Food procurement and short food value chains

AN ANALYSIS OF CASE STUDIES IN PUBLIC AND PRIVATE REALMS

Edited by Davide Fassi



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2. Food as relational practices: reflecting on alternative food networks for university campuses

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ABSTRACT

Private Sectors (PPSs) have increasingly been used to improve food quality and reduce costs in public and private institutions, promoting social and environmental sustainability. This chapter explores how PPSs can create innovative and accessible distribution networks in small urban areas. Focusing on university campuses, it examines how newly designed Alternative Food Networks (AFNs) can enhance distribution systems and foster community building through interconnected service nodes. Can AFNs act as catalysts for systemic transitions in urban neighbourhoods marked by gentrification and social tensions and in peri-urban areas of production and distribution? From the spatial and service design perspective, the physical environment plays a key role in shaping relational and functional dynamics through interconnected places that amplify relationship-building. Food exchange creates a web of commercial, social, and productive connections that transcend geographic boundaries. Cities ad-

In recent decades, food procurement programs in the Public and

dress this through policy tools involving universities, integrating AFNs into larger distribution networks. The goal is understanding how these systems can shape territorial identities and strengthen social bonds.

2.1 Place, proximity, and food systems for sustainable community development

The research builds on reflecting on the cultural, social, and political role of place (Casey, 1993, 1997), emphasizing its situated and ontological relationality. This concept encapsulates the cultural, historical, and ritual meanings of beings and things. It serves as a critical instance for meaningful social regeneration of communities within the dynamics of culture, power, and economy. By examining it as more than a geographical location, the research underscores its multifaceted dimensions, including the lived experiences and collective memories that shape community identity. This approach permeates places with cultural meanings and historical narratives, forming a framework that connects individuals to their heritage and traditions. This ontological relationality of place highlights how social structures and power dynamics are reflected in and influenced by the spatial configurations and meanings ascribed to different locales. The research posits that acknowledging and harnessing a place's rich, interconnected meanings is essential for addressing contemporary challenges related to cultural sustainability, economic development, and social justice.

This approach plays a crucial role in the regeneration of commons, involving the careful navigation of complex interdependencies (Escobar, 2018) – a concept implying the recognition of a complex relational matrix between all living beings, human and nonhuman – tied to shared identities within urban environments. As cities and neighbourhoods undergo transformations, including social frictions, patterns of immigration, and processes of marginalization, these interdependencies manifest in various forms. Also, understanding temporalities tied to place shows how historical events, collective memories, and evolving cultural practices shape and are shaped by

the spaces communities inhabit. This perspective emphasizes that the commons - shared resources and spaces - are not static but are continually redefined through the interactions and experiences of the people who engage with them. Therefore, the regeneration of these commons requires addressing the layered histories and diverse temporal dimensions that influence current social dynamics. This involves recognizing the impacts of past injustices and current socio-economic challenges while fostering inclusive and participatory approaches to urban development. By doing so, it becomes possible to create environments that not only reflect the multifaceted identities of place-based identities but also promote resilience and equity among different communities. This is fundamental to any community-based participatory approach for understanding the communal bonds and shared resources that sustain urban life, particularly amidst complex challenges such as social friction, immigration, and marginalization.

The physical environment acts not just as a backdrop but as an active determinant of relational, functional, and spatial relationships. There is no proximity (Howe & Dillon, 2003; Manzini, 2022) without a network of interacting multiple nodes of interconnected places where the potential for relationship-building is amplified. This conceptualization emphasizes that proximity is not merely about physical closeness but the dynamic and intricate web of connections that link various locales. In such a network, each node, representing a distinct place - not space -, interacts with others, fostering a robust and resilient social interaction and relationship-building framework. These interconnected places become vibrant hubs where cultural, social, and economic exchanges occur, allowing for the continuous flow of ideas, resources, and people. The multiplicity of nodes ensures that relationships are not confined to bilateral interactions but are part of a larger, more complex system where each connection strengthens the overall network. This amplification of relationship-building potential is critical in creating inclusive communities where diversity is embraced and collective identities are formed and reinforced through shared experiences and mutual support. The networked nature of these places facilitates bridging gaps between different groups, promoting understanding and cooperation. It allows

for a more comprehensive and nuanced approach to community development, emphasising fostering connections that transcend geographical boundaries. Therefore, in this context, proximity is redefined as an active, relational concept dependent on the vibrancy and efficacy of the network of places and the interactions within them.

