

Perspectives on Food in the Sustainable City

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Submitted: 9 July 2025 **Published:** 28 August 2025

Issue: This editorial is part of the issue “Perspectives on Food in the Sustainable City” edited by Birgit Hoinle (University of Hohenheim), Alena Birnbaum (University of Kassel), and Petra Lütke (University of Münster), fully open access at <https://doi.org/10.17645/up.i395>

Abstract

This thematic issue explores the importance of food geographies in understanding and shaping sustainable food systems in urban contexts. As cities strive to achieve sustainability goals, the importance of food as a critical urban system has become increasingly recognized. The contributions in this issue highlight the need for intersectional and interdisciplinary approaches to address issues of food justice, equality, and sustainability in urban areas. The Covid-19 pandemic, trade wars, and climate change have exacerbated existing inequalities in food access, underlining the urgency of rethinking and redesigning urban food systems. This issue brings together diverse perspectives from across disciplines and regions to critically assess theoretical frameworks and methodological approaches in food geographies, and to explore new avenues for innovation and collaboration. By examining the complex intersections of food, space, governance, and practice, this thematic issue illuminates potential pathways towards more just, equitable, and sustainable food futures for all. It also highlights the role of cities as key sites for transformative change in the pursuit of socio-ecological and socio-economical transitions.

Keywords

food geographies; food justice; intersectionality; Sustainable Development Goals; sustainable transitions; urban governance

1. Navigating the Complexities of Food Systems in the Sustainable City

In recent years, the issue of food has emerged as a crucial aspect of urban planning and development, highlighting the intricate relationships between food production, distribution, preparation, and consumption in the pursuit of sustainability transitions. The growing recognition of food as a “significant urban system”

(Pothukuchi & Kaufman, 1999, p. 217) in shaping urban environments has sparked a surge of interest in the field of food geographies, which provides a critical lens through which to examine the complex social, economic, and ecological dynamics of food in urban contexts. In addition, they enable an examination of the spatial dimension of sustainability transitions in the food context, which is often only implicitly addressed (Levin-Keitel et al., 2018). As cities worldwide strive to achieve sustainability goals, there is an increasing urgency for a comprehensive rethinking and redesigning of urban food systems. Thus, over the years initiatives such as alternative food networks (AFN), diverse forms of civic regulatory assemblages and urban food strategies, can be found (Maye, 2020).

The signing of the Milan Urban Food Policy Pact in 2015 marked a significant milestone in recognizing the critical role of food in urban sustainability transitions, with over 200 cities committing to prioritizing food as a key component of their urban agendas. This shift towards urban-focused food policies presents opportunities for transformative change, for example in the realm of public catering and civic engagement. Initiatives such as food policy councils and community-led projects are pushing for more inclusive and participatory approaches to food governance, seeking to address long-standing issues of food injustice and inequality.

This thematic issue aims to contribute to the ongoing discussion about the significance of food geographies in understanding and shaping sustainable food systems in urban contexts. By bringing together diverse perspectives from across disciplines and different regions, we seek to critically assess theoretical frameworks and methodological approaches that underpin the field of food geographies, while also exploring new avenues for interdisciplinary collaboration and innovation.

2. Exploring the Diversity of Food Systems in the Sustainable City

This thematic issue presents a diverse collection of manuscripts that showcase the breadth and depth of research in food geographies. The articles, written by scholars from various disciplinary backgrounds, offer a rich tapestry of perspectives on the complex relationships between food, space, and society. From empirical case studies to theoretical reflections, these contributions demonstrate the vibrancy and relevance of food geographies as a field of inquiry with a diversity of methods.

The manuscripts in this issue are organized around several key themes: policies of urban food governance, processes of sustainable food system transitions, and practices of AFN. Also, the geographies of food insecurity and the cultural significance of food in urban contexts play a major role. Together, they provide a nuanced understanding of the ways in which food shapes and is shaped by the social, economic, and environmental contexts of cities.

