national-level committee to be established. The regulatory changes by the Ministry of Environment, Urbanization, and Climate Change, which enable the establishment of zero waste and climate change-related units in metropolitan, provincial, and district municipalities, are an important step. The 11th Development Plan outlines goals related to ensuring food security, implementing effective stock management, reducing losses in the supply chain, and preventing waste within the framework of creating sustainable food systems (Presidency of The Republic of Türkiye Presidency of Strategy and Budget, p. 98). In addition, the "National Strategy Document and Action Plan on the Prevention, Reduction, and Management of Food Losses and Waste (2021-2023)" has been prepared in collaboration with the Ministry of Agriculture and Forestry and the Food and Agriculture Organization (FAO) of the United Nations (FAO, 2020).

Table 3. The Role of Local Governments in Türkiye's National Strategy for Food Loss and Waste Prevention, Reduction, and Management

Strategic Objectives	Actions	Role of Local Governments
Preventing and reducing food loss and waste	- Raising awareness and conducting consumer education campaigns - Establishing systems for measuring, monitoring, and evaluating food loss and waste - Optimizing packaging use and strengthening cold chain management	- Organizing training and awareness campaigns to educate the local population - Developing waste prevention initiatives in local food markets - Contributing to monitoring and reporting food losses through waste management systems
Recovering and redistributing food for direct human consumption	- Developing food donation mechanisms - Expanding food banking systems - Ensuring that safe and nutritious food reaches those in need	- Collaborating with food banks and social assistance organizations to distribute surplus food - Coordinating with markets, restaurants, and hotels to encourage food donations - Providing logistical support for food donations
Redirecting food waste to alternative uses (animal feed, fertilizer, etc.)	- Utilizing food unfit for human consumption as animal feed - Recovering energy from organic food waste	- Facilitating the use of organic waste in biogas and compost facilities - Collaborating with municipal animal shelters to repurpose appropriate food waste
Ensuring the recycling of food loss and waste	- Separating organic waste and processing it with appropriate Technologies - Promoting compost and biogas production - Strengthening waste management systems	- Implementing organic waste separation and composting systems as part of Zero Waste projects - Supporting biogas production facilities and enhancing waste management policies at the metropolitan level

Source: (FAO, 2020)

Table 3 summarizes the strategic areas, actions, and responsibilities local governments should undertake as outlined in Türkiye's National Strategy Document and Action Plan for the Prevention, Reduction, and Management of Food Losses and Waste. Local governments directly contribute to areas such as the widespread implementation of zero-waste practices, the reduction of food losses and waste, the establishment of sustainable supply chains, and food banking. In Türkiye, local governments have various duties and responsibilities in implementing sustainable food policies.

Municipalities Law No. 5393 and Metropolitan Municipality Law No. 5216 determine municipalities' authorities and responsibilities regarding sustainable food systems. These laws encompass the duties of local administrations to protect public health, support agriculture and livestock, protect the environment, and ensure food safety (Municipality Law No.5393, 2005). Metropolitan municipalities are especially

obliged to develop effective food production and distribution policies (Metropolitan Municipality Law No.5216, 2004). In this context, they are carrying out various projects to promote organic farming, spread urban agriculture practices, and improve the quality of agricultural production.

In order to ensure environmental sustainability, the 2872 Environmental Law imposes significant obligations on local governments regarding waste management and the prevention of air, water, and soil pollution (Environment Law No. 2872, 1983). Regarding the sustainability of agricultural production, Law No. 5957 on the Trade of Vegetables and Fruits and the Wholesale Market Registration System covers producer support, the regulation of vegetable and fruit trade, and the provision of healthy food to consumers (Law on the Regulation of Trade in Vegetables and Fruits and Other Goods with Sufficient Supply and Demand Depth No.5957, 2010). In this context, local markets ensure food safety.

The management of food waste is one of the fundamental components of sustainable food systems. The Waste Management Regulation and the Regulation on the Regular Storage of Waste regulate separating, recovering, and disposing of food waste at the source. These regulations impose an obligation on municipalities to ensure the sustainable management of biodegradable food waste and evaluate it for producing organic fertilizer or biogas. (Waste Management Regulation, 2015) (Regulation on Landfill of Waste, 2010). The Zero-Waste Regulation imposes various responsibilities on municipalities regarding the efficient use of natural resources, the prevention of waste generation, and the establishment of recycling systems. In this context, municipalities must implement zero-waste management systems to reduce food waste, collect it at the source through separation, and manage the recycling processes. (Zero Waste Regulation, 2019). Municipalities must also ensure that food waste is minimized by introducing regulations to prevent food waste in markets, restaurants, and hotels.

