

INDIVIDUAL EVALUATION AND COMPLEX COMPARISON OF THE INSPIRATIONAL CASES

Authors: Hanna Szemző, Kata Kepes, Eve Florence Palmer, Allison Sermarini, Maria Peteinaki, Chaido Kaproulia, Mosen Farhangi, Michael Martin, Livia Kastner, Marta Carrasco Bonet, Montserrat Iranzo-Domingo, Judit Onsès Segarra, Nadia Fava, Andreas Wesener, Jiabei Xu, Yuan Xu, Bálint Szöllősi, Noémi Vajdovich, Michele D'Ostuni, Francesco Orsini

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E-mail Contact for queries	szemzo@mri.hu
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CROSS COMPARISON ANALYSIS OF INSPIRATIONAL CASES

Introduction

The report is organised into two main building blocks that together provide the framework for the analysis. It begins with a cross-case analysis of the ten Inspirational Case Studies, introducing the broader context of why these initiatives are important and providing an overview of each case. This is followed by a description of the methodology used throughout the report. The core of the first section presents an in-depth comparative analysis of the case studies, examining their contributions to food security, local community impact, urban development, food governance, and financing models. The section concludes by exploring the role of the New European Bauhaus (NEB) values across the cases and by introducing and applying the Urban Food Value Framework (UFVF), a valuation tool developed specifically within the REDESIGN project to capture the full range of social, spatial, ecological, and economic values generated by urban food initiatives.

The second and larger building block consists of the ten inspirational case studies themselves, presented one after another and spanning a deliberately diverse set of geographical, cultural and institutional contexts: from market halls in Budapest, a converted social-cooperative hub in Bologna (Kilowatt), an urban-farming company and a long-running civil-society organisation in Athens (Trofy.Lab and Organisation Earth), an unrealised food-integration ambition in Stockholm (Marievik), a university-hosted garden in Girona (UDG Ecosolidary Garden), a grassroots support network in Nairobi (Growth4Change), two linked cases in Christchurch (the Canterbury Community Gardens Association, and the Christchurch City Council together with the Food Resilience Network), through to a therapeutic community garden in Faversham, UK (Abbey Physic Community Garden). This range was chosen deliberately, reflecting the NEB principles of sustainability, inclusion and heritage, and ensuring that the study captures a genuinely wide variety of governance models, financing arrangements and community contexts rather than a single template repeated across locations.

Despite this diversity, each case study follows a broadly consistent internal structure to keep the analysis comparable across contexts. Individual reports typically move through a common sequence: an introduction to the case and its selection rationale, a description of the methodology used (generally desk research combined with semi-structured interviews with key stakeholders), a descriptive overview of the case and its key actors, and a detailed findings section covering governance structures, legal and financial frameworks, patterns of engagement and collaboration, impact, and future plans. This qualitative approach was chosen deliberately: because the cases are so place-specific and shaped by local actors' motivations, informal networks and the meanings communities attach to food, land and shared spaces, a qualitative lens was considered best suited to surfacing the tacit, experiential knowledge, including



successes, bottlenecks and unresolved tensions, that numbers alone would struggle to capture.

Read together, these two building blocks are designed to serve complementary purposes. The comparison chapter equips the reader with a holistic understanding of the cases and their similarities and differences, while the frameworks provide a shared analytical vocabulary and set of values against which any given initiative can be assessed. The ten case studies that follow apply these lenses, implicitly or explicitly, to real, contrasting examples of urban food system transformation. This structure also mirrors the broader role the inspirational cases play within the wider REDESIGN project: beyond their value as a stand-alone comparative resource, they are intended to feed practical, tested solutions and comparative insight into the project's Living Labs through the so-called "Transformative Loop," meaning the structure of this study is not only an organisational choice but a reflection of how the cases are meant to be used beyond the document itself.

What are inspirational cases?

The continuation of migration towards urban areas across the globe, coupled with climate challenges and political insecurities put the question of urban systems and food security, as well as the access to food into the centre of attention of policy makers, researchers, NGOs and private actors alike.

The issue has become important in the EU as well, where, as of 2021 close to 75% of the population lived in urban clusters, a ratio which is likely to increase in the future (Eurostat, 2021). Urban food systems have wide ranging impacts, and raise questions about equity and governance, since access to healthy, affordable, and culturally appropriate food is unevenly distributed within cities, a problem that requires attention. It is in this context that access to food becomes linked to urban poverty regimes, since vulnerable groups in urban areas have been facing increasing inflation, resulting in worsening food security. These processes, which have been strengthened since the COVID-19 pandemic have helped to bring back the topic of food to policy and academic debates in Europe (Benassi et al, 2026). The emergence of these new realities has also coincided with more attention to food from the side of the Commission. Its *Farm to Fork Strategy*, aiming to create a more equitable, healthy and environmentally friendly food system was passed in 2020 (EU, 2020). Only a year later the *EU Soil Strategy for 2030* (EU, 2021) was accepted, which likewise calls for shorter supply chains, reduced environmental footprints, and more sustainable, inclusive food systems.

Academic literature on urban food governance describes an "urban turn" in food policy since the early 2000s, as cities have come to be seen as a more promising scale than national government for tackling the fragmented, production-driven governance of conventional food systems and for addressing gaps left by market-based and state-led approaches alike (Sonnino et al., 2014; Moragues-Faus & Morgan, 2015). This has produced a proliferation of what scholars term "urban food policies", which take a variety of institutional forms including municipal food strategies, food charters, food



action plans, and food policy councils - together sometimes labelled the "urban food policy trend" (Cretella, 2016; Sonnino & Spayde, 2014).

The *Milan Urban Food Policy Pact* was in line with this process of increasing focus on urban centres. Established by the city of Milan in 2015 as a global platform for knowledge exchange and capacity building among its members, it has over 300 signatories across the globe, among which more than 100 are from Europe. These cities have pledged their commitment to "developing sustainable food systems that are inclusive, resilient, safe, and diverse."¹ Such a commitment is necessary due to the dire social of unequal access to food. As the research by Benassi and his colleagues (2026) show, also on the example of Milan, strategies to get food followed by vulnerable households put very high pressure on women. Thus, gender-based expectations, together with broader social inequality issues create specific trajectories for wives and mothers, the pursuit of which require a lot of time. As they note, in an urban setting where food outlets are plentiful and varied, women still need sufficient time, know-how, and social networks to take advantage of it. This time-consuming viscous circle reproduces inequalities, perpetuating unpaid work as a form of gendered inequality.

In this changing policy landscape and increased research and policy focus on urban food systems, urban agriculture has emerged as a relevant method to overcome food insecurity, restore agency and dignity to vulnerable groups. As summarized by Adeyemi and her colleagues (2025), urban agriculture connects to food systems, while providing several interlocking benefits: 1) *Social benefits*, since local urban food initiatives foster access to fresh produce alongside education, social ties, and civic participation. 2) *Economic benefits* since they not only improve access to food, generate income opportunities, and cut transport costs, but generally support local economic development, can reduce poverty, and foster inclusion of marginalised groups, including women. 3) *Community and health benefits* are equally important, since urban agriculture boosts nutrition security through greater availability of fresh, culturally relevant food, while community gardening help create a stronger local network. 4) Finally, the *Ecological benefits* are derived from the fact that goals of urban agriculture align with multiple sustainable development goals, from poverty reduction to climate action, and offer a practical pathway for both developed and developing contexts to address issues like soil and air contamination and urban green space.

It is in this context that REDESIGN's inspirational cases were conceived. As explained in detail in the Grant Agreement, they are pre-existing good or best practices that support urban food system transformation towards a more sustainable and equitable one. For this aim they are gathered from across Europe and beyond (with sites ranging as far as New Zealand), spanning community gardens, marketplaces, local circular food systems, markets and educational initiatives. Inspirational cases were selected partly to reflect NEB principles — sustainability, inclusion, and heritage — and to capture a diversity of geographical, cultural, and institutional contexts.

¹ <https://www.milanurbanfoodpolicypact.org/>

Importantly, in the process of project realisation three of the inspirational cases changed compared to the original proposal, largely because some organisations did not respond to our communication attempts. The Greek case study Moving Ground was replaced by another Greek initiative, Trofy.lab. Similarly, the Albanian Mrizi i Zanave and the Italian Campi Aperti were replaced by Growth4Change from Nairobi and Abbey Physic Community Garden from the UK. These additions not only broaden the geographical scope of the project by introducing a new continent, but also bring new perspectives to the selected showcase and testing cases used to pilot the Urban Food Value Framework.



Name	Location	Focus of activity	Place in the food system	NEB status
Markets and Market Halls	Budapest, Hungary and Bratislava, Slovakia	The report explores the shifting role of food markets in a metropolis, specifically focusing on the renovation of the historic Hunyadi Square Market Hall, which is being reimagined as a mixed-use community hub. The study compares various models, including the civic-led revitalisation of the Old Market Hall in Bratislava and local Budapest initiatives like the online platform Farm2Fork and the private Czako Piacz farmers' market.	Primarily function as distributors and retailers, providing physical infrastructure that connects small-scale producers with urban consumers. The renewed Hunyadi Market Hall also aims to be active in waste management and consumption	Beautiful: III Sustainable: II Together: III Participatory: II Multi-Level: I Transdisciplinary: II
Kilowatt	Bologna, Italy	Kilowatt manages a regenerated complex of municipal greenhouses that has become an innovative metropolitan hub. The organisation integrates a diverse range of activities, including a community garden, a plant-based bistro (Vetro), a co-working space, and the "Kilowatt Baby" experimental educational service.	Primarily related to consumption through its on-site bar and bistro but also covers production (community garden), distribution (ethical purchasing groups and short food chains), and waste (composting and green waste valorisation). It also serves as an educator.	Beautiful: II Sustainable: I Together: II Participatory: II Multi-Level: II Transdisciplinary: III
Trofý.Lab	Athens, Greece	Trofý.Lab combines regenerative agriculture with open-source technology to build resilient local food systems. They design micro-farming installations like green roofs and school gardens that use sensors for high-precision data and automated climate response. They also encourage citizens to produce their own food and focus on overcoming the "aesthetic" barrier of productive urban landscapes.	Positioned primarily at the production stage through urban and micro-farming installations, though its role also extends to distribution, education, and research.	Beautiful: III Sustainable: III Together: II Participatory: III Multi-Level: II Transdisciplinary: III
Organization Earth	Athens, Greece	A grassroots organisation, with its primary hub, the "Center of the Earth," facilitating "active learning" through workshops on organic farming and communal meals, supporting refugees and demonstrating solidarity during times of crisis. The organisation is also involved in urban greening interventions such as "pocket parks" and community gardens.	Operates primarily as an educator and community builder but its role also involves small-scale production and consumption awareness, focusing on consumer-facing activities.	Beautiful: II Sustainable: II Together: II Participatory: II Multi-Level: II Transdisciplinary: III
UDG Ecosolidary Garden	Girona, Spain	The project serves as a "teaching campus," bringing together university student volunteers and individuals with intellectual disabilities, and it also	Functions as a small-scale producer and educator.	Beautiful: III Sustainable: II

		contributes to the nourishment of people experiencing homelessness. The three entities participating in the UdG Ecosolidary Garden are the University of Girona (UdG), Fundació Ramon Noguera, a private foundation with public funding that supports people with intellectual disabilities and La Sopa Centre for Reception and Social Services, a public consortium that functions as a reception centre and social service for homeless people.	Fundació Ramon Noguera (FRN): Acts as a voluntary producer through maintenance and harvesting tasks. La Sopa: Functions as a distributor (to its users), food preparer, and consumer.	Together: III Participatory: II Multi-Level: II Transdisciplinary: III
Growth4Change	Nairobi, Kenya	The project addresses structural inequalities by fostering an "ecosystem of changemakers". It provides small, flexible "urban acupuncture" grants and technical guidance to grassroots initiatives led by more vulnerable demographics, such as youth and women, enabling them to pilot solutions like hydroponics and circular waste management. Their activism, such as the "#FoodIsPolitics" campaign, integrates local hip-hop culture to empower residents to advocate for their food rights and become autonomous agents of change in a precarious urban environment.	Predominantly functions as a community builder and educator, guiding its partners to grow as agricultural producers, policy actors, and researchers.	Beautiful: II Sustainable: III Together: II Participatory: II Multi-Level: II Transdisciplinary: III
Canterbury Community Gardens Association	Christchurch, New Zealand	It acts as an umbrella organisation, advocating for active community gardens in Christchurch as "outdoor classrooms" where diverse residents, including those with mental health challenges, people performing community service, and local school children, learn to grow organic food. Specific gardens are evolving into social enterprises, incorporating cafes, tool libraries, and recycling schemes.	Roles include producers, distributors, processors, waste management supporters, and educators. Education is highlighted as the most prominent role, conceptualising gardens as outdoor classrooms.	Beautiful: III Sustainable: III Together: II Participatory: II Multi-Level: I Transdisciplinary: III
Christchurch City Council and Food Resilience Network	Christchurch, New Zealand	The report focuses on the governance and policy frameworks supporting local food systems in a city recovering from major disasters. The Council provides essential policy mandates and funding, while the Network acts as a vital umbrella organisation, managing projects like the Ōtākaro Orchard Urban Farm, which serves as a central city food hub and education resource. The initiative aims to move beyond simple food security toward a "regenerative economy" that addresses systemic inequalities, particularly for Māori, Pasifika, and low-income groups.	They serve as advocates, funders, and organisational supporters. The Food Resilience Network (specifically the Ōtākaro Orchard) focuses on the production and distribution of healthy, affordable food while acting as an educator	Beautiful: II Sustainable: III Together: III Participatory: II Multi-Level: III Transdisciplinary: III

Abbey Physic Community Garden	Faversham, United Kingdom	A therapeutic, half-acre garden dedicated to "growing a healthy community" by using permaculture and food as central tools for wellbeing, skill development, and social connection. Its primary activities revolve around horticultural programmes like "Gardening for the Mind" and "Hands-on Gardening," alongside a community kitchen that provides daily seasonal lunches and cooking courses. Beyond gardening, the site also serves as a social hub offering the Men's Shed, self-defence, Qigong, and music sessions, among other activities.	Defined as a community builder that integrates local production, consumption, waste management, and education within a single therapeutic space	Beautiful: III Sustainable: III Together: III Participatory: II Multi-Level: II Transdisciplinary: II
Marievik	Stockholm, Sweden	The report uses a redevelopment area in Stockholm as a "cautionary example" of the missed integration of food systems into urban planning. While the district was framed as a sustainability-oriented testbed, food-related ambitions remained aspirational because they were not translated into binding planning requirements or land-use decisions. Meanwhile, Nära is a local, operational counterpart, which, beyond serving as a food producer for the local neighbourhood, stores, and restaurants, functions as a testbed for innovation, a research facility, and a learning environment that hosts public tours. The relationship between the two is a "paradox of unrealised ambition".	Nära: A local producer operating a technologically advanced production system while it also serves as an educator and innovation actor, with roles that are consumer-facing (through stores/restaurants) and system-facing (research and circular resource loops)	N/A

1. Table: List of inspirational case studies



The role of the inspirational cases is rather complex: 1) they serve as a research resource for understanding how food system transformation unfolds locally, highlighting success factors and bottlenecks; 2) they act as practical knowledge providers offering ready-to-apply, tested solutions to the Living Labs; 3) and they function as network building assets. Their link to the Living Labs (in Dortmund, Salt/Girona, and Teviot) is operationalized mainly through the "Transformative Loop" methodology (see D2.3 and D2.4) for iterative, two-way knowledge exchange between the two groups. Concretely, the inspirational cases feed the Living Labs with ready-to-apply solutions and comparative insights from a wider range of geographic and socio-economic settings than the three Labs alone could offer, while the Living Labs provide grounded, in-depth co-creation and testing environments.

Inspirational cases are part of the REDESIGN Network, that in an ongoing dialogue through regular meetings, in-person visits, and joint dissemination activities connect Living Labs with them and organisations outside of the project partnership. In this sense, the inspirational cases function less as passive background examples and more as an integral engine of cross-contextual learning that complements and enriches what the three core Living Labs can achieve on their own.

Methodology

The inspirational case analyses follow a qualitative methodology, which is particularly well-suited to understand these complex, place-specific initiatives. The desktop research combined with semi-structured interviews allowed to capture the motivations of local actors, the informal networks that sustain a project, and the meanings that communities attach to food, land, and shared spaces. Given that the cases span such varied contexts, this qualitative lens also supported discovering the contextual nuances (cultural, institutional, geographic). The employed qualitative methods are also especially valuable for identifying the kind of tacit, experiential knowledge that the project aims to transfer through the Transformative Loop. Success stories or bottlenecks, as well as unresolved tensions are hard to quantify: rather, they emerge through narrative accounts, participant reflections, and close observation of governance and community-engagement processes. This is particularly important for a framework like the Urban Food Value Framework, which explicitly seeks to understand how values — social, cultural, environmental, even aesthetic — are embedded in local food systems.

The methodology to support the analysis of the inspirational cases was guided by the need 1) to provide analytical and comparable knowledge about these inspiring practices to support food system transformation; 2) to support the diverse Lab needs, by providing them with descriptions about governance, financing and legal frameworks; 3) and finally to contribute to academic and policy discussions through the development of the Urban Food Value Framework (UFVF). An additional consideration was the online compendium (D2.6 – which is to be finalised in M20), thus the methodological guidance already indicated the need for a few quotes as well as visual materials.



To ensure both depth and consistency across the inspirational cases, project partners were asked to carry out a desktop research, including a literature review where relevant, complemented by semi-structured interviews conducted for each case. Partners were advised to conduct at least 3-5 interviews per case, in order to capture a range of perspectives from those directly involved. A first outline of the case description was drafted in the autumn of 2025, which was subsequently discussed and refined on different occasions, most notably during the consortium meeting held in Girona in October 2025. To further support consortium partners through the writing process, two online workshops were organised in the spring of 2026, offering guidance and a space to address emerging questions. The draft inspirational case reports then underwent a review in late spring 2026, providing an additional round of feedback while also helping to ensure a coherent and unified structure across all cases. While partners were advised to aim for reports of roughly 15-20 pages, some exceeded this suggested length and others fell slightly short of it. This variation reflects, in part, the differing levels of detail and access to information that partners were able to draw on for their respective cases.

Importantly, to enhance the collaborative element and maximize input from the project partners, an in-person workshop was organised in the morning of July 2nd during the consortium meeting in London, which focused on the comparative analysis of the inspirational cases. The conversation was steered by MRI's Hanna Szemző and Kata Kepes, who by then had finished the analysis of the cases. Insights from this event have also supported the development of the current deliverable.

Finally, both the process of comparative analysis as well as the elaboration of some case studies were supported by the use of AI tools, most importantly by Claude.

Food security and access to food in the inspirational cases

A central thread running through all the inspirational cases is the challenge of food security and access to food. Each case tackles this challenge in its own way, and, crucially, each one targets a different social group, but all are aimed at driving change that widens and stabilises people's access to food. What the strategies share is an effort to shorten the distance between growing food and getting it to people — closing the loop and cutting supply chains down in size — but the way each does this depends heavily on who the initiative is designed to serve.

When the target group is vulnerable populations, the strategy often keeps production somewhat apart from the people who ultimately benefit. This is the case at the University of Girona's Ecosolidary Garden, where student volunteers grow produce that is then delivered directly to La Sopa, a social dining service. (The gardening work also does double duty: taking part functions as occupational therapy for people with disabilities.) A somewhat similar pattern appears at the Abbey Physic Community Garden (APCG), which started out as a therapeutic gardening project but has, under pressure from the UK's cost-of-living crisis and growing concern about sustainable food systems, shifted its focus toward food security, food education and sustainable production; there, food grown on site is prepared in a Community Kitchen open five



days a week and used to feed a Friday Community Lunch and a Men's Breakfast Club. Here, growing, cooking and eating all take place within one trusted community setting rather than being spread across a long supply chain.

For higher-income groups, shortening the food chain tends to rely instead on more upscale local markets, or on offering a small set of features that this audience particularly values. The Budapest and Bratislava market scene illustrates the first approach: rather than competing in price, these markets root themselves in community life. Budapest's traditional markets, for instance, cannot outcompete supermarkets on cost or convenience, so the ones that succeed are those offering "something more" — a social atmosphere in which vendors and regular customers know each other, a distinctive or higher-quality range of products, and values like sustainability, local sourcing and transparency that appeal to shoppers. Kilowatt's bistro in Bologna follows a related but slightly different logic, combining a fully organic, seasonal, locally-sourced menu with a co-working space, community garden and cultural programme, turning what was once a municipal greenhouse into somewhere people actively want to linger rather than just pass through.

Whichever group is being served, local production stands out as a core value and a key lever for improving access to healthy food. It is also seen as a genuine way to counter obesity, as the Ōtākaro Orchard Urban Farm in New Zealand demonstrates. New Zealand is also where the tension between local and commercial food production is sharpest: much of the country's agricultural output is grown for export, and this actually deepens local food insecurity even as national production figures stay strong. This mismatch may also feed public misunderstanding of local food initiatives — one interviewee suggested that because these initiatives look so different from the large commercial operations people are used to, the public struggles to make sense of them.

Athens offers further evidence that boosting small-scale local production can be a powerful way to fight poverty and food insecurity more broadly. Hit hard by the 2008 financial crisis, the city saw urban gardening take root on rooftops, terraces and balconies as a grassroots response, helping families keep access to good food through the years of austerity that followed. Cases like this show that when economic pressure is severe, local food production can fill gaps left by formal safety nets, providing not just food but also a renewed sense of control for the people involved.

Finally, education and skills-building run through many of the inspirational cases as a way of easing access to healthy food and pushing back against food insecurity. The common thread is teaching people to grow, cook and manage their own food, which builds resilience against rising costs over the longer term. At Abbey Physic, the "Hands on Gardening" and "Mindful Kitchen" courses teach participants everything from sowing and harvesting to composting, cooking from scratch and cooking within a budget. Trofý.Lab in Athens and Growth4Change in Nairobi take a more hands-on, technical approach, running "learning labs" that introduce community members to low-cost, often improvised growing methods. For Trofý.Lab that includes open-source environmental monitoring tools and soilless growing techniques, while Growth4Change relies on hydroponic systems built from repurposed materials — what



it calls "ghetto engineering" — which make it possible to grow food even where the soil itself is badly contaminated.

Impacting the local community

Although the word "community" carries real weight across every inspirational case, no single or formal definition of it emerges. Instead, community comes across as something relational and lived — built through repeated interaction rather than fixed membership in a group. The Christchurch case study is something of an exception, since it explicitly frames its analysis around community food security, a definition that ties community directly to shared, equitable access to food rather than to geography. Elsewhere, community is described more loosely, but always as something that takes shape around food and place. In the case examining the revival of Budapest's markets, many interviewees pointed to community as a single, central notion — one covering both the personal ties between vendors and regular customers, and the looser, sometimes virtual sense of belonging that a modern market hall can foster. A similar idea of connection appears at Organisation Earth in Athens, which builds its work around "reconnecting people with nature and with each other," strengthening community cohesion through shared meals, collective gardening and the joint creation of space. The University of Girona's Ecosolidary Garden, meanwhile, describes community as a "space of encounter," where volunteers and vulnerable service-users who had not previously met come together, support each other through shared tasks, and build relationships outside the more formal, protected settings they are used to.

Because the notion of community is defined so loosely, measuring its impact is difficult. Across every case, impact is understood as something much wider than food output alone, touching on social, educational, environmental and, at times, policy-related dimensions. Despite the difficulty of measuring it, social impact appears to matter most in many of the cases. At Christchurch City Council in New Zealand, for example, interviewees openly ranked social impact as the single most important category, ahead of environmental impact, education and policy influence. The Canterbury Community Gardens Association network reflects the same priorities: while interviewees agreed the food grown in the gardens was "highly relevant and needed," they stressed that the greatest reward actually came from the social interaction the gardens made possible — volunteers "chatting" while weeding, or people picking up everyday life skills "never learned in school" — alongside a strong educational effect on children and adults alike. Abbey Physic Community Garden treats community impact in much the same way, as inseparable from its mental-health mission: shared meals, volunteering and cooking education create chances for people of different ages and backgrounds to meet and build stronger social ties, with trust and a welcoming atmosphere seen as necessary preconditions for that impact to happen at all.

In Christchurch, practitioners noted that the CCGA has no systematic way of gathering impact data beyond informal debriefs and occasional feedback collected for funding reports, describing social and, especially, mental-health impacts as "quite hard to put on paper" even though "you see all those changes in people." Abbey Physic likewise sees community impact as a work in progress, having only recently secured the long-



term lease that would let it run longitudinal impact studies and try out new community-building formats, such as shared supper clubs.

Food literacy is one of the hardest impacts to quantify, yet raising it is a goal shared by every inspirational case study. Several of the cases build food literacy directly, through hands-on growing and cooking rather than abstract messaging about nutrition. Abbey Physic Community Garden in Faversham is the clearest illustration: as mentioned above, its "Hands on Gardening" course walks participants through the entire growing cycle, from sowing and pricking out to harvesting and composting, while its "Mindful Kitchen", a six-week rolling programme open to self-referrals as well as referrals from GPs and social workers, pairs practical cooking with structured discussion of nutrition and mental wellbeing, tying food knowledge explicitly to confidence and health. In this way, APCG treats food literacy as one continuous thread running from soil to plate: growing, harvesting, cooking, eating and talking about food all happen on the same site, so that what is learned in the garden reinforces what happens in the kitchen, and vice versa.

Other cases build food literacy in a more collective way. In Budapest and Bratislava, market halls found that cultural events, festivals and educational workshops held alongside the market's food offer can directly help "rebuild food literacy," using workshops, events and online content to keep demand for local, quality produce strong even where markets cannot match supermarket prices. Growth4Change, working in a very different setting from the previous examples, pursues food literacy through community "learning labs" in Nairobi, where residents of informal settlements get hands-on introductions to low-cost hydroponic growing methods adapted to their own "unique challenges," alongside activity-based training that extends into local schools to reach younger people too. Growth4Change pairs this practical skill-building with its #FoodIsPolitics campaign, which uses artistic formats, including collaborations with local hip-hop artists, and online educational material to open up dialogue about food-system issues and build broader community-level literacy about food and policy. Together these examples show that food literacy, in these initiatives, means more than individual cooking or growing skill, it also means the ability to understand and critically engage with the food system as a whole.

Even though these multi-dimensional impacts are difficult to quantify, some hard data does exist to back up impact claims. Kilowatt in Bologna is probably the case with the most thorough documentation: it recorded 140,000 visitors in 2024 and 181 cultural events. It also notes that 93 families applied for just 15 places in its "KwBaby" programme, and that its cultural activities involved as many as 180 artists. Its environmental impact is documented too: it reports saving 50.1 tonnes of CO₂ through renewable energy contracts, sourcing 80% of its food locally, and investing €217,015 in local agriculture, a 12% rise from 2023. Abbey Physic Community Garden reports similarly concrete figures, with 372 active members in 2025 and a further 171 new registrations at the start of 2026, alongside rapidly growing earned income. The University of Girona's Ecosolidary Garden operates on a smaller scale but carries real structural weight through its partner organisations, among them the FRN, which



employs 453 people, 49% of whom have intellectual disabilities, all of whom are able to work in the garden.

The figures from Budapest and Christchurch point to another important feature of impact: it can span a surprisingly wide area once different impact types are counted together. In Christchurch, the impact plays out at city scale, the number of community gardens has grown from 3 to 50, and food-growing activity now reaches roughly half of the city's 160 schools, up from almost none before. In Budapest, the impact reaches beyond the city limits once the producers who sell at the markets are factored in: the Hunyadi Market Hall hosts 62 long-term vendor tables, while the online platform Farm2Fork works with more than 80 producers. Thanks to the opportunities the markets provide, all of these producers can earn a decent living and run their farms sustainably.

Urban development and food governance in the inspirational cases

A less obvious but still widely felt effect of the cases studied is their influence on the urban environment around them. Although not strictly a food-related outcome, this influence is nonetheless significant. Putting underused urban space and infrastructure back into productive use creates new dynamics in the surrounding neighbourhood and directly shapes life there. Examples include the municipal greenhouses in Bologna, land earmarked for future university expansion in Girona, earthquake-damaged sites and vacant lots in Christchurch, and rooftops and balconies in space-constrained Athens — all converted into sites for growing food or running food-related community activities, and all contributing to the renewal of public space. The Bratislava Old Market Hall offers a particularly telling example, where a slow, inclusive process of repurposing brought the building back to life after a long closure, showing just how far-reaching this kind of urban impact can be. The Old Market Hall's renewal extended beyond the building itself to the surrounding urban space. Its transformation also had a multiplying effect: the same approach was later applied to reimagine Bratislava's "other" market hall — a modernist building that had been largely dormant — and it also served as the model for the ongoing transformation of the Hunyadi Market Hall in Budapest.

How much urban impact a food-related initiative has is closely bound up with local government, specifically, with how far local authorities see food policy, food access and food literacy as part of their job. National and regional governments set the broad framework within which food security is addressed, but it is city and municipal authorities that sit closest to the everyday experience of food insecurity. Cities have a range of tools at their disposal: they can use planning and zoning powers to protect land for urban agriculture, support community gardens and local markets, and fold food considerations into wider urban policy through instruments such as municipal food strategies or membership in relevant networks. Municipalities are also unusually well placed to build direct relationships with vulnerable communities, civil society

organisations and grassroots initiatives, which lets them design more responsive, participatory interventions.

Of the inspirational cases, only two cities were found to have, or to be actively developing, an explicit food strategy. The most fully developed example is Christchurch, New Zealand, where the City Council has adopted a Food Resilience Policy, a Food Resilience Network Action Plan, and an Edible Canterbury Charter. Yet the Christchurch case cannot be understood apart from the devastating 2010–11 earthquakes, which damaged around 90% of residential properties and forced a complete rethink of how the city accessed food. A wave of grassroots urban gardening initiatives sprang up in the earthquakes' aftermath, which the city's institutions subsequently formalised.

Food literacy and education sit at the heart of how Christchurch's stakeholders talk about their municipal strategy, which draws on food-growing infrastructure for a range of educational purposes. The city's flagship project, the Ōtākaro Orchard, built by the Food Resilience Network on a site cleared of earthquake rubble, was deliberately designed to include "an education hub" alongside its working orchard, and now runs educational tours and ongoing governance training workshops. In the same spirit, the city's food strategy gives priority to "resilience type of work" rather than funding only immediate-need responses like food banks. The City Council's efforts also include a dedicated officer, connected to the REDESIGN project, whose role is to support the city's network of urban gardens. The city additionally holds regular workshops with food-system stakeholders to discuss strategic directions spanning food security, food resilience, food justice and food sovereignty.

The Stockholm/Marievik case tells a more complicated story than Christchurch's. Even so, it still shows a city council genuinely engaged with food issues and actively searching for the right strategy. In Stockholm, responsibility for food is currently described as scattered across several departments, spanning planning, public meals and procurement, environment and sustainability, and preparedness functions. The city's food strategy, meanwhile, remains a work in progress, still exploratory and unsettled. There is, as things stand, still uncertainty about what such a strategy is actually for, and how it should connect to social and educational goals, or to crisis preparedness. As a result, work on food-related education and system transformation in Stockholm has stayed concentrated in individual practitioner-led initiatives rather than being pulled together through a municipal strategy.

It is against this backdrop that the case study describes the Marievik development in Stockholm as having "very limited food-related social impact." Food was never woven deeply enough into the district's development to shape how the community interacted or how the neighbourhood came to see itself. This echoes a pattern already seen in the other cases: meaningful community impact tends to require food to be embedded in sustained, face-to-face, place-based relationships, rather than treated as a stand-alone service or output. It also shows that engaging with urban agriculture on its own is not enough, a more comprehensive strategy is needed.

Bologna faces challenges that partly echo Stockholm's. The inspirational case notes that Bologna's food policy environment leans more toward benefiting consumers than supporting producers, suggesting the city has some food-adjacent policy interests but lacks a dedicated food strategy or any strong policy push behind alternative food initiatives. Within this context, Kilowatt can rely on the municipality mainly as a quiet enabler - essentially a landlord and occasional project partner rather than a strategic driver. The partnership between the municipality and Kilowatt began in 2013, when Kilowatt secured a public concession from the Municipality of Bologna to regenerate a 650 m² site of disused municipal greenhouses at Giardini Margherita. Since then, the relationship has continued mostly through Kilowatt's consultancy arm, K2, which works with public administrations while Kilowatt keeps its full organisational independence. Kilowatt's resilience and growth are therefore attributed chiefly to its own hybrid legal and financial model, rather than to strategic backing from the municipality.

Financing and networks

The inspirational cases reveal a broad range of financing models, running from full public ownership through to purely private, for-profit structures, with most initiatives landing somewhere in a hybrid middle ground. At one extreme is Budapest's Hunyadi Market Hall, run as a municipal department nested inside a municipally-owned company (Terézvárosi Vagyonkezelő Zrt.), which is fully owned by the 6th District Municipality. Its income comes mainly from tenant and stall rents, deliberately set below market rate to support producers and traders, which means the market runs at a structural loss, with the municipal operating company cross-subsidising it through other revenue streams such as parking fees. Given ongoing concerns about long-term sustainability, the market's revitalisation strategy, explicitly modelled on Bratislava's Old Market Hall, now aims to diversify income through cultural events, concerts and food festivals, showing a publicly owned model actively pursuing new commercial revenue without abandoning municipal ownership.

At the other end of the spectrum, Trofý.Lab in Athens operates as a straightforward for-profit private company (a Monoprosopi IKE), funded mainly by investors, research grants and project-based funding rather than NGO or philanthropic sources. This legal form was originally chosen for practical reasons, and although the founders once envisioned evolving into a horizontal cooperative, internal disagreements over fairness, compensation and accountability meant that shift never took place. The for-profit structure also creates genuine friction with public-sector work: because public bodies treat Trofý.Lab as a private contractor rather than a nonprofit, it faces higher overheads and is at a disadvantage when bidding for public projects such as school gardens, even though it actively seeks out and values collaboration with municipalities, schools and cultural institutions.

A third model combines genuine NGO status with a funding mix that depends heavily on individual projects, as seen at Organisation Earth in Athens. Legally a non-governmental organisation, it operates more like a social enterprise in practice, since it has no stable endowment and must constantly raise funds to keep running. Its finances draw on a blend of EU programme funding (its largest source, though also the slowest



and most bureaucratic), corporate social responsibility (CSR) funding (faster and more flexible, but less predictable), foundation grants, and modest income from its own educational activities.

Kilowatt in Bologna and the University of Girona's Ecosolidary Garden show two contrasting ways that institutional hosting can support a food initiative financially. Kilowatt's finances rest on a carefully constructed hybrid legal structure: a Social Promotion Association for when a non-profit vehicle is required, a cooperative as its main operating structure (which itself began life as an association before converting in order to expand its investment capacity), and a separate, wholly-owned for-profit limited company set up specifically to run its bistro, Vetro, since Italian cooperative rules on mutuality made running a restaurant directly impractical. Profits from the bistro, together with income from consultancy and communications work through its K2 studio, cross-subsidise Kilowatt's broader social and cultural mission, and its status as an "innovative startup" — granted to only a handful of cooperatives — gave it easier access to funding with lower guarantee requirements. Notably, Kilowatt describes itself as having no dependency on public institutions. The University of Girona's Ecosolidary Garden, by contrast, has no financial identity of its own at all: it is not separately registered and has no formal agreements with its key partners. Its costs are simply absorbed into the University's annual budget, approved by the Social Council, mainly through a small environmental-sustainability budget line (around €20,684 in 2026, of which €9,000 funds a placement student) plus general university resources covering materials, utilities and repairs — leaving it financially dependent on, and fully embedded within, a public institution's existing budget rather than raising funds of its own.

Finally, Abbey Physic Community Garden in Faversham shows how a financing model can shift as an organisation's mission evolves. It started out as an NHS-funded mental-health project run through the Schizophrenia Fellowship and the charity Mind, before becoming an independent registered charity and company limited by guarantee once the NHS narrowed its funding to employment-outcome-focused projects that did not match the needs of many of the garden's participants. Today it uses a mixed, blended-income model that combines grant funding — led by large multi-year awards, such as roughly £270,000 from the National Lottery Community Fund over three years, alongside a reported 174% success rate on grant applications in 2025 — community donations and partnerships, and a growing share of earned income from its own commercial activities: a Coffee Cabin, community lunches and garden produce sales, which in 2025 reached 190%, 220% and 119% of their respective targets. This mix lets Abbey Physic pay for permanent staff through its larger grants while relying on smaller, community-facing income streams to keep everyday programming going, such as its kitchen, cooking courses and Men's Shed activities — a deliberate strategy to move away from dependence on any single funder toward broader financial resilience.

One of the biggest obstacles NGO-led food initiatives face is that they often fall outside the criteria for conventional funding. Growth4Change specialises in addressing exactly this gap, using a flexible grant model to support initiatives that are too new,

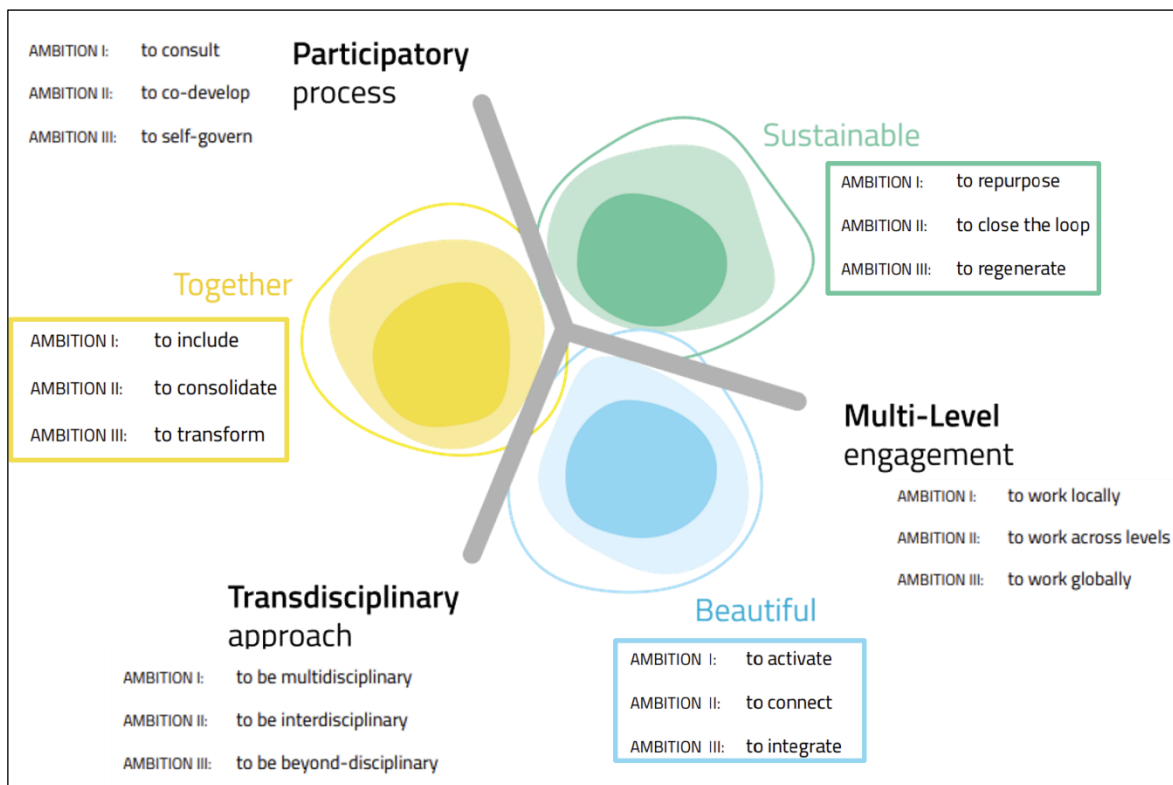


too small, or too marginalised to qualify for mainstream support. A similar logic underlies how small independent gardens turn to the Canterbury Community Gardens Association in Christchurch, which performs a related role as an umbrella and advocacy body for a wide network of independent gardens, helping them access funding and share knowledge so they can stay financially resilient.