Focusing attention on sustainable food systems, the flow of food into territories and cities is a critical material aspect that significantly influences relationships and the physical scale of space. Food exchange generates a complex web of commercial, convivial, and productive relationships that transcend geographical boundaries, creating interconnected networks that bind diverse communities. It may reveal underlying power structures rooted in colonial-patriarchal roots, which continue to shape contemporary food systems. An intersectional approach is essential to unpack these layers, as it allows for a deeper understanding of how various forms of oppression and privilege intersect in the context of food production, distribution, and consumption.

Design culture has a critical role and responsibility in this realm, as it can either perpetuate these inequities or contribute to more equitable and sustainable practices. By redesigning an alternative flow of food, for example, we may enhance cultural exchange and social interaction. Also, by rethinking design strategies, it is possible to create food systems that foster social justice. This involves considering the entire lifecycle of food, from cultivation and harvesting to distribution and consumption, and ensuring that each stage promotes environmental health, economic viability, and social equity. In essence, sustainable food systems are not just about the efficient flow of food but also about responsible transformations, making it a vital area of focus for fostering resilient and equitable communities. The research investigates how such systems can shape the identity of these territorial units and act on relationships towards increasing social bonds. These could be explored as testing environments, generating and supporting collective activities while enhancing new relations, materialities and preferable futures.

Territories, whether specific neighbourhoods in cities or more fluid and diversified areas, often face significant challenges such as gentrification and social stratification. Over the past 25 years,

there has been notable growth in bottom-up initiatives such as, for istance, neighbourhood solidarity networks for food production, recovery, distribution, and the valorization of food surplus. These initiatives have been supported by forms of design activism (Mouffe, 2007; Thorpe, 2008; Buser *et al.*, 2013; Fuad-Luke, 2013; Markussen, 2013; Cassim & M'Rithaa, 2015), which have played a crucial role in fostering community resilience and sustainable practices. This lineage of design practice has been activated through democratic experimentalism, which manifests in acupunctural interventions – small, targeted actions aimed at creating significant impact. These interventions serve as forms of resistance to global issues, such as climate change and social inequality, by promoting localized, community-driven solutions.

However, despite their potential, such experimentalism often results in practices that primarily involve the privileged – those who can afford to dedicate time and resources to imagining and developing alternative futures in designated co-creation spaces. This dynamic tends to further entrench existing inequalities, as marginalized communities, already burdened by economic, class, gender issues, and caregiving demands, are frequently excluded from co-creation spaces that are ostensibly meant to benefit them (Fry & Nocek, 2020). As a result, these well-intentioned initiatives may inadvertently perpetuate the disparities they aim to address.

To truly transform how we develop and live in neighbourhoods, there is an urgent need to reframe design politics and embrace a more radical and intersectional approach to justice design (Tassinari et al., 2025). This involves recognizing and addressing the barriers preventing marginalized groups from participating in these initiatives and actively involving them in the design and decision-making processes. By doing so, we can ensure that the benefits of design activism and bottom-up initiatives are more equitably distributed and that these efforts genuinely uplift and empower all community members. This rethinking requires a commitment to inclusivity, equity, and justice at every stage of the design process, from conception to implementation, and a willingness to challenge and dismantle the systemic structures that perpetuate inequality. Only by adopting an intersectional approach can we support truly sustainable and

resilient communities that are capable of thriving in the face of contemporary global challenges.