MUNICIPALITIES IN TÜRKIYE PARTICIPATING IN THE MILAN URBAN FOOD POLICY PACT AND THEIR PRACTICES

To create sustainable food systems in Türkiye, local governments must act by the strategies and regulations determined at the national level and participate in international collaborations. In this context, some municipalities are joining international platforms that shape food policies within the framework of sustainable development goals and are carrying out projects on sustainable food production and consumption, food waste, sustainable agriculture, etc.

Table 4. Türkiye's MUFPP Member Municipalities

Municipality	Signature Year
Mezitli Municipality (Mersin)	2019
Istanbul Metropolitan Municipality	2022
Nilufer Municipality (Bursa)	2022
Efeler Municipality (Aydın)	2022
Balıkesir Metropolitan Municipality	2024
Eregli Municipality (Konya)	2024
Muratpasa Municipality (Antalya)	2024

In Türkiye, seven municipalities, including two metropolitan municipalities, have signed the Milan Urban Food Policy Pact (Table 4). The first municipality in Türkiye to sign the MUFPP was Mezitli Municipality. In the following years, Istanbul Metropolitan Municipality, Nilufer Municipality, Efeler Municipality, Balıkesir Metropolitan Municipality, Eregli Municipality, and Muratpasa Municipality became members of MUFPP. In this context, municipalities are carrying out projects and sharing best practices on sustainable food production, consumption, supporting local producers, reducing food waste, and access to healthy food etc. Within the framework of these national policies and legal regulations, some municipalities in Turkey are taking an active role in sustainable food systems not only at the local and national level but also through international cooperation. The next section includes the practices of municipalities that are members of MUFPP, focusing on sustainable food policies and award-winning initiatives.

Mezitli Municipality Practices

Mezitli is a district in the Mersin province of Türkiye, located on the Mediterranean coast in the country's south. Mezitli Municipality is one of the district municipalities of Mersin Metropolitan Municipality, with a population of 223,424 (Mezitli Municipality, 2023, p. 4). Agriculture, tourism, and trade are prominent in the district, with a rapidly developing urban structure. Mezitli Municipality promotes local production through sustainable agricultural practices, urban agriculture projects, and food security efforts. In this context, Mezitli Municipality, which supports and implements sustainable development projects, is Türkiye's first municipality to sign the MUFPP. In addition to MUFPP, Mezitli Municipality is a signatory to various international partnerships (Mezitli Municipality, 2025):

- EUROCITIES (European Cities Organization)
- UCLG (United Cities and Local Governments)

- UCLG-MEWA (United Cities and Local Governments Middle East and West Asia Section)
- World Health Organization Regions for Health Network
- World Health Organization Cities Network
- UN Global Compact
- Global Covenant of Mayors for Climate and Energy

The Mezitli Municipality engages in various projects related to sustainable food production, consumption, and agriculture. “The Excess Food Project” collects products from supermarkets and distributes them to a soup kitchen, serving them as meals to needy individuals. In 2022, the scheme facilitated the provision of around 1 million TL in donated food (Mezitli Municipality, 2022, p. 176). The Biodegradable Waste Management Project involves collecting rotten and bruised fruits and vegetables from marketplaces at closing hours, setting them aside for compost production, and delivering those still in a consumable condition to those in need. Another municipality's project aims to support local women producers and ensure their participation in economic life. In this context, women's producer markets have been established, and various activities have been carried out. Mezitli Female Producers’ Market is one of the projects that received an award in the social and economic equity category from MUFPP in 2019. Mezitli Women's Producers' Market is an important project in Türkiye because it is entirely operated by women producers. To strengthen the local market, no fees are charged to female producers for opening sales stands, and only female producers are allowed to sell at the market. Organic vegetables obtained from small gardens and handmade products are offered for sale (MUFPP, Milan Pact Awards 2019 Mezitli, 2019).

The “Urban Applications for Sustainable Agriculture” project is being carried out to support sustainable agriculture and encourage citizens' participation in local food production. With this project, the municipality has applied for the “Healthy Cities Best Practice Competition” in the “Climate-Friendly City” category (Mezitli Municipality, p. 200). In addition, the municipality is continuing its international collaborations and sustainability efforts by applying to the NetZeroCities Pilot Cities Program.