Ultimately, money alone is not what these initiatives need most. Achieving real impact depends heavily on the existence of supporting networks. These networks do more than sustain initiatives through donations and mutual aid, they also help initiatives reach their goals by connecting them to key stakeholders and actors. The University Garden in Girona is a good illustration: although based on a university campus and somewhat removed from direct contact with the rest of the city, it shows how being deeply embedded in a local network of relationships and support structures can underpin an initiative's long-term sustainability, even when its physical ties to the wider urban fabric stay limited. It relies visibly on donated materials — reused pallets and recovered wood, manure from a nearby organic farm for fertiliser, and materials or display equipment no longer viable for commercial sale — and it reaches its target groups by building relationships with local NGOs such as La Sopa and the Occupational Therapy Service at Fundació Ramon Noguera (FRN). Many of the more durable initiatives, it seems, depend on formal alliances between public bodies, universities, NGOs and community groups rather than on any single actor acting alone. In Christchurch, the Food Resilience Network worked with the City Council to co-design the "Edible Canterbury Charter." Abbey Physic, similarly, operates as a hub within a wider referral network of GPs, mental-health services and food-redistribution partners, connecting people to further support beyond what the garden itself can offer.

The role of NEB among the inspirational cases

The New European Bauhaus (NEB) values are a central component of the REDESIGN project and play an important role in the selection, assessment, and ongoing development of both the Inspirational Cases and the Living Labs. Accordingly, each case study includes a dedicated assessment that analyses and summarises the initiative through the NEB lens. Evaluating the case studies using the NEB Compass reveals a wide spectrum of ambitions, ranging from local, community-driven initiatives to transformative urban interventions. By assessing the three core values 1) Beautiful, 2) Sustainable, and 3) Together, alongside the principles of 1) Participation, 2) Multi-level Engagement, and 3) Transdisciplinary Collaboration, the framework demonstrates how urban food initiatives can go beyond food production to become catalysts for social inclusion, environmental regeneration, and systemic change.



1. Figure: NEB values and working principles

The value of "Beautiful" is interpreted differently depending on the territorial context. For historic sites like Hunyadi Square Market Hall in Budapest and the Abbey Physic Community Garden in Faversham, beauty reaches Ambition III (to integrate), where the project (re)activates the cultural and aesthetic qualities of heritage buildings and walled gardens to foster emotional attachment to the place. In contrast, initiatives like Trofý.Lab in Athens address this value by challenging conventional urban aesthetics, intentionally introducing "unfiltered" productive landscapes, such as raised beds and natural fertilisers, to familiarise citizens with the realities of food production.

Regarding "Sustainability," the cases demonstrate a strong shift toward Ambition III (to regenerate). While most initiatives fulfil the baseline of repurposing land or resources (Ambition I), projects like the UdG Ecosolidary Garden and the Christchurch City Council initiatives aim higher by focusing on soil regeneration, biodiversity, and circularity. For example, the UdG garden improves soil quality and biodiversity on an empty university plot, while Growth4Change in Nairobi uses "ghetto engineering" to promote low-tech soilless systems that restore native species in contaminated urban environments.

The "Together" value often emerges as the strongest realised dimension, with cases like Kilowatt in Bologna and Organisation Earth in Athens achieving ambitions all the way to Ambition III (to transform) by creating non-discriminatory social spaces that bridge diverse demographics, including refugees, students, and marginalised groups.

The working principles further differentiate the cases. Participatory processes typically reach Ambition II (to co-develop), moving beyond simple consultation to active co-creation involving vendors, residents, and volunteers in the design of garden layouts or market logistics. However, financial self-reliance remains a persistent barrier to reaching Ambition III (self-governance) for many community-led projects.

In terms of Multi-level engagement, the Christchurch City Council stands out at Ambition III (to work globally) through its participation in international networks like the Milan Urban Food Policy Pact, whereas many other gardens remain primarily focused on Ambition I (working locally) or II (working across levels) within their city or province.

Finally, the Transdisciplinary approach is a core strength for the more established cases. Initiatives like Kilowatt and Trofý.Lab operate at Ambition III (beyond-disciplinary) by merging scientific research, artistic expression, and community expertise into holistic interventions. This is mirrored in the UdG garden, which connects academic knowledge from university departments with the experiential knowledge of users with intellectual disabilities and homeless populations, contributing to both environmental and social transformation.

The Urban Food Value Framework

This deliverable introduces the Urban Food Value Framework (UFVF), developed by the REDESIGN project. Recognising the constraints of current valuation tools, the project aimed to develop a valuation tool for urban food systems to capture the full range of values generated by these initiatives. The correct recognition of the contribution these initiatives make to such urban systems can aid policymakers, funders, and planners in recognising their true benefits and, eventually, in justifying long-term support and investment. Consequently, this framework will hopefully bridge the identified gap and enable a more holistic, transparent assessment of urban food systems, aligning with the REDESIGN value-based approach.

Systematically identifying and assessing diverse food values, the tool can be used to facilitate comparisons between initiatives and learning across different contexts, thereby strengthening the case for scaling and replicating successful practices. At the same time, it enables organisations to view their own activities in a systematic, value-oriented way, helping them better understand their strengths, missions, and current stage of progress towards their objectives, while providing a structured framework for reflecting on and measuring the achievement of their goals. Moreover, by making the tool replicable across different contexts outside the project, it will be scalable within regional, national, and EU policy frameworks, and have the potential to be translated into concrete measures and strategies, such as FOOD2030 and Farm2Fork.

The original FVF

The Food Value Framework (FVF), developed in 2023 by Brumm & Fukushi, was originally chosen within the REDESIGN proposal as the appropriate

framework to adapt and utilise. The FVF is under development to be a novel analysis tool, combining both monetary considerations from True Cost Accounting (TCA) with psychological ones from Schwartz's (1992) theory of 'Basic Human Values', which aims to highlight the importance of ethical dimensions and local values. Its holistic approach places a transdisciplinary approach at the core, allowing for a nuanced and open analysis. To achieve this, 4 evaluation categories have been identified: environmental, societal, health, and personal (Brumm & Fukushi, 2023).

Within their second paper on the FVF, they identify 48 value elements associated with food, clustered into the four dimensions of the FVF. These elements were derived through a systematic, literature-based review that consolidated insights from major transdisciplinary frameworks, such as the Sustainable Development Goals and the Intergovernmental Science-Policy Platform on Biodiversity and Ecosystem Services, as well as domain-specific models tailored to each value dimension. The aim of identifying these value elements is to create a comprehensive, theoretically grounded, and empirically practical foundation for evaluating what stakeholders value in food, ultimately enabling a shared language and more coherent decision-making across the agrifood sector (Brumm & Fukushi, 2024).

Environmental 1. Regulation of Climate 2. Biosphere Integrity 3. Land System Change 4. Impact on Marine Environments 5. Formation, Protection and Decontamination of Soils and Sediments 6. Regulation of Freshwater Quantity, Location and Timing 7. Stormwater management 8. Energy Use 9. Pollination and Propagation 10. Stratospheric Ozone Depletion 11. Novel Entities 12. Air Quality	Societal 1. Additional Resources Generated 2. Animal Welfare 3. Local Community Support 4. Cultural Value 5. Efficient Use of Resources 6. Food Security 7. Justice 8. Treatment of Workers 9. Inclusivity 10. Engagement and Recreation 11. Development and Progress 12. Diligence
Health 1. Caloric Content 2. Macronutrition 3. Micronutrition 4. Immediate Consumption Risk 5. Allergies and Intolerance 6. Chronic non-communicable Illnesses 7. Communicable Disease 8. Mental Health	Personal (related to your role) 1. Taste 2. Regionality 3. Comfort after Consumption 4. Ethical Value 5. Rarity and Diversity 6. Relationship and Relatability 7. Familiarity and Habit 8. Emotional Response 9. Scale of Food Producer

9. Physical activity 10. Being in contact with nature	10. Spiritual and Religious Value 11. Convenience 12. Stimulation 13. Social Standing 14. Aesthetics 15. Novelty
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2. Table: Brumm and Fukushi's Food Value Framework

The new Urban Food Value Framework

Due to the value element focus primarily relating to food products, in contrast to Agri-Food Systems and initiatives within urban and peri-urban locations, the utilisation of the FVF was deemed inappropriate for the studies' objectives. Instead, the tool was remodelled by Eve Florence Palmer (Alma Mater Studiorum - Università di Bologna), to be more conceptually aligned to urban and peri-urban place-based initiatives, titled the Urban Food Value Framework (UFVF), which combines elements of FVF with adapted value elements from Faltnann & Stotten's 2025 systemic review paper on values empirically identified in AFS.

This new tool, in order to identify the most significant values held within Urban/Peri-Urban initiatives, adopts the 4 value categories used by Faltnann & Stotten's (2025) in their systemic review paper: Social embeddedness values, Spatial embeddedness values, Ecological embeddedness values, and Economic embeddedness values. In addition to the values, contextualised and generalised descriptions were also developed to ensure that interviewers had sufficient understanding of each value element and could provide clear, standardised explanations if participants requested clarification, thereby supporting consistency across interviews and strengthens later analysis.

	Social embeddedness values
1	Autonomy, self-help, self-responsibility
2	Civic values (democratic values, shared power, ethical or participatory governance)
3	Community and social relations, interpersonal ties
4	Cooperation
5	Cultural values
6	Equality
7	Fairness
8	Inclusivity
9	Justice
10	Solidarity
11	Transparency
12	Trust
13	Social values (broadly)



	Spatial embeddedness values
1	Local food sourcing
2	Re-localization, re-territorialization of food systems
3	Spatial links between producers and consumers (i.e. physical proximity)
4	Supporting local agriculture
5	Valuing specific place, environment, or terroir
6	Value of local (broadly)

	Ecological embeddedness values
1	Air Quality
2	Animal well-being
3	Biodiversity
4	Energy Use
5	Environmentally friendly food production
6	Fresh water availability
7	Health
8	Impact on Marine Environments
9	Land degradation, conservation, restoration, de/reforestation
10	Pollination
11	Quality food
12	Regulation of Climate
13	Relations to nature
14	Soil quality
15	Ecological, environmental, sustainability values (broadly)

	Economic embeddedness values
1	Economic fairness
2	Economic support for local economies
3	Food security
4	(More) even distribution of economic value
5	Economic values (broadly)

3. Table: The Urban Food Value Framework

Methodology and coding

The UFVF was operationalised as supplementary qualitative tool which can be embedded into interviews to facilitate the translation of values. The UFVF values and value categories were translated into a vignette-style format, organised into four lists



of each value category to guide participants into choosing and prompting conversations on their organisation's most portrayed values. Participants were also asked about indicators of how these values are upheld, allowing the assessment to be personal to the organisation and to track progress toward the organisation's desired goals.

During the interviews, each value section was presented and discussed separately to minimise overlap and ensure clarity in later coding. The detailed value descriptions were not provided directly to participants to avoid overwhelm, but interviewees were informed that these descriptions were available should clarification be needed. For each value section, participants were invited to identify approximately three values they considered most important or representative of their initiative, with the option to select more if relevant or none if they felt the values did not apply. If participants believed that several values were equally relevant, or that an important value was missing from the vignettes, they were encouraged to select the broader value element or propose an additional one.

After selecting their values, interviewees were asked to reflect on how these values relate to their organisation's goals, with particular attention to the actions taken to uphold or strengthen them. Participants were also encouraged to discuss why these values matter to their community, any challenges or limitations they face, and how they assess or monitor the impact of their actions, including any concrete examples or indicators used. This approach ensured that the elicited values were grounded in organisational practice and contextualised within each initiative's lived realities.

Thematic analysis was conducted on the transcripts, with particular focus on:

- How participants linked the value to their organisation.
- The actions taken to uphold or strengthen the value.
- Contextual factors shaping its importance.
- Challenges or limitations encountered.
- Any indicators or methods used to assess impact.

Based on these aspects, the values were coded into the following interpretation and indicator categories:

INT: Value as aspiration	Value is desired but not yet successful.
INT: Value in practice	Value is enacted through concrete actions.
INT: Value constrained	Value is limited by barriers (time, money, capacity).
INT: Value tied to identity	Value linked to mission, ethos, organisational identity.
INT: Value tension	Conflicts or tradeoffs between values.

IND: Qualitative indicators	Stories, feedback, observations.
IND: Quantitative indicators	Numbers, outputs, sales, yields.
IND: Success = participation	Success is defined by engagement.
IND: Success = impact	Success is defined by outcomes or change.

4. Table: Set of predefined interpretations (INT) and indicators (IND) of UFVF values

This stage allowed the analysis to move beyond frequency counts toward understanding how and why values are enacted in practice. Patterns were then synthesised within each value group to identify commonalities, divergences, and organisation-specific expressions of value.

Utilisation of the UFVF

The previous sections outlined the developed methodology and the intended or baseline application of the UFVF. However, as the case studies differed considerably in their characteristics and research contexts, each team adopted and adapted the methodology to suit the specific needs of their case study. As a result, every case study applied the UFVF in a slightly different way. The most notable difference is between the New Zealand case studies and the others, as they used the earlier FVF developed by Brumm and Fukushi (2024), rather than the final UFVF, as by the time the UFVF evolved into its final form, more than half of the interviews for the New Zealand case studies had already been completed using the original FVF. To ensure methodological consistency, it was therefore decided to continue using Brumm and Fukushi's framework for the remaining interviews and their subsequent analysis, rather than attempting to retrospectively transfer interview findings into the revised UFVF structure. Although the two frameworks substantially overlap, such a conversion was considered methodologically unfeasible.

The progress and transformation of the framework's application is also evident across the two New Zealand reports. In the first report, the primary analysis of values is presented within the summary table, whereas the second report adopts the more developed approach of analysing each value through separate descriptions. The New Zealand case studies therefore illustrate the evolution not only of the framework itself but also of its practical application throughout the REDESIGN project.

Another important difference concerns the way values were identified. In the Organisation Earth and the Marievik case studies, rather than relying on the vignette methodology, researchers themselves coded and categorised the emergent values expressed by interview participants based on the interview transcripts. This demonstrates the flexibility of the methodology, allowing researchers to tailor its application to the specific requirements of their case study and research objectives. Some of the other case studies analysing the values explicitly selected by participants,

also mentioned those that emerged spontaneously during the interviews, enabling reflection on the UFVF's sensitivity and comprehensiveness in capturing food values.

A cross-case comparison highlights how different types of initiatives operationalised values in distinct ways. The application of the UFVF across the ten RED-N case studies demonstrates that food values are deeply embedded in organisational identity, territorial context, and broader socio-political settings. Across the cases, social values consistently emerged as the foundation upon which other values were interpreted and enacted. Spatial and ecological values displayed greater contextual variation, reflecting differences in land security, governance arrangements, and infrastructural capacity. Economic values were consistently relational in nature, prioritising fairness, solidarity, and support for local agriculture rather than profit maximisation. These findings reinforce the argument that values within urban food systems are multidimensional, context-dependent, and highly interdependent.

However, the application of the UFVF across the case studies also identified several areas for refinement. First, greater clarity and specificity are needed for some value elements, particularly within the social and spatial dimensions, which participants often perceived as broad or overlapping. Several participants also highlighted values that were central to their organisational identity but not explicitly represented in the framework, such as agency, urban sustainability, and food sovereignty. While these could currently be captured under broader value categories, this sometimes created ambiguity during analysis. Introducing an open or emergent value field within each category would allow participants to identify context-specific values without being constrained by a fixed taxonomy.

Second, participants across the case studies found it challenging to translate relational and process-based values into measurable indicators. As a result, many relied on qualitative narratives to describe how these values were realised in practice. Future applications of the UFVF could therefore be supported by an indicator guide, similar to the value description tool, providing examples of qualitative, narrative, and process-oriented indicators. This would be particularly beneficial for smaller initiatives operating in contexts of precarity, where limited capacity and immediate operational priorities often make formal monitoring difficult. These findings suggest that assessment approaches should remain flexible and recognise multiple ways of demonstrating progress and success.

Finally, the UFVF would benefit from more detailed facilitation guidance. Participants with less experience in reflective or deliberative methods often required additional support to distinguish between organisational and contextual values, develop meaningful indicators, and navigate the framework consistently. Providing clearer interview guidance and a more structured facilitation process would improve the consistency of the framework's application across different contexts and researchers.

This section of the deliverable therefore presented the design, operationalisation, and testing of a valuation framework capable of capturing the diverse and often intangible values generated by urban and peri-urban place-based food initiatives. It addresses an important gap in existing valuation approaches, which often prioritise quantifiable



outputs while overlooking the relational, contextual, and process-based dimensions that characterise alternative and value-based food systems. The UFVF offers a structured yet flexible methodology that enables researchers and practitioners to identify the values underpinning food initiatives, explore how these values are enacted in practice, assess their level of implementation, and consider meaningful ways of evaluating them across diverse organisational and territorial contexts.

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MARKETS AND MARKET HALLS

AUTHORS: KATA KEPES & HANNA SZEMZŐ

Introduction

Markets represent important alternative food networks available to citizens through local production and short supply chains. While this form of food purchase used to be very common, with the contemporary societal changes, this becomes increasingly rare, often tied to certain social class, income level or the residence in a particular locality. Our current research investigates this process for market halls and other platforms for small local producers in Budapest, Hungary.

The main question of our case study regards the role food markets play in a metropolis, more precisely in Budapest, today. To answer this central question, the study focuses on three different, but interrelated aspects: 1) we studied the incremental processes markets have been undergoing in Budapest, 2) we addressed the main factors influencing this shift, and finally 3) focused on how markets and local food suppliers can respond and adapt to the changes in consumption patterns. While the topic is still rather complex and multi-faceted, we chose to focus on municipal markets, not only because of their dominance in the city, but also as a result that the historically relevant market halls are in municipal hands today. It is this historical relevance and status on the conservation list that creates additional challenges, where safeguarding a piece of cultural heritage and finding new and appropriate adaptive reuse options need to go hand-in-hand.

To demonstrate the above processes, we chose the Hunyadi Square Market Hall (Hunyadi MH) as the main object of our research, which shows both the challenges a municipal market currently faces in Budapest, as well as possible solutions to counter these. Situated in a protected building from the early 20th century, it has been battling physical challenges – due to the lack of appropriate upkeep – as well as a steady reduction in consumers. To overcome these, the local municipality of the 6th district has been working on its physical renovation, paired with a new use concept.

Importantly, through this lens the case study also provides insights into the broader structure of Budapest's municipally run market system, outlining their main challenges, and bringing a supplementary case in, that of the Rákóczi Square Market Hall (Rákóczi MH). Moreover, the inclusion –of the Bratislava Old Market hall helps to understand how knowledge transfer play a role in the process of revitalisation, since it served as a role model for the transformation of the Hunyadi MH. Lastly, we complement the picture with a private farmers' market in Budapest and an online web shop of local producers delivering to both restaurants and households.

We present these cases through their governance structures, financial frameworks, and various engagement methods, investigating questions such as in what way these organisations are or should be socially inclusive. We finish with examining the values



considered important by these organisations through the lens of the Urban Food Value Framework, and lastly discuss what these might mean for the future.

Methodology

We chose a qualitative design to investigate the transformation municipal markets are going under and what role they, and other local produce sellers can play in a metropolis. Qualitative methodology makes it possible to have a deeper understanding of the phenomenon with subjective views and stories, making it more personal and narrative-like.

As the Hunyadi MH is the main focus of our case study, our first interview was conducted with Attila Rókey, the director of the market hall. From that point, we employed an emergent design, where each subsequent interviewee was identified based on the themes that arose in the preceding interview(s), and the exact focus of the research was shaped accordingly, making the research process strongly iterative.

Using this methodology alongside a snowball sampling approach, in which interviewees suggested further contacts, we in the end conducted eight interviews, branching out thematically from the Hunyadi MH in a star-like fashion. The interviewees are listed below, with more detailed descriptions available in the case description section.

- To gain a detailed understanding of the renovation concept and process at the Hunyadi MH, we interviewed Bence Dobos from Archikon, an architectural firm specialising in innovative building renewal, which designed the renovation plans for the market hall and is overseeing the process.
- To gain deeper insight into municipally run markets and establish a point of comparison, we decided to examine another market hall within the municipal system, looking at its current situation and the initiatives taking place within it. We selected the Rákóczi MH for this purpose, and interviewed Ádám Kobrizsa and Lukács Hayes, who organised and continue to organise (respectively) community breakfasts in the hall.
- The planned transformation of the Hunyadi MH was largely inspired by the Old Market Hall (Stará tržnica) in Bratislava. With this in mind, we interviewed Marián Mazag, Managing Director of Stará Tržnica, as well as Gábor Bindics, who was a key figure in the revitalisation of the Old Market Hall and through whom we also gained insight into the broader regeneration processes surrounding the New Market Hall in Bratislava.
- To examine the theme of markets from a different angle, we introduced a privately-run market into the research, the Czákó Piacz, in order to understand how it operates and whether it faces similar or different challenges to those of municipally run markets. We therefore also interviewed Luca Várady, the organiser of Czákó Piacz.
- Finally, since the interviews frequently raised the point that producers often opt for online sales rather than markets, we sought to include yet another perspective by speaking with an online representative of Hungary's alternative food networks. This was Boldizsár

Horváth from Farm2Fork, which connects Hungarian producers with restaurants and private customers, and also sells its own produce from the Farm2Fork organic garden. It thus operates within the frameworks of both local production and short food supply chains, but sells online rather than through the market model, making their perspective a valuable addition to our research.

Number	Interviewee	Affiliation
1	Attila Rókey	Director of Operations, Hunyadi MH
2	Bence Dobos	Architect at Archikon
3	Ádám Kobrizsa	Co-founder of Mindspace, which organised community breakfasts at Rákóczi MH between 2017 and 2019
4	Lukács Hayes	President of LePKE, currently organising community breakfasts at Rákóczi MH
5	Marián Mazag	Old Market Hall, Bratislava
6	Gábor Bindics	New Market Hall, Bratislava
7	Luca Váradý	Organiser at Czakó Piacz Farmers' Market
8	Boldizsár Horváth	Founding owner of Farm2Fork

5. table: The list of interviewees for the Markets and Markethalls case study

Out of the 8 interviews, 4 were conducted in person and 4 online. All were recorded and transcribed with the help of transcription software. Transcriptions were coded using thematic analysis, which allowed us to conduct a deeper analysis of the individual cases as well as identify common themes and codes throughout the interviews. Participants were consulted whether they give their name to the research and the quotes included within. Information was only included upon consent.

The case study also pilots a new methodology as part of the REDESIGN project, namely the Urban Food Value Framework (UFVF), which summarises in a structured way the subjective values these organisations hold important. The UFVF methodology was used to assess the values and their interpretations in the case of Hunyadi MH, Czakó Piacz and Farm2Fork, capturing the essence of three very different models of local food retail and short supply chains.

General description

Our interview subjects unanimously described a massive transformation that has considerably changed the role of markets in major cities, contrasting their current functions with the traditional ones. Markets have an extensive literature and have always served numerous functions, which there would neither be time to cover in full, nor is it the goal of the present paper. What did emerge from the interviews, however, was that our interviewees emphasised that markets have always had an additional function to purchasing food: the organisation of community life. Whether referring to the ancient Greek agora, or to the stalls of political parties and civil organisations at or near markets in the present day, markets have always formed a central part of political life and community organising.



And during Socialism, as a result of economy of shortage, grocery stores and super markets had little to offer, they lacked quality materials and varieties. While basic amenities were available, markets meant the availability of higher quality and fresher vegetables, fruits, but also cheese, poultry and meat. At markets everything could be bought at the same time, given the wide selection provided by the diverse vendors.

"The selection in those chains was quite limited back then, one type of milk, one type of butter, one type of whatever. Whereas if someone went out to [Hunyadi], there, you had lots of small-scale producers and many different kinds of butter, many different kinds of vegetables. So compared to what you could get in a Közért (state-run grocery store), a market actually offered a much more diverse selection." – Attila Rókey

This, however, as nearly all of our interviewees noted, was profoundly disrupted by the arrival of foreign supermarket chains after the regime change, and later by the well-organised German discount chains which in turn radically transformed shopping habits. We identified four core characteristics that interviewees attributed to these large retailers: 1) everything available in one place; 2) available at any time, regardless of season; 3) available cheaply; and 4) available in large quantities.

Markets simply cannot compete on these terms. Many of them are part of short supply chains and sourcing from seasonal local producers, while those buying more large scale have difficulty keeping their prices low enough. By contrast, retailers like Aldi or Lidl through global sourcing strategies and high-volume sales, can negotiate extremely low prices from suppliers.

"The shift that has taken place in Hungary, I think, has mainly been happening since the 1990s, when these large retail chains and shopping centres started appearing, they made shopping a much more convenient experience." — Attila Rókey

"People have less time, they want everything conveniently, from one place, and the rise of something like Lidl is, to some extent, a product of exactly that." — Boldizsár Horváth

These observations align well with the broader shift in consumer behaviour. As both Attila and Boldizsár noted, people value the convenience of getting everything in one place. Furthermore, since almost everything is always available, consumers no longer follow the seasonal rhythms of local produce; instead, they buy whatever is currently fashionable (a trend amplified by social media) or whatever ingredients a particular recipe calls for. The economic challenges Hungary went through also reinforced by shoppers gravitating towards cheaper goods and, when faced with higher prices, consumers tend not to take into account the underlying factors, such as out-of-season production, rarity, or superior quality.

"In the old days, people went to the market and cooked with whatever was there. Now they find a recipe, go to the market, and if the ingredient isn't available, many people don't have the basic culinary knowledge to substitute it with something else, they just think, well, it's not here, so I'll pop down to Aldi." — Luca Váradý



Parallel to this, producers have begun to disappear. Boldizsár pointed out that the average age of farmers in the EU is 57, with very few young producers entering the sector.² Meanwhile, smaller shops are also vanishing, a trend that can partly be attributed to the rise of the large retail chains mentioned above.

"I think our shopping habits have changed so profoundly that greengrocers are simply disappearing, the same goes for butcher's shops, small convenience stores, and small retail businesses in general". – Boldizsár Horváth

On top of all this, the COVID-19 pandemic dealt a heavy blow to producers and, according to the interviewees, significantly contributed to shifting both buying and selling habits. Many producers turned to online sales as a result.

"What I'm noticing is that younger small-scale producers, those who do exist, have started selling primarily through online channels. Who wants to set off from Szentes at two in the morning to get to Budapest? Instead, they sell their goods through Facebook groups and platforms like that." — Attila Rókey

In this baseline situation outlined by the interviewees, we wish to examine what adaptive responses they identify for alternative food networks facing these challenges, and what role, if any, markets can play within a major city in this context. Throughout almost all of the interviews, one recurring idea emerged, expressed in very similar ways by all participants: markets and other alternative food networks can only survive if they "offer something more" than simple food retail. During the interviews, we identified three main aspects of what "more" can mean:

- i. First, a market can function as a community space, where acquaintances can meet one another, customers know the vendors, and the atmosphere of the market itself is enjoyable enough for it to serve as a pleasant weekend activity.
- ii. Second, a market can offer more in terms of food than a large retail chain, whether through a broad and exciting selection of certain types of food, or through exceptionally healthy and specialised products.
- iii. Third, a market can attract people if it represents values that customers cannot find elsewhere.

Of course, this is not an exhaustive list; other topics also emerged during the discussions in relation to different markets, such as a possible focus on tourism. However, these did not prove to be as important for the markets we examined, so we remained with these three aspects.

Therefore, with these three dimensions in mind, within the broader discussion of markets we will now look at market halls specifically, before narrowing our focus to the Hunyadi MH, while also drawing on the other cases mentioned above.

Case Description

² https://commission.europa.eu/news-and-media/news/building-future-eu-agriculture-young-farmers-focus-2025-10-21_en

Hall and Market

At the centre of our case study stands not a "simple market" but a market hall. The role of market halls and the questions surrounding them form an interesting sub-section of the broader topic of markets. It is important to distinguish between the market hall as a building and the market that operates within it. Bence Dobos describes the difference between the two as follows:

"I think a market is a much more temporal thing. An outdoor market operates in a much less defined space and time than a market hall. A market hall is an architectural statement that a certain kind of function exists here, whereas a market, I think, can operate much more flexibly, you could hold one in a car park, for example." — Bence Dobos

At the turn of the 20th century, six grand historic market halls opened their doors in Budapest: the Fővám Square Market Hall (Great Market Hall), Rákóczi Square, Klauzál Square, Batthyány Square, Hold Street, and Hunyadi Square. The six market halls were designed to provide covered, regulated spaces for food trade with proper hygiene standards, replacing the city's outdated, chaotic, and often unsanitary street markets. This became all the more pressing in a rapidly growing capital that was drawing large numbers of people in from rural areas.



2. Figure: The central market hall in 1904, Source: Fortepan / Deutsche Fotothek / Brück und Sohn

Economic significance, an influx of labour³, and other factors shaped Budapest into a major city, one that today has a population of almost 1.7 million⁴, with a GDP per capita of 19 million HUF (approximately 48,000 EUR), representing 221% of the

³ <https://piaconline.hu/nagycsarnok/a-nagycsarnok-tortenete/>

⁴ https://www.ksh.hu/stadat_files/nep/hu/nep0034.html

national average⁵. Yet, the era of markets appears to be in decline, owing to broader social changes described above. This, however, raises an important question: what is to become of these beautiful buildings, the market halls themselves?

"These markets ended up as these large, hollow, echoing spaces because they lost the nineteenth-century role they once had. [...] If it had been possible to sell them off, I don't know, they would have been sold long ago, but the political climate of the eighties and nineties didn't allow for that. And so we are left with these empty, or half-empty, buildings, and the question becomes: what is the market's function now? And there is a kind of misunderstanding at play here, you can see it quite clearly in Budapest, where we simply erect a façade of what once was." — Gábor Bindics

Old Market Hall in Bratislava: The inspiration

Bindics Gábor is a key figure in the rethinking of market halls. As the previous director of the Old Market Hall in Bratislava and co-founder of the Old Market Hall Alliance, he played a central role in the revitalization of the hall. We had a conversation with both him and Marián Mazag who explained the Old Market Hall's functioning. Bratislava's Old Market Hall is a historic landmark revitalised by a civic-led NGO into a thriving urban centre. The building operates through a unique cooperation between the private, the public and the civil sectors where a private bank ensures financial stability, the municipality provides the building and has control over its function and the NGO selects events and manages day-to-day operation.

Beyond Saturday food markets, the hall hosts a wide range of cultural, civic, and community events, including concerts, design markets, theatre performances, conferences, festivals, humanitarian initiatives, and public forums, while also hosting private and business events that help sustain the venue financially. The hall also champions urban sustainability through a rooftop garden that helps lower the Urban Heat Island effect and a circular composting system that reduces waste.

⁵ https://www.ksh.hu/stadat_files/gdp/en/gdp0078.html



3. Figure: Old Market Hall in Bratislava. Source: Stará tržnica's (Old Market Hall) Instagram page

New Market Hall in Bratislava

Gábor Bindics is currently responsible for the New Market Hall in Bratislava. The large brutalist building, opened in 1978, faced serious challenges: oversized spaces, high energy demands, declining visitor numbers due to supermarket competition, and fragmented district-level governance. Bindics and his team's recent renewal efforts, however, have reframed it as an architectural and social asset rather than simply a retail space.

Its current transformation is rooted in values-driven and inclusive governance. A multidisciplinary board was established to oversee the hall's future, bringing together 5 members to each represent an important aspect: an expert in brutalist architecture, one in accessibility and inclusivity, one in communication, an energy specialist, and a representative of market vendors. Rather than imposing a fixed programme, management adopted an open and experimental approach, allowing diverse uses and tenants to emerge organically through transparent selection processes. Today, the New Market Hall combines traditional vendors with new cultural and food-related initiatives: mushroom farms, experimental gastronomy, workshops, music spaces, community events, and pop-up businesses all coexist within the building.

Rákóczi Square Market Hall: A Market Hall in Struggle

Gábor and his team represent an approach in which the use of the market hall building itself takes centre stage, and therefore the hall does not need to be exclusively a market any longer. This approach has strongly shaped the thinking around the Rákóczi MH, which is located in Budapest's 8th district. We spoke about it with Lukács Hayes and Ádám Kobrizza.



Ádám has known Gábor for a long time, they come from the same circle of young people with an interest in urban development. Through various grant schemes, Ádám and his colleagues began working on the revitalisation of the Rákóczi MH. Their initial idea was to help fill the many vacant commercial units, but they quickly ran into a number of problems: there was no heating, the hall closed at four o'clock, the atmosphere was gloomy, and the municipal company managing it was not particularly cooperative. They ended up supporting businesses in the surrounding area instead, while inside the hall they launched a community breakfast project called Rákóczi Breakfast.

The Rákóczi Breakfasts ran for a while before being put on hold, and were later taken over by Lukács and his team. Lukács is the president of LePKE, a locally oriented civil organisation founded by urbanists and urban researchers. In his view, the Rákóczi MH is.

"Both symbolically and practically the heart of the 8th district, and indeed of the whole city, but of the 8th district in particular, and it represents enormous value and holds enormous potential." — Lukács Hayes

Both Ádám and Lukács strongly hold the view, visible in the Bratislava case, that there is a need to move away from thinking of market halls purely as markets. As put forward by Ádám on the Rákóczi MH:

"I never really saw that building as being one hundred percent about food. I think it's a mixed-use cultural meeting place, in which food is actually very important, the main act, even, and quality produce matters, but it's not the whole story." — Ádám Kobrizsa

And in Lukács's words:

"What I'm certain of is that I don't picture it as solely and exclusively a market, because the market, as such, really does seem to be retreating from our lives in some way. [...] Personally, I'm less preoccupied with whether there would be gastronomy or events in there — actually, what interests me more, honestly, is what is not a market but is compatible with one: what can provide alternative sources of income and alternative uses beyond a market's regular opening hours, and that will actually make people want to use the space." — Lukács Hayes

Lukács also adds that it matters what people actually use the space for. At present, the Rákóczi MH houses a large Spar supermarket, and Lukács notes that people are not really using the space itself, but simply passing through on their way to the Spar. Dobos Bence shares this view:

"This is actually my criticism, that the Spar is, in a sense, suffocating the Rákóczi Square Market Hall. A large chain like that simply should not be allowed into a market hall, because what ends up happening is that the hall gets used as a kind of stage set: come inside and shop, isn't this a beautiful place, but you're eating exactly the same things you'd find anywhere else. The uniqueness of these spaces should not be exploited in that way." — Bence Dobos

The struggle continues at the Rákóczi MH over how to revitalise it and make the most of what is a truly special building. Meanwhile, work has already begun at another Budapest market hall: the Hunyadi MH, the main subject of our study.

The Hunyadi Square Market Hall: The case in question



4. Figure: Hunyadi Square Market Hall. Source: Balázs Both, PestBuda.hu

Timeline

1897: Hunyadi Market Hall constructed as one of six Budapest market halls addressing public health concerns from open-air markets

1970s: First major renovation adding reinforced concrete structures; interior becomes increasingly maze-like

1980s: Municipality begins discussing comprehensive renovation, planning continues for decades

Previous Municipal Administration (pre-2019): Initiates ambitious renovation plan including deep underground parking garage beneath entire market (ultimately deemed excessive and abandoned)

2019-2022: New municipal leadership redirects renovation vision toward pedestrian-oriented neighbourhood integration; eliminates parking garage; commissions Archikon architecture firm for design; municipal ownership commissions design while property management entity will issue construction tender

2023-2024: Tender process for construction (successful on second attempt); detailed relocation planning and vendor negotiations

June 2024: Vendors relocate from market hall to temporary container facilities on Hunyadi Square; construction begins



January 31, 2027: Target completion date for renovation; simultaneous opening of all facilities planned

"For the 6th district, Hunyadi Square itself is already a treasure. The Hunyadi Square Market Hall has always been a kind of crown jewel." — Ádám Kobrizza

The Hunyadi Market Hall is owned by the municipality of Budapest's 6th district and has served the local population since its official opening in 1897. Attila Rókey, head of the Hunyadi Market Hall administration, spoke to us about the hall's difficulties, which partly stem from the broader social changes mentioned above and the resulting decline of traditional market culture. As a municipally operated market hall, it also faces challenges related to complex administration and low rental fees, as well as decades long neglect in the building. At the same time, Attila emphasised how important Hunyadi Square remains for local residents. Long-standing personal relationships connect people to the market and its vendors, and many residents feel such a strong attachment to the hall that even the possibility of its closure carries political risks.

Through conversations with Attila and other stakeholders connected to the market halls mentioned above, it became clear that although all three main dimensions are present in these projects, the strongest emphasis is placed on the first dimension: the market as a community space. This can be understood firstly through the everyday functioning of the market, where acquaintances meet one another and customers personally know the vendors:

"Its primary function should of course be food supply, but in practice it seems that the markets that can truly prosper are those that become something more than that, places for meeting and community. [...] If a salesperson in a shopping mall pharmacy is replaced, nobody notices. But if a different butcher appears at a market instead of the one who has been there for twenty years, then even the quality of the products becomes secondary; it simply will not feel the same anymore." — Attila Rókey

Secondly, it can be understood through the broader role of the market hall as a space in itself within urban life. There is a strong ambition to bring life back into market halls and transform them into active community spaces, even if this means that the traditional market function becomes only one among many activities, as seen in the Bratislava market hall examples discussed earlier. Bence Dobos, who works at the Archikon architectural office on the renovation of the Hunyadi Market Hall, explained that the Bratislava market halls were also a direct inspiration for their project.