2.2 A multilevel systemic approach

In the *OnFoods* framework, we are analyzing what is and what could happen at small territorial units – both urban neighbourhoods and small towns in rural contexts – in relation to how existing and newly designed alternative food networks (AFNs) can innovate distribution systems towards environmental sustainability and act as promoters of community cohesion through interconnected service-provider locations. These territorial units have the potential to leverage their unique local contexts as service strengths by weaving together existing relational networks and organizational systems.

This approach allows for developing early-stage innovations that are structurally connected with social actors, facilitating the ability to scale initiatives up and down, deep and broad, to suit varying community needs. The discussion will be supported by referring to some case studies analysed during the first year of the *Public and Private food Procurement and short food value chains in Urban areas* project (*PPP-URB*), part of *OnFoods* strategy.

Addressing food systems within small territorial units requires a multilevel systemic approach that can operate across different scales, from macro to micro and *vice versa*, due to the common



Figure 1.
Erba Brusca interiors.
Ph. Erba Brusca website.

organizational proximity inherent in these units. This approach acknowledges that sustainable food systems are not only about efficient production and distribution but also about fostering resilient communities through localized networks of cooperation.

In this direction, AFNs are amplified by a novel conceptual framework called Values-based Territorial Food Networks (VTFNs). It focuses on three key elements: the values guiding agricultural-food initiatives, their place-based dimensions, and the cooperation networks steering their governance (Reckinger, 2022). The VTFN framework emphasizes the importance of aligning food systems with the core values of environmental sustainability, social equity, and economic viability. By grounding agricultural-food initiatives in these values, VTFNs can create more resilient and equitable food systems attuned to local communities' specific needs and resources.

The place-based dimension of VTFNs highlights the significance of local contexts in shaping food networks, recognizing that the success of agricultural-food initiatives depends on their ability to adapt to and integrate with each territory's unique cultural, historical, and environmental characteristics.

An example is the Erba Brusca restaurant (https://erbabrusca. it/), an entrepreneurial initiative in the South Agricultural Park in Milan (Figure 1). While it may not transform the local agricultural system, it fosters dedication within a small network. The restaurant's owners, recognizing the benefits of the location, established a network of local producers and committed suppliers and began developing a small vegetable garden close to the restaurant with fruits and vegetables for their recipes. Together with constant testing in crop choices and land preparation, this small system is increasing procurement self-reliance and has a significant impact on its territory.

The network of cooperation element of VTFNs underscores the importance of collaborative governance in managing food systems. This involves building partnerships among diverse stakeholders, including farmers, consumers, policymakers, and community organizations, to ensure that food networks are inclusive and participatory. Such cooperation can enhance the resilience of food systems by pooling resources, knowledge, and expertise and by fostering a sense of shared responsibility for the sustainability of local food networks.

Implementing VTFNs within small territorial units involves creating interconnected service-provider locations that act as nodes within a broader network. These nodes facilitate the distribution of locally produced food, support local economies, and strengthen community ties by providing spaces for social interaction and cooperation. By integrating these nodes into the existing fabric of urban neighbourhoods and rural towns, VTFNs can enhance the accessibility and affordability of healthy, sustainably produced food while promoting environmental stewardship and social justice.

SOSpesa - Equity and resilience around the corner (2020-ongoing) (Figure 2) and Coltivando - The convivial garden at Politecnico di Milano (2011-ongoing) (Figure 3) are relevant cases of this integration. Both were developed or implemented by researchers of Politecnico di Milano and are community-driven initiatives based in Milan neighbourhoods. SOSpesa supports vulnerable populations by distributing surplus food recovered from municipal markets and local groceries through a collaborative system with local stakeholders, promoting cultural integration and social empowerment. The initiative provides essential food assistance and fosters community support. It establishes local networks: local restaurants use recovered food to create discounted meals, with a portion of profits supporting the project; the Municipal Market sells fresh vegetables at reduced prices; Recup, an organization focused on redistributing food waste, provides unsold commodities from municipal markets. Coltivando is a community garden within the Bovisa Politecnico Campus. It allows the neighbouring community to uncover a hidden public location - becoming an essential communal space for the area - and cultivate their products.