Istanbul Metropolitan Municipality Practices

With a population of 16 million, Istanbul is Türkiye's largest metropolis and economic center. While a global city with a rich historical and cultural heritage, it also plays an important role in many sectors, such as industry, trade, and agriculture. In line with sustainable development goals, it carries out various activities and projects on issues such as combating climate change, food security, and supporting

agricultural production. In this context, Istanbul's food security and sustainability policies are shaped under international norms and are part of various global networks. The Istanbul Metropolitan Municipality (IBB) has memberships in different international organizations that operate in areas such as environment, food policies, healthy urbanization, cultural heritage preservation, and social services (Istanbul Metropolitan Municipality, 2023, p. 63):

- Organization of Islamic Capitals and Cities (OICC)
- United Cities and Local Governments World Organization (UCLG)
- World Union of Great Metropolises (METROPOLIS)
- European Cities Against Drugs Organization (ECAD)
- Union of Historical Cities (LHC)
- European Cities Organization (EUROCITIES)
- Organization of World Heritage Cities (OWHC)
- Earthquakes and Megacities Initiative (EMI)
- World Halls Union (WUWM)
- World Health Organization (WHO) Healthy Cities Network
- Turkish World Municipalities Union (TDBB)
- Asia Mayors Forum (AMF)
- European Social Network (ESN)
- International Committee of Historic House Museums (DEMHIST)
- Urban Mobility European Institute of Innovation and Technology (EIT)
- CIVITAS Forum Network
- C40 Cities Climate Leadership Group
- B40 Balkan Cities Network
- International Lighting Association (LUCI)
- Milan Urban Food Policy Pact (MUFPP)
- Global Sustainable Tourism Council (GSTC)

The Istanbul Metropolitan Municipality became a member of MUFPP in 2022. The “Istanbul Food Strategy Document” was implemented in 2021 to establish a sustainable food system in Istanbul. The scope of this document includes protecting local producers in the short, medium, and long term, combating hunger, ensuring food access, social security, healthy food and nutrition policies, food safety, water security, preventing food waste, loss, and spoilage, and making the city resilient to crises and disasters (Istanbul Metropolitan Municipality, 2021). This document aims to transition to a food system considering economic, social, and ecological priorities, ensuring everyone can access healthy and good food (Istanbul Metropolitan Municipality, 2021).

Various activities are being carried out to ensure that Istanbul can access healthy and affordable food. The IBB Public Market e-commerce project supports the marketing of products through cooperatives in which farmers are partners. At Public Market, producers' products within the provincial borders and the regional products produced by all producers and women's cooperatives across Türkiye are offered for sale. At the İBB Public Market, more than 800 products from 57 cooperatives are offered for sale (Istanbul Metropolitan Municipality, 2023, p. 259). Various activities are being carried out within the borders of Istanbul to support urban agriculture and ensure the reuse of agricultural land (Istanbul Metropolitan Municipality, 2023).

- "The Kemerburgaz Biometanization Facility" produces fertilizer from food and kitchen waste.
- As part of the domestic seed research begun in 2021, experimental plantings and harvests were conducted in Silivri and Catalca.
- To reintroduce agricultural areas in Istanbul to production and support farmers, vegetable seedlings, oilseed sunflower seeds, and fodder plants are being distributed.
- Farmers are provided with various trainings on food safety, quality, vegetable training, and digital marketing.
- The "From Soil to Shelf Food Monitoring Model," supported by the Istanbul Development Agency, has been a national project since 2021.
- Practical agricultural education and training on healthy food consumption are being provided to students.

In addition to these activities, the Istanbul Metropolitan Municipality is making various efforts to meet citizens' food needs within the framework of the right to food.

- "Istanbul Public Bread Project" produces bread to meet the local community's need for healthy, high-quality flour and baked goods.
- "The Public Milk Project" has been implemented since 2019, providing free milk to children.
- Food parcel support, which includes essential consumption products, is provided to ensure that households facing social and economic difficulties can access food. (Istanbul Metropolitan Municipality, 2023, p. 266).
- Mobile support is provided to the areas in need with mobile buffet vehicles to meet basic food needs in situations where direct supply of food and beverages is difficult 7/24.

Istanbul Metropolitan Municipality, in the interest of creating a sustainable food system, encourages producers and implements various initiatives that guarantee inhabitants access to nutritious and economical food. These actions, ranging from promoting local agriculture to mitigating food waste, as well as social assistance and educational initiatives, seek to establish a more resilient, equitable, and sustainable food ecosystem in Istanbul's future. Given the city's magnitude and dynamic framework, such extensive policies and initiatives are crucial for Istanbul and Türkiye's food security and sustainable development objectivesand sustainable development objectives in Istanbul and Türkiye.