"The experiences and impressions I had in market halls around the world were articulated by Gábor [Bindics] in the idea that these places are not primarily for shopping, but for spending time." — Bence Dobos

Bence emphasised the importance of bringing together gastronomy, culture, and everyday social life within the market hall. What he particularly appreciated in the Bratislava example was the combination of events and informal community spaces: people could casually spend time there, relax in deck chairs, read, eat international food, and participate in festivals such as sausage or beer festivals. For him, a successful

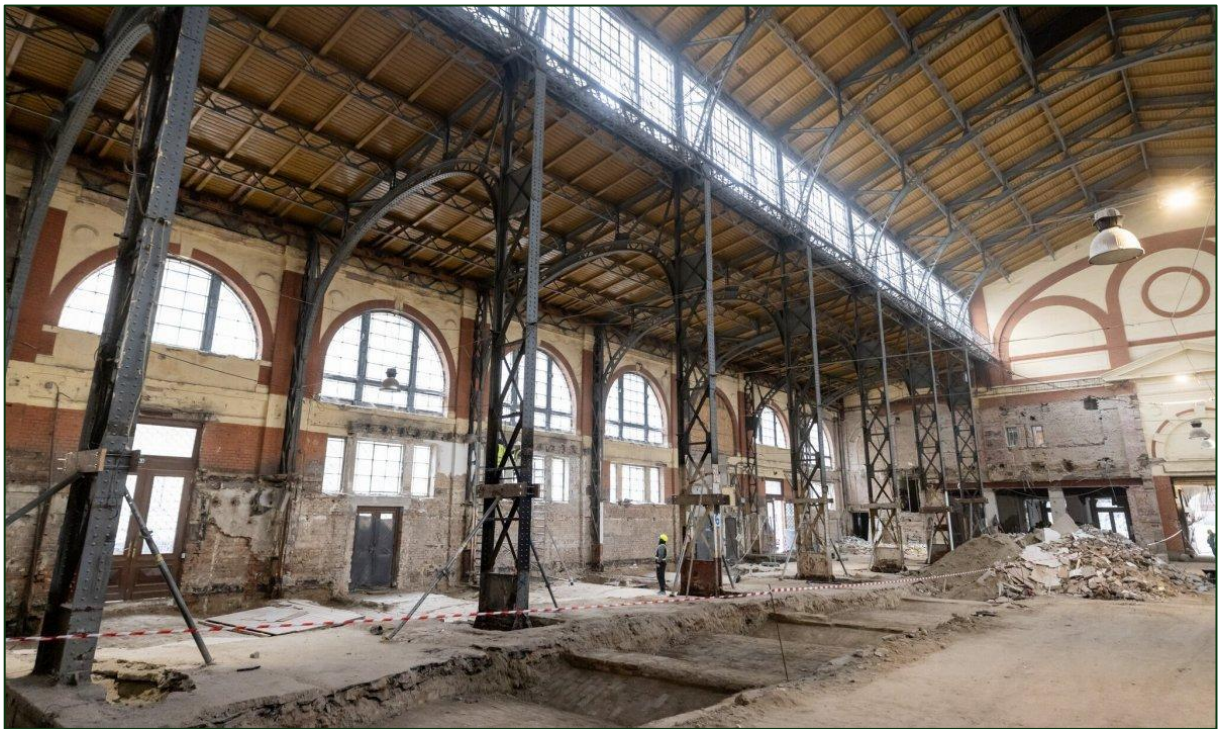


market functions almost like a public square where people naturally interact, young people, elderly visitors, children, and vendors alike, and where these everyday encounters help connect people to a broader urban culture through the atmosphere of the place. He also noted that he had rarely experienced such a strong atmosphere in Hungarian markets, which is why the renovation seeks to create a similar feeling at the Hunyadi Market Hall.

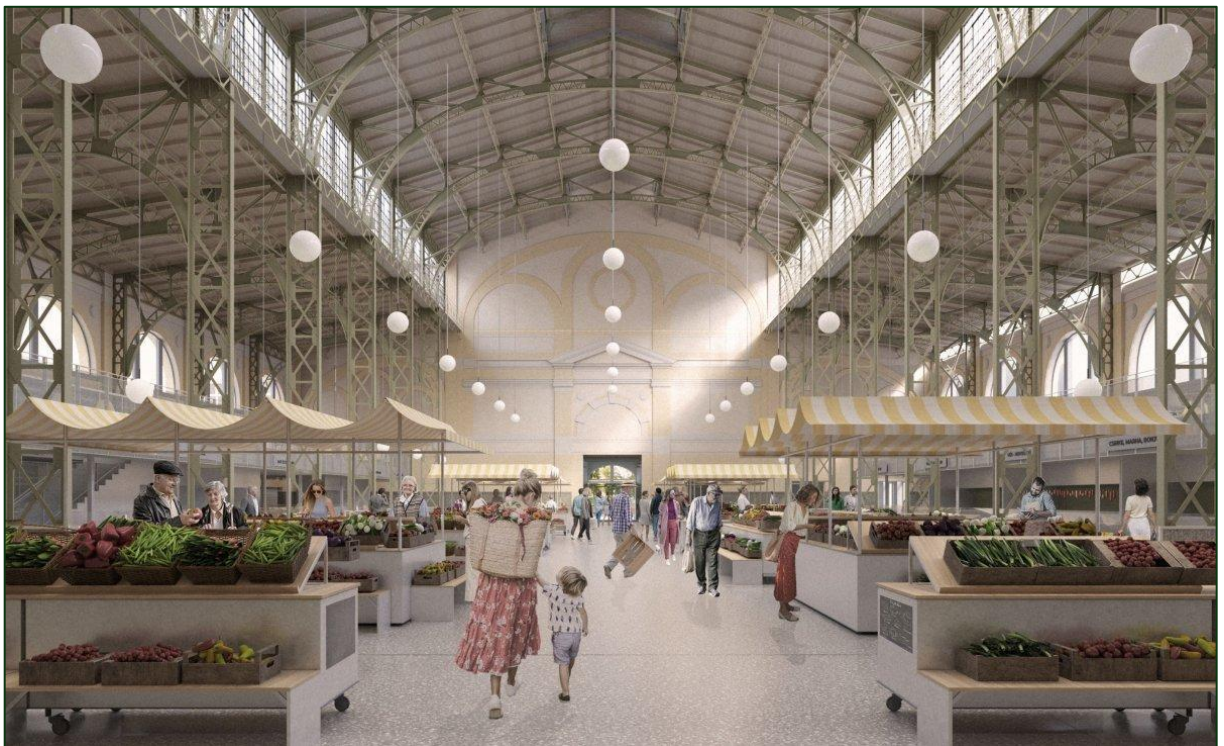
“Refilling a market hall with new content and activities is, in my opinion, one of the main tasks of contemporary architecture today.” — Bence Dobos

According to Attila, the renovation project, designed by the Archikon architecture firm for the municipal government, focuses on connecting the market hall more closely with the surrounding public spaces. The plans include several new entrances, improved pedestrian connections to nearby streets, and outdoor seating areas. Vendors moved out of the building in June 2024, and the temporary market location has functioned successfully so far. The renovation is expected to be completed by 31 January 2027.

The renewed market hall is planned as a hybrid space that preserves its traditional market function while introducing new activities and sources of revenue. While its primary role in the food system is a distributor or retailer as it provides physical marketplace infrastructure connecting small-scale producers and food vendors with urban consumers, it will also be active in waste-management with a basement composting unit, as well as in consumption with a food court and restaurants. The project aims to establish a financially sustainable model through a combination of outdoor producer stalls, indoor vendor spaces, the food court, street-facing cafés and restaurants, cultural events such as concerts and community gatherings, and upper-floor spaces that may function as galleries, offices, or other uses capable of attracting visitors and generating local value.



5. Figure: Reconstruction works at Hunyadi Square Market Hall. Source: PestBuda.hu



6. Figure: Architectural visualisation of Hunyadi Square Market Hall. Source: Archikon

NEB COMPASS

The renovation of the Hunyadi MH is therefore is a transformative project that aligns with the principles of the New European Bauhaus (NEB), bridging historical



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preservation with contemporary demands for sustainability, inclusivity, and community-oriented urban life. Below we present the Hunyadi MH through the NEB compass, based on the interviews with Attila and Bence.

Beautiful	Sustainable	Together
<i>Ambition III: to integrate</i>	<i>Ambition II: to close the loop</i>	<i>Ambition III: to transform</i>
The Hunyadi Market Hall, one of Budapest's smallest and most atmospheric market halls, is a nationally protected historic building with strong local significance. The renovation project (re)activates the building's cultural and aesthetic qualities by restoring original architectural features, such as the steel structures and the 140-year-old ceramics. Beyond functionality, the design focuses on sensory experience, preserving the market's unique atmosphere [I]. Beyond its traditional market function, the renewed hall aims to strengthen its role as a public gathering space through more welcoming communal areas and future cultural programming, such as concerts and community events, helping to reconnect the building to the city's social and cultural life [II–III]. <i>"I think the atmosphere extends beyond the boundaries of the hall, and it would be good if it extended everywhere. And as I say, it was a strong experience for me to enter and always smell this scent. I think it is very important, at least for me, and I hope that it will be able to remain in it, even if not in an extreme way, like it was there, but I think that these scents absolutely belong to this experience."</i> — Bence Dobos	The core of the project's sustainability is the repurposing of the historical built heritage rather than demolition, which significantly reduces its environmental footprint [I]. The renovation incorporates circular systems, such as a basement composting unit for neighbourhood waste and oil, as well as rainwater collection systems to irrigate surrounding green spaces. Energy efficiency is addressed through modern heat pumps and floor heating [II].	Inclusivity is prioritised through barrier-free physical access and the installation of glass photocell doors that open the hall to the surrounding streets. Beyond its architectural openness, the Hunyadi Market Hall has long functioned as a non-discriminatory social space that welcomes people regardless of age, gender, or social background. There are also plans to make the building even more inclusive by creating child care services [I]. Moreover, the project overcomes social segregation by ensuring that existing vendors remain through the use of a "container city" during construction, as well as by ensuring equal access through transparent tendering processes [II]. By creating a "green office," a cooking school, and multifunctional community spaces, the hall fosters new ways of living together where education and social interaction redefine the traditional market experience [III].
Participatory	Multi-Level	Transdisciplinary
<i>Ambition II: to co-develop</i>	<i>Ambition I: to work locally</i>	<i>Ambition II: to be interdisciplinary</i>
The process began by consulting with vendors and residents to	The project involves close horizontal and vertical cooperation between	The renovation is a multidisciplinary effort involving

identify their needs and fears regarding the renovation [I]. The architects then moved toward co-developing solutions, such as a mobile furniture system and logistics for the temporary relocation, working as partners with the stakeholders [II]. Planned community workshops, like local ceramic tile making, further strengthen this collaborative bond.	the district municipality, the asset management company, and urban planners. The renovation specifically bolsters district identity by preserving a 140-year-old landmark that remains a central point of attachment for residents of the 6th district. The project is also integrated with neighbourhood public realm improvements, such as the green, pedestrian-friendly renewal of the surrounding streets [I].	architects, heritage restorers, engineers and urban planners from the district municipality. The connection between these disciplines is facilitated by the municipality and the asset management company, which act as the coordinating bridge between the "hardware" (the architectural renovation) and the "software" (the social and community management) [I & II].
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6. table: Hunyadi Square Market Hall through the lens of the NEB Compass

Czakó Piacz – Farmer's Market

To examine the question of markets from multiple perspectives, we conducted an interview with Luca Várady, manager of the Czakó Piacz, a farmers' market in Budapest. Farmers' markets represent one of the three main market types. Another type is the conventional market — such as the Hunyadi MH — which is typically municipally operated and includes not only primary producers but also traders and resellers⁶. In contrast, farmers' markets allow only producers to participate, while organic markets are even more restrictive, permitting only certified organic producers to sell their goods.

Although all three adaptation dimensions can also be identified in the case of the Czakó Piacz, we found the second dimension to be the most prominent: attracting visitors through the uniqueness of its food and products. As Luca explained:

"I think our function is partly that of a gastronomic market as well, through the more exciting product ranges." – Luca Várady

According to Luca, one of their producers began experimenting with unusual vegetables and specialty products that were not necessarily appreciated by their regular customer base:

"They had experimental vegetables and started working with many interesting varieties that their own customers did not necessarily value. [...] Everyone looked at them with interest, applauded the idea, and then bought the traditional products they were used to. So I think the Czakó Piacz became a really good showcase platform for them." – Luca Várady

⁶ Benedek, Zs. & Fertő, I. (2015). Miért választják a termelők a rövid ellátási láncokat? Statisztikai Szemle, 93. évfolyam 6. szám



7. Figure: Source: Czako Piacz's Facebook page

Farm2Fork

One of the main causes, and consequences, of changing food purchasing and selling habits is the rise of online shopping. Since this phenomenon is becoming increasingly widespread, we also wanted to include this perspective in the case study and explore how these systems operate. We therefore interviewed Boldizsár Horváth, founder of Farm2Fork, an online platform that connects Hungarian producers with individual consumers and restaurants.

Boldizsár, as did the others, also emphasised that it is important for his business to offer “something more” than simply functioning as a webshop. As part of this approach, Farm2Fork organises chef tours where chefs visit producers, as well as educational dinners focused on seasonal ingredients.

“I also feel and see that because the whole food sector is such a highly competitive field, we cannot simply operate as a webshop; we have to provide something extra. This is where creativity comes in. That is connected to the events we organise, as well as the content available on the website. There is now much more information accessible there.” – Boldizsár Horváth

The “information and content” Boldizsár refers to includes detailed descriptions of products, information about their origins and producers, and transparent communication about the company’s broader values and operations. In Boldizsár’s own words, Farm2Fork is a strongly

“value-oriented business.” As part of this value orientation, vegetables and fruits remain the company’s primary focus, and the business deliberately avoids expanding significantly into meat products in order to maintain a lower ecological footprint. Deliveries within the inner city are carried out by cargo-bike couriers to minimise



transport-related emissions, while fair compensation for producers is also considered essential, partly to ensure that future generations can continue to see farming as a viable livelihood. These values will be revisited later in the study through the framework of the Urban Food Value Framework.

Based on our findings, although Farm2Fork is not a physical market but rather an online platform selling goods from local producers, it is noteworthy that the strongest adaptation dimension in its case (apart from it functioning online of course) lies in the values it represents. As Boldizsár explained:

"We work specifically with local, seasonal, and partly organic ingredients. Organic production is especially important to me because I am an ecological agricultural engineer by training. This is what I studied and worked in. We primarily try to support producers who do the most they can to protect our environment and our health. These considerations remain the defining values that guide me in running the business and managing its operations." – Boldizsár Horváth

Governance structure

From a governance perspective, two aspects are particularly interesting to examine. First, the relationship between municipalities and markets, and how different municipal governance structures influence the operation of market halls. Second, the ways in which politics can shape and influence their functioning.

The Role and Structure of Municipal Governments

As noted earlier, conventional markets in Hungary are generally owned and managed by municipalities. Within Budapest, however, two distinct governance structures exist as a result of the city's unique administrative system. Budapest operates under a two-tier municipal model. On one hand, each of the city's 23 districts has its own local government; on the other, there is a central metropolitan government, the Municipality of Budapest. The two levels are not in a hierarchical relationship but are legally and institutionally equal. Their responsibilities are generally divided: district municipalities provide local public services such as pre-school education and healthcare, while the metropolitan government is responsible for city-wide functions including public transportation, waste management, and water services.

In practice, however, the division of responsibilities is not always clear-cut. Budapest's market halls provide a good example of this ambiguity. A dual governance system has emerged in which some market halls are owned and managed by district municipalities, while others fall under the authority of the Municipality of Budapest. The latter are operated by Budapest's Market Halls Ltd. (Budapest Vásárcsarnokai Kft.), a company wholly owned by the metropolitan government. As a result, district-managed and metropolitan-managed market halls have developed different operational dynamics and levels of autonomy. (To get a full picture we tried to conduct an interview with the company, however, despite several attempts, we were not successful.)

Hunyadi Square Market Hall – Owned by a District Municipality



The Hunyadi MH is owned by the 6th District (Terézváros) Municipality and operated by Terézváros Property Management Ltd. (Terézvárosi Vagyonkezelő Zrt.), specifically through its Market Hall Operations Directorate with a team of 12 staff members responsible for day-to-day operations, event programming, and facility management. The main responsibility of the market hall, however, is to manage tenants (vendors).

6th District Municipality (Terézváros)

|
| (ownership)

Terézváros Property Management Ltd. (Vagyonkezelő Zrt.)

|
| CEO (signing authority)

Market Hall Operations Directorate

|
| Director: Attila Rókay (since Sept 2022)

12 Staff Members

|
└ Operations & Tenant Relations
└ Event Programming
└ Vendor Recruitment
└ Facility Management
└ Regulatory Compliance

Typically, conventional markets make long-term contracts with the vendors, but they can also rent tables on a first come first served basis, those, however, are usually priced higher.⁷ In the case of the Hunyadi MH, contracts used to be for a fixed period, however, they switched to open-ended contracts. Though at the moment the market signs fixed-term contracts again due to the renovation works that the market hall has gone under. Contracts before the renovations were therefore until the construction works began and current contracts at the temporary market space outside are until the renovations finish.

⁷ Benedek, Z., Fertő, I. & Molnár, A. Off to market: but which one? Understanding the participation of small-scale farmers in short food supply chains—a Hungarian case study. *Agric Hum Values* **35**, 383–398 (2018).

The leasing process of vacant stalls at the Hunyadi MH is quite lengthy, complicated, and bureaucratic at the moment. After the Operations Directorate prepares a proposal, it is reviewed and approved by higher-level authorities; the resulting contract template can be sent out in the form of a tender by the Operations Directorate, and the final contract is signed by the director of the Terézváros Property Management Ltd. However, Attila stresses that this will change in the near future, indicating that with the large renovation works, the bureaucratic and administrative system of the hall will be reimagined as well.

Rákóczi Square Market Hall – Owned by the Metropolitan Government

The Hunyadi MH enjoys a relatively high degree of autonomy precisely because it is managed at the district level. By contrast, the Rákóczi MH, which falls under the authority of the Municipality of Budapest, operates with considerably less flexibility. According to Lukács Hayes and Ádám Kobrizsa, Budapest's Market Halls Ltd., which manages six market halls as well as numerous marketplaces and commercial properties across the city, exercises significant influence over the day-to-day functioning of the hall. As representatives of civil society organisations, they have experienced first-hand how even seemingly minor issues such as the unauthorised placement of posters advertising the Rákóczi Breakfast events can become sources of conflict.

"The Rákóczi Square Market Hall is something of a neglected stepchild within the broader CSAPI (today: Budapest's Market Halls Ltd.) system." — Ádám Kobrizsa

Based on these experiences, Lukács argues that district-managed markets often perform better than those operated under the metropolitan company because they have greater room for manoeuvre and decision-making. At the same time, he emphasises the importance of involving civil society actors in governance processes. The revitalisation of Bratislava's Old Market Hall, discussed earlier, offers an example of a successful public-civil partnership.

"We like the local municipality and believe that it is moving things in the right direction. At the same time, as a public authority, it cannot always know what the right direction is in every area. As a civil society actor, I see it as part of my role to contribute to that process. This is also why the future of the Rákóczi Square Market Hall is important. As a civil actor and a locally embedded stakeholder, we can help draw attention and resources to particular issues or locations where they are needed." - Lukács Hayes

In contrast to the examples above, non-municipal initiatives are not as closely tied to local governments in their day-to-day operations. Nevertheless, challenges can still arise in the course of coordinating with municipal authorities. For example, in the case of Czakó Piacz, occasional disagreements emerge regarding parking regulations and street closures. By contrast, Farm2Fork, due to its online nature, does not face similar challenges in its relationship with local authorities.

Political Influence on Market Governance



The central role of municipalities in managing market halls also means that politics can significantly influence their operation. One example is the lack of coordination between markets. In 2023, an initiative called the Markets Cooperation Forum was launched with the aim of facilitating knowledge exchange among Budapest's and Hungary's markets. In practice, however, the initiative has largely ceased functioning, apart from the annual Open Markets Day organised for customers. There is currently no systematic coordination with institutions such as NÉBIH (the Hungarian National Food Chain Safety Office), social service organisations that could support food redistribution, or regional food policy initiatives. Attila highlights the political challenges of establishing effective coordination networks in Hungary. Since municipal markets are owned by local governments with different political affiliations, participation in cross-municipal initiatives often requires explicit approval from municipal leadership.

"It's not that market leaders are politically committed or politicised, but to join such an organisation requires some approval. If it comes from an opposition-led city like Budapest, non-opposition rural markets won't join, they will say no, their leader will say no. And maybe vice versa." — Attila Rókay

Political considerations have also directly affected activities within market halls. The Rákóczi Breakfast programme was temporarily forced out of the Rákóczi MH prior to the municipal elections. Although the events themselves were not political, they became entangled in the broader political climate during the Orbán government. Because representatives of opposition organisations occasionally attended the breakfasts, the events were eventually suspended. Officially, all public events in market halls were prohibited during the election period to ensure political neutrality. However, according to Ádám Kobrizza, some other events nevertheless continued to take place.

Legal and financial framework

Legal status

Municipal markets are embedded within the municipality's broader financial and legal framework. The legal status of the Hunyadi MH is a municipal department operating within a municipal company (Terézvárosi Vagyonkezelő Zrt.), which is wholly owned by the 6th District Municipality. This hybrid structure, a limited company owned by government is common for Hungarian municipal asset management. It provides some operational flexibility compared to direct municipal department status while maintaining full public ownership and accountability. However, it can also constrain operational capacity, with contracts needing formal public tender processes and strict bureaucratic documentation, as mentioned above.

Also from a legal perspective, markets and all initiatives related to the production of agricultural goods are regulated by specific policies that define what a market is, where and how farmers can produce, as well as the conditions for obtaining a farmers' permit. However, our interview participants agreed that, in practice, these regulations and distinctions are not always clear-cut or easy to navigate. Czakó Piacz, for example, is not classified as a "market" but as a "local farmers' market" (helyi termelői piac), which is a distinct legal category from a market, fair, or market hall. In some respects, this



classification imposes stricter regulations (for example, vendors are not allowed to sell fresh cuts of meat), while in others it is more lenient. For instance, the market is not required to maintain a dedicated mushroom inspection room, but mushrooms may not be sold unless a certified mushroom inspector is present. The picture is further complicated by EU legislation governing organic and ecological farming, under which organic certification can only be granted by accredited certification bodies.

Financial structure

At Hunyadi MH, long-term tenants rent the permanent retail units, and these rental revenues constitute the primary source of funding for the market's day-to-day operation. Table/stall rentals operate through a simpler system based on daily permits. Rental fees are set below market rates, which has both advantages and disadvantages. On the one hand, lower rents provide financial support to producers and traders. On the other hand, within the rigid municipal bureaucratic system, inflexible and relatively low rental fees make it difficult to ensure the market hall's long-term financial sustainability.

The market's financial embeddedness also allows for cross-subsidisation. Interviewees suggested that almost all municipal markets operate with losses. The municipally owned company responsible for operating the market can draw on other revenue streams, such as parking fees, to support its continued operation. Nevertheless, financing remains a challenge. Alongside the planned structural renovation, the revitalisation strategy for the market hall seeks to diversify funding sources through events and cultural programming, drawing inspiration from Bratislava's Old Market Hall.

"What was particularly interesting about the Bratislava market hall was that Gábor explained that a significant share of their income actually comes from events. They host large concerts, major installations, various food festivals, and we incorporated this idea into the Hunyadi project as well. Both the Market Hall and the Hunyadi square have been designed so that they can accommodate concerts with several hundred attendees. They are also prepared to host food trucks inside the building, and we designed mobile furniture that can be folded, moved on wheels, stored away, and reconfigured as needed, allowing the market hall to be rearranged at any time."

— Bence Dobos

"The expectation would be moving toward break-even, all these functions I've listed together: the outdoor producer row, indoor space utilisation, indoor tables collectively for traditional market function, food court function, street-front restaurants and head buildings, plus event-based utilisation should ideally move toward zero balance, or better yet, generate profit." — Attila Rókay

In contrast to municipally operated markets, the operation of a private farmers' market follows a very different financial model. The Czakó Piacz pays market-rate rent to a private individual for the use of the site and covers tables and tools as well as utility costs such as electricity, marketing and other costs from the organisational fee paid by the producers, which ensures financial sustainability.

Seasonal fluctuations present an additional challenge from a financial perspective. During the winter months, fewer people are willing to visit open-air markets and there is also less produce available. This creates significant difficulties for Farm2Fork as well. As Boldizsár explains, the company operated with a negative budget in January, which meant that he was unable to pay himself a salary. At the same time, he remains committed to Farm2Fork's core values, such as avoiding imported products. In his view, the decision to focus on online sales reduces many financial burdens and offers a more viable long-term business model.

"I support markets, and I often emphasise that farmers' markets are necessary. I genuinely believe they have an important role to play. At the same time, I think the model we represent is ultimately more sustainable in the long term." — Boldizsár Horváth

Legal policy

From a legal perspective, markets and all initiatives related to the production of agricultural goods are regulated by specific policies that define where and how farmers can produce, as well as the conditions for obtaining a farmers' permit. However, our interview participants agreed that, in practice, these regulations and distinctions are not always clear-cut or easy to navigate. The picture is further complicated by EU legislation governing organic and ecological farming, under which organic certification can only be granted by accredited certification bodies.

Engagement and collaboration

Vendors

At Hunyadi MH, currently, there are 62 tables with long-term leases, as well as additional vendors who rent tables on a daily basis. During the main season (approximately from April to September), around 80% of the tables are leased, according to Attila. In contrast, Czakó Piacz is somewhat smaller, with approximately 25 vendors, from which around 20 are regulars and the remainder attend on seasonal basis. Farm2Fork, as an online enterprise, works with more than 80 producers, supplying nearly 40 restaurants as well as several hundred individual consumers.

The interviewees reported using a variety of methods to recruit vendors. Hunyadi MH primarily promotes the market itself in the hope of attracting more farmers to its produce stalls. In addition, Attila distributes his business cards at local farmers' markets during his travels. Both Czakó Piacz and Farm2Fork rely heavily on personal recommendations when recruiting producers, which also helps ensure a certain level of trust and quality. Nowadays, Czakó Piacz needs to do less active outreach, as many farmers approach the market directly after registering through the market's website or hearing about it through word-of-mouth recommendations, giving the market a broad pool of potential vendors to choose from. While Luca continues to actively look for promising producers, experience shows that those who initiate contact themselves are generally more committed to participating and tend to become more reliable long-term vendors.

Target audience and social role

Target audience setting is deeply intertwined with the societal changes described at the beginning, as well as with the question of what social role if any these organisations should play. According to Attila the Hunyadi MH has a diverse audience which is becoming increasingly challenging to accommodate as they often have conflicting priorities in terms of taste, aesthetics and affordability of products.

"There is the classic elderly lady who gets around with a shopping trolley and arrives at the market as early as six in the morning. They make up a significant share of Hunyadi's customers. Then there are younger people who are a bit more particular about their food, wandering around the market at around 11 a.m. on a Saturday, perhaps slightly hungover. And then there are families." — Attila Ró kay

Lukács reported similar experiences regarding the Rákóczi Breakfasts initiative. He spoke about the changing audience of markets and the closely related process of gentrification that is increasingly visible in the neighbourhood.

"The Market Hall quarter is right now going through a gentrification process quite strongly. It did not start recently, it has been happening for quite some time, but I think we can now see much clearer evidence of it. In my opinion, pensioners use a market very differently from young people, or in many cases young people do not use it at all." — Lukács Hayes

While it is important to note that both Budapest and Bratislava are capital cities, with higher income households than in the rest of the country, in the context of gentrification and rising food prices, the question still arises as to what social role markets should play, and what kind of population they should cater to. For the Bratislava Old Market Hall, it is part of their mission to fight gentrification, which they are doing through several means. Firstly, they maintain low rents for their stores and stalls. Secondly, they keep their events free and open to the public as many days as they can, which is often made possible with the financial support from the private sector bank.

According to Attila, a municipal market's social role can be tricky. He views them as a public service infrastructure serving neighbourhood needs rather than a profit-generating enterprise. This supports the market's social mission but limits operational flexibility and financial sustainability. He also emphasises that municipalities have dedicated social welfare departments that operate independently, therefore, markets are not necessarily expected to implement social programmes directly.

Moreover, social responsibility can be far more complex than simply ensuring that food remains affordable for everyone, as shown by the two private organisations. They view their social role primarily as providing a platform for Hungarian small-scale producers to sell their products at fair prices. Consequently, it is unsurprising that both private initiatives largely cater to more affluent consumers, as higher product prices are necessary to support producers and maintain financial viability.



Luca emphasised that, at Czakó Piacz, while visitors from many different nationalities attend the market, a stable local customer base is essential for the market's long-term future. Farm2Fork's customer base is also relatively affluent, but it is predominantly composed of women, often mothers, who, according to Boldizsár, tend to be more open to conscious and healthy eating practices. The majority of customers are also relatively young, in which familiarity and comfort with online ordering have probably played an important role.

Activities

As an adaptation strategy, offering 'more' than simple food retail to attract more customers is a key aspect of the Hunyadi MH's operations, especially after the renovations. However, even before the construction works, the market has been organising 10 gastro-themed events a year, such as the Tomato Festival, programmes live music and even stilt walkers. A particularly successful initiative is the "Lom-mentő Bolhapiac" (Waste-Saving Flea Market), held 10 times annually on Sundays when the regular producer market is closed. The hall also had an evening market aspiration to capture the demand of the working professionals who finish work around 6pm, producers resisted resulting in the failure of the initiative.

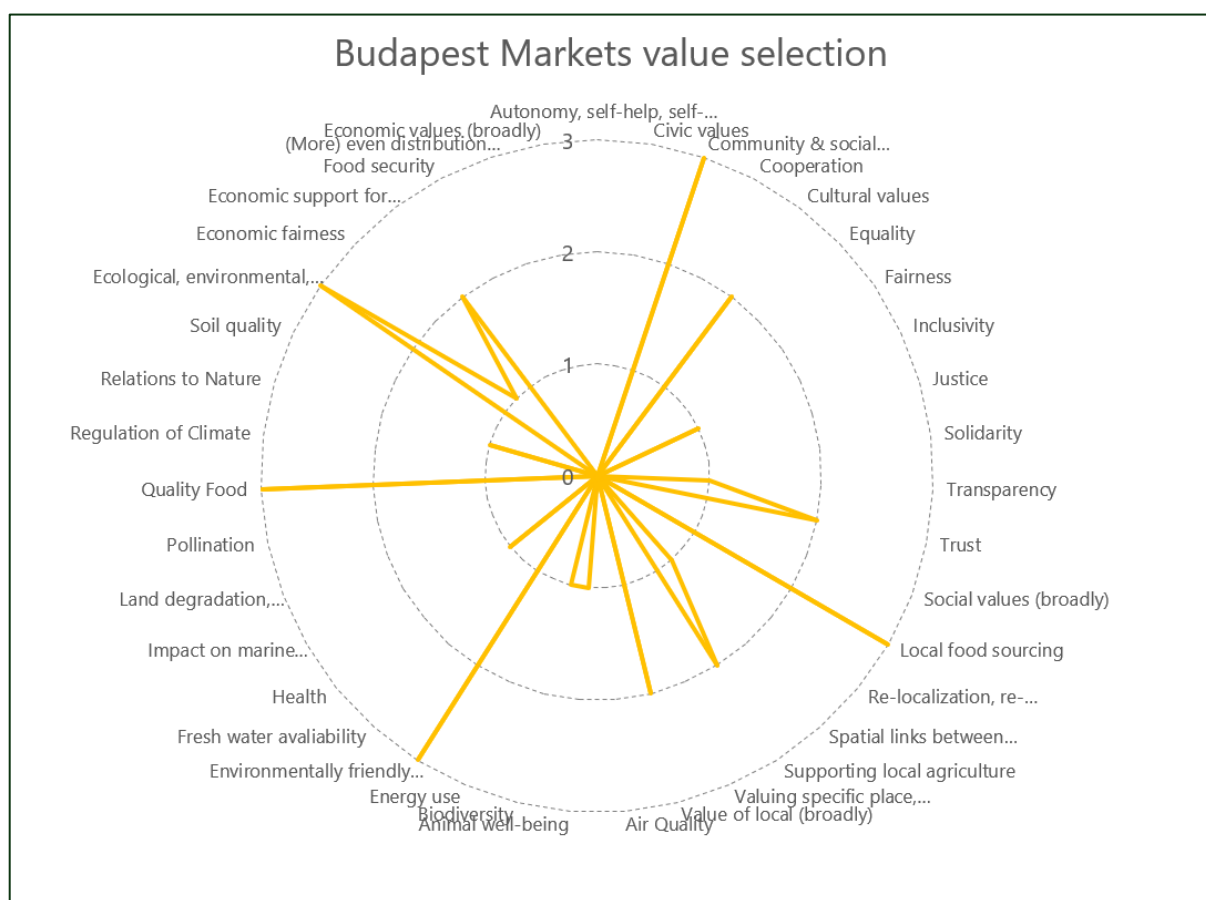
We identified two directions that the hall aims to take its future events after the renovations are finished: collaboration with other organisations and education. There are plans to co-organise pop-up exhibitions with one of Budapest's largest art schools as well as other programmes with NGOs and charities.

"We hope that functions and activities will move into the main buildings that can also make use of these spaces. Our biggest worry is that, at some point, everything becomes rigid and is no longer used flexibly. If the market hall loses this quality, if it ceases to be inclusive and welcoming, and all the furniture simply remains fixed in place, then something that we designed into the project will be lost." — Bence Dobos

One ambitious initiative is the 'green office', that will host cooking workshops and educate people about the origins of different ingredients as well as waste management including recycling and composting. Food sustainability-related education is an important aspect of both Czakó Piacz, who uses its social media to educate about seasonal produce and Farm2Fork as well, who organises educational dinners for chefs and the public.

Impact – according to the Urban Food Value Framework (UFVF)





8. Figure: The values identified among the surveyed organisations, grouped according to broader thematic categories. Source: based on the author's own research (2026.).

The Urban Food Value Framework (UFVF) presents in a structured way the essence of the organisations captured by what the representatives from each considered as important values for the initiatives. The UFVF is divided into four categories of values: 1) Social embeddedness values, 2) Spatial embeddedness values, 3) Ecological embeddedness values and 4) Economic embeddedness values.

Among the surveyed initiatives, social and environmental (ecological) values play the most significant role, while spatial values are also considered important. Economic aspects receive somewhat less emphasis based on the interviewees' remarks. The first figure shows the frequency of the values picked by organisations, while the following tables highlight the same aspects in greater detail, broken down by organisation.

Categories	Value	Indicators	Interpretation
Social values	Community & social relations	Qualitative indicators, & Success in participation	Value in practice
	Cultural values	No formal indicators, qualitative indicators, & success in participation	Value as aspiration
	Trust	Participation	Value in practice

Spatial values	Local food sourcing	Quantitative indicators and success in participation	Value in practice and tied to identity
	Spatial links between producers and consumers (i.e. physical proximity)	Both qualitative and quantitative indicators and success in participation	Value in practice and tied to identity
	Supporting local agriculture	Success in participation	Value in practice and tied to identity
	Value of local (broadly)	Qualitative indicators, Success in participation	Value in practice, tied to identity
Ecological values	Animal well-being	Quantitative and qualitative indicators and participation	Value in practice, value constrained and value tied to identity
	Environmentally friendly food production	Quantitative indicators	Value in practice
	Quality Food	Qualitative indicators	Value in practice
	Relations to nature	Qualitative indicators	Value in practice, tied to identity
	Ecological, environmental, sustainability values (broadly)	Qualitative indicators	Value in practice, Value tied to identity
Economic values	Economic support for local communities	No quantitative indicator, Qualitative indicators, success in participation	Value in practice

7. table: UFVF table of Czako street market based on interview with Luca Várady

Categories	Value	Indicators	Interpretation
Social values	Community & social relations	Qualitative indicators	Value in practice
	Cultural values	Quantitative indicators & success in participation	Value in practice
	Inclusivity	Success in participation	Value in practice and value constrained
Spatial values	Local food sourcing	Success in participation	Value in practice and tied to identity
	Value of local (broadly)	Success in participation	Value in practice and tied to identity
Ecological values	Environmentally friendly food production	Quantitative and qualitative indicators	Value tied to identity
	Quality Food	Qualitative indicators and success in participation	Value tied to identity
	Ecological, environmental, sustainability values (broadly)	Quantitative indicators	Value tied to identity
Economic values	Economic fairness	Success in participation	Value in practice

8. table: UFVF table of Hunyadi MH based on interview with Attila Róka



Categories	Values	Indicators	Interpretation
Social values	Community & social relations	Qualitative indicators	Value in practice and value as aspiration, value tied to identity
	Transparency	Success in participation	Value in practice
	Trust	Qualitative indicators	Value in practice
Spatial values	Local food sourcing	Qualitative indicators and success in participation	Value as aspiration, value in practice and tied to identity
	Supporting local agriculture	Qualitative, quantitative indicators and success in participation	Value as aspiration, in practice and tied to identity
Ecological values	Biodiversity	Quantitative indicators, success in impact	Value in practice
	Environmentally friendly food production	Qualitative indicators	Value in practice and tied to identity
	Health	Qualitative indicators and quantitative indicators	Value as aspiration, value in practice as well
	Quality Food	Qualitative indicators and success in participation	Value in practice, tied to identity
	Soil quality	Qualitative indicators and success in participation	Value in practice and tied to identity
	Ecological, environmental, sustainability values (broadly)	Qualitative indicators and success in participation	Value as aspiration, value in practice and tied to identity
Economic values	Economic support for local communities	Qualitative indicators and quantitative indicators	Value as aspiration and tied to identity

9. table: UFVF table of Farm2Fork based on interview with Boldizsár Horváth

Social values

Among the *social embeddedness values*, *community and social relations* were selected by every interviewee: at Czakó Piacz, the personal relationship between the market organisers and producers is considered a very important value, providing a fundamental basis for the organisation of the market. At Hunyadi MH, since the building is currently under renovation, the aim was to preserve the old tenants, the personal relationships, and the community. To achieve this, the market did not temporarily cease to exist, but instead moved into containers placed in front of the market hall building. In this way, the relationships, the old customer base, and the producers were all able to remain in place. In the case of Farm2Fork, due to online sales, connections are limited to the collection of goods. Yet, they aim to maintain good personal relationships on both the consumer and producer sides.