Overall, the *OnFoods* framework, through the lens of VTFNs, offers a comprehensive approach to rethinking and redesigning food systems within small territorial units. By focusing on values, place-based dimensions, and cooperation networks, this framework provides a pathway for developing sustainable, resilient, and equitable food systems deeply rooted in local communities' specific contexts. This systemic approach recognizes the interconnectedness of food systems and community development, highlighting the potential for AFNs to act as catalysts for broader social and environmental change.

Figure 2.

SOSpesa during food distribution.
Ph. Polimi DESIS Lab.



Figure 3.
Coltivando
The convivial garden
at Politecnico di Milano.
Ph. Polimi DESIS Lab.



Figure 4.

Copenhagen House
of food cooking activity.
Ph. Madhus website.





Figure 5. REWE Green Farming interiors. Ph. © Jürgen Arlt.

Two other cases are good examples of this: the *Copenhagen House of Food* (Figure 4), a non-profit foundation founded by the City of Copenhagen that, since 2007, has been substantially restructuring the food preparation techniques to incorporate organic products for the 900 municipal kitchens (canteens, day-care centres, and nursing homes); and REWE, a new model of supermarket in Germany (Figure 5). The project reimagines the conventional grocery shop with a low-energy building, incorporating an aquaponic system and rainwater collection for restrooms and irrigation. The store entry features a dedicated space for local producers, with about 20% of products sourced locally from 150 regional producers. This initiative, part of REWE Green Farming, helps stabilize prices by mitigating market fluctuations.

Therefore, AFNs and VTFNs can be seen as magnifying lenses for mapping and enabling systemic transitions within urban neighbourhoods – characterized by gentrification and social stratification – and remote areas – characterized by relational remoteness and depopulation. In urban neighbourhoods, gentrification often leads to the displacement of long-standing communities and the erosion of local cultural identities. AFNs can counteract these effects by fostering community cohesion and resilience through localized food initiatives, creating cooperation networks among diverse stakeholders and strengthening the cultural and social fabric. Conversely, in remote areas where relational remoteness and depopulation are pressing issues, VTFNs can act as critical interventions to revitalize these communities.

By leveraging local agricultural practices and integrating them into broader food networks, VTFNs can create new economic opportunities with other stakeholders. This approach can help offer economic stability and foster a sense of community and belonging.

This research also challenges the traditional city-periphery dualism, which often associates cities with being welcoming, safe, and liberated spaces, while rural locales are traditionally deemed inhospitable to socio-political activism. By guestioning this dichotomy, the study highlights the potential for urban and rural areas to foster vibrant and active communities. AFNs and VTFNs provide a framework for a systemic transition that transcends geographical boundaries. In practical terms, AFNs and VTFNs can facilitate mapping existing food systems, identifying areas where interventions are needed, and opportunities for collaboration and innovation exist. They can help create platforms for knowledge exchange and capacity building, enabling communities to learn from each other and implement best practices. Additionally, these networks can advocate for policy changes that support sustainable food systems and community development, ensuring that local initiatives are recognized and supported at higher levels of governance, enabling systemic transition within urban neighbourhoods and remote areas. The study aims to understand how rural locales can relationally rebuild their proximity networks, grappling with the complexities of visibility, safety, and resource access in their rural communities and devising a public-private politics that effectively engages communities noticeably marginalised in the regeneration of their public realm. This is approached from a situated thinking perspective (Haraway, 1988), effectively addressing the power structures that generate ecosystemic and social injustices.

