Supplementary Material 2: Methodology

The three cases analysed in this paper originate from distinct research projects, conducted between 2022-2026. Although each was developed within its own empirical and institutional context, they share a common qualitative research design and core research questions that enables comparative analysis. This expanded methodology section synthesises the empirical material and research approaches underpinning the three cases and explains how they informed the development of this paper.

The analysis combined participant observation, semi-structured interviews, and engagement with a shared set of research questions across the three case studies. In addition, the authors have also maintained sustained engagement with the initiatives and the wider food governance landscape in Barcelona over the last five years, participating in more than 50 workshops, seminars, meetings, and public events. This long-term involvement provided complementary empirical insights into the governance context in which the initiatives are embedded and fostered a nuanced understanding of the actors, practices, and dynamics shaping them. Throughout the research process, preliminary findings were discussed with participants, allowing interpretations to be refined through feedback and dialogue. Finally, collaboration across the three research projects enabled collective reflection and critical discussion among the authors, strengthening the comparative analysis by challenging and refining interpretations.

In total, 35 semi-structured interviews were conducted with members and/or workers of the initiatives, policy officials, and other actors involved in the initiatives and broader networks. Interviews were audio-recorded, transcribed, and anonymised to ensure confidentiality. Informed consent was obtained prior to each interview. The interviews were guided by a semi-structured interview script. Across the cases, interviews were guided by questions on governance and contextual factors, including barriers and enabling conditions, participation processes, access to resources, and relationships with other actors and institutions.

The empirical material collected across the three case studies is summarised below, including the number and profile of interview participants and the range of qualitative methods employed in each case.

- **Urban community gardens:** 10 semi-structured interviews (five individual and five group interviews, involving seventeen participants in total). Participants included five policy officers, three members of a cooperative specialising in community garden management, two representatives of a public facility hosting community gardens, and seven gardeners. Additional data were generated through the co-production of four workshops conducted in collaboration with *Agròpolis*, a Barcelona City Council initiative that fosters networking and collaboration among urban and peri-urban agroecological projects. The workshops involved community garden participants and other agroecological actors. Topics included drought management in community gardens, project sharing and mutual support among initiatives, and, in two workshops, the relationship between research and food initiatives.

- **Food cooperatives:** 13 semi-structured interviews: two with members of a cooperative supermarket, one with a cooperative supermarket employee, two with agroecological farmers, two with policymakers, and six with members of small-scale food cooperatives,

three of which were formally organised as associations and three operated as informal collectives. In addition to the interviews, an ethnographic field diary was maintained throughout the research period. This diary documented observations from daily practices, meetings and workshops, informal exchanges, and reflexive considerations related to the author's embedded position within the processes.

- **Food insecurity initiatives:** 12 interviews were conducted with programme officers, coordinators, and staff involved in food insecurity initiatives. These included two individual interviews—with the coordinator of the Barcelona City Council's municipal food insecurity programme, and the Director of Municipal Social Services of Barcelona—seven individual interviews with coordinators from food insecurity initiatives operating in the city under diverse provision models, and three group interviews with coordinators and staff from these initiatives.

For all three cases, data also included the analysis of relevant reports and official documents from both the Barcelona City Council and the Catalan Regional Government, including the Barcelona Healthy and Sustainable Food Strategy 2030, the Urban Agriculture Strategy, policy reports, and annual programme reports.

The material was analysed using the analytical framework developed in *Section 2: Urban food infrastructures and the role of the public sector*. First, each case was examined as urban food infrastructure through three analytical domains outlined in that section: material and biophysical configuration, infrastructuring practices, and governance and political mediation. Second, we identified and compared the public sector roles emerging in each case to examine how different forms of public involvement shape the development and governance of urban food infrastructures across contexts. This two-step approach enabled us to connect the socio-material specificities of each case with a broader examination of hybrid governance and public sector involvement.

The study has several limitations. The three cases originated from distinct research projects, although they shared a qualitative methodology and a common set of core research questions. The analysis focuses on three types of urban food infrastructure and does not cover dominant forms of food provisioning, such as supermarkets, food outlets, or municipal markets. In addition, the study examines public-sector roles rather than evaluating the cases in terms of success or failure; developing such evaluative criteria remains an important area for future research.