Nilufer Municipality Practices

Nilufer is a Bursa province settlement and one of the city's most important central districts. As of 2023, the total population of Nilufer has reached 543,934 (Nilufer Municipality, 2023, p. 9). It is a developed region with industry, commerce, education, social, and cultural opportunities. Nilufer Municipality engages in international collaborations and is a member of many organizations within the environmental and social sustainability framework. The municipality, which became a member of MUFPP in 2022, is a member of many international organizations (Nilufer Municipality, 2023, s. 9):

- UCLG-MEWA (United Cities and Local Governments Middle East and West Asia Section)
- World Health Organization (WHO) Healthy Cities Network
- European Network of Local Authorities in Energy Transition (ENERGYCITIES)
- Global Fund for Cities Development (FMDV)

In 2023, the "Nilufer Food Living Lab and Nilufer Social Entrepreneurship Center projects" were awarded in the "Exemplary Initiatives" category of the VI. Guangzhou International Urban Innovation Award, supported by the United Nations and Local Governments (UCLG), the World Association of Major Metropolises (Metropolis), and Guangzhou. By being included in the publicly accessible "Urban Innovation Database," both projects contribute to knowledge exchange and mutual learning on urban innovation and sustainable development (Nilufer Municipality, 2023, p. 108).

Nilufer Municipality is conducting various projects on sustainable food systems and agricultural development. "Hasanaga Food Center" is a project established to support local producers and ensure sustainable agricultural products meet consumers directly (Nilufer Municipality, 2023, p. 214). Hasanaga Food Center supports producers, cooperatives, and women's associations in the Hasanaga neighborhood

in producing, processing, and storing food products; it encourages reliable and high-quality food production (Nilufer Municipality, 2023, p. 398).

Within the scope of the "Nilufer Garden Project," sales points have been established in the city to encourage the consumption of healthy and natural food. These points allow local producers to offer their products directly to the public. With the opening of the sixth branch in 2023, agricultural products such as figs, wheat, corn, and sunflowers are offered to the local public at these sales points (Nilufer Municipality, 2023, p. 400).

Another project aimed at supporting sustainable agriculture is the "Agricultural Analysis Laboratory." Within the scope of this project, soil, plant, and irrigation water analyses are conducted to ensure that farmers engage in more conscious production and to provide guidance on plant nutrition; the scientific data obtained are shared over the internet (Nilufer Municipality, 2023, p. 401). The "Compost Production" project has encouraged compost production to ensure the recycling of organic waste, thereby reducing food waste and increasing agricultural sustainability. 3.3 tons of compost were produced in 2023 as a result of this project. (Nilufer Municipality, 2023, p. 398).

Efeler Municipality Practices

Efeler Municipality is an Aegean Region district affiliated with Aydın Province. According to 2023 data, the district's population is 308,039. The city, influenced by the Mediterranean climate, is rich in agricultural products; olives, figs, chestnuts, cotton, tobacco, and citrus fruits are among the main agricultural products. (Efeler Municipality, 2024, p. 12).

Efeler Municipality has strategic goals such as developing agriculture and increasing employment, establishing facilities where agricultural and livestock products can be processed and marketed, supporting productive women, and functionally using municipal lands. (Efeler Municipality, 2024, p. 65). In line with these goals, the "100% Women's Labor Agricultural Products Factory" project is one of the important projects contributing to the city's sustainable food production and consumption. In 2022, it was awarded in the "Food Production" category at the Milan Pact Awards (MUFPP, 2023). Products grown on agricultural lands belonging to the municipality (artichokes, black wheat, cauliflower, cabbage) are processed at the "Women's Labor Agricultural Products Factory" and offered to the public. The food products produced in the factory are sold through Efe Bakkallar. However, the sale of the produced food products is not limited to the city; they are delivered to every part of Türkiye through various chain stores and online sales platforms (Efeler Municipality, 2024). This project contributes to the creation of sustainable

food systems, the use of local resources, the involvement of women's labor in the production process, and the delivery of healthy foods to the public.