2.3 How can we re-interpret the role of university campuses as part of broader territorial systems?

On university campuses, AFNs can be pivotal in promoting sustainability, fostering community engagement, and serving as microcosms

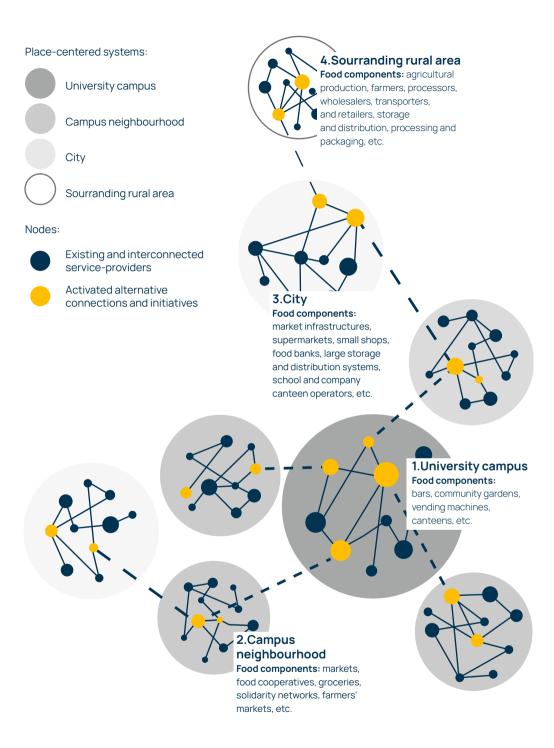


Figure 6.
The posible impact of AFNs in university campuses within the broader territorial systems. © Irene Bassi.

for systemic transitions within broader urban and rural contexts (Bruning et al., 2006; Valluri, 2010; Barlett, 2011; Trencher et al., 2014; Fassi, Galluzzo & De Rosa, 2016; Fassi, Galluzzo & Rogel, 2016; Balducci, 2018; Torrijos et al., 2021). Universities, often situated at the intersection of diverse demographic groups and equipped with significant intellectual and material resources, are ideal for implementing and studying AFNs (Figure 6). Campuses can serve as living laboratories where innovative food distribution systems are tested and refined, demonstrating the feasibility and benefits of sustainable practices for students, faculty, and staff. By establishing networks that connect local farmers and food producers with - for instance campus canteens, universities can ensure a steady supply of fresh, nutritious, and sustainably produced food. These networks can also include initiatives such as campus/community gardens - intended for the inhabitants of the campus and the neighbourhood as one community bound together by the place itself -, farmers' markets, and food cooperatives, which provide hands-on learning opportunities for students and foster a sense of community and shared responsibility.

Furthermore, universities can act as catalysts for broader community engagement by extending the reach of campus-based AFNs to surrounding neighbourhoods and rural areas. Through partnerships with local organizations, municipalities, and other educational institutions, universities can help scale up successful initiatives and disseminate best practices. This outreach can foster stronger connections between campuses and local communities, promoting a more integrated and cohesive approach to regional food systems. By leveraging their resources and influence, universities can play a critical role in driving the systemic transitions advocated by AFNs and VTFNs, creating more sustainable and equitable food networks locally and globally.

This chapter presents the positioning of the research, and the approach identified for the redefinition of the food system in a relatively small but powerful system such as a large university: promoting and activating better models can serve as an example and a stimulus for sustainable agreements between the actors involved.