2.1. Policies—Cities as Places for Just Urban Food Governance

In recent years, the notion of food justice has become a relevant concept for many urban communities. The concept of food justice raises awareness of unequal and racialized power relations in the shaping of urban food systems (Garth & Reese, 2020). The Covid-19 pandemic, the Russian invasion of Ukraine, and the recent tendency towards trade wars have demonstrated the fragility of globalized value chains. Increasing prices for basic food, fruits, and vegetables particularly affect social groups with low income, migrants, and single-parent households. Food insecurity and food poverty are on the rise, including in countries of the

Global North (WBAE, 2023). At the same time, increasing numbers of children and adolescents have obesity and diet-related diseases (Kovacs et al., 2020). Equal access to healthy and fresh food is becoming a pressing policy issue on the urban agenda. In this regard, public procurement, such as school meal programs, is seen as a lever for transitioning to a sustainable and just food system (Filippini et al., 2018; Stein et al., 2022). Vivero-Pol et al. (2019) emphasize that food encompasses six main dimensions, amongst others: food as a human right, as a social-cultural determinant, as a public good, and food as a commodity. Within the dynamics of a corporate food regime, processes of industrialization and commercialization of agriculture have become evident, leading to a stronger tendency of the food as commodity dimension in recent decades (McMichael, 2005). In this sense, people have access to food only in their role as consumers through their purchasing power. By contrast, the dimension of food as a public good or food as a commons means that citizens gain decision-making power over the local food system and participate in decisions about the local food system. The democratization of the urban food system is on the agenda of food policy councils, a movement that goes back to struggles against food racism in North America in the 1990s. These initiatives have brought food to the center of urban policies and shown its interconnectedness with other urban policy fields, such as education, health, transportation, local economies, and environment. Enhancing spaces for democratic participation in the food system while pursuing sustainability goals can pose several challenges for food policy councils and for inclusive urban food governance (Michel et al., 2022). Many policy approaches are facing dilemmas between top-down oriented strategies with ambitious goals and bottom-up processes that design urban policies in co-creation with civil society.

The section on policies in this thematic issue provides novel insights into how urban policy actors address challenges in just and inclusive urban food governance. Authors discuss the tensions between institutionalization and civil society participation in the sense of food democracy. Zentgraf analyzes the Berlin Food Policy Council's work in raising awareness of intersectional food inequalities, while at the same time facing challenges to make the initiative more inclusive and diverse. The challenges of organizing urban food governance in an inclusive way are also the subject in the study in Rome by Sonnino and Zollet. They work with the concept of collaborative governance and urban commons to analyze the way urban agriculture has been promoted in urban food policies. They distinguish between a commons-oriented framework and neoliberal co-optation through different historical phases of urban planning. The notions of a more sustainability- and neoliberal-oriented urban food governance can be found in the text of urban food policy strategies. By applying the method of a critical discourse analysis, Cretella aims to identify the directions in which urban food policies are designed for the cases of London and Rotterdam. The issue of food justice is a major challenge for urban planning. This is shown in two case studies of Barcelona. In a historical analysis of planning documents, Gomez-Escoda shows the relevance of public market halls for providing access to fresh food in Barcelona. In the same context, we also learn about the essential role of food security initiatives in the Catalan metropolis where we see struggles for equal access to food for disadvantaged social groups. By mapping different food security initiatives (food banks, community kitchens...) La Rota-Aguilera and Moragues-Faus provide a typology of food security initiatives for the Global North and discuss the tensions between narrow and comprehensive, territorial approaches.

2.2. Processes—Cities as Part of Sustainable Transitions

Cities are relevant for sustainable transitions in all three—social, economic, and ecological—dimensions of sustainability. This means that the social foundation of urban development is as important as inclusive