Cultural values were selected by two out of the three organisations. At Czakó Piacz there is an effort to ensure that certain kinds of food remain traditional, such as wheat pudding, cherries from Nagykörű (such as Germersdorf cherries, the most popular late-ripening cherry variety in Hungary), homemade sour cream with a very high fat



content, fermented vegetables. Hunyadi MH also strives for diversity and variety of 'cultural' products.

Trust at Czakó Piacz also appears in the nature of community relationships. It is important for them to know what the finished product they put on the market contains. At Farm2Fork, trust plays an especially important role precisely because of the online presence. Since everything takes place on online platforms, stable and long-term cooperation with producers and the establishment of stable relationships are crucial.

Inclusivity mainly appears as a fundamental value at Hunyadi MH, not only on a theoretical level, but also because they announce open applications for currently vacant spaces, thus trying to help those who are just starting out. *Transparency* as a value appears at Farm2Fork: they explicitly indicate on their website who the producers are.

Spatial values

Spatial values were fundamental for all three organisations. For Czakó Piacz and Farm2Fork, *local food sourcing* and *Supporting local agriculture* mean a focus on domestic products: they warmly welcome what is Hungarian, while they reject imports. This is one of Farm2Fork's core values and selling points. Similarly, part of Czakó Piacz's mission is to treasure the local by sharing certain domestic recipes regarded as national values on their website and social media platforms, and they also strive to always address current and seasonal topics in their monthly newsletter.

Ecological values

Among the ecological values, *environmentally friendly food production* was chosen by Czakó piac where it is considered important that food is Hungarian and local, reducing travel time, packaging, and post-sprayed chemicals. At Hunyadi MH, they positively discriminate in favour of producers instead of resellers, allowing them to obtain their annual rental contracts at half price. At Farm2Fork, *environmentally friendly food production* is mainly manifested in the sale of organic products.

One of Czakó Piac's most significant competitive advantages is providing *quality food*. At Hunyadi MH, it is also an aspiration: it is their basic expectation that poor-quality products do not appear on the shelves. According to Farm2Fork, in order to reduce the burden on the healthcare system, prevention through conscious nutrition is key. They try to help customers abandon bad eating habits created by large supermarkets, and they also communicate these issues in an educational way.

Animal well-being, as a limited value, was highlighted at Czakó Piac:

"Animal well-being is indispensable for small-scale and primary producers: there is a limit on how many animals may be kept per hectare. This is indispensable in some way, because the whole breeding process becomes endangered once it reaches an industrial scale. This is important, but it is not something we require; rather, what we require is small-scale producer existence, so this is a semi-indirect consideration of the market." — Luca Várady



Furthermore, *relations to nature* appeared only at Czakó Piacz as a value: according to Luca, while this is mostly an aspiration, they would like to be stronger in this area. For example, they previously organised mushroom-picking events with mushroom gatherers and some producers also offer opportunities for farm visits.

Biodiversity appeared prominently at Farm2Fork, during winter they strive to sell not just one, but at least 6–8 types of apples, while they also try to sell special plant species. *Health* also stood out at Farm2Fork, as Boldizsár has always considered this issue important: they pay significant attention to the human ecological footprint and strive for meat- and dairy-free consumption whenever possible. *Soil quality* also emerged as an important value at Farm2Fork: according to Boldizsár, producers should not work by turning over the soil, but rather within a four-mulch system.

The broader, umbrella category of *Ecological, environmental, and sustainability values* was picked by all three organisations, although for different reasons. At Czakó Piacz, as in the other cases as well, this is partly a producer consideration, and partly a matter of transportation, which is also connected to chemical-free production and locality. At Hunyadi MH, ecological values are also supported through promoting producers, this year they are even opening an exhibition on the side of their fence, to communicate this producer value. At Farm2Fork, the presence of organic products, fair trade towards colleagues, and the reduction of their ecological footprint (through reducing the sale of meat and dairy products) appear among the sustainability considerations.

Economic values

Economic fairness is reflected at Hunyadi MH mostly through its open applications, allowing anyone to sell at the tables. At Farm2Fork, as mentioned above, fair wages and proper salaries regardless of financial difficulties of the company is one of their core values, while economic support also takes a more indirect form: they support study halls where the majority of children are from disadvantaged backgrounds. At Czakó Piacz, these issues are less emphasised: although the market has a sustainability aspect, it still operates as a private market, meaning they rent the area, and therefore they do not really have the opportunity to support producers economically. Instead, economic values are manifested in providing the opportunity for small-scale producers to sell on a well-known farmer's market which means both the physical and online platform, as they also receive social media communication and advertisement support from Czakó Piacz.

Future

Our case study presented different adaptive mechanisms that markets and local food suppliers can adopt in order to remain relevant in an era dominated by large grocery chains. Some focus primarily on local specialties, such as Czakó Piacz, while others, like Farm2Fork, have moved online, adapting to changing consumer lifestyles while remaining committed to core values such as organic and locally sourced food.

The main focus of our case study, however, was historic market halls, which have a responsibility not only to keep the tradition of markets alive and promote local food



sourcing and short value chains, but to ensure that these beautiful public buildings have a purpose in today's cities and serve their local community.

To this end, the Hunyadi MH is currently undergoing renovation as it is being repurposed and reimagined. Its transformation has been heavily inspired by Bratislava's Old Market Hall, and similar discussions are taking place regarding the future of the Rákóczi MH. This raises the question of whether such a model should represent the future of all market halls. According to Marián, the answer is no. Even in Bratislava, while the Old Market Hall was transformed into a cultural urban centre in which the market is only one of several functions, the New Market Hall has a stronger, traditional food market focus.

"It's a very, very good working model. But it's good working in our case, in our city. And it's not possible to say that this should be the model for any market or building anywhere else." — Marián Mazag

An important lesson from our case study is the significance of local variations and context-specific solutions. Governance provides a good example. In Budapest, market halls owned by district municipalities, having more autonomy and flexibility, might currently work better than those owned by the Budapest metropolitan municipality. In Bratislava, the existing civil–public–private partnership functions effectively. However, Gábor Bindics's long-term vision is to bring market hall management under municipal control, led by a capable and highly qualified director who would be democratically reappointed every few years. In his opinion, this would be the most effective governance model.

Variations therefore do exist, but market halls also share some overarching missions, including providing access to a variety of high-quality, sustainably produced food, while also nurturing personal relationships and a sense of community.

"It is very important for this generation to be able to access food in a sustainable way. It is very important to have access to fresh food. I also think it is important, and becoming increasingly important, that I can look the person who produced it in the eye, talk to them about something, and have that kind of relationship between us. In my view, this is what market halls should be able to offer, as opposed to simply putting vegetables and fruit into my shopping basket and buying them." — Bence Dobos

Conclusion

The market scene in Budapest is undergoing a deep transformation: it started with the regime change, but the ensuing societal changes, as well as the related consumption pattern developments have speeded it up. The result is that traditional markets have been losing ground to large supermarket chains in Budapest. Halting and reversing this process is important for reasons of sustainability, public health and food security, but also for urban development, since the city has six traditional market halls under heritage protection, that have had important social functions in the last century.



Based on the semi-structured interviews we conducted with various stakeholders active in operating and/or changing the market system we not only wanted to find out more from this slow process of transformation, but also understand the different perspectives, as well as the opportunities of development. The selected interviewees are part of a bigger network – some loosely some more tightly connected – and this allows a flow of information and knowledge transfer. This might have influenced the research outcome as well: the share a relatively similar picture about how markets should transform in order to remain relevant in the 21st century.

Community is the most important notion they referred to: markets and market halls need to be anchored in a local community (that can be virtual as well), which appreciates their offer. Importantly, market halls can thrive when repositioned as mixed-use urban centres, that serve as centres to a larger neighbourhood. This was the concept behind the transformation of the Old Market Hall and it is the aim the Hunyady MH tries to reach. But the term community has other layers of meaning as well: personal relationships between vendors and customers are crucial to sustain the markets. It makes people return every week, and allow a loosely defined community to be established around the markets.

In relation to the importance of community, the “consumer experience” needs to change. Markets must offer something more than food retail, since traditional markets can no longer compete with supermarkets on price, convenience, or product range. All interviewees converged on the same insight: markets and alternative food networks can only remain viable if they provide a richer experience —offering unique or high-quality products unavailable elsewhere, or embodying values that resonate with consumers (sustainability, local sourcing, transparency). Additionally, while food needs to remain important, but it cannot remain their only focus. Cultural events, festivals, educational activities, and informal gathering spaces are essential to attracting diverse audiences, generating the diversified financial revenue needed for economic sustainability and strengthening local embeddedness. But a connection to food can be retained: these programs can have a role to play in rebuilding food literacy through workshops, events, and digital content — contributing to longer-term demand for local, quality produce.

While the different markets studied here follow different governance models, the municipality always plays an important role for market halls. It remains the owner and the main financing source in Budapest, while in Bratislava’s civic-led Old Market Hall hall it remains the owner of the site, who can demand certain services and investments. The presence of municipalities in these processes can ensure that the often-neglected social aspects can be taken into account. Privately owned markets – as shown by Farm2Fork and Czakó Piacz in this study – have to cater to higher income, more affluent groups, otherwise their business won’t be financially sustainable. (Naturally, the support of local farmers through providing a forum to sell their products is also an important form of social support, but its effects are more dispersed.) Around the market halls it is the local authority that can ensure through influencing the programs and the diversity of the food offer, that people of different incomes and backgrounds

come. Despite this, it is crucial that the autonomy of the market halls is kept, to keep political interference at bay, and to have an efficient planning and decision-making structure.



KILOWATT

AUTHORS: EVE FLORENCE PALMER & ALLISON SERMARINI

Introduction

Kilowatt is an organisation which can be described as a multidisciplinary working cooperative, which cover areas of social innovation, culture and art, communication, urban regeneration, education, and nutrition. Their main operations transpire within Le Serre Dei Giardini Margherita, an urban regeneration project of municipal greenhouses. It is a primary case of successful revitalisation of a public space, where food is incorporated through innovative technologies of soilless cultivation, as well as through entrepreneurship activities, like their on-site bar. Their aim of ecological restoration is also explored here, with the integration of nature into their fundamental space designs. The space is comprised of a community garden, Bistrot, day-care centre, co-working and open community spaces for the public and the organisation to utilise.

Their ability to act freely is also heavily influenced by their unique governance structure, which promotes autonomous acting. Their hybrid public-private model additionally aids in the breadth of activities which are undertaken. Accordingly, this case study report aims to outline the functionality of Kilowatt as a multifaceted organisation and its management of Le Serre. It aims to specifically showcase the interconnectedness of social and cultural values within its operations, that ultimately contribute to the successful integration and promotion of short food supply chains into the city.

Methodology

This report was curated upon the information gathered both from literature review on Kilowatt, as well as semi-structured interviews with chosen employees by the cooperation for organisational representation. The aim of employing this mixed qualitative methodological approach was to generate both depth and structure in understanding how Kilowatt fosters meaningful engagement within its local context. The use of a literature review alongside semi-structured interviews enabled the research to be both theoretically grounded and empirically informed. While the literature review provided a conceptual foundation and helped identify existing knowledge gaps, the interviews allowed for the exploration of lived experiences, organisational practices, and internal perspectives that are not always captured in secondary sources.

The literature review was conducted through a structured search of academic and grey literature using online scholarly databases and search engines, enabling the identification of both peer-reviewed sources and relevant organisational and policy materials.

The three subsequent interviews were conducted with employees. These ranged from 60-90 minutes timeframe utilising a semi-structured interview method. The literature review, combined with the REDESIGN Case Report Guidelines, aided as a guide to the



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construction of interview question guides, which was tailored to Kilowatt, identify gaps of knowledge and best fit with the participants of the interviews.

Prior to conducting the interviews, the interviewees were provided with ethical forms and information sheets. The information sheet served as a basis on why the research was being conducted, the expectation of the interview and possible areas of focus. The ethical forms purpose was to confirm that the participant had an adequate understanding of the interview, further, to ask for permissions of the further use of the information gained during the interview. All interviewees further consented to the interviews being recorded and transcribed to be used for the preparation of this report, which had been curated by MRI.

Subsequently, the nature of the interviews and selected interviewees led to the focus of this report, to explore the how the activity of Kilowatt fosters meaningful engagement within its local community and businesses of Bologna.

The interviews were analysed using two methodologies aligning with the research question: Thematic analysis facilitated the identification of recurring patterns, perceptions, and narratives emerging from the interview data, ensuring that findings remained closely aligned with the research question. The pilot testing of the Urban Food Value Framework, focusing on the impacts of the organisation, was analysed using a Framework analysis methodology, allowing for a more structured and systematic approach which was replicated over other studies.

An additional review of the identified literature was conducted to see how the literature appropriately supported our research focus.

General description

Kilowatt is situated within Bologna, Italy, and described as a medium-sized, European city with strong metropolitan influence. It is embedded within the urban park Giardini Margherita, south-east of the historical city centre. More specifically, the population of the city surpasses 390,000 inhabitants, with a high population density of 2,774/km². The Gross Domestic Product per capita of the region, Emilia-Romagna, reached to 43,335.62 within 2023, situating the area very strong economically in the European context.

The city itself suffers from multiple disparities which require interventions to bring a sense of equity to residents. Foremost, the rise of tourism has grown at an unstable rate, simultaneously suffering with a severe lack of housing availability for residents, has led to both market distortion and the multiplication of many pre-existing socio-economic inequalities within the city. Gentrification therefore is a prevalent issue, translating to the food system with the increase of food tourism and tourist-oriented outlets replacing local establishments.

The urban geography of the city often results in the health and environmental issues being distributed disproportionately, with Southern areas predominantly more affluent, coupled with a higher concentration of private and public green spaces and proven better health outcomes. Aligning with wider national challenges, the city is also



vulnerable to population aging, bringing about an increase in health challenges. As Bologna situated within the Po Valley, its geographical morphology results in the area being one of the polluted settlements in Europe. The compactness of the city and population density similarly contributes to this issue, with vehicle exhausts and residential combustion being the primary pollutant sources, often making it difficult to comply with particulate matter limits within the ranges proposed by the European Union. These issues regarding the compact nature of the city consequently lead to Bologna suffering from both Urban Heat Island and Urban Pollutant Island effects.

The compactness and high density of the city offers little opportunity for self-sufficiency, furthermore, the potential for integrated agricultural systems or use of grey spaces is overlooked. One reason to the apprehension of innovative solutions is the lack of appropriate policy support, hindering the integration of Alternative Food Initiatives (AFIs) into the formal food structure of the city. Policy orientation in Bologna is focused more on the consumer benefit and often less to the producer, moreover, multiple governance and actor level involvement of food policy leads to coordination difficulties and implementation gaps when in practise.

Accordingly with these primary concerns, Kilowatt aims to promote a sense of community within the city where inclusivity is a central value. It aims to address local ecological concerns with multi-sectional integration through social, artistic, cultural and food related mediums. Its positioning as a thinktank aids with the promotion of local businesses is an integral role to build social cohesion. Specifically in a food related context, it supports small supply chains within the area from its Bistro, and includes 0km food producing within its onsite garden.

The focus of the case study is therefore to examine how Kilowatt fosters meaningful engagement with local communities and businesses through its onsite bistro and cultural programming, highlighting the ways these activities build relationships, support local networks, and create shared social value. The aim of this case study is to show how these methods can be successfully replicated across other initiatives to harbour meaningful change.

Case description

Kilowatt was founded as a cooperative in Bologna in 2012, with their initial area of focus being the application of social innovation, to encourage both collaboration and support, as well as increase socio-economic working conditions within newly established organisations. With collaboration with the Municipality of Bologna, coupled with assistance from the Emilia-Romagna Region, the Golinelli Foundation and AR-TER, they revived a 650m² space full of municipality greenhouses into an innovative metropolitan hub, appropriately called Le Serre. Since this initial renovation, they have continuously revitalised the place for the inclusion multiple business ventures.

The projects which Kilowatt focuses on can externally be divided into the main areas of:

- K2 is the creative communication studio, which specialisation lies in the development of communication strategies and creative projects for their respective clients. To do this, they

utilise strategy, brand identity, 2D animation, on-life communication, graphic design, and photography.

- Their consulting sector has a heavy focus on ensuring that design, urban regeneration and training are heavily embedded with including principles of inclusion, community engagement, and sustainability. It supports its partners through their design and implementation processes, aspiring to generate a higher social and environmental impact. Their approach to achieve this is aided by the utilisation of participatory processes and collaborative innovation for the consideration of all intended beneficiaries.

These projects are generally implemented on a wider scale, involving a variety of clients beyond Bologna's local context, in contrast to the more internally focused activities that take place within Le Serre. The focus, therefore, of these projects is to consider the needs of all participants and stakeholder relations within a system, and not solely those of the end consumer. It strongly ties back to the stressed importance of collaboration within the organisation, with its projects targeted towards networks of young businesses striving for holistic group and practising cooperation.

Other focuses of Kilowatt are more centralised in the setting of Le Serre for their dissemination. Foremost, it fundamentally focuses on acting as a social incubator and co-working space, with dedicated areas to encourage engagement. Priding itself on being an open and inclusive, their outdoor working areas remains completely free for members of the public to access and utilise. The indoor space, reserved for paying organisations or employees of kilowatt, also retain access to the outdoor areas. The co-working space displays an extension of their core beliefs, believing that both personal and work life should have a balance and the same importance in terms of fulfilment and comfort. This extension is part of Kilowatts main social outlooks, which they argue of the importance of achieving the same levels of content in a work life as a personal life.

The encouragement of social engagement, especially with external actors, is greatly supported by the inclusion of a Bistrot and café, Vetro, creating an intentional space for people to connect and socialise through the medium of food. The restaurant prides itself on being 100% sustainable, furthermore, the food is completely organic and plant-based, focusing on local producers who believe "food is a lifestyle and community choice". They additionally express the importance of changing the menu to match with seasonal ingredients and maintain the menu consistently with local produce.

"The menu on the bistro changes, I think, once a month from once a month and a half, because we usually we use only seasonal vegetables"

A community garden is also found within Le Serre. the garden focuses on creating a sensory experience, creating an artistic and sensorial trail with the feature of land art pieces for visitors. The aim with this is to create a space which can be appreciated by people of different demographics, which is frequently used within educational activities with children, especially. The site is therefore viewed as a 'platform for inclusive and therapeutic experiential learning'. A focus is given to older varieties of produce and

vegetables not usually used or deemed as popular, which are, in turn, used by Vetro in their dishes.

"Usually, [from] the products we have in the garden, we use all of them in the dishes, [or] maybe sometimes in the water, sometimes the ice... I usually make a syrup from the herbs in the garden, or I even use flowers....to aromatize water, to serve something different."

Kilowatt continuously aims to support cultural events as a venue that caters to a variety of audiences (Montanari, 2018). The Serra Madre greenhouse, is a recent development within the area, representing Kilowatt's wishes for a 'space that promotes and cultivates ecological imagination through a dialogue between art and science, to build alternative presents and desirable and accessible futures.' The converted greenhouse is an open space with an ambition of holding residencies, public programs, cooperative events, training, workshops, and exhibitions.

"It's a space for research, art, but also culture around this idea of ecological imagination, and so creating a dialogue and a connection between art, science, and humanities."

Through these activities, it is apparent that Kilowatt covers multiple sectors within the food value chain: production from its community garden; distribution through ethical purchasing group and short food chains; consumption, through the on-site bar and bistro; and finally, waste, through composting and waste valorisation of green waste. Primarily speaking, they are most related to consumption. Additionally, Kilowatt contributes to other areas which are interlinked into the food value chain, acting as an educator through its social events, demonstrations of hydroponic units, and kindergarten activities aimed at children.

Timeline:

2012 - Kilowatt is founded in Bologna as an association and coworking community.

2013 - Kilowatt wins the public concession to regenerate the abandoned municipal greenhouses at Le Serre dei Giardini in Giardini Margherita, Bologna.

2014 - Le Serre dei Giardini opens.

2015 - The Emilia-Romagna Region provides co-financing to support the expansion and redevelopment of Le Serre dei Giardini.

2019 – In collaboration with Aquaponic Design, an aquaponic system is installed within Le Serre.

2020 - Funding is secured for the regeneration of the remaining greenhouses through the Serra Madre project.

2021 - Construction of Serra Madre begins, with a temporary public opening during ART CITY Bologna while redevelopment continues.

2024 - Serra Madre officially opens as a permanent cultural production centre, completing the expansion of the Le Serre ecosystem.

NEB: New European Bauhaus

Beautiful	Sustainable	Together
<i>Ambition II: to integrate</i>	<i>Ambition I: to repurpose</i>	<i>Ambition II: to transform</i>
Kilowatt fosters community engagement through several branches of their initiative. Their community garden, Le Serre, is a sensory experience that allows for artistic installations, environmental educating, and a space for diverse groups to gather [I]. The sustainable bistro, Vetro, brings the community together through local, seasonal, and organic food. Promoting the value that “food is a lifestyle” [III]. Lastly, Kilowatt’s annual summer festival offers a range of free events, including film screenings, dance parties, and educational talks, to encourage meaningful social interaction and strengthen connections among visitors [II].	The bistro at Kilowatt, Vetro, focuses on ethical eating by choosing to serve local, sustainable, and organic food. The 2025 impact report states that 64% of their suppliers sell certified organic raw materials and products, and/or products with a reduced impact on the environment. The report also states that around 40.5 tonnes of CO ₂ were saved by using renewable energy, compared with gas and electricity alternatives [I]. In 2025, a new festival, Sensing the Climate, explores the ecological crisis as a symptom of modern values. The festival seeks to rebuild the relationship between humans, nonhumans, mind and body, nature, and culture.	Kilowatt shares values by creating spaces where people from different backgrounds can meet, collaborate, and participate in community life [I]. The site attracts a diverse range of users, including families, working professionals, students, and tourists, and welcomed approximately 150,000 visitors over the past year. Their newest project a renovated greenhouse, Serra Madre, is an open space to host residencies, host public programs, trainings, cooperative events, and exhibitions [II]. Another programme, Kilowatt Baby, promotes inclusivity and creativity through a collaborative, nature-based educational approach for children up to six years old, fostering a generation that learns through hands-on experience [III].
Participatory	Multi-Level	Transdisciplinary
<i>Ambition II: to self-govern</i>	<i>Ambition II: to work across levels</i>	<i>Ambition III: to be beyond-disciplinary</i>
Kilowatt is a cooperative made up of 10 members and around 30 employees. Its structure promotes shared ownership, collaborative decision-making, and participatory management [I]. The cooperative is organised into branches with their own budgets and objectives, while remaining aligned with a common mission. Progress and decisions are reviewed every five years, redefining the cooperative’s goals and priorities. Alongside its internal activities, Kilowatt works with public administrations to design and implement initiatives while	Kilowatt has built a diverse network of local producers, academic institutions, nonprofits, businesses, and public agencies. Through its bistro, Vetro, it sources products such as wine, bread, eggs, and cheese from ten local suppliers and collaborates with businesses operating within Le Serre [I]. Partnerships in hydroponic, aquaponic, and vertical farming further strengthen its supply of fresh, locally produced ingredients. Beyond food, Kilowatt partners with the University of Bologna and Johns Hopkins University to support educational and cultural initiatives focused on sustainability [II]. The	From its inception, Kilowatt has centred its activities on social innovation, fostering collaboration, mutual support, and improved socio-economic opportunities for emerging organisations [I]. This commitment is reflected in the inclusive spaces developed within Le Serre. The community garden, for example, is designed as a welcoming environment that can be enjoyed by people of different ages and backgrounds, while also serving as a therapeutic and educational space. The public outdoor work areas are freely accessible, encouraging interaction between workers, visitors, and

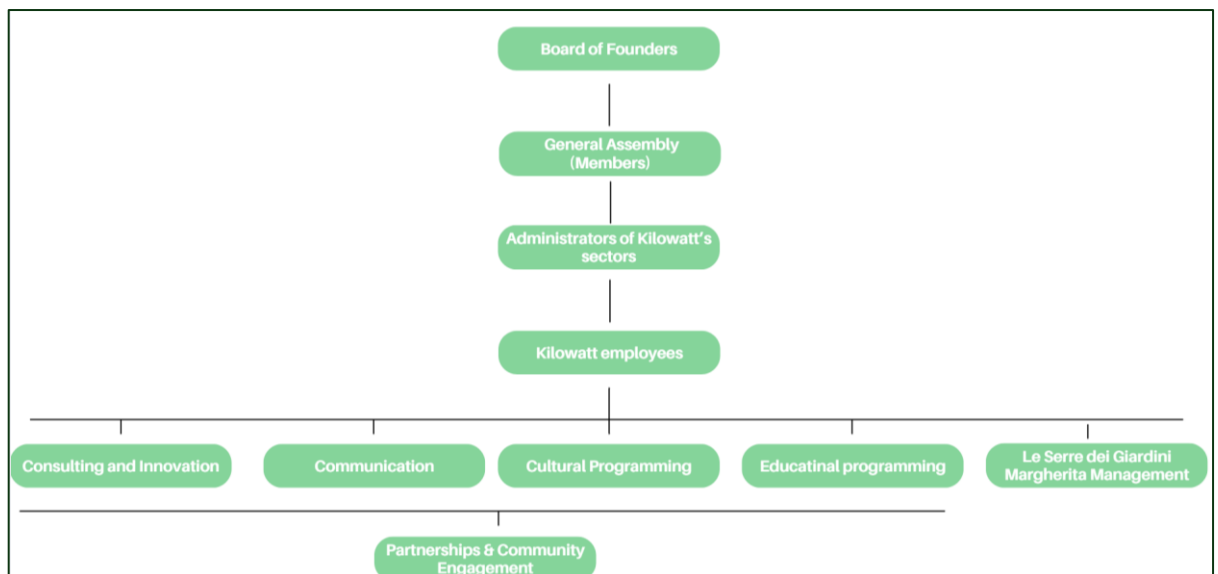


preserving its organisational independence [II].	initiative has also worked with the Municipality of Bologna on community outreach projects, including a recent campaign promoting reading and libraries [I].	residents [II]. Additionally, dissemination activities have promoted topics such as sustainability and the importance of libraries among public and professional audiences [III].
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10. table: Kilowatt through the lens of the NEB Compass

Governance structure

Kilowatt operates firstly as a cooperative, comprising of 10 members and an additional 30 employees working directly with the organisation. This structure aims to prioritise a sense of shared ownership, collaborative decision making, as well as participatory management. Staff are organised either into distinct teams or across multiple areas. In addition, the organisation includes administrative personnel who support its overall functioning. Formally, its sections are structured around five key domains consistent with its areas of activities: consultancy, communication, education, culture, and space management. Employees are not always restricted to one sector of the organisation and can be working across multiple simultaneously.



9. Figure: Organogram of Kilowatt's internal structure.

"[We were] growing in different direction and also with not using a hierarchical approach, the inner [structure], is something very generative."

Separately, the bar operates with a core group which is employed all year round, comprising of 10 people operating within the kitchen or bar. With the increase of traction within spring/summer months, seasonal staff is hired, which is usually around 20/25 people extra.

Employee and collaborator turnover remains relatively low. According to Kilowatt's most recent assessments, the organisation has one of the lowest turnover rates among Italian co-working spaces. Furthermore, client retention is high, with a significant proportion of companies returning annually to collaborate with the organisation. Although new collaborations vary from different sectors, an estimation of 70% of organisations from their consulting services chose Kilowatt to cooperate with again, whilst 30% is made up of new collaborators. Similarly with Vetro, a high percentage of seasonal staff is re-hired for the next year, however this is highly dependable on personal availability.

Coordination is also ensured within the team through the significant time and attention dedicated to maintaining its effectiveness. Frequent meetings are held, and, in addition, founding members have undertaken an annual one-week retreat together over the past 11 years. This practice plays a key role in ensuring alignment between members' goals and the organisation's development, while also keeping everyone engaged with one another and continuously improving. Additionally, an internal impact strategy is redesigned every five years. This process involves collective discussion to define the organisation's goals and vision for the coming years, as well as to determine what will be most impactful. Each area then outlines how it will contribute to achieving these objectives.

However, despite this, on a more informal basis, the communication between the internal teams tends to be a main challenge which is faced by Kilowatt. Although their approach aims to keep inner hierarchy at a minimum, to enable different divisions to act with autonomy, it can simultaneously lead to some disorganisation and miscommunication. With over 40 actors involved within the main organisation, it can be a challenge to exchange information and share updates. To counteract this, implementations are to be set to define an internal structure with minimal hierarchy.

Decisions within the organisation are made through a Board of Directors, which includes the founding members. In addition, there is a Members' Assembly, where more strategic decisions are deliberated and finalised. With regard to the organisation's operational activities and team-specific areas, each team works with a high degree of autonomy within its respective domain. This structural decision

Due to the internal complexities and increase of employees within the structure of Kilowatt, it has resulted in a reduced capacity to take on volunteers. Volunteers therefore, are mainly restricted to work within their onsite garden, and are usually informal without agreements. A large percentage of these volunteers are elderly members of the community.

Legal and financial framework

The legal framework whereby Kilowatt operates can be described as unique and complex. Their hybrid model encompasses an Social Promotion Association (Associazione di Promozione Sociale), a cooperative and a private enterprise with the cooperative as the only associate dramatically effects their ability to act and support a wide variety of projects over the years they have been active. The structure of the



organisation leads to optimise the support different sectors projects and allow for a learning environment pervading public projects and internal processes.

Initially, Kilowatt began as an association and later evolved into a cooperative to expand its investment capacity and strengthen collaboration with financial institutions. The association continues to exist and is used when a non-profit legal entity is required, while the cooperative serves as the organisation's primary operational structure.

As Kilowatt expanded its activities and established a bistro, it became apparent that managing a restaurant within the cooperative structure was challenging due to the regulatory requirements governing cooperatives in Italy, particularly those related to mutuality. Consequently, a separate for-profit limited company was created to manage the bistro and other commercial activities. This company is wholly owned by the cooperative, allowing profits generated through commercial operations to support the organisation's broader social and non-profit objectives.

There is no dependency on public institutions due to its legal form, however Kilowatt maintains collaborative relationships with public institutions, particularly through its consultancy area. The organisation works with public administrations as a project design and implementation partner, supporting the development of initiatives while retaining its organisational autonomy.

Following the establishment of the cooperative, the organisation obtained recognition as an "innovative startup", a status introduced by the Italian government to support innovative enterprises. Kilowatt was among the few cooperatives to receive this designation. The status provided access to a range of benefits, including financial support mechanisms requiring lower guarantees and eligibility for funding opportunities that would not otherwise have been available. As a result, the organisation's legal form and strategic use of different legal entities have enhanced its capacity to secure resources and support its activities.

The decentralised organisational structure in which Kilowatt is divided into extends furthermore to the financial side of the company. Within each of focus, there is a responsibility for managing its own budget and financial performance, with individual revenue targets designed to ensure that operating costs are covered. This structure provides each team with a degree of financial autonomy.

"Inside Kilowatt, we are divided because Kilowatt is a cooperative, so it's a unique company, but we're divided into different areas and each area has its own break even and its own amount of money that has to do like revenues that has to create in order to cover all the cost."

Kilowatt has been in a state of gaining profit for the last 12 years, furthermore, growth has been consistently sustained throughout these years. The most important revenue stream remains the Vetro, specifically within spring/summer months, that supports the operations year-round. However, consistent with other trends of decrease of customer consumption, their revenue has decreased by approximately 15%. Other activities providing profit include the consulting and communication services offered.

Despite the advantages provided by the cooperative structure, Kilowatt has identified limitations in relation to funding eligibility. Since the opening of Serre Madre, the organisation has recognised the need for a stronger non-profit entity, as many grants and funding programmes for cultural initiatives in Italy are only accessible to non-profit organisations. Although Kilowatt retains its original association, this entity currently has no employees, which creates practical challenges in managing grant-funded projects, particularly with regard to staffing and the administrative requirements associated with reporting and timesheets. As a result, the organisation is considering strengthening its non-profit structure to improve access to funding opportunities and support future activities.

Engagement and collaboration

Le Serre continuously aims to support cultural events as a venue that caters to a variety of audiences. Serra Madre is a recent development within the area, representing Kilowatt's wishes for a 'space that promotes and cultivates ecological imagination through a dialogue between art and science, to build alternative presents and desirable and accessible futures.' The converted greenhouse is an open space with an ambition of holding residencies, public programs, cooperative events, training, workshops, and exhibitions.

Creating an active cultural programme and agenda further enhances this portrayal of a venue enhancing social and cultural values within the community. One project which perfectly describes this is Kilowatt Summer, an annual festival of cultural activities and events, free and open to the public for a 4-month duration. The promotion of the cultural events understandably aids in creating traction towards the bar and bistro.

Furthermore, food is understood and utilised as a cultural medium to foster connection, storytelling, and community engagement. Kilowatt organises a range of events, including performative dinners that combine artistic performances with shared meals, which can demonstrate the role of food in creating meaningful social and cultural experiences. These events highlight the origins and value of the food being served and encourage participants to reflect on where its source, how it is produced, and the sustainability of the food system.

"it's an occasion to make people see what Vetro can do, our products, even our philosophy, because in what we serve in Vetro...we have to say our philosophy of sustainability...so even working with the events allows us to make people be more conscious of what we try to communicate."

Beyond nourishment, food is viewed as a means of strengthening social connections and cultivating a sense of belonging. Shared meals provide opportunities for participants to engage in discussion and develop a deeper appreciation of the relationship between food, culture and the environment. The organisation sees mindful food choices as extending beyond individual wellbeing, fostering greater care for the wider community and the ecosystems that support food production.



"We organise several events like performative dinners or a combination of a cultural event, with a performance and then a dinner. And we saw the power of food to create the connections and to bring up memories from the past and, for us, it's important to tell the value of food that people are eating. So, tell them the story of the food where the food comes from, and if it is sustainable or not. But also like for me it's really nice to see how food can open discussions and can really feel that you are part of a community."

The experimental educational service 'Terra' is another example of catering to a wide range of audiences and enhancing inclusivity. Collaborated with the patronage of the University of Bologna, up until the age of 6, it promotes situated learning and fosters creativity. The spaces and programmes utilised continually match the same principles within their other projects, collaborating with parents and pedagogists to identify and meet needs. It ties together their external and internal ambitions, of achieving fulfilment within personal and professional lives of its citizens, workers and collaborative organisations.

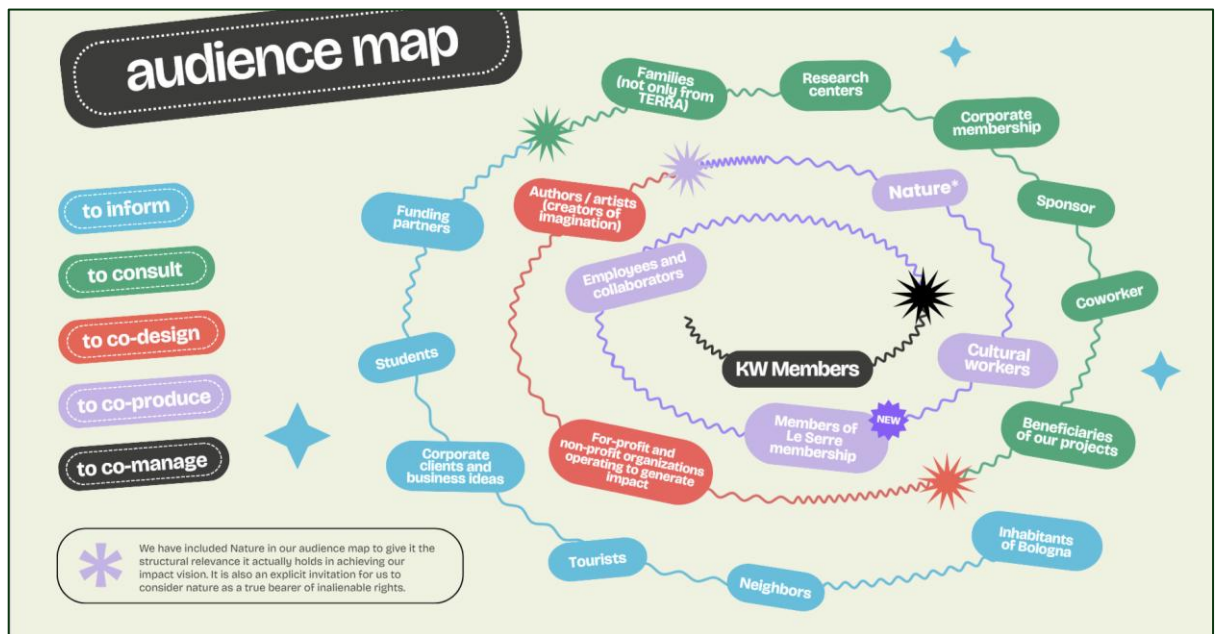
'Green and Learn: Growing in Nature at the Greenhouses' is an extension of the educational programmes offered for children, promoting a 'learning by doing' methodology and a variety of workshops for children at primary and secondary schools. These activities are completed within the community garden within Le Serre, creating a meaningful connection with nature and ecological wellbeing.

Accessibility and inclusivity are further key priorities for Kilowatt in the management of the public space at Le Serre. This is firstly ensured by the facilities of the area, with the provision of services such as free access to electricity, Wi-Fi and water. Next, communication across multiple online pathways is utilised to for maximum engagement of different demographic groups. Specific events held which aim to engage marginalised communities into conversations pertaining socially and politically sensitive topics. This way of engagement, ensures authentic perspectives are included as well as creating a collective dialogue which includes more vulnerable members of the community.

"For three or four years we started to do some specific events, for example we have this festival that is for this about the colonial thinking and the curator is a migrant woman artist. So then we have a festival on that they choose and we involve people that live that kind of problem or issue or work. And in this way, I mean, involving these people is easier to then talk to communities."

Community members engaged and using the space depends heavily on the time of year. In winter months, families are usually the most prominent groups of people using the space. Within June, 30-45 years of age are populated in the area, as well as students who utilise the space as a study venue. From estimation, 70% of visitors can be counted from the local community, and 30% remain tourists. Most recently, approximately 150,000 people visited from last year. Even so, some difficulties remain in integration into wider demographics of Bologna. As from their location being perceived in an affluent location, there is often a stereotype surrounding the area which they combat.