References

- Barlett, P. F. (2011). Campus Sustainable Food Projects: Critique and Engagement. American Anthropologist, 113(1), 101–115.
- Bruning, S. D., McGrew, S., & Cooper, M. (2006). Town-gown relationships: Exploring university-community engagement from the perspective of community members. *Public Relations Review*, 32(2), 125–130.
- Buser, M., Bonura, C., Fannin, M., & Boyer, K. (2013). Cultural activism and the politics of place-making. *City*, 17(5), 606–627.
- Casey, E. (1993). Getting back into place: Toward a renewed understanding of the place-world. Indiana University Press.
- Casey, E. (1997). The fate of place: A philosophical history. University of California Press.
- Cassim, F., & M'Rithaa, M. (2015). Design Activism: Redefining the Designer-Client Relationship? Proceedings of the Cumulus Conference, The Virtuous Circle Design Culture and Experimentation. Cumulus Conference, The Virtuous Circle Design Culture and Experimentation, Milan. McGraw Hill Education.
- Escobar, A. (2018). Designs for the pluriverse: Radical interdependence, autonomy, and the making of worlds. Duke University Press.
- Fassi, D., Galluzzo, L., & De Rosa, A. (2016). CampUS: Co-designing spaces for urban agriculture with local communities. PAD Journal – Pages on Arts and Design, 13 (Design for Territories), 254–278.
- Fassi, D., Galluzzo, L., & Rogel, L. (2016). Hidden Public Spaces: When a university campus becomes a place fro communities. *DRS2016: Design+ Research+ Society-Future-Focused Thinking*, 3407–3421.
- Fry, T., & Nocek, A. (2020). *Design in crisis: New worlds, philosophies and practices*. Routledge.
- Fuad-Luke, A. (2013). Design activism: Beautiful strangeness for a sustainable world. Routledge.
- Haraway, D. (1988). Situated Knowledges: The Science Question in Feminism and the Privilege of Partial Perspective. *Feminist Studies*, 14(3), 575–599.
- Howe, T., & Dillon, P. (2003). Design and its context: Place, proximity and closure. Proceedings of the 5th International Conference of the European Academy of Design.
- Manzini, E. (2022). Livable Proximity: Ideas for the City that Cares. EGEA spa.
- Markussen, T. (2013). The disruptive aesthetics of design activism: Enacting design between art and politics. *Design Issues*, 29(1), 38–50.
- Mouffe, C. (2007). Artistic activism and agonistic spaces. Art and Research, 1(2), 1-5.
- Reckinger, R. (2022). Values-based territorial food networks: Qualifying sustainable and ethical transitions of alternative food networks. *Regions and Cohesion*, 12(3), 78–109.
- Tassinari, V., Vergani, F., & De Rosa, A. (2025). Re-framing co-design practices.
 Towards a pluriversal mindset in co-design. In Busciantella-Ricci D., & Scataglini,
 S. (Eds.), Exploring Research Through Co-Design: Multiple Perspectives for
 Collaborative Inquiry. Taylor and Francis's CRC Press.

- Thorpe, A. (2008). Design as activism: A conceptual tool. In Proceedings of Changing the Change. Design, Visions, Proposals and Tools Conference. Allemandi Conference Press.
- Torrijos, V., Calvo Dopico, D., & Soto, M. (2021). Integration of food waste composting and vegetable gardens in a university campus. *Journal of Cleaner Production*, 315, 128175.
- Trencher, G., Yarime, M., McCormick, K. B., Doll, C. N., & Kraines, S. B. (2014). Beyond the third mission: Exploring the emerging university function of co-creation for sustainability. *Science and Public Policy*, 41(2), 151–179.
- Valluri, V. (2010). Campus Gardens: A Growing Trend in Campus Sustainability, in Leal Filho, W., & Zint, M., The Contribution of Social Sciences to Sustainable Development at Universities, World Sustainability Series. Springer.









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The PPP-URB project (Public and Private Procurement and Short Food Value Chains in Urban Areas) is a key initiative within the Onfoods PNRR research program, aimed at reimagining urban food systems. This volume showcases how the project, coordinated by the Design Department of the Politecnico di Milano, implemented a systemic design approach to integrate various disciplines and viewpoints, addressing the complexity of the topic. By analyzing case studies, the project investigates the role of food ecosystems in small territorial units. with a particular focus on university campuses, to understand their influence on local systems. The research's first deliverable concentrated on this analysis, establishing a foundation for future strategy development and practical experiments. Input from six Italian universities highlighted how interdisciplinary collaboration among project partners encouraged critical thinking about food systems in urban environments, opening the door to innovative models and strategies for tackling food challenges in future cities.

