

1 Supplementary material.

Reclaiming Food Insecurity in European Urban Policies: Lessons from Public and Community-Based

Initiatives

5 **Table S1**. Food security initiatives through the HLPE's framework

Initiative	Availability	Access	Utilisation	Stability	Agency	Sustainability
Food Banks	Redistribute diverse products from market surpluses; availability varies with donation levels, leading to fluctuations.	Provide free food, reducing economic barriers; however, access can be limited by the location of distribution points.	Limited food variety and quality can restrict the preparation of healthy meals.	Dependent on donations and external support, unstable during crises or periods of low donor engagement.	Beneficiaries have minimal choice in food selection, limiting autonomy and empowerment.	Heavy reliance on donations and volunteers raises concerns about long-term sustainability and does not address the root causes of food insecurity.
Solidarity Pantries	Source surplus food locally (markets, supermarkets); steady fresh and frozen products supply.	Offer food at low or no cost, often through a distribution network system (i.e., collection points), lowering economic barriers.	Some provide cooking workshops and nutritional guidance, promoting healthier food practices; the variety of food types depends on available products.	Rely on continuous community support and donations, with stability tied to ongoing engagement.	Specific models allow beneficiaries to choose their food, fostering dignity and autonomy; others provide a fixed basket.	Help reduce food waste and promote community involvement, but long-term sustainability depends on donations and volunteers.
Soup Kitchens	Steady supply through surplus recovery or public procurement; distributed regularly or periodically.	Free or low-cost meals, though social service eligibility requirements may restrict access.	Balanced meals: Some initiatives include culinary training and promoting healthy eating habits.	Dependent on consistent food donations, community involvement, and funding support.	Varies; community kitchens often enable beneficiaries to participate in food preparation and planning.	Promote food recycling and community engagement, yet long-term viability relies on ongoing donations and support.
Gov. Food Distribution	Diverse foods are regularly sourced through government procurement, prioritising local and seasonal options.	Free or subsidised; accessible via schools, community centres, and senior homes. Primarily serves those at extreme risk, with limited reach to other vulnerable groups.	Adheres to balanced nutrition standards, often including health and nutrition education.	Reliably funded by the government, resilient to crises, and adaptable to seasonal variations.	Limited direct participation, though cultural dietary needs (e.g., halal, vegetarian) are considered.	Emphasise local and organic foods, reduce food miles, and support eco-friendly procurement.
Prepaid Cards	Beneficiaries select food from designated retail outlets, typically supermarkets.	Removes economic barriers, though the range of participating outlets may limit access.	Enables beneficiaries to choose foods that meet their nutritional needs; individual nutrition knowledge, habits, and food availability may influence autonomy.	Relies on steady funding from local authorities or foundations; financial instability could disrupt service.	Promotes autonomy and reduces stigma by allowing control over food choices; dignity can vary with how retailers manage the card system.	Reduces household waste; retailer concentration may challenge sustainability, with potential for improvement if local businesses are included.



Initiative	Availability	Access	Utilisation	Stability	Agency	Sustainability
Urban Gardens	Increase access to fresh produce, though production remains small- scale and supplementary.	Improve access to fresh food for vulnerable communities, though space limitations may restrict reach.	Promote proper food use through nutrition and cooking workshops.	Dependent on secure access to land and resources, with ongoing support from authorities.	Empower participants by allowing them to choose crops and use produce as they see fit, fostering autonomy.	Reduce food transport emissions and support agroecological practices; potential to expand if integrated into public policy.
Food Recovery and Redistribution Program	Recover surplus food from farms, markets, restaurants, and stores to provide fresh, nutritious food for vulnerable communities.	Offer free or low-cost food, though centralised distribution points and outreach capacity may limit access.	Focus on nutritious, fresh foods; recipients' cooking ability can impact the full nutritional benefit.	Depending on variable surplus food and funding, they are vulnerable to shifts in food waste trends and funding availability.	Community-driven, promoting collective decision-making and participant empowerment, though resources may be constrained.	Reduce food waste and environmental impact, encourage community involvement and social cohesion, rely on stable funding and avoid dependency narratives.
Food justice, democracy and sustainability initiatives	Connect actors to promote sustainable food systems and democratise access to organic, local products.	Improve access through coordinated efforts, engaging community-based and agroecological initiatives.	Encourage sustainable diets and support food sovereignty movements.	Rely on sustained collaboration among diverse actors and support from local authorities.	Foster inclusivity and empower communities to shape their food systems.	Focus on local, agroecological practices and social equity; scalability and systemic challenges remain.