10. Figure: Audience map of Kilowatt from 2025 impact report.

An additional strong emphasis is placed on building and maintaining long-term relationships with producers, many of whom have collaborated with the project for several years. These partnerships are seen as central to ensuring continuity, trust, and quality within the supply network. This is especially seen through the creation of Kilowatt's own 'Serre IPA' in collaboration with local brewers from Zapap, and using organically grown sorghum. Some relationships date back to the early stages of the initiative, demonstrating the stability of these connections. The organisation expresses a clear intention to continue strengthening these ties, while also remaining open to improvement and development in future collaborations. Overall, these long-standing relationships are valued as a key foundation for maintaining trust, consistency, and shared growth within the food system.

"We usually know [the company/producer], even on personal level, maybe it's a friend of one that comes in, or maybe it's an action with a person give us to go further. And even with the other farmers or the people that makes yogurts [for us], usually our connection knowing on the territories. So it's a friend of a friend or maybe we just make research and give a phone call to ask for collaboration."

Currently, the local collaborations with local producers are:

- Podere Terra Viva – Vegetable producer.
- Forno Brisa - bakery & pastry providers, since there is no capacity to bake onsite.
- La Sfoglina Bio – Fresh pasta provider.
- Zapap Bologna – Local beer provider and collaborators to make Le Serre's own beer.
- Les Caves de Pyrene – Wine producers.
- Baule Volante – Local, sustainable organic food supplier.

- Sfoglia Arianna – Egg producer
- Cerutti Azienda Agricola – Producer of milk and eggs.
- Le Mucche di Guglielmo (Il Latte di Bologna) - Milk and yoghurt producer.
- Mediterranea Bioveg – Vegetarian protein products.

In-person bar communications of these collaborations additionally help with the promotion and nudging of customers to choose certain products that are more local. The staff seek to share the stories behind the products, explaining where they come from, how they are made, and the people involved in their production. This emphasis on storytelling helps customers understand the value of choosing local products and the work that goes into producing them. With a more personalised approach, there is a strengthening in customers' appreciation of local food systems to foster stronger connections between consumers and the origins of their food.

"[...] because it's our choice to go for local, we communicate [why] from website...and tell this story [that] every customer receives. They try asking us for a beer, maybe we propose a [local] beer, explaining how it's made"

"So we have the fortune to choose local, to choose local freely...It's difficult to choose local because usually we go out with full prices. It's difficult to get delivery here from the producers because someone may not have the car to bring things and we need to...So it's I'd say it's quite difficult to choose local, supporting Le Serre obviously helps you to choose local."

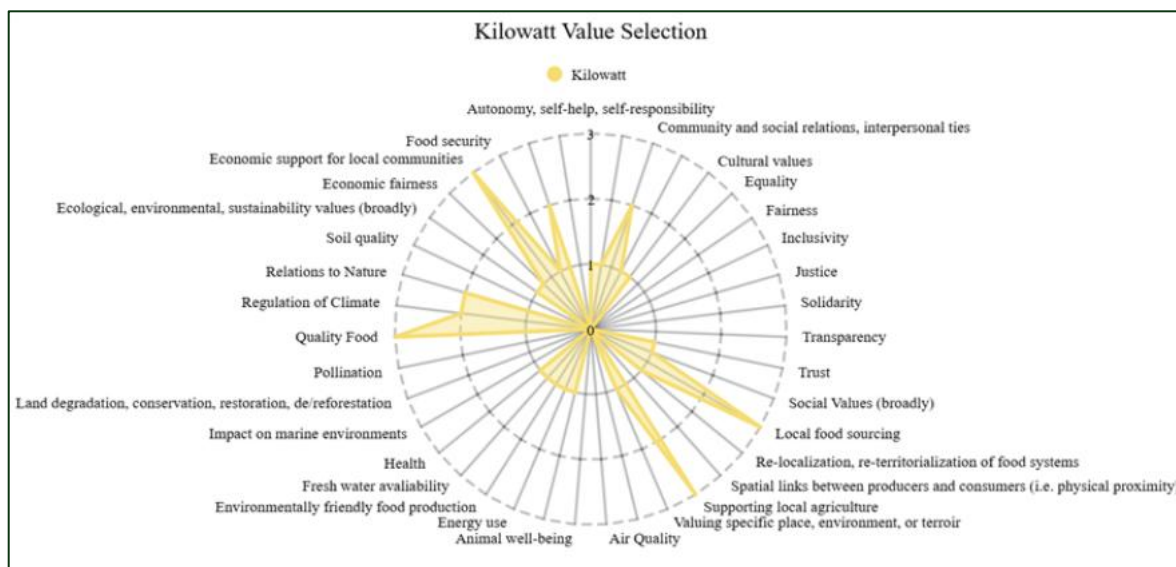
Equally, there is also collaboration with businesses which operate internally in Le Serre. Fostering collaborations for the addition of hydroponic, aquaponic and vertical growing structures, strengthens its supply of fresh, locally produced ingredients, which have a 0km food miles. As the business relies extensively on leaves, flowers, and vegetables to create syrups and other distinctive products for the bar, the types of varieties can be requested so they are utilised for these purposes. This collaboration provides a tailored source of high-quality ingredients whilst also promoting sustainable production practices. It also enhances product innovation and strengthens the integration of local, circular food production within the business model.

Additionally, their input to greening the space has aided towards their ambition of the integration of anthropogenic and ecological interactions. This is achieved with the introduction of the same vertical growing structures, however with oriental plants, increasing the aesthetic value. Interviewees commented that this incorporation has helped to educate visitors on the structures, which remain quite novel technologies, and showcase how easy they are to set up and maintain.

Aside from private partnerships within cultural events or business settings, Kilowatt is heavily related to the local municipality, due to the initial project being developed and funded in collaboration, and the space being formally owned by them. Due to the trust developed over the years, there is less of an involvement with the municipality into tasks. From the beginning, autonomy was a core principle, with the organisation

envisioned as capable of independently managing and directing its actions, as the municipality preferred.

Impact – according to the Urban Food Value Framework (UFVF)



11. Figure: Value Selections for Kilowatt in the UFVF.

Categories	Frequency	Value	Indicators	Interpretation
Social values	1	Autonomy, self-help, self-responsibility	No formal indicators; qualitative evidence of team autonomy, internal governance model.	Value in practice
	1	Civic values	Qualitative indicators (events, cultural programming); 15 free events promoting decolonial thinking; 57 free events promoting ecological thinking in 2024.	Value as aspiration, value in practise, value tied to identity.
	2	Community & social relations	Quantitative: 140,000 visitors in 2024; 181 cultural events; 130 family events; 93 families applied for 15 KwBaby places (community demand) all in 2024. Qualitative: asking the community questions about food available and the prices.	Value in practice; Value successful

	1	Cooperation	Qualitative indicators of partnerships, collaborations; 180 artists involved in cultural activities; 75 startups supported; 15 organisations + 2 public administrations supported in strategic planning all in 2024.	Value in practice; Value successful; value as core identity
	1	Cultural values	Qualitative indicators (art residencies, installations); Quantitative indicators; 8 permanent art installations at Le Serre; €150,400 invested in cultural programmes; €113,700 in cultural production; 181 cultural events all in 2024.	Value tied to identity
	1	Inclusivity	Quantitative indicators; 62% women employees; 140 free cultural events in 2024; accessibility through open public space; success linked to impact and engagement.	Value tied to identity, Value in practice
	1	Trust	Quantitative: 63% returning clients; 90% of customers felt positive impact in impact questionnaires in 2024; low turnover among coworkers.	Value in practice, Value as an aspiration
	1	Social values (broadly)	Encompasses all other social measurements.	Value tied to identity
Spatial values	3	Local food sourcing	80% of food locally sourced; 52% of purchases from low-impact suppliers in 2024.	Value as a success; value in practise
	1	Re-localization, re-territorialization of food systems	No formal indicators.	Value as aspiration; Value limitations
	3	Supporting local agriculture	€217,015 invested in local suppliers (+12% from 2023) in 2024.	Value as success; value in practise
	1	Valuing specific place, environment, or terroir	Regeneration of Le Serre (7,600 sqm), 140,000	Value as success



			visitors using the space as a community hub in 2024.	
Ecological values	1	Biodiversity	No formal indicators available currently.	Value as an aspiration
	1	Energy use	Quantitative indicators, 50.1 tonnes of CO ₂ saved through renewable energy contracts in 2024.	Value in practise
	1	Environmentally friendly food production	No formal indicators available.	Value in practise
	1	Fresh water availability	68,000 litres of water distributed by Armilla fountain in 2024.	Value in practice
	1	Health	No formal indicators available currently.	Value as an aspiration
	3	Quality Food	Quantitative/qualitative indicators - ratings and reviews on media sites.	Value in practise
	2	Regulation of Climate	No formal indicators available.	Value in practise.
	2	Relations to Nature	No formal indicators, difficult to measure as the value is so personal and differs from each person. Qualitative evidence from consumer behavioural patterns.	Value in practise
	1	Ecological, environmental, sustainability values (broadly)	No formal indicators available.	Value in practise.
Economic values	1	Economic fairness	Quantitative indicators, salary ratio of 1:1.7, below legal maximum of 1:8 in 2024.	Value in practise; Value as a success
	3	Economic support for local communities	Quantitative indicators; €217,015 invested in local suppliers; 75 startups supported; 15 organisations + 2 public administrations supported in 2024.	Value in practise; Value as a success
	1	Food security	No formal indicators available.	Value in practise
	2	(More) even distribution of economic value	Quantitative indicators; Salary ratio of 1:1.7, below the maximum of 1:8 in	Value as an aspiration

			2024; local procurement indicators.	
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11. table: Kilowatt through the lens of the Urban Food Value Framework, showcasing the participant-selected values, their selection frequency, indicators, and interpretation

Social Values

The analysis of social value within Kilowatt, highlights a strong emphasis on the importance of civic values, cultural values, and community relations. Autonomy and self-help are also reflected in a decentralised organisational structure, where teams operate with a high degree of independence supported by horizontal decision-making processes and collective strategic reflection, such as annual retreats. This heavily fits with the ideas which are proposed by Kilowatt in other areas of their work, whereby there is an aim to consider all stakeholders, especially those internally, and not just the end consumer. Civic values are actively embedded through cultural programming that promotes ecological and decolonial thinking, including numerous free public events and forums that encourage civic dialogue and education. These values are not only aspirational but also operationalised through regular public engagement activities that reinforce the organisation's identity as a civic and cultural actor.

Community relations, cultural value cooperation, inclusivity, and trust emerge as central and interconnected dimensions of social values. High levels of participation in cultural and family-oriented events demonstrate strong community demand and engagement, while partnerships with artists, organisations, startups, and public administrations illustrate diverse transdisciplinary involvement. Cultural value, furthermore, is expressed through significant investment in artistic production and programming, reinforcing the organisation's role as a centre for ecological and social imagination. Inclusivity is reflected in workforce composition and programming focus, supporting gender and cultural diversity. Trust is evidenced by high rates of returning visitors and positive impact perceptions, indicating strong relational stability. Overall, these dimensions collectively reinforce social value as a core element of organisational identity and practice.

Spatial Values

The spatial values of the organisation are strongly anchored in local food sourcing and the reinforcement of territorial food systems. A high proportion of food is sourced locally, supported by significant investment in local suppliers. These practices reflect a commitment to short supply chains, particularly through direct relationships with local producers and the integration of site-based resources, such as the garden. Supporting local agriculture, was identified as a key operational priority, expressed through sustained financial investment and the development of long-term relationships with producers who share similar ecological and ethical values. However, while local sourcing is well established in practice, broader processes of re-localisation and re-territorialisation remain more aspirational, as these require deeper systemic change and stronger community engagement.



Place-based identity is a central component of the organisation's spatial values, particularly through the regeneration and activation of Le Serre as a large-scale ecological and cultural commons. The site functions as a hub for community interaction, hosting a high number of visitors and reinforcing the connection between physical space, cultural activity, and ecological imagination. This place-based approach reflects a broader understanding of value rooted in territorial embeddedness rather than purely economic exchange. While direct spatial proximity between producers and consumers is not formally measured, the organisation nonetheless cultivates strong spatial linkages through its commitment to local ecosystems, cultural regeneration, and the creation of shared public spaces that support both social and ecological functions.

Ecological Values

The ecological values of the organisation are primarily expressed through practical sustainability actions, with several dimensions still emerging as aspirational. Biodiversity, health, and broader environmental impacts are not yet formally measured, although they are supported through educational programmes, cultural activities, and ecological initiatives. In contrast, energy use is more clearly evidenced, with measurable CO₂ savings achieved through renewable energy contracts. Environmentally friendly food production is embedded in practice through strict sourcing criteria prioritising organic, biological, and cruelty-free products, alongside experimental cultivation methods such as hydroponics. Water management is also addressed through the provision of publicly accessible infrastructure, such as the Armilla fountain, which supports local water distribution.

More developed ecological practices are visible in areas such as food quality, climate regulation, and human–nature relations. High standards for food sourcing and production reflect a strong commitment to ecological integrity, while spatial design features such as gardens, hydroponic systems, and aquaponic installations contribute to microclimate regulation and climate adaptation, including the designation of the site as a climate shelter. Relations to nature are actively shaped through cultural programming and everyday practices that encourage more reflective and less anthropocentric interactions with the environment. Overall, ecological values are deeply embedded in organisational practice, combining operational sustainability measures with broader cultural and behavioural change.

Economic Values

The organisation's economic values are strongly centralised around principles found also in the social category, on fairness, transparency, and support for local economic ecosystems. Economic fairness is demonstrated through a relatively narrow salary ratio (1:1.7), supported by a cooperative ownership model that reinforces internal equity and transparency. Economic support for local communities is a major priority, reflected in significant investment in local suppliers, startups, and partner organisations. Through its commercial activities, particularly in food and beverage operations, the organisation actively reinforces local economic networks and prioritises collaborations with producers aligned with organic, biological, and cruelty-free principles.

Food security and the more even distribution of economic value are also important, though they now remain a partly aspirational value. Food security is understood not in terms of scarcity, but as stability and reliability from the producers' perspective, ensuring there is a consistent demand for their outputs. Efforts to achieve a more balanced distribution of value are reflected in fair pricing practices and the strengthening of short supply chains. Overall, the economic model combines measurable equity mechanisms with broader commitments to local resilience, ethical procurement, and more just redistribution of economic value across stakeholders.

Future of the project

Due to the continuous engagement and financial stability of Kilowatt, there is little concerns for the feasibility within the future. One main point, which remains the most crucial to the operations within Le Serre, is the renewal of the grant agreement for the converted space. Aligning with this, the next focus for the initiative is to prioritise the renewal agreement with the municipality for the continuation of the use of Le Serre, due to the 15-year rental agreement will be expiring in three years. This ultimately will shape Kilowatt's future activities and capacity.

A general wider focus on ecological topics was also commented, when asked about future plans. Project motivations such as assessing the biodiversity within the garden are being discussed for future implementation. Additionally, generational turnover is another important topic for Kilowatt to continue focusing on, including new views and different perspectives from around the world. This, aims to be more explored throughout its events and cultural programming. Expanding on their cultural programming and general accessibility of different demographics to events in Serra Madre was expressed also as a potential future improvement. This was interpreted as through the involvement of more diverse cultural events.

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TROFY.LAB

AUTHOR: MARIA PETEINAKI

Introduction

During the crisis years of 2010–2018, numerous initiatives in Athens embraced urban gardening as a strategy for resilience. These included planting in public spaces, on



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terraces and verandas, and cultivating vegetables on rooftops. For several years, urban gardening became an essential element of city reclamation, food autonomy, community building, and more sustainable living. While many of these initiatives have since ceased operations, some new ones have emerged. A mapping exercise conducted in 2020⁸ documented the landscape at that time. All the initiatives of active edible gardens in and around Athens to that day were recorded and enumerated in the linked site. Another more recent ongoing mapping effort from Stevi Kopelia reveals that approximately ten community gardens remain active in 2026 within the municipality of Athens. Of these, four are community gardens, three are located in school facilities, and three are in private spaces. Trofý.Lab contributed to the creation of three of these gardens⁹.

Trofý.Lab is an urban farming initiative focused on advancing sustainable food systems through circular design principles. This case was selected because it represents one of the more successful organizations related to urban gardening in Athens, and it offers valuable insights into the factors that have enabled it to be both extroverted and impactful. Drawing on expertise in regenerative agriculture, permaculture, and short food supply chains, the organization develops innovative solutions that strengthen green infrastructure and foster community engagement. Within the REDESIGN project, Trofý.Lab contributes by integrating nature-based solutions, circular food practices, and open-source technologies to support urban resilience and sustainable food production.

This inspirational case helps address two important questions. The first concerns technology. Given that the organization's communication revolves around "food-tech" and innovative practices in the food sector, it is relevant to ask: Does technology help address climate change, and if so, how? Is technology genuinely contributing to more sustainable food production?

Furthermore, Trofý.Lab is organized as a for-profit company. This raises the question: Does this legal structure help or impede the organization's goals? Can it undertake social work while remaining profit-oriented? How does governance influence its operations?

Methodology

The methodology followed for this report is based on qualitative bibliographic review and a series of semi-structured interviews; Two site visits were conducted, during which the company president and two other team members were interviewed at two different locations. In addition, three online interviews were carried out with the president. All

⁸ <https://1step2now.travel.blog/2020/03/19/edible-gardens-in-and-around-athens/>

⁹ [Δήμος Αθηνών – Youth Climate Action Fund - ΤΡΟΦΗ.Lab](#)

[Πράσινη STEGI - ΤΡΟΦΗ.Lab](#)

[ANKAA project - ΤΡΟΦΗ.Lab](#)

interviews were video-recorded with prior consent, and transcripts were prepared to accurately capture the content of the discussions.

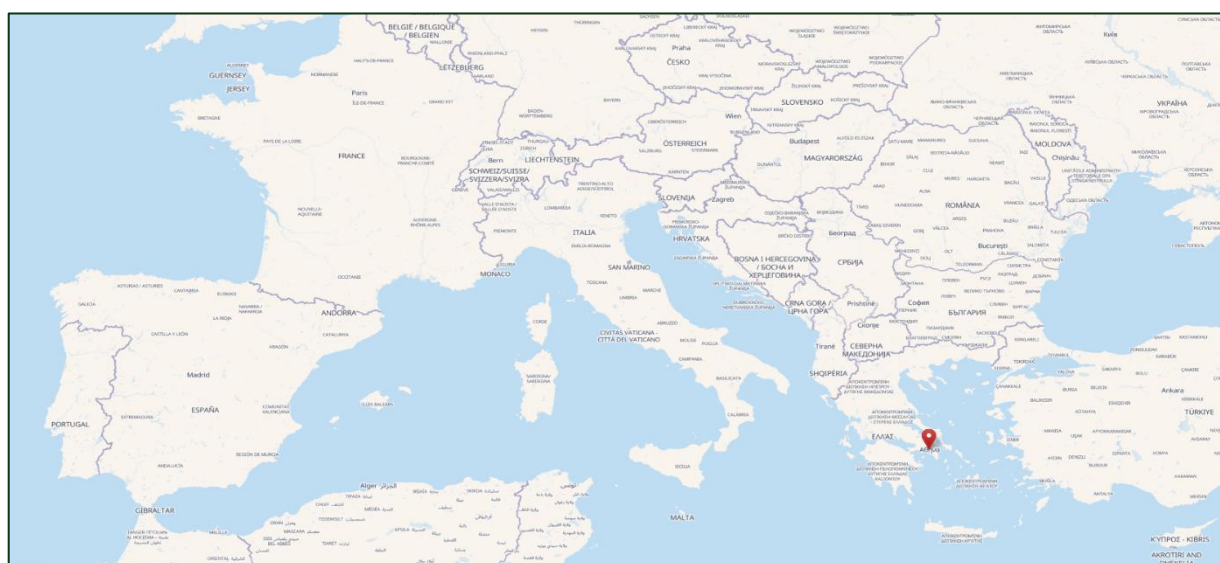
The interviewees were:

Interviewee	Organisation
Petros Kartsimadakis	Founder and CEO, Head of operations
Vaggelis Fytas	Agronomist
Konrad Kavallieratos	Permaculture Specialist

12. table: Interviewees of Trophy.Lab

The interviews followed a semi-structured format, based on Sections 2–7 of the REDESIGN interview framework. Section 1, which focused on quantitative data, was completed separately via a Google Form distributed to participants in advance.

This approach aimed to develop a comprehensive understanding of the case study, both in terms of its practical implementation and its underlying intentions, through site observation and engagement with key stakeholders. During the first visit, students were actively involved in harvesting activities. Although no interviews were conducted with them due to time constraints, the process was observed, including interactions between the project, the schoolteachers, and participants. The researcher maintained a non-disruptive presence in order to closely observe the everyday functioning of the initiative.



12. Figure: The site is located in Athens, in the Attica region of Greece. Source: Adapted from Open Street Maps.



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General description (context)

Location: Athens, Greece

Sector: urban farming, community engagement, open-source technologies, research

Type: for profit

Main Issues in Athens:

- Urban heat island effect
- Lack of urban green spaces
- Flooding and extreme weather
- Climate crisis impacts
- Limited municipal capacity

The Athens metropolitan area has a population of 3,190,154 (2021), representing approximately one-third of Greece's total population of 10,482,487. Attica plays a central role in the national economy, accounting for nearly half of the country's GDP (109.74 billion), and functions as the primary center of governance and decision-making. This reflects Greece's historically centralized development model, characterized by a dominant capital and comparatively limited development in peripheral regions. Athens has experienced rapid urban growth, resulting in several environmental and spatial challenges. The city has a relatively low amount of green space per capita, although this has shown slight improvement in recent years, reaching approximately 24% green coverage¹⁰. However, the distribution of urban green spaces remains uneven. High levels of urban density and impervious surfaces contribute to an intensified urban heat island effect, as well as increased vulnerability to flooding (Papakonstantinou, 2026).

Food production:

Attica has a regional agricultural production in the following areas:

Marathonas, Kapandriti and Vravrona: vegetables, horticultural products, herbs, organic products¹¹

Markopoulo: Figs, pistachios, olives, olive oil

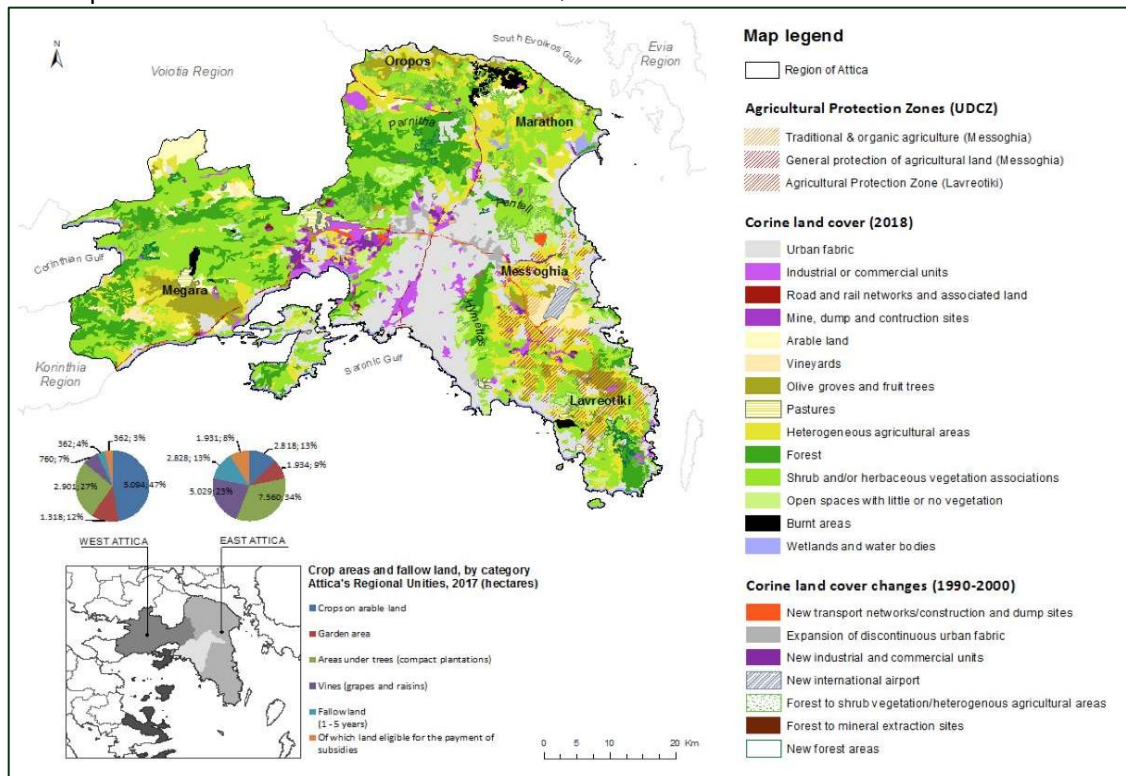
Parnitha: herbs, mushrooms

Megara: eggs, olives, vines, pistachios

¹⁰ [How green is Athens? Find out at HUGSI.green](#)

¹¹ [Τι παράγει η Αττική: Η κρυφή αγροτική ζωή της Αθήνας | ΕΛΛΑΔΑ | Gastronomos.gr](#)

Attika production does not cover the needs of the metropolitan area of Athens, as Attika produces <10% of what it consumes, as most of its land has been urbanized.



13. Figure.: Agricultural protection and land-use dynamics in Attika, Greece

Source: Sofia Nikolaidou, 2021

Most products come from:

Thessaly: fruits and vegetables, cereals¹²

Macedonia: peaches, cherries, apples, legumes

Crete: tomatoes, cucumbers, potatoes, citrus fruits

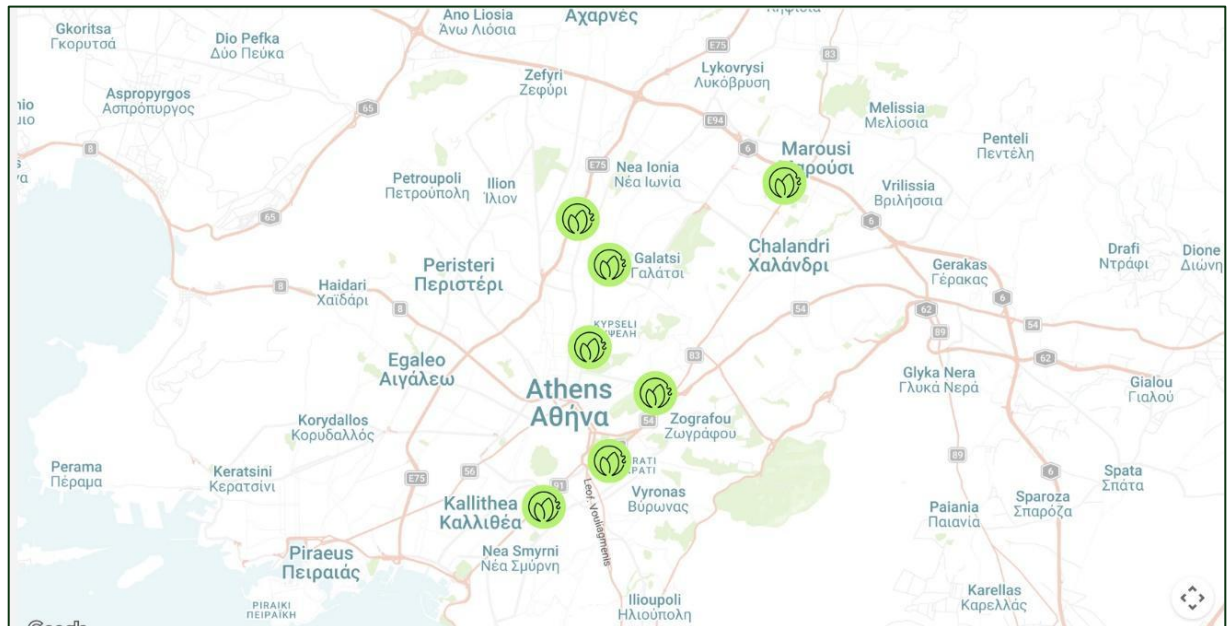
Aegean & Ionian Islands: special PDO/PGI products (e.g. Chios mastic, Santorini fava beans, Messolonghi roe)

Peloponnese: watermelons, oranges, potatoes, olive oil

Problem statement that Trofý.Lab addresses

TrofýLab aims at creating alternative food supply chains, by bringing food production in the urban fabric. Trofý.Lab operates primarily within the region of Attika, Greece, with a strong presence across the metropolitan area of Athens. Its projects are distributed across several neighborhoods, including Ampelokipi, Kypseli, Neos Kosmos, Agia Paraskevi, Viktoria, Acharnon, Ilion, and Marousi.

¹² <https://www.agrodata.gr>.



14. Figure: Map of Trofy.Lab projects in Athens, taken from Έργα - ΤΡΟΦΗ.Lab site.

Case description

Trofý.Lab was established in May 2020, emerging from its founder's motivation to move away from a competitive and unsustainable corporate environment towards a form of activity more closely connected to nature, soil, and ecological processes. Continuous learning and knowledge exchange have been central to the initiative from its inception as reflected in the urban farming and urban micro-farming installations. It's essentially the field work that goes from the design, consulting agroecological practices, the foodscape design, the installation of organic matter and irrigation, then maintenance, and harvesting.

The activities of Trofý.Lab can be grouped into four main clusters.

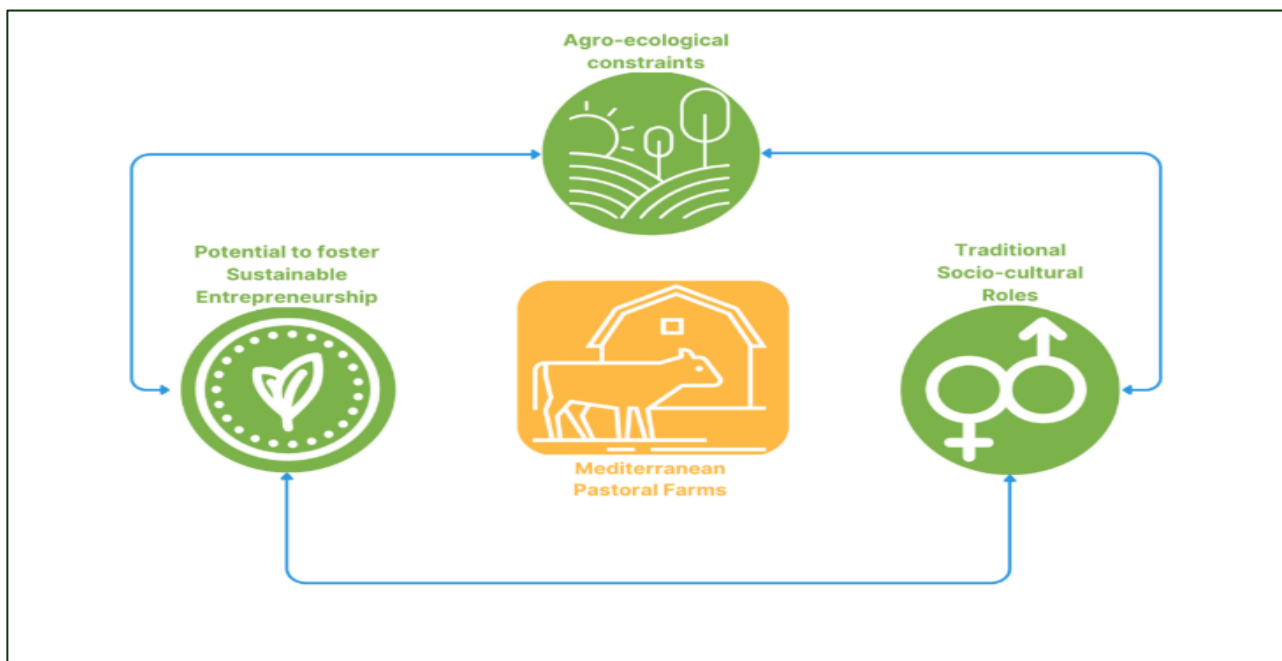


16. Figure: Activity clusters of Trofy.Lab



15. Figure: Photo of the Citizen Parking urban garden installation

First, urban farming and micro-farming installations constitute the core of its practical work. This includes the design and implementation of agroecological systems, foodscape design, installation of soil and irrigation systems, as well as ongoing maintenance and harvesting.



17. Figure: Prima reserves program

Second, research and development activities link practice with academic inquiry. Trofý.Lab has developed open-source hardware systems for environmental and plant

monitoring, including tools to track plant health, growth, and microclimatic conditions. These systems also function as small-scale weather stations, collecting data on temperature, irrigation, and other relevant variables. Through this work, Trofý.Lab participates in research initiatives such as the Pastinova Project¹³, which focuses on enhancing the sustainability, profitability, and resilience of small pastoral farms, by setting up innovations, business and organizational models (IBM)¹⁴, as well as the PRIMA RESERVES programme, where it contributes as a technical partner. Additionally, Trofý.Lab has been involved as a case study in the SUAVE¹⁵ urban agriculture Horizon project.

The third cluster involves participation in the Open Food Network¹⁶, a platform that connects producers and consumers while supporting short supply chains and community-supported agriculture. Trofý.Lab is responsible for developing and managing the Greek domain of the platform.

¹³ [Consortium - PastInnova.eu](https://pastinnova.eu)

¹⁴ [PASTINNOVA Project - PastInnova.eu](https://pastinnova.eu)

¹⁵ [SUAVE : urban farming](https://suave.eu)

¹⁶ [Home - Open Food Network](https://openfoodnetwork.org)



Τροφή απευθείας από τον αγρό στο πιάτο μας

Κάποιες φορές ο καλύτερος τρόπος για να διορθώσεις το σύστημα
είναι να ξεκινήσεις ένα νέο...

▼

Αγορά - δες εδώ πώς δουλεύει.



1. Αναζήτηση

Αναζητήστε τα προϊόντα ή/και αναζητήστε καταστήματα που προσφέρουν εποχιακά τοπικά προϊόντα. Αναζητήστε από γεωπαραγωγούς και καταστήματα φρεσκάδας ή σε ποσότητες παραλαβής (από το κατάστημά ή απευθείας) (είτε χύμα είτε σε).



2. Κατάστημα

Επισκεφτείτε τις εγκαταστάσεις που απελευθερώστε προστά τοπικό φυτό από ένα οικολογικό/αγροτικό περιβάλλον, ηρώων και καταστήματα. Κάθε την ιστορία πίσω από το φυτό που και τους ανθρώπους και το περιβάλλον.



3. Παραλαβή / Αποστολή

Παράδοση: είτε παράδοση του φρέσκου σας ή αποστολή του καταστήματός ή το κατάστημα της πόλης/της σου για μια πιο προσωπική αγορά. Η αγορά των προϊόντων είναι, τότε οικολογική και η φρέσκη αγορά.

18. Figure: Open Food Network platform



19. Figure: Photo from the mini weather station installation at the urban garden installation at the 2nd Prototype high school of Athens.

The fourth cluster focuses on community engagement, including workshops, participatory design processes, and collaborations with diverse groups such as students, urban farmers, and artists. These activities aim to reposition food as a central element in the aesthetics and economy of urban spaces.

One of the main challenges faced by the organization concerns the social acceptance of urban farming aesthetics. Unlike ornamental greenery, productive landscapes introduce elements such as raised beds, edible crops, and organic fertilizers, which may be perceived as unfamiliar or undesirable in urban environments.

"The main issue so far has been the acceptance by people. By that I mean the acceptance of the rural aesthetics that infiltrate the urban landscape through our installations. So what we want and what we envision is to bring nature closer to us within the urban landscape. And that of course comes with a lot of effort and with many contradictions compared to what we so far considered as hygienically appropriate or as aesthetically appropriate, or even what has been considered as marketable in terms of fresh produce. [...] And we come with a quite different and outside the box suggestion that's not easy to be adopted by the average urban dweller." (Petros Kartsimadakis)



20. Figure: Green Stegi installation at Leontiou st. 47.8sm of planting on a 136sm terrace.

To address this, Trofý.Lab collaborates with cultural institutions and design practitioners to bridge the gap between cultivation, aesthetics, and sustainability. Participatory design processes play a key role in this effort, as they foster a sense of ownership and long-term engagement, even if the resulting spaces may diverge from conventional design expectations.

This challenge is closely linked to the broader cultural context of Athens and Greece, where unmanaged or spontaneous forms of nature are often undervalued. For instance, allowing seasonal wild vegetation to grow in public spaces may be perceived as neglect rather than as a strategy for supporting biodiversity. At the same time, urban agriculture offers important environmental benefits. Green roofs and productive landscapes can contribute to mitigating the urban heat island effect by reducing heat-absorbing surfaces, while also addressing the limited availability of green space in the city. In a dense urban environment such as Athens, rooftops and balconies represent critical opportunities for expanding vegetation cover.

Trofý.Lab's work directly responds to several pressing urban challenges, including high density, limited open space, and climate-related impacts such as increased

temperatures. However, the expansion of urban agriculture is constrained by structural factors, particularly land availability and competing economic interests. Processes such as gentrification and real estate speculation reduce access to vacant land, while alternative land uses are often perceived as more financially viable than community-oriented initiatives. Public institutions may also be reluctant to allocate unused land for community gardens due to potential opportunity costs, while private owners may be concerned about the financial sustainability of such uses.

“In order even to persuade public entities, such as local authorities or municipal authorities to hand out a certain square or an unattended piece of land to the community in order to build some community gardens over there contradicts a lot with any possible potential financial interest that they could have upon this space.” – Petros Kartsimadakis

Within this context, Trofý.Lab promotes the concept of prosumerism, encouraging citizens to actively participate in food production within urban environments. This approach addresses broader issues related to industrialized food systems, including the environmental impact of long supply chains, the use of chemical inputs, and the prevalence of processed food.

Examples from other European contexts demonstrate potential pathways for supporting urban agriculture. In cities such as Nice, France, municipalities have implemented policies to counter land speculation and enable the temporary use of underutilized land for food production^{17,18}. Such initiatives combine professional agricultural activities with opportunities for citizens to cultivate their own plots, while also contributing to local food systems, for instance by supplying schools. These models highlight the potential role of policy frameworks in facilitating more inclusive and sustainable urban land use practices.

Trofý.Lab’s primary role within the food system is that of a producer, with its long-term objective being the establishment of productive urban gardens with cashcrops. At present, however, the organization also assumes additional roles when required. For instance, it has engaged in distribution activities, such as supporting local initiatives by facilitating the dissemination of harvested produce within neighborhoods.