economic performance within the Planetary Boundaries (e.g., biodiversity loss, climate change). The search for climate-neutral solutions in cities often focuses on the energy and transport sectors. However, the agri-food system is responsible for up to 30% of global greenhouse gas emissions (Crippa et al., 2021). To achieve just and sustainable urban futures within the Planetary Boundaries, it is essential to integrate food systems into climate policies, while also considering social justice aspects. In this context, cities have a double role in the pursuit of socio-ecological transitions. On the one hand, urban lifestyles have strong sustainability impacts on the surrounding environment in terms of waste, water pollution, and land degradation. Through globalized value chains, the effects of urban consumption in the Global North affect other parts of the world, for example, when considering the water footprint of different products. On the other hand, cities can be seen as think tanks and innovative spaces for creating sustainability initiatives. In many cities worldwide, experimental niches are emerging where new social innovations are developed by grassroots initiatives (Evans et al., 2021; Seyfang & Smith, 2007). AFN can be seen as such social innovations in the way that they experiment with new models based on solidarity economy and short food supply chains. According to the concept of the multi-level-perspective (Geels, 2019), when such niche actors gain enough social acceptance and support for their ideas, they can even influence the regime level and promote transitions within the socio-institutional system. Also, global dynamics at the landscape level (e.g., climate change, trade wars) can open up a window of opportunity or put pressure on the regime level to foster transitions at other levels (Geels, 2019). In sustainability literature, authors identify several leverage points as interventions that lead to transformative change (Abson et al., 2017). They distinguish between shallow leverage points and deep leverage points where deep leverage points have longer-term effects and lead to profound changes of the system, but are more difficult to implement. As an example, Abson et al. (2017, p. 33) refer to a change in the policy design or a shift in mindsets and values, such as orientation toward food security rather than rent-seeking in the agri-food system. This shows the challenges of bringing forward sustainable transitions in urban contexts at different levels. In this thematic issue we selected several contributions that analyze tools for promoting sustainable transitions in cities, and give insights into key dynamics, interventions, and actors.

In the section of processes, two articles discuss the role of public procurement as a lever for promoting sustainable food system transitions. Hoinle and Parot conducted a comparative analysis in France and Germany to identify different school food management models and their impact on promoting just sustainability transitions. They show how each model promotes outcomes regarding diversity, social accessibility, participation and education in school meals. Bückart-Neufeld et al. identified in their systematic literature analysis barriers and drivers for promoting biodiversity and organic food in public procurement through regional value chains. They apply the concept of leverage points to formulate policy recommendations for transitions to more biodiversity-oriented and sustainable public catering. What tools can support food system transitions? With an action research-based approach, Levkoe et al. analyze the role of Community Food System reports as a tool for socio-ecological transitions. With two case studies in Ontario, they showed the relevance of Report Cards for understanding the regional food system, involving the community and fostering transitions. Drawing on their fieldwork in Nairobi, Hering and Kohrs also emphasize the importance of considering the local context in transition processes, particularly with regard to the role of the informal sector in ensuring a sustainable urban food supply.