Source: Authors' elaboration.



Table S2. Strengths and Limitations of Food Security Initiatives

Type of initiative	Strengths	Limitations		
Food Banks	 Improve food availability and access for the most vulnerable during a crisis. Capacity to deliver high volumes of food to a high number of recipients. Consolidated format. 	 Reliance on donations leads to inconsistent food availability, undermining long-term support. Stigma and geographic barriers limit access, forcing many users to travel to other neighbourhoods. The absence of educational activities reduces users' ability to enhance food use and nutrition. Limited choice and decision-making involvement restrict users' autonomy in addressing their FS. Heavy reliance on donations and volunteers raises concerns about the initiatives' long-term viability. Unpredictable food supply due to fluctuating donations affects the consistency and variety of available food. 		
Solidarity pantries	 Provides an innovative, community-based approach to combat food insecurity. Self-managed and promoting mutual support, it ensures food access while empowering beneficiaries and fostering social cohesion in neighbourhoods. Offers a dignified local food aid model, facilitating access without significant transportation barriers. 	 They face challenges in stability and sustainability due to reliance on donations of volunteer time and food, limiting support. Rarely connected to sustainable food systems through public policies or institutional backing, reducing potential impact. By not integrating fully into a broader sustainable food system, it often focuses on short-term relief rather than addressing root causes. Its ability to reduce household food insecurity is limited, as this issue is tied to deeper structural problems that require solutions through social protection policies (Loopstra, 2018). 		
Soup kitchens and Community kitchens	 Integrates food provision with education and sustainability strategies. Operating locally facilitates easier access to food without significant transportation barriers. Increased intake of nutritious foods and improved cooking skills enhance food utilisation and enjoyment (Loopstra, 2018). Strengthening social cohesion and encouraging community participation supports long-term FS stability. Promoting dignity and self-reliance empowers individuals to engage more actively with social services. Fosters long-term solutions to food insecurity with sustainability practices. 	 Community-based initiatives face stability and sustainability challenges due to reliance on limited volunteer time and food donations. Donation levels and volunteer availability constrain success; long-term effectiveness relies on sustained community engagement and public policy integration. Program availability can be affected by holiday schedules, funding constraints, and staff time (lacovou et al., 2013). Initiatives have limited potential to address household food insecurity, as this issue is fundamentally linked to underlying structural problems that require solutions through social protection policies (Loopstra, 2018). 		
Government food distribution program (School, youth and senior meal programs)	 Increasingly aligned with sustainable sourcing practices, these programs prioritise local and seasonal products. They provide a consistent and regular food source, especially during critical times like school lunch hours. Beneficiaries have reliable access to nutritious meals offered in strategic locations such as schools and community centres, eliminating transportation barriers. Meals typically include balanced options that promote healthier eating habits among beneficiaries. Funded and supported by the government, these programs generally enjoy greater stability and long-term sustainability. 	 Reliance on government budgets can make them vulnerable to political shifts. A lack of participant input in decision-making processes may diminish agency. Bureaucratic limitations can create obstacles for individuals seeking aid. Additionally, populations not registered in the city, such as those with irregular migratory status, may be excluded. 		