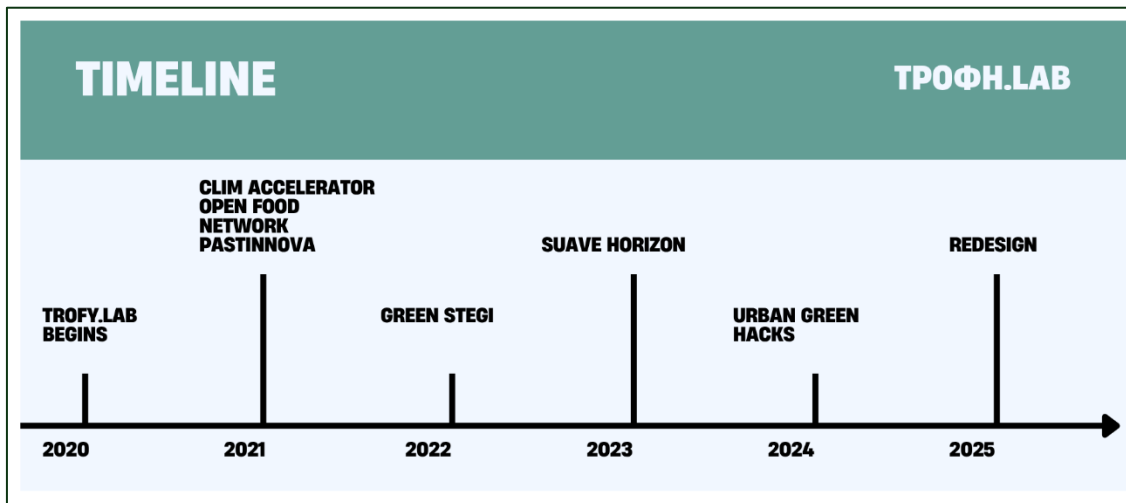
In educational and community-based settings, Trofý.Lab integrates urban farming installations with workshops on maintenance and harvesting, particularly involving students. Participatory design processes further contribute to community building and local engagement. In parallel, research and innovation constitute a significant component of its activities, as Trofý.Lab participates in several EU-funded projects with a focus on food technology.

Overall, within the food system and value chain, Trofý.Lab is positioned primarily at the production stage, while maintaining a flexible and hybrid role that can extend to distribution, education, and research.

¹⁷ [Projet d’agriculture urbaine, étape par étape - Métropole Nice Côte d’Azur](#)

¹⁸ [Jardins potagers - Ville de Nice](#)

Timeline of TrofyLab development:



21. Figure: Timeline of the milestones of the organization.

Is technology really helping for a more sustainable food production and if yes how?

Guided by the motto *"Uniting Food with Technology: Sustainability, Research, Art, Self-sufficiency,"* the organization maintains a nuanced relationship with innovation. While Trofý.Lab views technology as a vital tool for addressing climate change—and recognizes it as a prerequisite for most research funding—it consciously avoids "tech-evangelism." The organization maintains that technology is a means, not an end.

"We have a critical attitude towards technology. We don't like it very much, also at a personal level because I have worked for many years in the technology sector as an employee. I don't like techvangelism that comes to bring a positive message that technology will solve everything because it can also create problems of a different nature from those it promises to solve. We use it in a non-intrusive way on natural cycles, with a very critical eye, towards technology that supports new agricultural models ... e.g., precision agriculture etc., I don't like them." (Petros Kartsimadakis)

In practice, technology is utilized for high-precision data collection via sensors that exceed human capacity. More importantly, it provides automated, immediate responses to volatile climate events; for example, they are working on a smart garden cover that deploys during torrential rain. Similarly, an automated irrigation shut-off would be useful. Ultimately, Trofý.Lab seeks to leverage these tools not to replace the human element, but to protect it, ensuring that the fundamental connection between people, the soil, and the natural life cycle is preserved.

"We try to implement a lot of open source technology, and digital or hardware technology. As discussed before, we have built these two mini weather stations from scratch which operate on an open source code base and Open Access database in the data that they are collecting." – Petros Kartsimadakis



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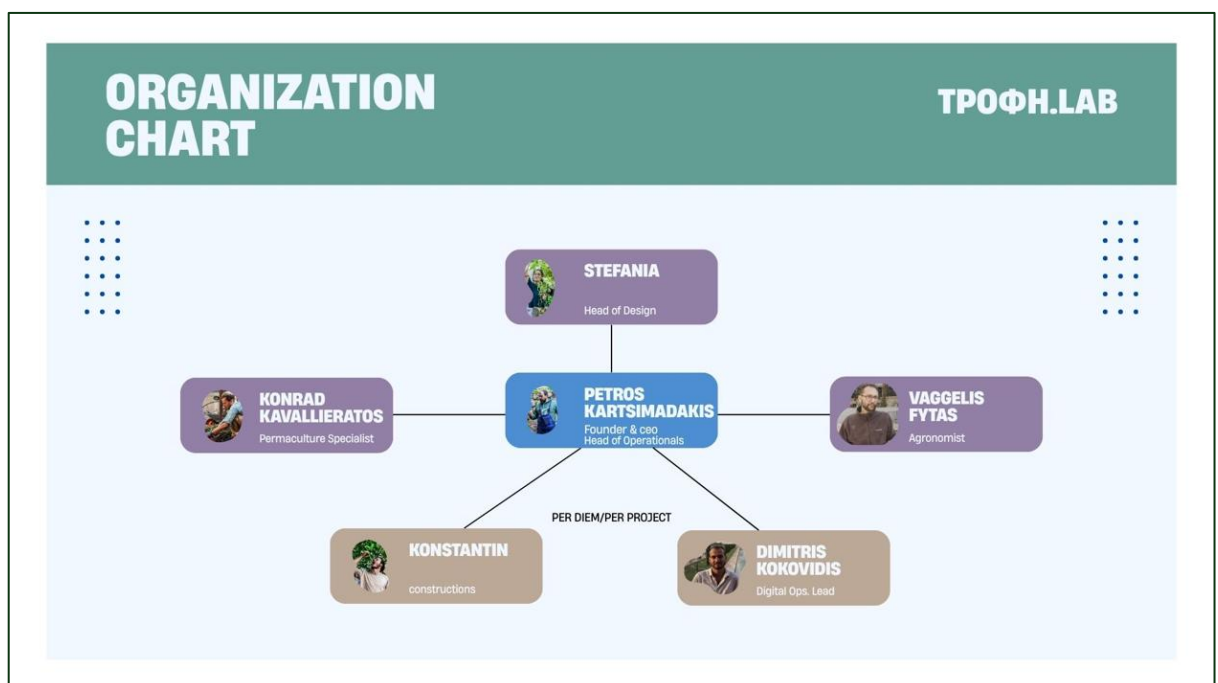
Funded by the European Union. Views and opinions expressed however those of the author(s) only and do not necessarily reflect those of the European Union or the European Research Executive Agency. Neither the European Union nor the granting authority can be held responsible for them.

Governance structure:

As a for-profit organization, Trofy.Lab operates with a defined structure and expertise-driven roles. Strategic direction is led by Petros Kartsimadakis, whose background in business intelligence and performance management informs the organization's development. But each collaborator has the project management and the responsibilities of their sector. Core collaborators include Konrad Kavallieratos, a permaculture specialist responsible for co-cultivation strategies, circularity, traceable raw materials, and Vaggelis Fytas, an agronomist with a PhD from the Agricultural University of Athens works on the research sector. Technical aspects, particularly in relation to digital infrastructure and the integration of technology in agriculture, are supported by collaborators such as Dimitris Kokovidis. Some people work remotely like Stefania who is responsible for all the communication aspects like, logo, graphic identity, presentations etc. Others work on per diem, or project basis, making Petros the only full time employees right now.

From the storyline, some collaborations have changed over the years, as the initial core, or the social media responsible, some have moved abroad. But the turnover of employed collaborators has more to do with the stability of a continuous influx of income to cover full-time jobs. Most staying as a part time collaborators have different careers and interests in parallel.

Until September, there were 3 full time employees and one part time with deliverables. Since September 2025 it is only 1 full-time employee, Petros and others as per/diem or per project (field crew, digital ops., etc.)



22. Figure: Organization chart of Trofy.Lab

Institutional collaboration also plays an important role. Municipalities are emerging as key partners, particularly through initiatives such as the Youth Climate Action Fund, which engages young people in becoming urban agriculture stewards. However, broader institutional support remains critical for the long-term expansion of urban agriculture, particularly through policy integration and strategic planning at the municipal level.

Trofý.Lab is embedded within a wide network of organizations and initiatives related to alternative food systems, commons-based approaches, permaculture, degrowth and circular economies. These include participation in platforms and networks such as Impact Hub, Open Food Network, the good market commons¹⁹, Synallois²⁰ and Mpostani²¹, as well as partnerships with cultural institutions (Onassis), schools, and suppliers. Engagement in festivals and public events like Amalthea²² or S+T+Arts forum or Circular Economy Fair²³ further contributes to the visibility and dissemination of its work.

Although the organization does not rely on formal volunteers due to its for-profit structure, participation is facilitated through workshops and educational activities, where students and community members actively contribute to project implementation. Overall, Trofý.Lab operates within a dense and dynamic ecosystem, positioning itself at the intersection of practice, research, and community engagement in the field of urban food systems.

Legal and financial framework:

Trofý.Lab operates under the legal entity *P. Kartsimadakis Monoprosopi IKE*, a common for-profit company structure in Greece. As a private enterprise, it engages with funding mechanisms typically available to startups and businesses, including platforms such as Dun & Bradstreet²⁴ and F6S²⁵, as well as participation in bioeconomy ventures²⁶ networks. Rather than relying on non-profit or NGO-based funding, the organization primarily accesses financial support through investors, research programmes, and project-based funding schemes.

This legal structure has posed some barriers to collaborations with public institutions, as it is considered a contractor. Trofý.Lab actively participates in research projects and public programmes, maintaining partnerships with municipalities, schools, and cultural organizations. The organization does not intend yet to alter its legal form, as it has proven compatible with its operational model.

¹⁹ [Trofy.Lab](#)

²⁰ [καλως ήλθατε στη νέα μας ιστοσελίδα | Συν Άλλοις](#)

²¹ [Μποστάνι](#)

²² [ΑΡΧΙΚΗ](#)

²³ [Athens ReShape](#)

²⁴ [Unlock Strategic Value with Dun & Bradstreet Business Data](#)

²⁵ [F6S - Get funding, save on software & find startup jobs](#)

²⁶ [Trofy.Lab – Bioeconomy Ventures – Platform](#)

Trofylab was initially established as a for-profit entity primarily due to the immediate administrative requirements of the Climaccelerator program. After winning this competition—organized by Impact Hub and the European Institute of Technology—the team required a swift legal setup to receive the award and begin operations.

The Cooperative Ambition

While the long-term vision was to transition into a horizontal cooperative, the founding team encountered significant internal friction. This stemmed from the following factors:

- **Team Heterogeneity:** The diverse backgrounds of the initial members made immediate alignment difficult.
- **Organizational Maturity:** Achieving true horizontality requires a level of internal development and "maturity" that the group had not yet reached.
- **Misalignment of Values:** A core point of contention was the definition of fairness. For a cooperative to function, there must be a shared understanding that compensation is tied to contribution.
- **The Accountability Gap:** From Petros's perspective, the cooperative principle of equal profit-sharing must be balanced with an equal commitment to personal responsibility and accountability. Without a shared dedication to putting in the same amount of effort, the model becomes unsustainable.

Legal and Financial Constraints

Maintaining this legal status has presented persistent hurdles, particularly regarding capital and funding:

- **Funding Assumptions:** Investors and financial institutions often assume that for-profit entities secure funding through organic income.
- **Public vs. Private Sector Realities:** While organic income sustains private-sector contracts, it is less effective for public-sector projects (such as the Model High School[K1] urban garden in Abelokipi²⁷)
- **Cost Efficiency:** When submitting proposals for public works, the current legal structure often incurs higher overhead and expenses compared to a non-profit (AMKE legal structure for nonprofit organizations), placing Trofylab at a competitive disadvantage in those specific frameworks.

While not institutionally embedded within municipal structures, Trofý.Lab identifies strategic collaboration with local authorities as essential for scaling its activities. In particular, the development of supportive policy frameworks is considered crucial for advancing urban food production and improving food security.

Several policy gaps currently limit the expansion of urban agriculture. These include the lack of incentives for the productive use of underutilized land in urban and peri-urban areas, as well as regulatory restrictions on agricultural activity within the city. Potential policy measures could include incentives for landowners to allocate unused land for micro-farming, the integration of "green clauses" in rental agreements linking

²⁷ [Ἀήμιος Αθηνών – Youth Climate Action Fund - ΤΡΟΦΗ.Lab](#)

housing to access to shared gardens, and collaborative models in which institutions provide land in exchange for a share of production.

A key legal constraint relates to land-use regulations, which rarely classify urban land as suitable for agricultural production. As a result, while small-scale cultivation for personal use may be permitted, commercial activity—such as selling produce—is largely restricted. This significantly limits the economic viability and scalability of urban farming initiatives, as it prevents integration into formal food distribution systems. Addressing these regulatory barriers would be essential for enabling broader participation and unlocking the full potential of urban agriculture.

“One legal challenge that we are facing is that very few pieces of land can be declared or characterized as arable agrarian land within Athens, which means that you are not supposed to cultivate and grow food. You cannot cultivate cash crops, you cannot sell this. You may be able to cultivate this land for your own purposes, but you cannot have a commercial activity. You cannot have a commercial activity on this land and growing foods in an urban environment. And this is a legal challenge that we need to address in collaboration with municipal authorities and regional authorities in order to take a step further and in order to provide initiatives to even small stakeholders that could grow food and would make a limited, yes, but still quite tangible income out of the excess of food that they are producing [...] The fresh produce that is produced in the city cannot be invoiced, cannot be sold, cannot be consumed from some third party. And that already reduces the power of this initiative by a lot because it's not capable to provide an alternative to the food distribution system as we know it.” – Petros Kartsimadakis

Financial structure

The organization maintains its viability through a diversified set of income streams, including installations, consulting services, maintenance contracts, workshops, and digital services. The largest share of revenue derives from field-based activities such as installations, maintenance, consulting, and foodscape design. Additional income is generated through participation in research projects, cascade funding mechanisms, and European open calls. A further revenue stream comes from community-engagement activities, including workshops delivered to cultural institutions, schools, amateur urban farmers, and cultural festivals.

The primary share of Trofylab's income is organic revenue, generated through professional services provided by the organization's members. The second largest funding source consists of research grants and projects; notably, Petros served as a partner in the Prima project, where he was responsible for a specific technical deliverable.

The public sector represents the third income stream, involving initiatives such as the school urban garden project. Finally, community-led funding comprises the remainder



of the budget, exemplified by workshops—such as composting sessions—commissioned by local parents' associations.

The organization can be in plus or minus depending on the year. Last year was a difficult year.

Engagement and collaboration

To foster public engagement, TrofyLab designs and implements workshops, presentations, and participatory activities. Some of these are embedded within ongoing projects—for example, educational programs in schools—while others are independently funded. The most recent workshop series was supported by the Youth Climate Action Fund and the Municipality of Athens, enabling a program of lectures, field visits, and participatory tools aimed at empowering young people to become leaders in agro-food systems. Additional workshops have focused on home gardening, composting, and practical urban agriculture skills.

Community engagement is tailored to the specific characteristics and needs of each project. TrofyLab has developed a wide range of initiatives, each involving distinct participant groups and local communities. The organization collaborates closely with the local municipality—as demonstrated through the Youth Climate Action initiative—and with schools, while also exploring opportunities for deeper partnerships. A new community-garden project in Kypseli is currently being launched, organised by Green Kypseli²⁸, where TrofyLab participates in the design process for the moment. It will further involve local residents and the municipality, who will provide access to the land.

As the team describes:

"We try to make every micro-farming venue a space for community engagement and social awareness—highlighting the traceability of our food, the resilience of our food systems, and the nutritional value of food as it is produced."

The ANKAA project was established as a collaborative exchange with the ANKAA organization, which serves refugee populations. The initiative sought to create a community garden maintained by participants as a hub for permaculture workshops and environmental education. However, the partnership faced significant challenges due to a misalignment of organizational goals.

Beyond strategic differences, the project encountered a clash in urban aesthetics—specifically regarding the definition of "weeds" versus intentional growth—and differing perspectives on food resilience. While TrofyLab emphasized the importance of minimizing waste in locally grown crops, this vision was not fully shared by the partner organization. Ultimately, while the project aimed to engage a diverse and vulnerable community, its limited success was a result of institutional misalignment rather than a lack of engagement from the participants themselves.

²⁸ [Green Kypseli](#)

Impact – according to the Urban Food Value Framework (UFVF)

Petros was presented with the UFVF vignette and asked to identify values that are important for Trofý.Lab. As only one interviewee was asked to present the organisation's values through the lens of the UFVF, the frequency is consistently one. While Petros primarily identified values that are reflected in Trofý.Lab's current practices, he also mentioned values the organisation aspires to achieve, as well as certain challenges associated with them. Trofý.Lab uses very few formal indicators; instead, the organisation mostly assesses its impact through qualitative, informal measures.



Categories	Values	Fr eq	Indicators	Interpretation	Main Findings
Social values	Equality	1	No formal indicators, qualitative informal indicators	Value as core identity, Value in practice	These values are very much embedded in the organization itself and the relations between the collaborators. The question of trust is very important with outside collaborators. But as a for profit company, there are not as many social values embedded in outward activities.
	Fairness	1	No formal indicators, qualitative informal indicators	Value as core identity, Value in practice	
	Trust	1	No formal indicators, qualitative informal indicators	Value as core identity	
Spatial values	Re-localization, re-territorialization of food systems	1	No formal indicators, qualitative informal indicators	Value constraint	There is a big difficulty in re-localization of food systems at a bigger scale, there is not much discussion about the resilience factor in the local food systems for the legislation to change and enable that.
	Spatial links between producers and consumers (i.e. physical proximity)	1	No formal indicators, qualitative informal indicators	Value constraint, Value as an aspiration	
	Value of local (broadly)	1	No formal indicators, qualitative informal indicators	Value constraint, Value as an aspiration	
Ecological values	Air Quality	1	Temperature, humidity, CO2 concentration	Value as core identity	The ecological values are very much at the core of the local food system creation, promoting awareness, on quality food production and enriching biodiversity. Those are applied values from all urban gardens and also those created by trofylab.
	Biodiversity	1	No formal indicators, qualitative informal indicators	Value as core identity, Value in practice	
	Quality Food	1	No formal indicators, qualitative informal indicators	Value as core identity, Value in practice	
	Soil quality	1	Temperature, humidity, CO2 concentration	Value as core identity	
	Ecological, environmental, sustainability values (broadly)	1	No formal indicators, qualitative informal indicators	Value as core identity, Value in practice	
Economic values	Economic support for local communities	1	man-hours of work, production efficiency per square meter	Value as an aspiration	These values are still a goal, not really achieved as there

	Food security	1	No formal indicators, qualitative informal indicators	Value as core identity, Value as an aspiration	is not much institutional support or funding.
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13. table: Trophy.Lab through the lens of the Urban Food Value Framework, showcasing the participant-selected values, their selection frequency, indicators, and interpretation:

Social Impact

As a for-profit entity, Trofý.Lab's primary social impact is rooted in its internal governance and the professional standards of its members which is reflected by Petros' two chosen values and their explanations in the social embeddedness category. As he explained, rather than focusing exclusively on external community outreach, the organization prioritizes incorporating core values, such as *equality and fairness*, into its daily operations. Externally, however, a key social objective is to foster public *trust* - a value identified to be part of Trofý.Lab's core identity - in the organisation, as well as in the safety and viability of edible urban gardens.

Ecological Impact

The values picked in the ecological embeddedness category can help showcase the organization's main environmental contributions. Petros argued that broad ecological, environmental and sustainability values are all qualities that are embedded in the projects, the design, the materials, the general concept of all the projects.

There is special care on local biodiversity. The design of the garden and its maintenance, the different species used are in immediate relation with the aim to maintain and promote biodiversity. Educating people on what should or should not be considered weeds and species that should be maintained as positive for the soil and the pollinators is part of the work. Trofý.Lab ensures special treatment for wild and native plants, they do not recognize them as weeds when they are not invasive, they keep them. It defines the planting design and aesthetics.

Food, air and soil quality are also important values for the organization. Trofý.Lab pays special attention to food quality as all primary materials used are organic and traceable, which means they have a high nutritional value. Air and soil quality both have official quantitative indicators such as temperature, humidity and CO₂ concentration, as these measurements help research in proving the effects of the gardens in the local environment.

Lastly, while these values were not explicitly picked, through Trofý.Lab's Urban Mitigation work, land conservation and restoration as well as climate mitigation closely relate to the organization's work by greening rooftops and backyards to actively combat the urban heat-island effect.

Economic Impact

The initiative has two primary economic objectives. The first is to bolster *food security* by incentivizing self-production. By reducing dependence on traditional global supply chains, Trofý.Lab empowers households to build localized resilience. This model offers a dual benefit: it reduces household food expenditures while simultaneously increasing the nutritional quality of the produce consumed. The second is to provide *economic support for local economies* through urban farming, which can be measured by indicators such as man-hours of work and production efficiency per square meter.

Spatial and local impact

The project's spatial impact centers on the *localization of food production* and of material supplies. Moreover, spatial links between producers and consumers appear in the chosen values. The open farm platform is strategically designed to close the distance between producers and consumers, fostering a more robust local economy. As the project scales, these localized economic shifts are expected to yield quantifiable data, allowing for a measurable assessment of the project's impact on urban economic health. The organization also aspires to build more links and engage with the local community, some local producers currently remain sceptical of organization and resist cooperation and partner, creating constraints for the realization of broader local values Trofý.Lab has.

The UFVF analysis shows that there is a difficulty in bringing quantitative indicators to the impact of urban food initiatives; even the existing indicators (man-hours and efficiency per m² economically, temperature, humidity and CO₂ concentration ecologically) function more as emerging research measures than as established proof. Nevertheless, the impact is present in all sectors and is largely qualitative. Still, the effect of an initiative on its own is quite limited, especially without proper support and recognition. The ecological values are among the most prominent in this specific initiative, embedded directly in the design, planting choices, and materials of every project. At a bigger scale, this embedded approach could have more impact.

Future of the project/initiative/organisation

Moving forward, Trofý.Lab seeks deeper integration with **municipal and regional authorities** to secure land-use agreements. These sites would be dedicated to community gardens or, contingent on legislative shifts, the high-efficiency production of **urban cash crops**—a primary objective for the organization.

In parallel, the organization is intensifying its **R&D efforts** on climate-responsive infrastructure, specifically **automated protective covers** for urban agriculture. Trofý.Lab's long-term sustainability is rooted in its inherent flexibility and its ability to integrate into the existing economic systems. By operating as a specialized agricultural actor with diverse funding streams, the initiative remains resilient and well-positioned for future expansion.

NEB Compass

Beautiful	Sustainable	Together
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<i>Ambition I (to activate), Ambition II (to connect), Ambition III (to integrate):</i>	<i>Ambition I (to repurpose), Ambition II (to close the loop), Ambition III (to regenerate):</i>	<i>Ambition I (to include), Ambition II (to consolidate)</i>
I. A key consideration in Trofý.Lab's work is the role of aesthetics in shaping public acceptance of urban farming. As noted during the interviews, early project proposals raised a tension between presenting a "polished" version of urban agriculture and a more direct, unfiltered representation. Trofý.Lab ultimately adopted the latter approach, intentionally introducing elements such as natural fertilizers to gradually familiarize users with the realities and sensory qualities of food production. With the presence of designers within the team, aesthetic considerations remain integral to each project. At the same time, Trofý.Lab actively challenges conventional perceptions of urban greenery by promoting productive landscapes over purely ornamental ones. Comfort and usability are also addressed through design choices such as raised beds, which facilitate accessibility and ease of maintenance. Material selection varies across projects, ranging from minimal and refined applications in institutional contexts to the reuse of materials such as corrugated metal sheets or wood in schools and other community settings.	I. Sustainability represents a core value in Trofý.Lab's approach, reflected in its efforts to repurpose resources, close material loops, and promote regenerative practices. Design strategies also consider environmental performance at multiple scales. Material use and construction methods are approached with an emphasis on efficiency and adaptability. Structures are designed to minimize waste, using simple construction techniques and, where possible, reclaimed materials.	Trofý.Lab engages with the NEB value of "Together" by fostering inclusion, consolidation, and social transformation through urban food production. Its projects emphasize participation (of the students, the clients, the users etc), empowerment, and community connection, positioning urban farming as a form of stewardship over shared and public spaces. These initiatives often create environments that are not only productive but also therapeutic, encouraging collective engagement and a sense of ownership. The inclusivity of Trofý.Lab's projects is closely linked to the nature of its collaborations. Many initiatives are designed with accessibility and affordability in mind, aiming to involve diverse groups, including marginalized or vulnerable populations. Through participatory processes, communities are encouraged to actively engage in food production, strengthening social ties and promoting knowledge exchange.
II. Beyond their physical form, these urban gardens function as interactive environments that foster collaboration and engagement. In educational contexts, they enable students and participants to connect with natural processes through hands-on experience. This includes understanding the rhythms of plant growth, seasonal cycles, and the	By integrating food production into urban environments, the organization contributes to reducing the environmental footprint of food systems. Its projects are grounded in principles of circular design, incorporating composting, permaculture practices, and resource-efficient systems that minimize the need for external inputs such as chemical fertilizers and pesticides.	Trofý.Lab's work aligns particularly with the ambition of consolidation, as it seeks to support social equity and food autonomy. Community gardens, especially when developed in collaboration with municipal authorities, have the potential to reduce social segregation by creating shared spaces that bring together individuals from different backgrounds. In this

influence of climate on food production. Such experiences encourage a shift in perspective, reconnecting individuals with the ecological systems that sustain everyday life but also connect with each other.	Opportunities for further improvement include the integration of rainwater harvesting and greywater reuse systems. In one example, a greywater system was implemented to recycle water from domestic use through filtration and phytoremediation processes, demonstrating the potential for closed-loop water management in urban agriculture.	way, urban agriculture becomes a tool for reinforcing social cohesion and enabling more inclusive urban environments.
III. The projects of Trofý.Lab respond to broader societal challenges related to contemporary food systems. By enabling individuals to participate in growing their own food, Trofý.Lab promotes greater awareness of food quality, production methods, and health implications. This is particularly relevant in the context of increasing reliance on processed and ready-made meals. As highlighted in the interviews, access to fresh, locally grown produce—even in small quantities—can contribute to improved well-being, while also addressing concerns related to the intensive use of pesticides in conventional agriculture. By caring for their own food, those projects look at a broader transformation of lifestyle, integrating new habits related to the earth.	Urban gardens are configured to provide shade, mitigate heat, and contribute to localized cooling, thereby addressing urban heat island effects. In addition, plant selection can support broader ecological functions, such as improving air quality and enhancing biodiversity. Technological tools developed by Trofý.Lab further support sustainability goals by enabling precise monitoring of plant conditions and optimizing water use. Crop selection also reflects sustainability principles, prioritizing local and climate-resilient species. Seed-saving practices and collaborations with suppliers of organic compost further reinforce a regenerative approach to cultivation. More broadly, Trofý.Lab promotes a vision of urban resilience grounded in local food production and a renewed connection between people and ecological processes. By encouraging the acceptance of safely grown urban produce, the initiative also addresses common concerns regarding food quality, offering an alternative to conventional systems that rely heavily on chemical inputs (Kaiser, 2015; Steenkamp, 2021) .	
Participatory process	Multi-level engagement	Transdisciplinary approach
<i>Ambition I (to consult), Ambition II (to co-develop, Ambition III (to self-govern):</i>	<i>Ambition I (to work locally), Ambition II (to work across levels),</i>	<i>Ambition I (to be multidisciplinary, Ambition II (to be interdisciplinary), Ambition III (to be beyond-disciplinary)</i>
I. All garden implementations developed by Trofý.Lab are	I. Multi-level engagement is embedded in Trofý.Lab's projects	I. At the heart of Trofý.Lab's methodology is the integration

grounded in participatory processes, supported by workshops involving the relevant stakeholders—whether students, residents, or employees. Continuous communication and awareness-building are integral to these processes, ensuring that each project reflects the needs and capacities of its users.	are strongly place-based—responding to specific urban conditions, material availability, and local communities—the organization is also actively connected to broader knowledge and innovation ecosystems. At the local level, Trofý.Lab develops context-specific interventions, tailoring design, materials, and partnerships to each site. The scale of its physical interventions remains relatively small, reflecting both the localized nature of its work and structural constraints within the Athenian context. In particular, the limited integration of urban agriculture into municipal or regional policy frameworks currently restricts opportunities for expansion at a larger scale.	of scientific knowledge, technological innovation, and community expertise. Their work spans urban agriculture, nature-based solutions, open-source agri-tech, foodscape design, and participatory governance, merging these domains into holistic interventions that address the complexity of urban food resilience. Their projects—ranging from edible landscapes and rooftop gardens to Horizon Europe research on regenerative urban agriculture—demonstrate how digital tools, ecological design, and social participation are combined into new, cross-sectoral practices.
II. In school-based projects, student communities actively engage in participatory design processes to shape the vision of their garden spaces. Their involvement extends beyond design to include construction, planting, harvesting, and ongoing maintenance. This hands-on participation strengthens both learning outcomes and a sense of ownership.	The organization engages across levels through collaborations with research initiatives, platforms, and peer organizations. Internationally, its participation in projects such as SUAVE, PASTINOVA, and REDESIGN enables the exchange of knowledge and the dissemination of practices related to urban agriculture and food technology. Through these activities, Trofý.Lab contributes to global discussions on scaling up urban farming and enhancing sustainable food systems.	II. This transdisciplinary orientation is also expressed through Trofý.Lab's strong communication and knowledge-sharing strategy. The organisation systematically disseminates research results, workshops, and project outcomes, contributing to public understanding of sustainable food systems and supporting the uptake of innovative practices across sectors. Several of their initiatives focus exclusively on knowledge creation and open dissemination, including digital infrastructures for small producers and collaborative research platforms.
III. Trofý.Lab approaches each installation as a “living lab” embedded within the local community it serves. This perspective applies not only to collective settings but also to individual households. When providing maintenance services for private edible gardens, the organization encourages active involvement from residents, fostering knowledge transfer and enabling them to gradually		III. Trofý.Lab's projects consistently embed public engagement and youth involvement. Through school gardens, community workshops, living labs, and municipal collaborations, they introduce citizens to collaborative food-production processes and participatory design. These activities position food not only as a biological or economic resource but as a social, cultural,

develop the skills needed to cultivate their own food. A key principle underpinning these initiatives is the transfer of ownership to stakeholders. Users are encouraged to take responsibility for the long-term care and maintenance of the gardens, ensuring their continuity beyond the initial implementation phase. While Trofý.Lab may provide ongoing support as part of its service model, the emphasis remains on empowering communities and individuals to sustain these spaces independently.		and civic medium, enabling communities to co-shape resilient urban environments. This reflects Trofý.Lab's commitment to collective stewardship of the commons, urban ecology, and inclusive sustainability.
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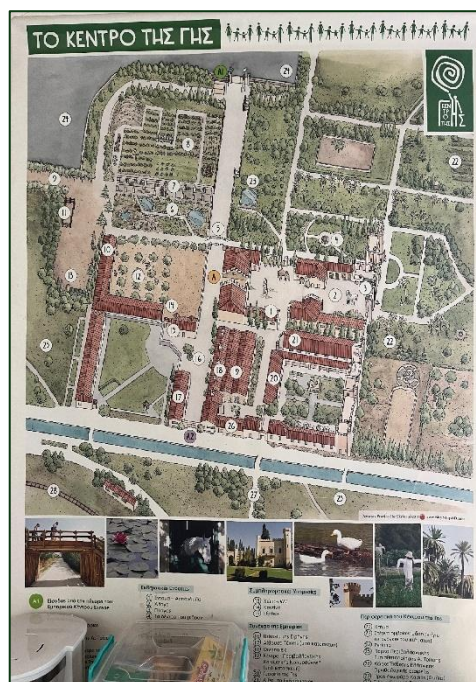
14. table: Trophy.lab through the lens of NEB Compass



ORGANIZATION EARTH

AUTHORS: CHAIDO KAPROULIA

Introduction



23. Figure: Masterplan of Tritsi Park including Center of the Earth, the urban farm of Organization Earth

This case study examines Organisation Earth, a grassroots civil society organisation based in Athens, Greece. The case was selected due to its integrated approach to urban greening, environmental education, and social engagement, particularly within the context of climate crisis and urban resilience. The report covers methodology, case description, governance, financial framework, engagement, impact, and future perspectives. What makes this case especially significant is its longevity and adaptability. Emerging during the period of the Greek economic crisis, the organisation has managed not only to survive over time but also to continuously expand its activities and social impact. Its resilience demonstrates a strong capacity to respond to changing social, environmental, and economic conditions. Despite the diversity of its initiatives, climate awareness and environmental resilience consistently remain at the core of its mission and actions.

Methodology

The research for this case study is based primarily on qualitative methods, specifically semi-structured interviews conducted with three key actors within Organisation Earth. These include Alexis Galinos, who provides a strategic and organisational perspective, Nikoleta Karistini, who is responsible for educational programs, and Panagiotis Gritsos along with another team member, who contribute operational and environmental insights. The interviews were recorded and transcribed, and the content was analysed



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through thematic interpretation focusing on key themes such as governance, education, climate adaptation, and community engagement.

The aim of using this methodology is to gain a deep understanding of the organisation's internal functioning, its values, and its real-world impact, while capturing the lived experiences and reflections of those directly involved. The interviews provide nuanced insights that cannot be captured through quantitative methods alone, particularly regarding social dynamics, challenges, and motivations.

General description (context):

Location: Athens, Greece

Sector: Environmental education, urban greening, social impact

Type: NGO / grassroots organisation

Problem Statement Organisation Earth addresses:

Organisation Earth addresses issues related to the disconnection between people, nature, and local communities within the urban environment. The organisation also responds to the lack of environmental awareness translated into everyday action by promoting participation, education, and community engagement through its activities. At the same time, its initiatives aim to support climate adaptation in dense urban environments, particularly through urban greening interventions and climate-responsive public spaces.

"The idea for creating Organisation Earth was to reconnect people with nature and with each other." – A. Galinos

Organisation Earth operates within the metropolitan area of Athens, a city that faces significant environmental and social challenges. Athens is characterised by a dense urban fabric, limited green space, and increasing exposure to the effects of climate change. These include the urban heat island effect, extreme summer temperatures, seasonal flooding, and the growing threat of wildfires at the city's periphery. Additionally, socio-economic pressures and limited institutional capacity further complicate efforts to address these challenges.

Within this context, Organisation Earth addresses a central problem: the disconnection of people from nature and from each other. This disconnection is seen as a root cause of both environmental degradation and social fragmentation. The organisation's overarching goal is to reconnect individuals with natural systems and promote more sustainable lifestyles, while also strengthening community bonds. As one of the interviewees explained, the organisation aims to help people understand "what can I do?" in the face of climate change, focusing on actionable, everyday practices rather than abstract awareness.

Case description

Organisation Earth was officially founded in 2012, although the initial discussions and preparations began earlier, during the financial crisis in Greece around 2011. The



founders, a group of approximately 40 to 45 individuals from diverse but generally middle to upper socio-economic backgrounds, shared a common concern that society had deviated from a sustainable path. They believed that modern lifestyles had become disconnected from the Earth and from fundamental human relationships.



24. Figure: Herbs planted in Center of the Earth (Left side). Herbs and aromatic plants that are planted at Center of the Earth, the urban farm of Organization Earth (right side)

As Alexis Galinos explained, the organisation emerged from the belief that “our society has veered in the wrong direction” and that the solution lies in reconnecting with nature and with one another. While the initial motivation was rooted in a broader critique of societal values, the focus has since shifted toward addressing the urgency of the climate crisis, which now frames much of the organisation’s work.

The core activities of Organisation Earth revolve around what they describe as “active learning.” This approach seeks to change people’s habits by engaging them directly in hands-on experiences, such as gardening, composting, and environmental workshops. Initially focused on children, these programs have expanded to include adults, vulnerable populations, and entire communities. The organisation operates primarily through the “Centre of the Earth,” a space in Athens that serves as a hub for educational activities, community gatherings, and experimental environmental practices.

“Every Sunday, we organised a communal meal at the Centre of the Earth — a large open table where everyone was welcome to eat, and anyone who wished could participate in preparing the food. This collective kitchen became an important tradition for the organisation. When the refugee influx began in Greece, members of the organisation took the pots and pans from the Centre of the Earth and went to Piraeus, where hundreds of refugees were stranded at the port. They began cooking

meals there collectively, extending the same practice of care and solidarity into a moment of humanitarian crisis.” – A. Galinos

In terms of scale, Organisation Earth operates mainly at the local level within Athens, although it participates in European programs and collaborates with international partners. Its role within the food system is primarily educational and community-oriented, rather than production-focused. While it engages in small-scale cultivation, the emphasis is on learning, awareness, and behavioural change rather than large-scale food production.

Founded during the Greek financial crisis, the organisation initially focused on reconnecting people with nature through environmental education and organic farming. Over time, however, it expanded its role beyond environmental action alone. During the refugee crisis, it developed solidarity initiatives such as collective kitchens and support activities for displaced communities. This marked a significant turning point in its identity. As Galinos noted, this experience shifted the organisation from being perceived primarily as an environmental group to a broader civil society actor focused on social impact.

More recently, it has focused on urban greening, climate adaptation and cooling spaces in Athens. The organisation’s pocket parks and communal gardens respond directly to the lack of green space in Athens and aim to involve citizens in the transformation of their urban environment.

Organisation Earth has managed to remain active for more than fifteen years because it continuously adapts its activities to the changing social and environmental needs of the city. This flexibility has been essential to the organisation’s longevity. Rather than remaining static or limited to one specific mission, Organisation Earth evolved into a broader grassroots civil society organisation. By responding to current challenges — from food insecurity and migration to extreme heat and lack of public green space — the organisation has maintained both social relevance and community support over time.

Main Activities

To summarise Organisation Earth’s main activities, they engage in a range of environmental, social, and educational initiatives, which include environmental education programs for children, adults, and vulnerable groups, as well as urban gardening and organic farming practices. The organisation also develops community cooking activities and social events that encourage participation and collective engagement. In addition, it is involved in urban greening interventions such as pocket parks and communal gardens, alongside climate adaptation initiatives focusing on shade and cooling systems. Its work further extends to refugee camps and vulnerable communities, while sports for development programs also form part of its activities.

Role in Food System

Within the food system, Organisation Earth primarily operates as an educator and community builder. Its role is connected to education, small-scale production, and



consumption awareness, with a particular focus on consumer-facing and educational activities directed toward local communities.