2.3. Practices—Cities as Experimental Spaces for Social Innovations

As noted above, cities provide fertile soil for creating sustainable transitions that experiment with visions of alternative food futures. Especially after the 2008 financial crisis, there has been a renewed interest in AFN based on solidarity economy (Rosol, 2024). One such example is community-supported agriculture (CSA), which seeks to connect rural farmers with urban consumers through short, trust-based food supply chains. Urban agriculture initiatives are flourishing in many cities of the Global North and South. They often transform vacant, abandoned spaces, rooftops, backyards, or even unused cemeteries (as in the case of Prinzessinnengärten Berlin) into oases of biodiversity and meeting places for the surrounding neighborhood (Baier et al., 2024). Some are even working as places of healing, knowledge sharing and empowerment for refugees and migrant communities. They work on alternative food futures in the sense of creating commons where space and resources are shared within a community. However, they are also threatened by tendencies of neoliberal city development to outsource community and welfare services into voluntary organizations (Kumnig et al., 2017). Other initiatives are committed to combat food waste by saving food that was already destined for the supermarket waste bin, as in the case of the food sharing movement. Also, we can observe a revival and refreshed interest in farmers' markets in the Global North, a format that experienced a decline during the "supermarket revolution" in the 1970s and 1980s (McMichael, 2005). Movements such as Slowfood (Hendriks & Lagendijk, 2022) question the related expansion of processed and convenience foods and seek to contribute to a revaluation of artisanal techniques, such as bread baking. Seed savers struggle against the commodification of seeds and emphasize the ancient knowledge of agrobiodiversity and the use of traditional varieties (Gutiérrez-Escobar, 2015). The fair-trade movement questions the ways in which global trade still operates within colonial power structures, while establishing direct market channels with small-scale farmer cooperatives in the Global South (Kister, 2013). All in all, we can see an increasingly diverse panorama of different alternative food initiatives. But what is "alternative" about them? What do they have in common? According to James (2016, p. 67), they are "intended to create a space outside of the neoliberal mainstream system through shortening the supply chain and connecting consumers to small-scale farmers." Rosol (2020) emphasizes that they are built on trust and personal interactions and are guided by normative ideals of more ecological, direct, and small-scale food production, distribution, and consumption, which differentiates them from conventional supply chains. She distinguishes between alternative products, alternative distribution networks, and alternative economic models (Rosol, 2020, p. 18). While "alternative products" are merely related to the product quality (e.g., organic certification), alternative "networks" and "economic models" experiment with non-capitalist economic practices. This includes other forms of economic transactions, working practices, and economic organization, which contribute to a diverse food economy (Gibson-Graham, 2008). But how can these alternative proposals emerge out of the niches? What are strategies for upscaling them to initiate transformations of the whole food system? These are essential questions for many of the AFN, as they often do not manage to include the social groups they originally wanted to address. Often, they are criticized for remaining in a middle-class, white bubble. But what are ways to make them more diverse and accessible? In the third section, we zoom in on diverse AFN in different parts of the world. The studies show how these initiatives deal with the dilemma of creating alternative food futures while struggling with gentrification and elitism.

The third section explores innovative practices for sustainable urban food systems, food justice, and inclusivity with regard to intersectional power dynamics related to class, race, gender, and age. The research of Schrobrenhauser and Lütke reveals how urban sustainability transitions can lead to gentrification and

displacement in migrant foodscapes. It illustrates how community members in Amsterdam's Javastraat adapt to and struggle with these changes. Two articles explore community-oriented food production through community gardens and CSA. A GIS analysis by Wesener et al. examines the spatial accessibility of community gardens in Christchurch, New Zealand, in relation to the local demographic context. Based on a literature review on CSA in Brazil, Ribeiro et al. found that, while CSA has the potential to promote food system transitions by reducing carbon emissions, it has limited accessibility to consumers with lower incomes. Organic production is a leverage point, but it can be more expensive due to labor-intensive cultivation methods that avoid synthetic pesticides and fertilizers. Babajani et al.'s study on customer willingness to pay for organically produced food in Tehran shows that trust in certification and labeling systems plays a crucial role, particularly in the absence of standardized systems. Finally, Štraub et al.'s research highlights the increasing importance and potential of digitalization in transition processes, using the example of food sharing apps that reduce food waste. The impact of these apps depends on the urban context and the type of food.

3. Conclusion

This thematic issue highlights the potential of food geographies to inform sustainability transition processes in urban contexts, focusing particularly on the interplay between spatial and social dimensions. A notable theme that has emerged from the contributions is the imperative need for intersectional and interdisciplinary approaches that prioritise justice and equity in urban sustainability transitions. As urban areas continue to grow and develop, it becomes apparent that the transition towards sustainable food systems is a complex, multifaceted, and iterative process (Evans et al., 2021). In order to address the forthcoming challenges, there is a requirement for innovative and experimental thinking, as well as a commitment to social justice, environmental responsibility, and human well-being. By synthesising insights from food geography and the collective expertise of academics, activists, and practitioners, we aim to help envision a future where food systems no longer perpetuate inequality and unsustainability, but instead contribute to a positive urban transformation.

Acknowledgments

We thank the Journal team for the opportunity to lead this thematic issue and for the fruitful cooperation. Our thanks also go to the reviewers of the contributions for their constructive feedback and to Haley Swanger for her dedication in revising the language and style of our text.

Conflict of Interests

The authors declare no conflict of interests.

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