Type of initiative	Strengths	Limitations		
Prepaid cards and cash transfer programs	 Provides a flexible and dignified approach to addressing food insecurity by improving access, fostering beneficiary autonomy, and supporting program sustainability. It enhances dignity by allowing beneficiaries to choose their food and essentials. 	 The limited choice of shops can increase stigma and restrict true agency. At the system level, this may undermine the sustainability of local businesses and potentially increase food miles. It lacks a sustainability approach and does not promote seasonal produce or support local economies. Highly selective criteria for program qualification can exclude those most in need. There is a risk of inadequate nutritional guidance accompanying the use of the cards, along with an absence of socio-educational support for beneficiaries. Programs are vulnerable to volatile food prices; rising costs can diminish the purchasing power of cash transfers, leading to instability in food access. Beneficiaries are not involved in decision-making processes related to food systems. 		
Urban gardens	 Empowers participants to grow their own food, reduce grocery costs, and improve access to healthy options (Eigenbrod & Gruda, 2015; Opitz et al., 2016). Fosters hands-on learning about gardening, nutrition, and sustainability. Encourages local involvement in planning and maintaining green spaces, strengthening community ties, promoting social interaction, enhancing urban biodiversity, and increasing food resilience by reducing reliance on distant sources. 	 Access is limited by space and resources. Continuity depends on local authority support and may not involve all beneficiaries in decision-making. Additionally, insufficient food production may fail to meet household nutritional needs. 		
Food recovery programs	 Redirects surplus food from businesses and households to those in need, increasing community food availability and reducing waste. Enhances dietary diversity by providing foods not typically offered through traditional food aid. Lowers food costs for low-income households, improving access to nutritious meals. Strengthens social networks through community-level operations (Davies & McGeever, 2022). Improves access to food with minimal transportation needs through localized, territorial distribution. Promotes environmental sustainability by diverting food from landfills and reducing greenhouse gas emissions. 	 Struggle to prioritise healthy and nutritious options, which can hinder beneficiaries' health outcomes. Struggle to prioritise healthy and nutritious options, which can adversely affect beneficiaries' health outcomes. Some programs lack educational components that teach participants about nutrition and cooking skills, limiting their ability to utilise the food they receive effectively. 		
Food justice, democracy and sustainability initiatives	 Employs a multi-actor approach to promote sustainable food systems through coordinated efforts that engage community-based and agroecological projects. Fosters inclusivity and community participation, empowering communities to shape their food systems. 	 Stability relies on ongoing collaboration among diverse actors and support from local authorities, which can be inconsistent. Scalability may limit the widespread impact of these initiatives. Additionally, addressing systemic issues can be complex, potentially undermining the effectiveness of efforts to promote food justice and sustainability. 		

Source: Authors' elaboration.



References - Supplementary material

- Davies, A. R., & McGeever, A. (2022). Social innovation for food waste reduction: Surplus food redistribution. In S. Busetti & N. Pace (Eds.), *Food loss and waste policy* (pp. 209–223). Routledge. https://doi.org/10.4324/9781003226932
- Eigenbrod, C., & Gruda, N. (2015). Urban vegetable for food security in cities. A review. *Agronomy for Sustainable Development*, 35(2), 483-498. https://doi.org/10.1007/s13593-014-0273-y
- lacovou, M., Pattieson, D. C., Truby, H., & Palermo, C. (2013). Social health and nutrition impacts of community kitchens: A systematic review. *Public Health Nutrition*, *16*(3), 535–543. http://doi.org/10.1017/S1368980012002753
- Loopstra, R. (2018). Interventions to address household food insecurity in high-income countries. *Proceedings of the Nutrition Society*, 77(3), 270–281. https://doi.org/10.1017/S002966511800006X
- Opitz, I., Berges, R., Piorr, A., & Krikser, T. (2016). Contributing to food security in urban areas: differences between urban agriculture and peri-urban agriculture in the Global North. *Agriculture and Human Values*, *33*(2), 341-358. https://doi.org/10.1007/s10460-015-9610-2