NEB Compass

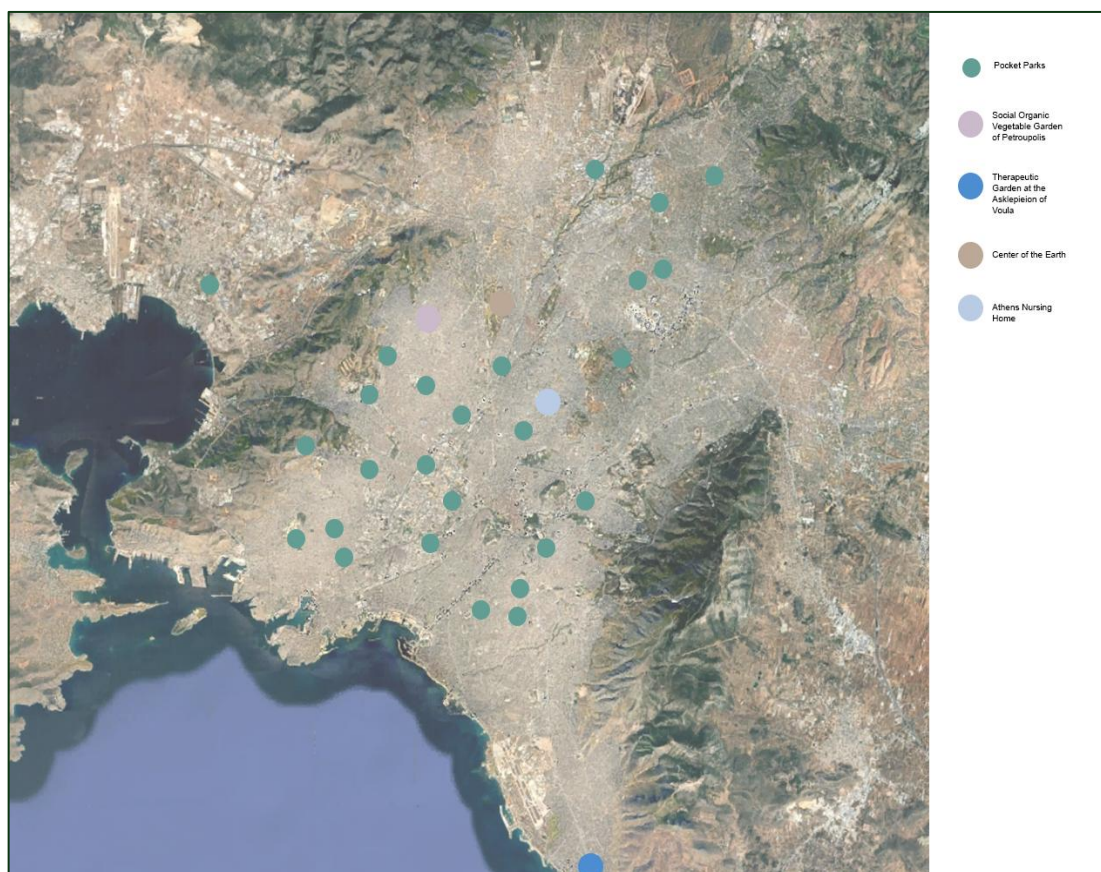
Beautiful	Sustainable	Together
<i>Ambition I (to activate); Ambition II (to connect).</i>	<i>Ambition I (to repurpose); Ambition II — (To close the loop).</i>	<i>Ambition I (to include); Ambition II (to consolidate)</i>
I. Organisation Earth approaches urban greening not only as an environmental intervention but also as an aesthetic and sensory experience that can reshape public perception of nature in the city. Through community gardens, public installations, and participatory activities, the organisation activates underused urban spaces and reconnects citizens with ecological processes. Their projects intentionally create welcoming and accessible environments that encourage interaction, learning, and emotional attachment to place. The aesthetic dimension of their work helps communicate climate awareness in a tangible and everyday manner, making sustainability more relatable to local communities.	I. Organisation Earth demonstrates a clear commitment to repurposing at the foundational level of sustainability. Its work systematically avoids waste and reduces environmental footprint through organic farming, composting, water-saving irrigation, and the reuse of underutilised urban land. Neglected plots and peripheral city spaces are transformed into productive community gardens and pocket parks, extending the usability of urban resources rather than generating new demand. Materials and practices are chosen for durability and ecological compatibility — pollinator-friendly planting, natural inputs, and low-impact cultivation methods reflect an awareness of the environmental cost of urban activity. The organisation also promotes circular consumption habits through educational workshops on food waste reduction, recycling, and sustainable living, embedding the repurposing logic into the behavioural dimension of its work.	I. Inclusion is central to Organisation Earth's approach. Its projects are designed to engage diverse social groups, including students, local residents, vulnerable communities, and volunteers. Participatory workshops and collective activities create accessible spaces where people can actively contribute to environmental action. By encouraging shared stewardship of urban spaces, the organisation strengthens social inclusion and community empowerment.
II. The organisation's initiatives function as collective spaces that strengthen social interaction and environmental awareness simultaneously. Community gardens, educational workshops, and participatory events foster collaboration between residents, schools, researchers, artists, and local institutions. Through these shared experiences, participants reconnect with food systems, biodiversity, and climate-related issues while also building	II. Beyond individual practices, Organisation Earth operates with a systemic understanding of urban resource flows. Composting programmes close the organic waste loop at neighbourhood scale, while collective kitchens and community food initiatives link production, preparation, and consumption within a single local circuit. Green infrastructure interventions — shading systems, misting installations, and communal gardens — are designed as integrated urban cooling	II. Organisation Earth strengthens social cohesion by creating collaborative environments where communities work together toward common ecological goals. Their initiatives encourage knowledge exchange, cooperation, and collective care practices that reinforce trust between participants. Through urban agriculture and environmental education, the organisation supports more inclusive and connected



stronger social ties. The projects cultivate a sense of belonging and collective responsibility toward urban ecosystems and public space.	systems rather than isolated features, addressing energy, water, and biodiversity simultaneously. Crucially, all stakeholders are involved across the full lifecycle of each initiative: residents participate in design, planting, and long-term maintenance, ensuring that projects do not remain temporary installations but become self-sustaining systems embedded in community routines. This multi-actor, whole-system approach reflects the closing-the-loop ambition of Ambition II, where circularity is not a technical fix but a governance and participation model.	neighbourhoods while fostering awareness of shared environmental responsibilities
Participatory	Transdisciplinary	Multi-Level
<i>Ambition I (to consult), Ambition II (to co-develop),</i>	<i>Ambition I (to be multidisciplinary), Ambition II (to be interdisciplinary), Ambition III (to be beyond-disciplinary):</i>	<i>Ambition I (to work locally), Ambition II (to work across levels):</i>
I. Organisation Earth develops its projects through participatory dialogue with communities, schools, municipalities, and local stakeholders. Workshops, discussions, and collaborative planning processes ensure that interventions reflect local needs and capacities. Continuous communication and environmental education are essential elements of their methodology, supporting transparency and active citizen involvement.	I. Organisation Earth combines expertise from environmental sciences, urban design, education, social innovation, and community engagement. Its projects integrate ecological knowledge with participatory methods and creative practices, allowing the organisation to address urban climate challenges through multiple perspectives. This interdisciplinary structure strengthens the adaptability and relevance of its initiatives.	I. The organisation's work is strongly rooted in the local context of Athens, responding directly to neighbourhood needs, urban conditions, and community dynamics. Its interventions focus on local engagement, environmental education, and accessible climate action, creating small-scale but meaningful transformations within the urban fabric.
II. The organisation emphasizes co-creation by involving participants directly in the design, implementation, and maintenance of projects. Citizens actively contribute to planting, cultivation, educational activities, and public events, transforming environmental initiatives into collective learning experiences. This hands-on approach strengthens	II. The organisation actively connects research, education, and practice through workshops, collaborations, and open dissemination of knowledge. Its initiatives bridge scientific understanding with practical urban interventions, encouraging broader public engagement with sustainability and climate resilience. Through interdisciplinary collaboration, Organisation Earth	II. Organisation Earth collaborates with schools, municipalities, research institutions, and international networks, connecting grassroots action with broader environmental and policy discussions. Through partnerships and interdisciplinary projects, the organisation contributes to the exchange of practices related to

ownership, practical knowledge, and long-term community engagement.	develops holistic responses to environmental and social challenges.	sustainability, urban resilience, and climate adaptation.
	III. Organisation Earth extends beyond academic or professional boundaries by involving citizens, schools, municipalities, NGOs, and grassroots networks in its activities. Climate awareness is communicated through accessible and participatory formats that encourage collective action and civic engagement. This beyond-disciplinary approach enables the organisation to create projects that are socially embedded, locally relevant, and environmentally transformative.	

15. table: Organisation Earth through the lens of the NEB Compass



25. Figure: Map of Organization Earth's activities

Governance structure

Total: ~11 people



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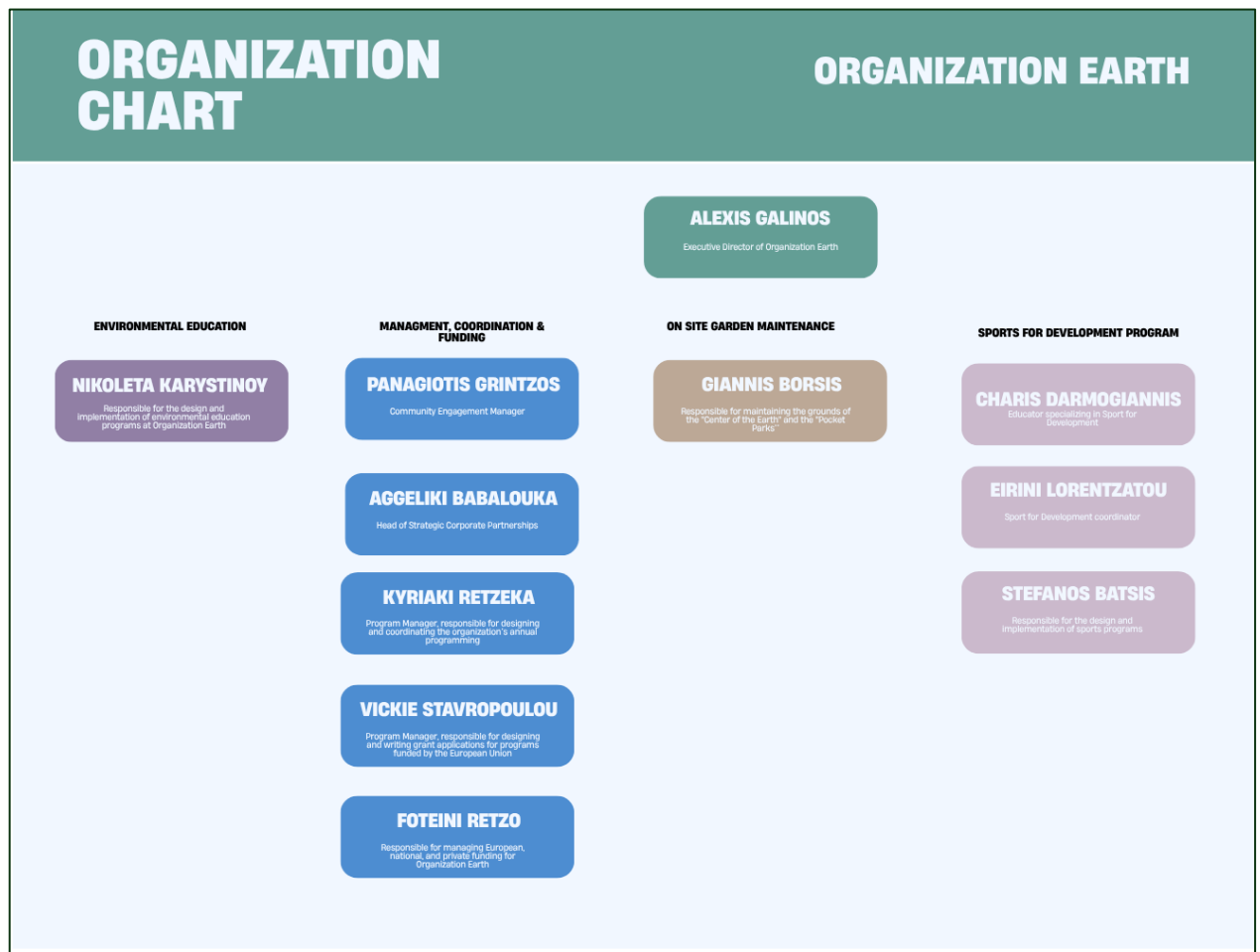
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The organisational structure of Organisation Earth is relatively small and flexible, consisting of approximately eleven members. These include environmental trainers, sports trainers, administrative staff, a community manager, and operational support personnel. The division of roles reflects the organisation's dual focus on education and program implementation. For example, some team members specialise in environmental education, while others focus on sports-based social programs.

Decision-making within the organisation is largely pragmatic and based on internal capacity. As Galinos explained, projects are selected based on whether the organisation has the necessary expertise to implement them effectively. This approach ensures that the organisation remains focused and avoids overextending its resources. The presence of a community manager also plays a key role in maintaining the organisation's grassroots identity and ensuring that it remains connected to the communities it serves.

Collaboration is an essential aspect of governance, particularly with municipalities, which are described as both necessary and challenging partners. While municipalities provide access to public space and infrastructure, they are often characterised as slow, under-resourced, and unreliable, especially in the context of political changes. Despite these challenges, Organisation Earth actively seeks to formalise its collaborations with public authorities to ensure continuity and accountability.

Volunteers also play a significant role in the organisation's activities, including local residents, international participants, and students. These volunteers contribute to workshops, gardening activities, and community events, reinforcing the organisation's participatory approach.



26. Figure: Organization chart of Organization Earth

Legal and financial framework

Organisation Earth operates as a non-governmental organisation, although its functioning resembles that of a social enterprise due to its reliance on project-based funding and the need to generate income to sustain its operations. The organisation does not benefit from a stable endowment and must continuously secure funding to support its activities and staff.

The financial structure is based on a combination of European Union programs, corporate social responsibility (CSR) funding, foundations, and limited income from educational activities. EU programs constitute the largest share of funding but are described as bureaucratic and slow to deliver funds. CSR funding, on the other hand, is considered more flexible and faster, although less predictable.

Financial instability is identified as a major challenge. As Galinos stated, *"financial stability is the nightmare of every NGO,"* highlighting the difficulty of maintaining continuity in the face of short-term funding cycles and limited budgets. This situation affects not only the organisation's operations but also its ability to achieve long-term impact.



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Engagement and collaboration



27. Figure: Gardening at Organisation Earth

Engagement and collaboration are at the core of Organisation Earth's identity and operational model. The organisation does not function as a top-down provider of services but rather as a facilitator of collective processes that aim to reconnect individuals with nature and with each other. This approach is deeply embedded in both its educational philosophy and its spatial interventions, where participation, co-creation, and social interaction are considered essential for long-term impact.

A central element of this engagement strategy is the concept of active learning, which is implemented through hands-on workshops, environmental education programs, and community-based activities. These activities take place primarily at the Centre of the Earth but are also extended to schools, social institutions, and neighbourhood spaces. Participants are not passive recipients of knowledge; instead, they are actively involved in processes such as planting, composting, cooking, and maintaining shared spaces.



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This experiential approach allows individuals to internalise environmental practices and translate them into their daily lives.

The organisation works with a wide range of target groups, including children, adults, elderly people, refugees, and other vulnerable populations. Each group is approached differently, depending on its needs, capacities, and context. For example, educational programs for children often focus on sensory engagement, observation, and play, helping them reconnect with natural processes in a direct and intuitive way. Activities such as interacting with plants, observing birds, or participating in cultivation are designed to activate curiosity and critical thinking. In contrast, work with elderly participants tends to emphasise emotional connection, memory, and social interaction. Many older participants already have prior knowledge of cultivation, so the emphasis shifts toward sharing experiences, reconnecting with familiar practices, and fostering a sense of belonging and purpose.

Engagement with vulnerable groups, such as refugees, presents additional challenges, particularly in terms of communication barriers and differing priorities. Language differences often require simplifying information and focusing on practical, accessible activities. Moreover, participants in these contexts may be dealing with urgent life concerns, which can limit their ability to fully engage in structured programs. Despite these challenges, the organisation observes strong interest and participation, especially among younger individuals, who are more open to engaging in playful and hands-on activities.

A key aspect of Organisation Earth's approach is the adaptability of its programs. Each activity is tailored to the specific group, taking into account factors such as age, group size, mobility, and social conditions. In some cases, the organisation brings its activities to external locations, effectively transferring elements of the Centre of the Earth into schools, care facilities, or community spaces. This flexibility allows the organisation to reach people who might otherwise be excluded due to physical or social barriers.

Community engagement is also deeply linked to the creation and maintenance of urban spaces, such as pocket parks and community gardens. The organisation recognises that the success of these spaces depends on the active involvement of local residents. Simply constructing a green space is not sufficient; without participation, these spaces risk being neglected or damaged. Therefore, Organisation Earth actively involves residents in the design, implementation, and upkeep of these projects. This process fosters a sense of ownership and responsibility, which is crucial for the long-term sustainability of the intervention.

The example of the Petroupoli community garden illustrates this approach. In this project, small plots were allocated to local residents based on social criteria, and participants were responsible for cultivating their own land. The organisation provided training and support but did not directly manage the cultivation. Over time, this led to the formation of a small community, where people not only produced food but also socialised, shared knowledge, and participated in collective activities. The project demonstrated that, when given the opportunity and support, a significant number of people are willing to engage actively in maintaining shared spaces. However, it also



highlighted the importance of structure, rules, and ongoing coordination to ensure fairness, transparency, and collective responsibility.

Despite these successes, engagement is often constrained by practical limitations, particularly lack of time and financial resources. Many participants struggle to incorporate activities such as gardening, recycling, or repair into their daily routines, as these require time and effort that are not always available. This reflects a broader structural issue, where sustainable practices are not fully integrated into everyday life but are perceived as additional burdens. The organisation acknowledges this challenge and emphasises the need to make these practices more accessible and embedded within daily routines.

Collaboration with external actors is another critical dimension of engagement. Municipalities are identified as key partners, particularly for projects involving public space. However, these collaborations are often complicated by bureaucratic processes, limited institutional capacity, and political instability. Organisation Earth has developed strategies to navigate these challenges, such as formalising agreements and ensuring that projects are supported by official procedures. At the same time, the organisation recognises that municipalities alone cannot guarantee the sustainability of interventions, and that community involvement is essential to compensate for institutional weaknesses.

The organisation also collaborates with other NGOs, educational institutions, and private sector actors, particularly through European programs and CSR initiatives. These collaborations provide financial support, expand the organisation's reach, and facilitate knowledge exchange. However, the level of collaboration with other organisations is described as lower than desired, indicating potential for further development in this area.

An important observation from the interviews is that engagement is not only about participation in activities but also about changing mindsets and behaviours. Many people initially approach cultivation and environmental practices with hesitation or fear of failure. There is a perception that these activities are complex, time-consuming, or beyond their capabilities. Organisation Earth seeks to overcome this barrier by demonstrating that such practices are accessible and manageable. Through hands-on experience, participants gain confidence and begin to see themselves as capable of contributing to sustainability.

At the same time, the organisation emphasises the importance of redefining needs and consumption patterns. Engagement is therefore not limited to practical skills but extends to broader reflections on lifestyle, such as reducing consumption, avoiding waste, and prioritising quality over quantity. This holistic approach links individual behaviour to larger environmental and social systems.

Finally, engagement within Organisation Earth is deeply connected to the idea of community building. Activities such as communal meals, workshops, and shared gardening create opportunities for social interaction and collective experiences. These moments are not incidental but are intentionally designed to foster relationships and

strengthen social cohesion. As highlighted in the interviews, creating a space where people feel safe, connected, and valued is as important as the environmental outcomes of the projects.

In conclusion, engagement and collaboration in Organisation Earth are multi-layered processes that combine education, participation, spatial intervention, and social interaction. While facing significant challenges related to time, funding, and institutional limitations, the organisation demonstrates that meaningful engagement can lead to both behavioural change and the creation of resilient communities.

Impact – according to the Urban Food Value Framework (UFVF)

Categories	Value	Interpretation
Social values	Community connection & cohesion, inclusivity, solidarity, equality, cooperation	Values as core identity and practice
Spatial values	Local food sourcing, urban & peri-urban agriculture, producer–consumer links, place-based food systems	Values as aspiration and practice
Ecological values	Sustainability, biodiversity, circularity, pollination, ecological food production, climate adaptation	Values as core identity and practice
Economic values	Food security, local economic support, production viability, resilience to global supply chains	Values as aspiration and constraint

16. table: Organisation Earth through the lens of Urban Food Value Framework

The impact of Organisation Earth can be understood through multiple dimensions, including social, ecological, economic, and spatial aspects. Socially, the organisation plays a significant role in building community cohesion and fostering a sense of belonging. Through its programs, it creates opportunities for interaction, learning, and mutual support, particularly among vulnerable groups.

The Urban Food Value Framework analysis reveals that Organisation Earth generates multi-dimensional value across social, ecological, economic, and spatial domains. Unlike cases where food initiatives remain peripheral or fragmented, Organisation Earth demonstrates a high degree of institutional and spatial integration — rooted in more than fifteen years of adaptive practice, grassroots governance, and community participation in Athens.

Social values

Social impact is the most strongly realised dimension of Organisation Earth's work. Founded on the principle of reconnecting people with nature and with each other, the organisation builds community cohesion through communal meals, shared gardening, environmental workshops, and participatory co-creation of public spaces. Social bonds are strengthened not only through food practices but also through Sport and



Development programmes that engage refugees, migrants, and other marginalised groups. Unlike cases where social impact depends on incidental participation, Organisation Earth deliberately designs its activities around inclusivity,

mutual support, and collective responsibility — making social embeddedness both a core identity and a value in practice.

Ecological values

Environmental impact is visible and well-integrated across Organisation Earth's activities. Organic farming, composting, water-saving irrigation, and the use of pollinator-friendly plants embed agroecological logic into everyday operations. Urban greening initiatives — including pocket parks, shading structures, misting installations, and community gardens — address Athens' specific ecological pressures: urban heat, lack of green infrastructure, and biodiversity loss. Environmental education and circular economy workshops extend this impact beyond the physical environment, promoting ecological awareness and behaviour change among diverse audiences. Sustainability is not merely an aspiration but functions as a core organisational identity and operational practice.

Economic values

Economic impact is present but unevenly distributed, reflecting a pattern common to urban food initiatives. Community gardens contribute to local food access and security, and the organisation supports small-scale producers and reduces dependence on global supply chains. However, transformative functions — education, coordination, refugee support, and climate adaptation — rarely generate direct revenue and depend on EU programmes, municipal partnerships, and NGO collaboration. This hybrid funding model is both a constraint and a recognition of the broader public value that such activities generate. Long-term economic viability therefore hinges on sustained institutional support rather than market logic alone.

Spatial values

Spatial impact is one of Organisation Earth's most distinctive contributions. Rather than operating in peripheral or hidden spaces, the organisation actively transforms underutilised urban areas into visible, functional, and socially meaningful places — community vegetable gardens, school gardens, pocket parks, and climate shelters. These interventions are attached to dedicated, recognisable sites, giving food and ecological practices a legible presence in the urban fabric of Athens. Collaboration with municipalities and institutions, despite bureaucratic challenges, has been essential for securing access to public space. Community ownership of these spaces — through shared maintenance and collective management — further deepens their spatial and social integration.

Future of the organisation

Looking ahead, Organisation Earth aims to expand its impact, particularly in the areas of urban greening and sustainable food systems. The organisation recognises the need



to scale up its activities and reach a wider audience, although this ambition is constrained by financial and institutional challenges.

One of the key strategies for the future is to strengthen community involvement and create systems that encourage residents to take responsibility for public spaces. The experience in projects such as the communal gardens in Petroupoli demonstrates that this approach can be effective, especially when it aligns with the needs and motivations of participants.

At the same time, the organisation acknowledges the limitations of the current system, particularly the lack of long-term planning and the instability of public institutions. As a result, its future sustainability will depend on its ability to diversify funding sources, strengthen partnerships, and adapt to changing conditions.

Conclusion

A key aspect that distinguishes Organisation Earth is its ability to maintain continuity and relevance over time despite changing economic, social, and environmental conditions. The organisation emerged during the Greek economic crisis, a period marked by economic instability, austerity measures, and increasing social vulnerability. In this context, grassroots initiatives often played an important role in addressing local needs and strengthening community resilience.

Organisation Earth reflects this dynamic through its long-term engagement with urban greening, environmental education, and participatory climate action. The organisation's longevity can be understood through the concept of resilience and adaptive capacity. Organisation Earth demonstrates this adaptive capacity through the continuous evolution of its activities, expanding from small-scale grassroots initiatives into interdisciplinary projects involving urban agriculture, environmental education, participatory governance, and international collaborations.

Another important factor supporting the organisation's continuity is the consistency of its core mission. Although the scope of projects has diversified over time, climate awareness and urban resilience remain central to all initiatives. This continuity of values has enabled the organisation to maintain a coherent identity while simultaneously adapting its methods and partnerships.

Furthermore, Organisation Earth's resilience is strengthened through multi-level collaborations involving schools, municipalities, researchers, local communities, and European initiatives. These partnerships contribute to the sustainability of the organisation beyond individual projects and support the creation of broader social and institutional networks.

Overall, the case demonstrates how grassroots organisations can achieve temporal resilience through adaptability, interdisciplinary collaboration, community engagement, and a stable environmental mission. Organisation Earth's ability to survive and remain active over time illustrates how locally grounded initiatives can contribute to broader discussions on climate resilience and sustainable urban development.



MARIEVIK, STOCKHOLM

AUTHORS: MOSEN FARHANGI, MICHAEL MARTIN, AND LIVIA KASTNER

Introduction

Urban food systems are increasingly recognized as critical components of sustainable, resilient, and just city-regions. Traditionally treated as external to urban planning and organized through global supply chains, rural production, and largely invisible logistics systems, food is now being re-evaluated as part of the material and institutional infrastructure of urban life. This shift is driven by multiple converging pressures: climate change, geopolitical instability, rising concern over public health, the fragility of global supply chains, and the need to reduce consumption-based environmental footprints. Across Europe, municipalities are therefore beginning to ask not only how food is consumed in cities, but also how food production, governance, preparedness, and distribution can be more closely integrated into urban development.

In this context, urban agriculture and localized food systems are gaining renewed attention. They are increasingly framed not only as mechanisms for food provision, but also as multi-functional practices that may support biodiversity, circular resource flows, social cohesion, place-making, education, and climate adaptation. Urban food initiatives thereby sit at the intersection of environmental, social, spatial, and economic agendas. Yet the increasing visibility of food in strategic policy discourse has not automatically translated into stronger implementation. Many cities experiment with pilot projects, living labs, or temporary interventions, but struggle to embed food systems structurally into planning frameworks, land-use decisions, and development processes.

This report examines the case of Marievik in Stockholm, initially considered an inspirational case for the possible integration of urban food production into a new mixed-use development area. Marievik appeared promising because of its redevelopment trajectory, its sustainability profile, and its proximity to innovative food-system actors. However, the closer the case was investigated, the clearer it became that Marievik is at least as significant for what did not happen as for what was initially imagined. Instead of evolving into a district in which food systems became visible elements of urban infrastructure, the area appears to have remained largely disconnected from active food-system practices, with food-related ambitions becoming diluted and largely confined to broader research or innovation narratives rather than embedded implementation.

The report therefore uses Marievik as a lens through which to examine a broader question: why do promising urban food ambitions so often fail to materialize in spatial development processes, even where innovation, policy interest, and local initiatives are present? To answer this question, the Marievik case is analysed in relation to Stockholm's wider governance landscape and supported by comparative insights from

three additional cases: Nära in Stockholm, Alnarp Agroecology Farm, and Uppsala Matråd. Each of these cases highlights a different dimension of urban food transformation: technologically advanced urban production, socially embedded agroecological practice, and intermediary coordination for governance.

The central argument of the report is that the main barrier to integrating food systems into urban development is not a lack of ideas, ambition, or technical possibility. Rather, the central barrier is a persistent misalignment between actors, governance levels, institutional responsibilities, and planning frameworks. Innovation exists. Policy interest exists. Community engagement exists. But these do not converge. Instead, they remain separated into parallel spheres—policy without implementation pathways, practice without institutional embedding, and development without food.

This report was selected as an inspirational case study because Marievik illuminates an important paradox of contemporary sustainability transitions. It shows that even in a city with strong sustainability ambitions, institutional capacity, and emerging food-system awareness, urban food remains marginal unless it is actively translated into planning categories, governance structures, and spatial decisions. The analysis is therefore relevant not only for Stockholm, but also for other European cities attempting to move from experimental food initiatives toward more integrated and systemic urban food futures.

The structure of the report follows the template for REDESIGN inspirational case studies. After outlining the methodology, the report provides a general description of the Stockholm context and the challenges facing the city-region. It then reconstructs the Marievik case, examines the governance and financial structures surrounding it, analyses patterns of engagement and impact, and discusses the wider implications through the lenses of governance alignment and spatial justice. The final sections outline recommendations and reflect on the future of urban food system integration in urban development contexts.

Case study focus	Marievik as an unrealized urban food system integration case
Location	Stockholm, Sweden
Empirical basis	Six semi-structured interviews with municipal actors and practitioners
Comparative cases	Stockholm Municipality, Nära (Stockholm), Alnarp Agroecology Farm, Uppsala Matråd
Analytical lens	Governance alignment, spatial integration, food resilience, and spatial justice

17. table: The focus of the case study

Methodology

This report is based on a qualitative research design combining desk research, review of project-related material, and six semi-structured interviews conducted within the



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REDESIGN project. The interview material provides the core empirical basis of the report. The selected interviewees represent both municipal and practice-based perspectives and were chosen in order to understand how urban food systems are framed, governed, implemented, and experienced across different roles and scales.

The interview material includes three interviews with representatives of Stockholm Stad working on planning, landscape architecture, urban agriculture, and food-related strategy; one interview with a practitioner from Nära, a controlled-environment urban farming initiative in Stockholm; one interview with Alnarp Agroecology Farm; and one interview with Uppsala Matråd. This set of interviewees made it possible to compare a municipality-led exploratory governance approach with actor-driven, practice-based, and intermediary models of food-system organization.

The interviews were semi-structured and covered governance structures, perceived barriers and opportunities, food-system roles, spatial integration, social and environmental values, financing, and future visions. Interviewees were informed that the material would be anonymized in reporting, and the interviews were recorded and transcribed for analysis. As one transcript begins, anonymization and recording conditions were explicitly clarified before the discussion proceeded. The use of semi-structured interviews was appropriate for this case because the study sought to capture not only facts, but also perceptions, institutional logics, uncertainties, and emerging understandings.

Originally, Marievik had been approached as a potentially inspirational case of integrated urban food system development. During the research process, however, it became clear that the case was better understood as one of unrealized ambition. The analytical task therefore shifted from documenting a successful integration process to understanding why a case that appeared promising gradually became limited to more diffuse participation in research and innovation discussions, without a visible and operationalized plan for embedding food systems in the area itself. Importantly, this does not mean that food-system activity disappeared from the wider area. Rather, a number of practitioners and initiatives continued working on related questions in parallel, but largely outside the formal development logic of Marievik.

The interviews were analysed thematically. Four themes guided the analysis: governance alignment, actor integration, spatial embedding, and transformative capacity. Governance alignment refers to the extent to which policy frameworks, institutions, and actors work in a mutually reinforcing way. Actor integration concerns whether practitioners and food-system actors are included in planning and decision-making. Spatial embedding examines how far food is translated into land-use, built form, infrastructure, and development processes. Transformative capacity concerns whether initiatives remain experimental and localized or whether they are able to influence wider systems.

The comparative cases were used not as direct equivalents to Marievik, but as analytical contrasts. Nära illustrates technologically advanced and locally embedded production with circular ambitions, but weak planning integration. Alnarp demonstrates a deeply embedded production-community-research model, but one

constrained by finances and institutional rules. Uppsala Matråd shows the role an intermediary platform can play in connecting municipalities and food actors. Together, these cases reveal more clearly what is missing in Marievik and, by extension, in Stockholm's current urban food governance landscape.

The study has limitations. It is based on a relatively small number of interviews and therefore does not claim to represent all actors or all dimensions of food-related activity in Stockholm or Marievik. Nor does it provide a full documentary reconstruction of every planning process. Rather, it identifies patterns, governance gaps, and recurring themes that are analytically significant. The conclusion that Marievik lacks a clear and operationalized food-system strategy is based on the absence of such a strategy in the interviews and the limited visibility of integrated food-related planning in the case material reviewed. This interpretation should therefore be seen as grounded but open to refinement through future data collection.

General description

The settlement context for this case is Stockholm, Sweden's capital and largest metropolitan region. Stockholm is a national political centre, a regional growth hub, and a highly influential site for experimentation in sustainability, innovation, and urban development. At the same time, like many large European cities, it faces multiple overlapping challenges: climate mitigation and adaptation, socio-spatial inequality, the need for resilient infrastructure, housing pressure, and increasing awareness of the vulnerability of global supply systems. Within this wider landscape, food has historically occupied an ambiguous position. It is essential to urban life but has not been treated as a clear object of urban planning.

The importance of the city in territorial terms is therefore considerable. Stockholm is not simply a local settlement, but a capital city whose institutional choices, planning approaches, and sustainability experiments influence national debate and often become reference points for other Swedish municipalities. Food-system governance in Stockholm is thus not only relevant to local urban development but also potentially significant as a model, or cautionary example, for broader urban transition strategies.

The main issues the settlement is facing in relation to food are threefold. First, there is a preparedness challenge. Recent crises and geopolitical instability have intensified concerns over food supply vulnerability and the dependence of urban populations on long, complex, and externally controlled supply chains. Second, there is a sustainability challenge. Food consumption links directly to climate emissions, land use, resource efficiency, and biodiversity. Third, there is an equity challenge. Access to healthy and sustainable food is uneven, and food environments are shaped by wider patterns of inequality across the city.

Against this background, urban agriculture and urban food governance have become more visible in municipal discussions. One municipal actor noted that Stockholm has started to engage more actively with urban agriculture through new organizational roles and ongoing strategy work. Another municipal interview highlighted that the city is still trying to understand what kind of urban farming question it is actually dealing



with—whether the focus should be commercial production, social functions, education, preparedness, or some combination of all of these. This uncertainty is significant, because it shapes the terms under which food can enter planning and development.

The broader project goal reflected in the case can therefore be formulated as follows: how can Stockholm integrate urban food systems into urban development in a way that supports resilience, sustainability, and social value? The Marievik case was explored because it seemed to offer a concrete site at which such integration might become visible. Yet the empirical material suggests that the key issue at stake is not simply whether food could be inserted into a single development, but whether the city has the governance capacity, coordination mechanisms, and actor alignment necessary to translate emerging food-policy agendas into built urban form.

“We are asking ourselves the same question. Will it be quantity, commercial food, or more social farming? We don’t really know yet.” – Stockholm municipal interview

This quotation captures the current stage of Stockholm’s urban food governance particularly well. The city is not indifferent to food. On the contrary, there is growing interest. But this interest remains exploratory and unresolved. Food is simultaneously recognized as important and not yet fully institutionalized. This creates a structural condition in which innovative initiatives can emerge, but their integration into mainstream planning remains weak.

Marievik sits directly within this context. It is both a local development site and a symptom of a broader urban condition: a city that is increasingly aware of the strategic importance of food, yet has not fully defined food as a planning object or embedded it institutionally across departments and development processes.

Case description

Marievik is a redevelopment area in southern Stockholm, historically associated with offices and industrial functions and now being transformed into a denser mixed-use district of housing, workplaces, services, and public space. As such, it forms part of Stockholm’s wider densification trajectory, in which former mono-functional urban areas are repurposed into compact and supposedly more sustainable districts. Because these areas are often framed as testbeds for innovation, they provide potential entry points for new approaches to energy, mobility, circularity, and social infrastructure. In principle, food systems could have been part of this agenda.

The reason Marievik was considered an inspirational case is that it seemed to offer an opening for food-system integration in several ways. The district had a redevelopment narrative oriented towards sustainability and innovation; it was spatially close to active food-related experimentation; and food-system integration could have aligned with ambitions around circular systems, neighbourhood activation, and urban resilience. In theory, Marievik could have linked food production with energy use, circular resource flows, educational activity, local supply, and public engagement.

Yet the story that emerged from the interviews was markedly different. Rather than revealing an area in which food became an integrated component of development, the case pointed to an absence. Food-related ambitions appear to have remained weak, diffuse, or confined to external conversations and research activities rather than becoming embedded in the district's development logic. One interviewee directly stated that they had not encountered Marievik as a substantive food-related project at all, despite having a food-related role within Stockholm's municipal system.

The gap between planned ambition and actual implementation is therefore central to the case. Marievik illustrates a trajectory in which a site that might have become a visible example of urban food integration instead became a place where food remained peripheral. This does not mean there were no actors or no ideas. On the contrary, the empirical material shows that relevant actors, technologies, and motivations were present around the case. The problem is that they were not effectively assembled.

"We have no other actors at this point. We are reframing the problem and talking to stakeholders, but we don't really know yet what kind of urban farming we are dealing with." – Stockholm municipal interview

This statement from the municipal side is revealing. It shows that even where urban agriculture is being taken seriously, the city is still operating in a problem-framing stage rather than an implementation stage. In a context like Marievik, where development processes move forward through concrete decisions, timelines, and actor constellations, this lag is consequential. By the time food-system questions are institutionally clarified, many of the spatial and governance opportunities may already have been lost.

The absence of active food-system actors from planning processes emerges as a particularly important issue. Planning discussions tend to be dominated by developers, architects, and municipal actors, while practitioners with operational knowledge of food production, circular systems, or local distribution remain peripheral. As a result, food is seldom translated into development requirements or spatial allocations at an early enough stage to matter. This is a crucial lesson from Marievik: inclusion too late is functionally similar to non-inclusion.

A second issue concerns institutional ownership. Food may be recognized as an important urban issue, but no single actor appears responsible for ensuring its integration into specific development projects. This means that ambitions remain aspirational, while implementation responsibility is diffused. A third issue concerns the weak translation of city-level sustainability and preparedness discussions into development frameworks. Even where policy language on food resilience exists, it does not automatically become a planning requirement in local development.

In this respect, Marievik is not simply a case of failure at the neighbourhood level. It is a case in which a district development reveals wider governance limitations. The district did not become a food-integrated urban area not because food systems were

impossible, but because the governance architecture necessary to connect food ambitions, spatial planning, and operational actors was absent or underdeveloped.