Balıkesir Metropolitan Municipality Practices

Balıkesir is a province in the Marmara Region with a population of 1,273,519 according to 2023 data. Within the borders of Balıkesir Metropolitan Municipality, there are 20 district municipalities. Becoming a member of MUFPP in 2024, Balıkesir Metropolitan Municipality conducts various activities and projects to enhance the local population's social and economic welfare by supporting rural development and sustainable agriculture within the framework of sustainable development goals. Balıkesir Metropolitan Municipality carries out its activities in this field through the companies it has established. BATAS (Balıkesir Agricultural Products Joint Stock Company); established in 2017, operates in production and marketing in the agriculture and livestock sectors throughout the province. On the other hand, BAGYAS (Balıkesir Real Estate Investment and Food Joint Stock Company) produces bread and its varieties in its bread factory and sells them at bread sales booths to ensure that the public consume healthy and high-quality bread (Balıkesir Metropolitan Municipality, 2023).

The municipality's principal objectives are to raise plant production within the provincial boundaries and improve agricultural output's effectiveness, efficiency, and sustainability. The activities carried out by the Balıkesir Metropolitan Municipality are as follows (Balıkesir Metropolitan Municipality, 2023):

- The “Heirloom Seed Village Project” aims to preserve, spread, and distribute local seeds at risk of extinction to producers.
- The “Honey Forest Project” has introduced many kinds of plants, including both medicinal and fragrant species, to improve beekeeping efforts and enrich the flora present in honey wood.
- “Agriculture Camps” are being organized to enhance farmers' agricultural knowledge.
- Making agricultural production agreements with producers provides seedling support to producers for 3 years.
- Einlorn wheat provides support to producers who want to cultivate einkorn wheat.
- It provides material support to fig and olive producers.

Agricultural training programs are being organized to increase farmers' knowledge and awareness levels. Olive Cultivation, a Practical Gardening course, and a Practical Plant Tissue Culture Course can be given as examples. Food assistance is

provided to disadvantaged groups to increase the social and economic welfare of the local population and ensure their access to healthy food. In this context, Balıkesir Metropolitan Municipality provides "Food Card" support to those in need, which can be used in chain supermarkets (Balıkesir Metropolitan Municipality, 2023). Furthermore, food packs and hot meals are being disseminated.

Eregli Municipality Practices

Eregli, affiliated with Konya province, has a population of 150,978 (Eregli Municipality, 2025). As of 2024, the Eregli Municipality, which joined MUFPP, is carrying out various projects in sustainable agriculture and food production. These projects promote environmentally friendly production, local development, and healthy food consumption.

The Adabag Organic Agriculture Project has carried out seedling planting within the scope of the Adabag Neighborhood Organic Agriculture Zone, and vegetables have been grown there. Some harvested tomatoes were sent to sales points as paste and vegetables, while some were gifted to the municipal staff (Eregli Municipality, 2023, p. 92). This project aims to establish Eregli as a leading city in organic agriculture. (Eregli Ajans, 2022).

The Eregli Municipality Agricultural Services Directorate aims to prevent soil and water pollution by monitoring agricultural activities and to protect human health. The activities to be carried out within this scope are as follows (Eregli Municipality, 2025, p. 100):

- Conducting inspections of the long zucchini, black carrot, sheep yogurt, and white cherry with geographical indications
- Increasing activities aimed at promoting regional and geographically marked products
- Supporting and promoting environmentally friendly practices within the scope of environmental protection and combating climate change
- Supporting good agricultural practices and organic farming to increase product reliability and contribute to the sustainable use of natural resources
- Implementation of agricultural support and training for farmers

Eregli Municipality conducts various programs to ensure healthy nutrition and access to food for disadvantaged groups. As part of the "Soup Kitchen Meal Assistance" project, it delivers daily hot meals to those in need (Eregli Municipality, 2023, p. 61). Another service is the distribution of food aid packages consisting of essential food items at regular intervals (Eregli Municipality, 2023, p. 70). In 2025, the municipality aims to provide at least one meal daily to high school stu-

dents studying in the district (Eregli Municipality, 2025, p. 118). These projects are being carried out to ensure food security, increase social solidarity, and support disadvantaged groups.

Muratpasa Municipality Practices

Muratpasa is a district in the Mediterranean Region affiliated with Antalya province. Its population is 512,700. Muratpasa Municipality became a member of MUFPP in 2024. The Muratpasa Municipality Climate Change and Zero Waste Department is working on establishing natural farming methods, ecological balance, biodiversity, safe food production, and a fair food distribution system (Muratpasa Municapility, 2023, p. 50). Additionally, various activities and projects are being carried out in these areas to ensure sustainable development.

The Muratpasa Municipality participated in the "Food Trails Cascade" learning program, a Horizon 2020 program funded by the European Union (EU) in 2023. This program aims to spread knowledge and best practices throughout cities to redesign, develop, and implement sustainable, healthy, and inclusive food policies (Food Trails, 2025). Within the project's scope, Muratpasa Municipality has been paired with Roeselare from Belgium and Thessaloniki from Greece, one of the 11 project partners. The "Muratpasa Food Policy Guide" is being prepared as part of this project (Muratpasa Municapility, 2023, p. 158).

Muratpasa Municipality has initiatives to increase the local population's economic and social welfare through food aid and social support projects. In this context, it provides disadvantaged groups hot meals and dry food aid. To raise awareness among the local population about issues such as healthy eating and food safety, a project titled "There is Life in the Garden" is being carried out. Discussions and workshops are being held on environmental issues, crises of climate change, food, and consumption patterns (Muratpasa Municipality, 2023, p. 157). In 2023, a seminar on healthy eating, including safe food consumption, label meaning, illness caused by food, and conscious consumption, was organized within the project's framework in collaboration with the Antalya Olimpos Rotary Club (Muratpasa Municipality, 2023, p. 158).

Workplace and school cafeterias within the municipal limits are routinely inspected to guarantee safe food consumption. The inspections performed in school canteens assess the appropriateness of the food offered, adherence to general hygiene regulations, and preservation standards. The initiatives of the Muratpasa Municipality in food safety, sustainable production, and mindful consumption play a pivotal role in formulating local urban food policy.

CONCLUSION

Local governments are essential in implementing the Sustainable Development Goals as the entities closest to the population. They are a primary institution that provides services to meet community needs and formulates policy. In areas such as sustainable urban development, responsible production and consumption, and health and well-being, they develop and advance policies and practices tailored to local needs.

Sustainable food systems are directly connected to the economic, social, and environmental dynamics of cities, and the role of local governments in this area is becoming increasingly important. Cities are actively taking responsibility in many areas, such as developing policies that promote healthy eating, preventing food waste, supporting local producers, and combating climate change. In this context, international platforms such as the Milan Urban Food Policy Pact (MUFPP) provide an important framework that guides cities in creating sustainable food systems.

The literature and case studies examined in the study demonstrate that political coherence, stakeholder collaboration, and community participation are critical for local governments to implement sustainable food policies successfully. Following good practices on a global scale is important for enhancing the capacities of local governments. The examples of cities that are members of MUFPP show that city administrations can effectively implement sustainable food policies through good governance and strategic planning.

Within the framework of sustainable food policies in Türkiye, the participation of the municipalities of Istanbul, Mezitli, Nilufer, Efeler, Eregli, Balıkesir, and Muratpasa in the MUFPP demonstrates the local government's efforts to integrate into the global transformation in this field. Upon examining the initiatives and practices of the member municipalities, it is obvious that they take an active role in diverse domains, involving sustainable food production and consumption, reducing food waste and loss, ensuring access to healthy food for those who are disadvantaged, rural development, organic farming, and strengthening local producers. For example, Mezitli Municipality contributes directly to women's employment by supporting female producers. In this respect, a municipality in Türkiye is a member of MUFPP and has received an award for the first time as a good practice example. Nilufer Municipality has developed projects on sustainable agriculture and establishing direct producer-consumer connections. Eregli Municipality has taken significant steps to promote organic farming. Balıkesir Metropolitan Municipality has tried to protect local seeds and increase agricultural production. Muratpasa Municipality, on the other hand, contributes to the development of sustainable food policies by improving the sharing of knowledge and experience through international projects.

The food strategy document implemented by the Istanbul Metropolitan Municipality indicates that sustainable food systems can be applied locally.

When the practices of municipalities such as Mezitli, Nilüfer, and Istanbul are analyzed, it is seen that the implementation of sustainable food policies in Turkey is not equal among local governments. While some municipalities have developed strategies aligned with the MUFPP, others are still in the planning or implementation phase. Moreover, systematic monitoring and evaluation mechanisms are needed, even though many initiatives aim to address food waste, support local producers, or increase access to healthy food.

Sustainable food systems are an environmental policy and a multidimensional process that includes social and economic development. For sustainable food systems at the local level to be successful, it is necessary to strengthen the financial and technical capacities of local governments, promote inter-city information sharing, and ensure that local governments are more integrated into national and international food policies. In this context, monitoring and sharing successful practices in combating climate change in Türkiye and around the world guide local governments in developing sustainable food policies while increasing the resilience of cities. Thus, city administrations can implement these policies more efficiently, building sustainable and resilient food systems in the long term.

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