Period	Key development
Initial redevelopment framing	Marievik emerges as a sustainability-oriented mixed-use redevelopment area with potential for circular systems and innovation.
Early food-related expectations	Food-system integration appears possible in principle due to local innovative actors and wider municipal interest in urban agriculture and resilience.
Exploratory governance stage	Municipal food and urban agriculture discussions continue, but no clear food-system implementation pathway is attached to Marievik.
Research engagement phase	Food questions become associated more with research and innovation conversations than with binding development plans.
Parallel practice continues	Actors such as Nära and other initiatives continue developing food-related activities in the wider area, largely outside formal Marievik planning.
Current interpretation	Marievik is best understood as an unrealized or weakly materialized urban food integration case rather than a fully developed inspirational example.

18. table: Chronology of the case study

Nära and the persistence of practice outside planning

The interview with Nära is particularly important because it demonstrates that advanced urban food production does in fact exist locally. Nära operates a technologically advanced production system with circular ambitions and a strong local food identity. It is not a speculative concept but an operational practice. The interviewee described the initiative in explicitly local and system-oriented terms: “We are a local food producer and then we sell our greens in the neighbourhood.” This local orientation is combined with reflection on short supply chains, input-output loops, and connections to restaurants, stores, and circular resource systems.

The interview also makes clear that Nära produces value beyond food output. The site functions as a testbed, a place of public tours, a learning environment, and a meeting place for different kinds of expertise. The practitioner described it as “a hybrid” where people, technology, production, and experimentation meet. In social terms, the initiative creates a local employment and learning environment. In environmental terms, it explores circularity and urban resource use. In economic terms, it participates in local markets. In spatial terms, however, it remains only weakly integrated into urban development processes.

Most crucially, there was no substantive connection between Nära and Marievik as a food-integrated development project. The interviewee noted that contact with actors on that side of the neighbourhood had been limited and had not materialized into anything substantial. This is analytically important because it reveals the paradox at the

heart of the case: the kind of actor that might have helped make Marievik an inspirational food case already existed nearby, yet was not structurally integrated into the development process.

"We are a local food producer and we sell our greens in the neighbourhood... that's one of the most fun sides of what we do." – Nära interview

"It's a local food production facility, but it's also a research facility and a place—a testbed—for all this stuff." – Nära interview

Seen through the template's questions, Nära can be summarized as a local producer, educator, and innovation actor operating primarily in production, education, and governance-adjacent experimentation. Its role is consumer-facing through stores and restaurants, but also system-facing through its circular ambitions and research links. The geographic scale is local to metropolitan, but its symbolic significance is broader because it acts as a demonstration of what is possible in dense urban settings.

Marievik therefore represents not the absence of innovation but the absence of integration. The case demonstrates how urban planning can proceed without being able to make use of the innovative capacities already present in the local ecosystem.

Marievik through the NEB compass

Although Marievik cannot be presented as a mature urban food integration case, it can still be interpreted through the New European Bauhaus (NEB) compass in order to show both its strengths and its limits. In terms of sustainability, the district clearly emerged within a broader sustainability-oriented redevelopment logic, and food could in principle have contributed to circular resource use and local resilience. In terms of inclusion, however, the food dimension remained weak because active practitioners and local communities were not systematically integrated into shaping the district's food-related vision. In terms of beauty and experience, food was not translated into visible and shared public qualities such as productive landscapes, learning spaces, or local food-oriented meeting places.

Seen through the NEB working principles, Marievik therefore appears strongest in terms of ambition and discourse, weaker in terms of participatory process, and weakest in terms of translational implementation. The case is useful precisely because it shows how a district can align with a sustainability narrative while still failing to turn food into a socially visible and institutionally anchored urban function.

Beautiful	Sustainable	Together
Food did not become visible as a public spatial quality or experiential element of the district.	General sustainability discourse present; food-related circularity remained largely aspirational rather than embedded.	Limited evidence of structured inclusion of active food actors or communities in shaping the food dimension.
Participatory	Multi-Level	Transdisciplinary



Planning and redevelopment advanced without a strong co-creation process around food.	Relevant actors existed in the wider ecosystem, but not effectively aligned.	Strong rhetorical potential, weak implementation capacity in relation to food systems.
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19. table: Marievik through the lens of the NEB Compass

Governance structure

The governance structure surrounding the Marievik case is best understood as dispersed, multi-actor, and weakly coordinated. The main actors include municipal departments and strategic functions within Stockholm Stad, developers and planning actors associated with redevelopment, and external practitioners and organizations operating in the wider food-system landscape. Yet these actors do not appear to be assembled through a stable governance arrangement focused on food-system integration.

Within the municipality, responsibilities relevant to food are spread across several domains: planning, public meals and procurement, environment and sustainability, urban agriculture coordination, and preparedness. This institutional spread means that food is recognized in multiple places, but not owned centrally. One municipal actor emphasized that food-related responsibilities are 'everywhere and nowhere', highlighting the challenge of coordinating across departments that each touch the issue but do not govern it as a unified field.

The relation between these actors is therefore characterized less by formal integration than by partial overlap. Coordination appears to rely heavily on individual roles, emerging collaborations, and exploratory project work rather than established governance mechanisms. This is one reason why food ambitions struggle to translate into concrete development requirements. The governance system has many relevant actors, but no clearly institutionalized centre of coordination for urban food integration.

By contrast, the Uppsala Matråd case demonstrates a more explicit intermediary governance model. There, the organization sees itself as a platform meant to improve communication and collaboration between actors already existing within the food system. The contrast is instructive because it reveals not simply that Stockholm has fragmentation, but that it lacks a dedicated actor with the mandate to bridge between municipal structures, civil society, producers, and developers.

In terms of stability, the Marievik-related governance constellation also appears relatively weak compared with embedded organizational models such as Alnarp or Uppsala. There is no visible stable governance body dedicated to the case's food dimension, no organogram that clearly distributes responsibilities for urban food integration, and no evidence of a durable mechanism for including active practitioners in decision-making.

"Our goal is to become a platform for collaboration to improve communication between different actors already existing within the food system." – Uppsala Matråd interview



Legal and financial framework:

The Marievik case is shaped by a legal and financial environment that is not designed primarily around urban food integration. This is important because even when ideas and actors are present, they require institutional and economic conditions that allow them to act. The comparative cases show that urban food systems often operate through hybrid arrangements involving market-based activity, public support, project funding, and access to land or infrastructure controlled by institutions.

The Alnarp case illustrates this clearly. The farm combines vegetable production, education, community building, and research-related functions. Yet the interview emphasized that only part of this is economically self-supporting. Production can generate income, but the activities most directly related to transformation—community building, movement building, and educational work—are not financially viable on their own. As the interviewee put it, “The farming itself is self-financing, but the educational and movement-building part is not financially feasible.” This distinction is highly relevant to Marievik because it suggests that if urban food is valued only through market output, many of its transformative functions will remain under-supported.

A similar challenge appears in relation to urban development. Developers have limited incentives to incorporate food-related functions unless they are required, subsidized, or clearly linked to added value recognized within the project logic. If food remains an optional sustainability add-on rather than a core infrastructure consideration, it will tend to be displaced by more immediately monetizable land uses such as housing or commercial functions.

Regulatory and legal issues also matter. The Uppsala case shows how land designation can affect what kind of certification is possible and how access to land depends on negotiations with municipal authorities. The Alnarp case shows how institutional rules, in that case linked to the university, can restrict activities such as livestock even where they would make agroecological sense. Urban food initiatives therefore often operate in a regulatory landscape not designed with them in mind, having to adapt to rules around land use, construction, hygiene, certification, and institutional ownership.

Marievik is affected by this wider pattern. Even if active food integration had been desired, it would have required legal clarity on space, functions, responsibilities, financing, and maintenance. The absence of a clear governance pathway also implies the absence of a clear financial model. No stable funding structure, business model, or public-support arrangement appears to have been attached to urban food integration in the district. The result is that food remained economically and institutionally peripheral.

“We are producing enough vegetables to generate an income equivalent to two full-time positions... but the transition part is not financially feasible.” – Alnarp interview

Engagement and collaboration

The engagement dimension differs sharply between the comparative cases and the Marievik case. In actor-led initiatives, engagement is often deep, layered, and central to the initiative's identity. In Marievik, by contrast, food-related engagement appears weak, indirect, or absent. This difference is analytically important because it suggests that food-system transformation depends not only on policy and technology but on the capacity to build social relations, publics, and collaborative communities around food.

Alnarp Agroecology Farm provides the clearest example of deep local engagement. The initiative combines production with a community-supported agriculture model, volunteer involvement, open events, and educational work. The interviewee described its community structure as "like an onion," with layers ranging from core staff to volunteers, customers, students, and visitors. This layered engagement model is not incidental. It forms part of the initiative's social infrastructure and its transformative capacity. People are not merely consumers of a product; they become participants in a food system.

Uppsala Matråd similarly emphasizes relational work. Through a farm, café, and association structure, it seeks to create a meeting space and a platform for dialogue among producers, municipality, and residents. One interviewee explained that the initiative had 'created a place... a meeting space where there wasn't much there before.' This kind of engagement is not only social in a narrow sense but institutional: it helps build legitimacy, visibility, and channels for coordination.

The Nära case demonstrates another form of engagement. Here the emphasis is less on broad public participation and more on local market relations, tours, experimentation, and contact with restaurants and neighbourhood stores. Nära thereby produces local visibility and social value, but this engagement remains weakly connected to planning and development structures.

In Marievik itself, food-related engagement appears limited. There is little evidence that active practitioners, local communities, or future residents were systematically involved in shaping a food-related vision for the area. This is a crucial weakness. Without active practitioner involvement, planning lacks grounded operational knowledge. Without citizen or community engagement, food remains an abstract sustainability topic rather than a lived urban issue.

"The community is like an onion—there are layers, from core members to volunteers to customers to visitors." (Alnarp interview)

"We created a meeting space where there wasn't much there before." (Uppsala Matråd interview)

Seen through the template's guiding questions, engagement methods across the comparative cases include CSA subscriptions, feedback loops with members, volunteer days, public events, research visits, festivals, café activity, lectures, workshops, and local retail or restaurant collaboration. By contrast, the Marievik case lacks a comparable set

of food-related engagement mechanisms. The practical implication is that food in Marievik never acquired a community base strong enough to shape development choices.

This reveals an important asymmetry. Food-system initiatives can generate strong local engagement when they are built around everyday practices and accessible spaces. Municipal processes, however, often do not create equivalent opportunities for bottom-up participation in food planning. The result is that practitioner knowledge and citizen interest remain localized and are not translated into governance influence.

Overall UFVF Interpretation

The interviews point to a set of recurring values and impacts that can be interpreted through a broad Urban Food Value Framework. Because the available material did not include a full vignette-based UFVF selection exercise for each interviewee, the table below synthesizes values explicitly or strongly implicitly emphasized in the interviews. The aim is not to claim exhaustive measurement but to identify how key values are understood, where they are already in practice, and where they remain aspirational or constrained.

The UFVF analysis demonstrates that urban food systems generate multi-dimensional value across social, spatial, ecological, and economic domains. However, these values remain unevenly embedded within governance and planning systems. In the Marievik case, food systems remained peripheral despite strong sustainability ambitions, illustrating how governance fragmentation and weak actor integration limit the transformative potential of urban food initiatives.

Categories	Value	Main findings	Interpretation
Social values	Community building, cooperation, trust, justice	Strong local engagement exists in initiatives such as Alnarp, but practitioner involvement in planning remains weak and fragmented in Stockholm and Marievik.	Values as core identity and aspiration
Spatial values	Local food systems, re-localization, producer–consumer links	Food systems are increasingly discussed in relation to preparedness and local resilience, but remain weakly integrated into spatial planning and urban development.	Values as aspiration and constraint
Ecological values	Sustainability, biodiversity, circularity, environmentally friendly production	Urban food initiatives contribute to sustainability, circular systems, and ecological awareness, particularly through agroecological and controlled-environment agriculture practices.	Values as core identity and practice
Economic values	Food security, local economic support, production viability	Small-scale food production can generate local economic	Values as aspiration and constraint



		value, but transformative functions such as education and coordination require institutional support and hybrid funding models.	
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20. table: Impact according to the Urban Food Value Framework

Social impact

Social impact is strongest in the comparative practice-led cases. Alnarp produces social infrastructure through layered forms of participation, while Uppsala Matråd creates a meeting place and collaborative platform. Nära contributes through local jobs, tours, and market relations. Marievik, by contrast, shows very limited food-related social impact because food was not integrated strongly enough to shape community interaction or neighbourhood identity.

Environmental impact

Environmental impact is visible where food production is localized and connected to circular or agroecological logic. Nära's attention to short chains, circular inputs, and urban resource use illustrates the promise of technologically advanced systems. Alnarp emphasizes ecological functionality, biodiversity, and nutrient and water cycling. Marievik again shows a missed opportunity: sustainability may be present in general terms, but the environmental potential of food systems was not translated into the district.

Economic values

Economic impact is similarly uneven. Small-scale urban or peri-urban production can be viable when linked to direct sales, subscriptions, restaurants, or niche value chains. Yet the cases also show that transformative functions rarely pay for themselves. The economic logic of urban development therefore tends to privilege uses with clearer returns. Without support structures, food-related activity remains vulnerable, temporary, or secondary.

Spatial values

Spatial impact may be the most decisive category for the Marievik case. Food systems in Stockholm remain spatially marginal: often temporary, hidden, peripheral, or dependent on underused spaces. Nära is highly innovative but literally and symbolically hidden underground. Uppsala and Alnarp show stronger spatial embedding because food is attached to dedicated sites and recognizable spatial functions. Marievik illustrates the opposite condition: no meaningful allocation of space for food, no visible food-related infrastructure, and thus no spatially legible integration.

Taken together, the UFVF analysis suggests that urban food initiatives generate social, ecological, economic, and spatial value, but these values remain under-recognized when food is not institutionally and spatially integrated. Marievik therefore becomes



important not because it shows strong realized impacts, but because it reveals how such impacts fail to materialize when governance alignment is missing.

Future of the project/initiative/organisation

What, then, is the future of Marievik as an inspirational case? Strictly speaking, the case suggests that Marievik's value lies less in providing a success story than in clarifying what conditions are necessary if urban food integration is to move beyond aspiration. The district may still hold opportunities, especially if future phases of development or neighbourhood programming remain open to more active food-system integration. But such a shift would require a more deliberate governance architecture than is currently visible.

The first recommendation is to establish intermediary structures that can connect municipal strategy, planning actors, and active food-system practitioners. Uppsala Matråd demonstrates that a platform function matters even before large-scale implementation is possible, because it helps actors find one another, define shared problems, and activate resources. Stockholm does not necessarily need to copy Uppsala, but it does need a stronger bridging mechanism.

Second, food must be integrated into planning frameworks as infrastructure rather than left as a symbolic sustainability add-on. This means considering food in land-use decisions, development briefs, and circularity strategies. If food remains invisible in these frameworks, it will remain negotiable and easily excluded.

Third, transformative functions need support. The comparative cases show that production alone rarely finances the educational, social, and coordinative work that makes urban food initiatives systemically valuable. Municipalities and other public actors therefore need to consider funding or supporting not only outputs, but also the social and organizational conditions that make food-system transformation possible.

Fourth, active food actors need to be involved early in development processes. Practitioners such as Nära hold forms of operational and system knowledge that planning processes currently lack. Their participation should not be confined to late-stage consultation or research visibility; it should be part of shaping feasibility, programming, and infrastructure from the outset.

Finally, Stockholm's ongoing policy work on food resilience, food environments, and urban agriculture needs clearer implementation pathways. Existing strategic interest should be translated into development practices, responsibilities, and evaluation mechanisms. Without this, the city risks producing more awareness without more integration

UDG ECOSOLIDARY GARDEN

AUTHORS: MARTA CARRASCO BONET, MONTSERRAT IRANZO-DOMINGO, JUDIT ONSÈS SEGARRA, AND NADIA FAVA

Introduction

The Ecosolidary Garden at the University of Girona (UdG) has been selected as a case study due to its status as a notable example of an initiative that combines agroecology with a distinct social and community focus. The project integrates agroecological production with social inclusion, environmental education and citizen participation objectives, generating spaces for learning and territorial cohesion. Its link with the UdG also makes it a particularly interesting case for analysing the synergies between academia, community action and social innovation in the field of urban and social allotments.

This case study is structured as follows: first, the methodology used for data collection and analysis is presented. Next, a general description of the context and the project is provided. Then, a detailed description of the case is provided, covering its objectives, activities, and key stakeholders. Then, the governance structure, legal and financial framework and processes of participation and collaboration are analysed. Finally, the project's or initiative's impacts are presented, along with reflections on its future and potential for replication in other contexts.

Methodology

Qualitative methods and data

The methodology employed was entirely qualitative, based on case study analysis and carried out through observation classified according to the object. Thus, the first procedure consisted of documentary observation, in which the research sources were secondary and corresponded to a bibliographic review centred on the Ecosolidary Garden. The second procedure was primary and involved interviews conducted with individuals responsible for or acting as key informants within the organisations that are part of the Ecosolidary Garden; therefore, it falls within observation through interview-based surveys.

The documentary observation approach led to a bibliographic review from which eight documents were selected, including outreach articles, a bachelor's thesis, official documentation from two public entities, and informative content available via the project's website and blog. The analysis of these documents identified the most relevant and significant features of the case study. Following a theoretical sampling process for the identification and selection of interviewees, this stage was informed by the results obtained from the documentary observation, enabling the identification of key individuals necessary to understand the evolution of the selected case study—its origins, participants, current stage, and future direction. For all interviews conducted, consent and information forms were used.

The research instrument, a structured interview, consisted of 46 substantive open-ended questions: 2 triple, 7 double, and 37 single questions. A total of four one-hour interviews were conducted this year: four in an online format on 14 January, 12 February, 2 March, and 5 March, and one conducted face-to-face on 11 March. All interviews were recorded, either a voice recorder or through video recording using Zoom or Teams. At the same time, manual notes were taken on a computer in four of the interviews; however, in the fifth interview, conducted in person at the Ecosolidary Garden, it was not possible to take written notes. The subsequent step involved processing the audio/video recordings by converting them into written format, and, based on this written material and the manually taken notes, each of the interviews was transcribed. To complement and illustrate the data, photographs of the setting were taken during the face-to-face interview, including images of both the interviewee and the interviewers. For the remaining interviews, photographs were obtained through contributions from participants.

The analysis of the interview data made it possible to respond accurately to each of the questions in the research instrument, while the analysis of the documentation, beyond the foundations provided by the interviewees, enabled responses to the identification questions related to the case study.

The qualitative methodology employed allowed for comprehensive coverage of all fields involved in observation classified according to the object: on the one hand, the research instrument, and on the other, the theoretical sample concerning the Ecosolidary Garden of the University of Girona. In this way, the research team was able to delimit the scope of the inquiry. The choice of observation classified according to the object, as indicated by Sierra-Bravo (1988, 2001), proved entirely appropriate, as it enables both types of observation: documentary and interview-based survey observation.

Objectives

The main objective of the methodology is to respond to the proposed research questions and to meet the established objectives, through an in-depth understanding of the case study of the Ecosolidary Garden of the University of Girona. Specifically, the aim is to analyse its origin, development, organisational structure, and social and environmental impact, as well as to identify the key actors involved and the dynamics generated within the project.

Interviewees, positionality and power relations

The interviewees were:

- **Pep Juandó**, former University of Girona technician and one of the driving forces behind the Ecosolidary Garden, who has recently retired.
- **Luca Kelly**, student of the double Degree in Biology and Environmental Sciences at UdG, member of the Agroecology Group of UdG and temporary coordinator of the project following Pep Juandó's retirement.
- **Adrià Canyelles**, student of the double Degree in Biology and Environmental Sciences at UdG, and supervisor of the Ecosolidary Garden and the volunteer students.



- **Esther Roura**, coordinator of activities at the Occupational Therapy Service at Fundació Ramon Noguera (FRN from now on) and coordinator of the Foundation's volunteer group linked to the Ecosolidary Garden. FRN supports people with disabilities and their families.
- **Carles Fàbregas**, the Reception Centre and Social Services. La Sopa is a consortium made up of various public and private actors, and its staff are employed by Girona City Council.

The individuals selected have or have had a direct connection with the Ecosolidary Garden and are familiar with both the origins of the project and its current development. Their knowledge makes it possible to reconstruct the project's process of evolution from different perspectives.

The interviews reveal a range of power relations among those involved in the project. On the one hand, Pep Juandó's position as a university technician with a permanent contract differed from that of Luca Kelly, who took on the role of project liaison following Pep's departure and carried out this responsibility on a voluntary basis. At present, the post within the Unit for Social Commitment and Professional Guidance — hereafter UCSOP — previously held by Pep Juandó, has been publicly advertised through an open recruitment process. The relationship that each of them has had, or continues to have, with the university's organisational structure, as well as the degree of influence they have exercised within it, differs considerably, with implications for the continuity and development of the project. The future evolution of the project will become clearer once the new UCSOP coordinator has fully taken up the post.

On the other hand, Adrià Canyelles is the main point of reference and the person responsible for supporting the student volunteers who take part in the garden. Although he is also a student, Adrià is employed by the university on a part-time basis to carry out this role. His continued presence in the garden, his greater experience in comparison with the volunteers involved, and his supervisory role enable him to make decisions regarding the type of cultivation and other aspects related to the functioning of the garden.

The other individuals involved who are not affiliated with the University of Girona are Esther Roura and Carles Fàbregas. In relation to the Ecosolidary Garden, the role of these two individuals is currently to coordinate with Adrià and, previously, with Luca, ensuring the continuity and proper functioning of the collaboration between the different actors linked to the project. However, they are not involved in decision-making concerning the operation of the garden.

All three entities participating in the Ecosolidary Garden have a public financial basis. The relationship between the garden supervisor, whose role is temporary and linked to his status as a student employed by the University of Girona, and the coordinators of the FRN and La Sopa, who are contracted staff members, demonstrates that the continuity of the project does not depend on any one individual supervisor. Therefore, the supervisor's power to introduce change or make decisions in matters affecting the relationship with La Sopa or the Foundation is always subject to the approval of the head of UCSOP.

General description



Geographical context

Girona, a medium-sized city in north-eastern Catalonia (Spain), provides a relevant context for the analysis of urban and peri-urban food systems. With a population of around 100,000 inhabitants, it functions as a regional centre with strong links between urban life and the surrounding agricultural areas. The city is situated within a territory characterised by a mosaic of peri-urban farmland, small-scale horticulture, and a well-established gastronomic culture that combines tradition and innovation. In recent years, Girona has also promoted initiatives aimed at sustainability in the food sector, such as support for local production, short supply chains, and community gardens. Within this network of spaces, the Ecosolidary Garden contributes as an initiative for the transformation of the local food system.



28. Figure: The site is located in Girona city, in northeastern Catalonia (Spain). Source: Adapted from Open Street Maps.

Description of the settlement where the project is located

The Ecosolidary Garden is located in the northern part of the city of Girona, in the Palau-Montilivi neighbourhood. This area lies on Montilivi hill, which stands at 169 metres above sea level. This urban district is home to:

- one of the campuses of the University of Girona, including the Faculty of Science, the Faculty of Law, the Faculty of Economics and Business, and the Polytechnic School;
- the University of Girona Research and Innovation Park, which hosts companies and research groups;
- Montilivi Secondary School, an educational institution within the municipality;
- and the facilities of Girona Football Club, whose events attract large numbers of local residents and visitors to the area.

In residential terms, this is an area inhabited primarily by upper- and middle-class residents of Girona who have moved from the city centre to the newly developed peripheral zones of the municipality. Architecturally, in addition to the large university buildings, the residential fabric combines terraced houses, detached single-family homes, and low-rise apartment blocks of ground floor plus three or four storeys. The area has generous open spaces and green areas, which are used both by local residents and by members of the university community.



- **Population density:** 1.48 inhabitants/km² (2025)
- **Area:** 67.38 ha
- **GDP per capita:** €50,284.00 (2023)

The Ecosocial Garden site is located in the Montilivi neighbourhood, within a peri-urban setting where natural habitats, particularly woodland, still remain from before the area's urban expansion and require basic maintenance in order to comply with regulations regarding cleanliness and risk prevention on undeveloped plots (Figs. 2 & 3).



29. Figure: The site is located in a periurban area of Girona city, next to the surrounding forest green infrastructure. Top: Site location in the Montilivi Campus. Down: Site location in the city of Girona. Source: Adapted from ICGC orto

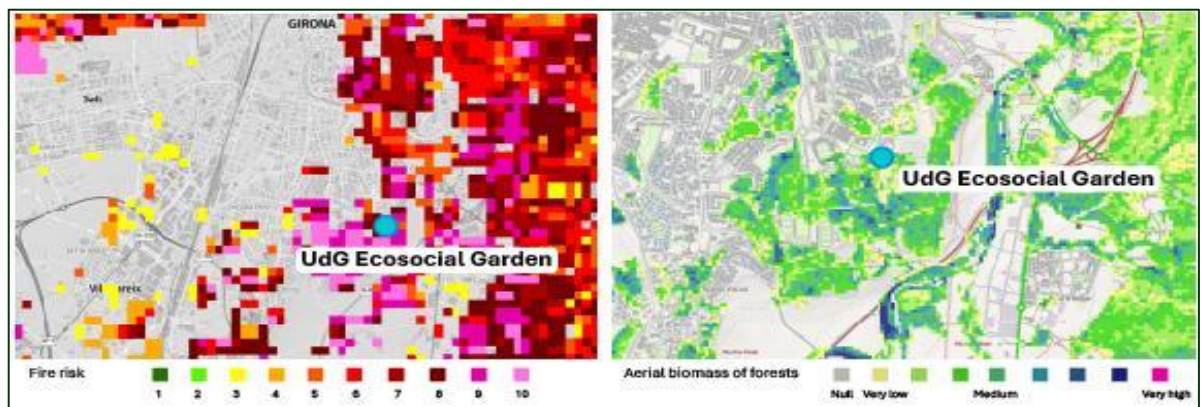
Main issues the settlement is facing

One of the main challenges facing the neighbourhood lies in its configuration of land uses. There is little local food retail, one large supermarket, and few nearby public amenities. The combination of isolated or semi-detached residential typologies — associated with a middle-upper- and upper-income social profile — together with educational and sports facilities serving the wider city, and this lack of local services, results in a very low level of interaction between residents and their immediate surroundings. This poses a challenge for the university in terms of strengthening its relationship with its closest environment — namely, the neighbourhood in which it is located — and of generating synergies with the social fabric beyond the university community. Also, the proximity to forested areas, within a Mediterranean climate such

as that of Girona, entails a significant fire risk, making the campus particularly vulnerable given the large number of people it attracts.

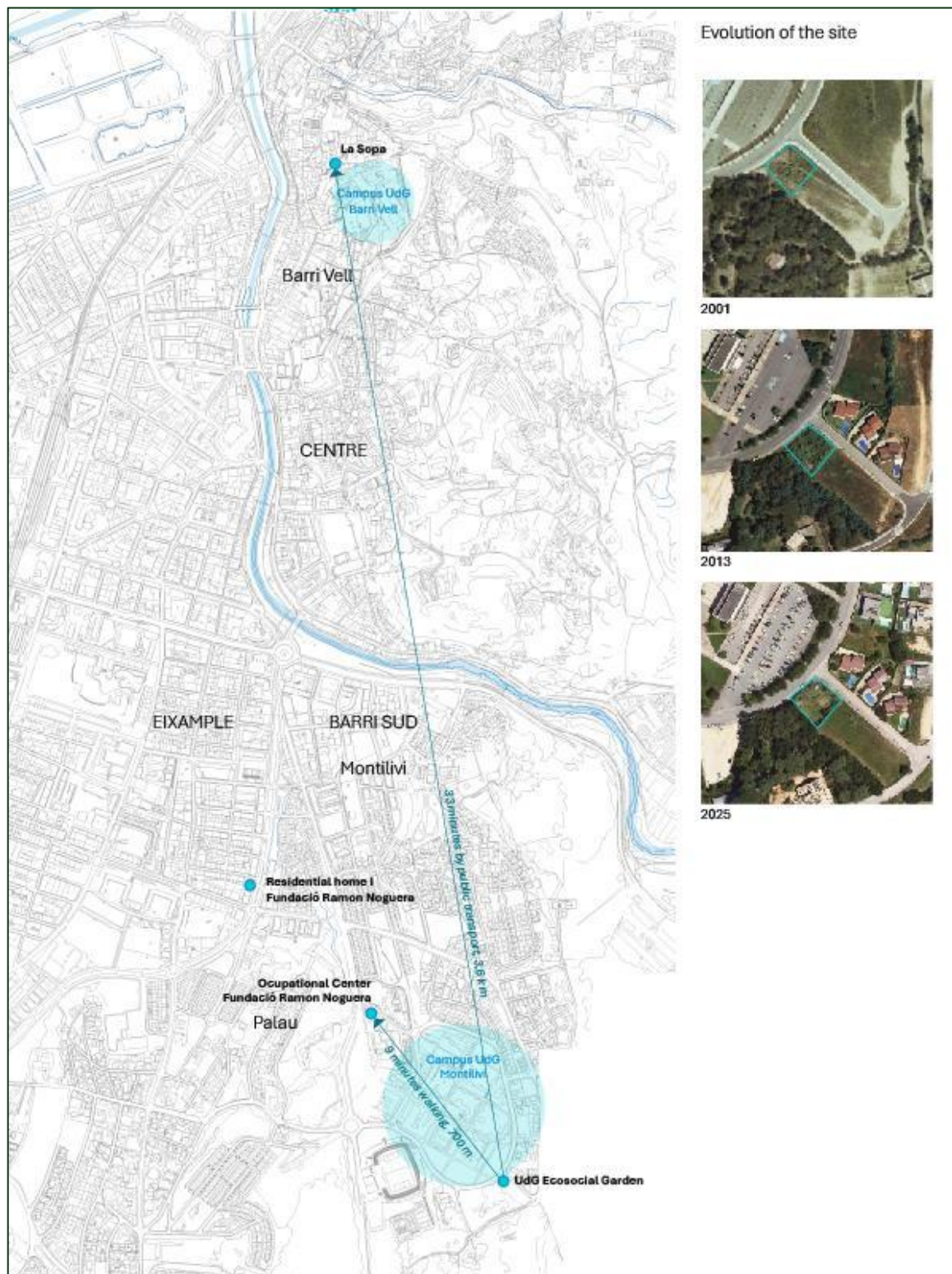


30. Figure: Location of the public facilities in the Montilivi area. Source: Adapted from UMAT Open Data Cartography (Ajuntament de Girona).



31. Figure: Fire risk level and aerial biomass level in the project area. Source: Adapted from UMAT Open Data Cartography (Ajuntament de Girona).

This peripheral location also entails difficulties in terms of accessibility to the site. The campus is connected to the rest of the city by several urban bus lines. The Girocleta public bicycle-sharing system, as an alternative cycling-based mode of transport, does not extend all the way to the campus, as the nearest station is still around a ten-minute walk away. The presence of cycle lanes facilitates access by bicycle. However, private vehicles remain the main mode of transport. The layout of the campus provides extensive surfaced parking areas. Overall, the distance from Girona's urban centre, where there is greater activity, a larger concentration of people, and more services, makes it difficult to establish synergies and collaborative relationships in projects of this kind, which require a significant degree of in-person involvement.



32. Figure: Relation between the location of the participant stakeholders. Fundació Ramon Noguera is located near the site, its users only have to walk 9 minutes to the project site. On the other side, la Sopa is located in the city center, further and with less accessibility. Its users have to walk 46 minutes or spend 33 minutes by bus. This situation makes it more difficult for the personal engagement of La Sopa users that have other priority needs. Source: AiT (UdG).

Problem statement and project goals



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The main objective of the project is to build a virtuous system of interrelation between social and environmental needs and access to healthy food. The food production generated by the garden makes it possible to supply fresh produce to La Sopa's social dining service. Other complementary objectives include, on the one hand, the development of a social reintegration programme that benefits the centre's users themselves through organic cultivation. On the other hand, the participation of users from the FRN involves carrying out garden-related activities that become therapeutic in nature.

Case description

Origins: when and why the project was established

The project was promoted by the University of Girona's Unit for Social Commitment and Professional Guidance and, more specifically, by the Green Office for Sustainability, through the temporary repurposing of a plot of land acquired by the University itself with a view to expanding the campus in the future. Combining a socio-ecological vision — cooperation and sustainability — these university units initiated the garden project in collaboration with, and with support from, teaching staff in Environmental Sciences and technical staff from EQATA (the Department of Chemical, Agricultural and Agri-Food Technology Engineering).

The 2008 crisis halted the University's expansion plans, and the plot on which the Ecosolidary Garden would later be established was left abandoned, with no short- or medium-term prospect of use. At that time, moreover, from the perspective of public space, attention in Spain was being drawn to the potential of this kind of sites as spaces to be activated from a socio-ecological and/or sociocultural perspective. Added to this, and appealing to the University's ethical responsibility in relation to the fire risk posed by the plots, an alternative was proposed. Thus, in 2013, UCSOP, led by Pep Juandó and other members, decided to launch a project to create a vegetable garden at the University of Girona that would not only be linked to the University itself, but also to other organisations in Girona, such as the FRN and La Sopa. Initially, the activity was conceived as temporary, but over time the project has become consolidated.

The University of Girona's Ecosolidary Garden was established in 2013 in a global context of crisis, which had a particularly severe impact on groups at risk of marginalisation. At the local level, different factors converged and, through the project, found an opportunity to interact: the availability of an empty plot of land; the increase in the number of people at risk of social exclusion in the immediate area; and the city of Girona itself, where there was growing demand from people experiencing severe economic hardship in meeting their basic needs, which in some cases led to a loss of autonomy that hindered their social integration. Another factor was the potential of this university space to bring socio-environmental realities closer to students and the public, in line with what was proposed in the strategic study *«UdG Teaching Campus: Special Educational Opportunities for the University of Girona»²⁹*, released in 2012 by

²⁹ Original title: «UdG Campus didàctic, Oportunitats educatives especials per a la Universitat de Girona».

Pablo Campos (UdG, n.d. a, p. 1). It was this complex reality that gave rise to the Ecosolidary Garden project as a setting in which the combined efforts of different areas of work within the University of Girona could strengthen the University's commitment as a social reference point, as reflected in the UdG Strategic Plan:

"The university has a responsibility to promote scientific and civic values that contribute to social coexistence and to improving people's quality of life. These values must be visible in university policy guidelines and must guide professionally and socially responsible work." – UdG, n.d. a, p. 1

Through the project, the university community has a further opportunity to demonstrate its solidarity as a socially and environmentally responsible reference point. It can channel learning, teaching, and research towards social inclusion, economic and cultural dynamisation, sustainability, and cooperation, while also exercising its key role of transferring knowledge and capacity to the society to which it is accountable.

The project was created with the intention that it would be maintained by university volunteers, mainly students, and that the food produced would be destined for La Sopa's social dining service. Over time, relations with this organisation, together with the incorporation of others such as the FRN, have allowed the initial objectives to evolve and adapt to changing circumstances. The Ecosolidary Garden has therefore developed from being a productive space with a social vocation into also being an educational and pedagogical space for social inclusion. Users of the FRN attend the garden and are supported by University of Girona students who participate as volunteers in the Solidarity Activities programme of the Cooperation Office. During periods when users of La Sopa also attend the garden, this interaction³⁰ likewise takes place.

This project is particularly noteworthy because community garden experiences can be found at many universities, but without an underlying social model, as their users are typically the university's own teaching staff or students. The University of Girona's Ecosolidary Garden is the only known experience in Catalonia that works directly with two vulnerable groups and fosters the exchange of knowledge and dialogue between students and these groups.

Case Description: description of the entities linked to the project

The entities involved in the Ecosolidary Garden are outlined below:

- The Sustainability Area of the University of Girona's Unit for Social Commitment is a service for the university community that promotes values such as health, sustainability, equality, and inclusion, while also encouraging volunteering and support for people with disabilities. The Sustainability Area sets objectives and determines actions for

³⁰ At the time this research was conducted, the relationship with La Sopa was based on the provision of food. At other times, some of its users had participated in work at the garden. It is not ruled out that, in the future, La Sopa users may once again become involved in working in the garden.

environmental improvement and the promotion of sustainability across all areas of activity and influence of the University of Girona. Its actions are primarily oriented towards the sustainable management of environmental resources across the University's different spaces, as well as towards promoting a culture of sustainability and environmentally respectful attitudes in the fields of teaching and research. It is the unit responsible for drafting and managing the Strategic Environmental Plan³¹ approved by the Governing Council on 30 September 2021, which is the tool adopted by the University of Girona to guide its future actions in environmental and climate matters. Through the Unit for Social Commitment, volunteering is promoted in exchange for academic credit recognition, with the aim of contributing to the development of students' transversal competences.

- Fundació Ramon Noguera (FRN) was established in 1965 under the name Associació Àngelus. It was created by a group of families with children with intellectual disabilities in order to address their needs and, above all, of their families in Girona. It has since become a foundation and has expanded its activities across the whole province of Girona. It provides support to people with intellectual disabilities at different stages of life: early intervention, CDIAP³², adulthood through employment centres, protected workspaces in the form of special employment centres, day centres, specialised centres, shared housing, and occupational therapy services involving cleaning and gardening work. It has 453 employees, 49% of whom are people with intellectual disabilities. The organisation is private in nature, but it receives both private and public funding, the latter from both state and national sources. Statistically, its own resources account for 45.92%, private funds for 0.53%, and 53.55% comes from private sources and occupational service agreements.
- La Sopa³³ Centre for Reception and Social Services, was founded in 1910 as a reception centre run by a religious organisation that sought to meet the basic needs of the most vulnerable and impoverished people, within a charitable assistance-based model. It now aims to function as a facility that supports homeless people in their process of social integration. Initially, it operated at provincial level; at present, however, its role is mainly local, since the Local Homelessness Plans promoted by the Catalan government provide local councils with resources to address these issues at this more local scale.

Functioning of the Ecosolidary Garden

- Agroecological production and regenerative agriculture

The garden plot covers an area of approximately 890 m², within which activities are carried out relating to food production, compost generation, rainwater harvesting, a rest area, and production in a small greenhouse. The care and maintenance of the garden are undertaken by University of Girona volunteers, who work 25 hours in exchange for academic credit recognition. *"Students who volunteer teach other volunteers"* (statement from the interview with Luca, 14 January 2026). The objective of this activity is to produce food that is distributed free of charge to La Sopa. Although the garden is a learning space and allows a certain degree of flexibility for experimentation with different cultivation approaches, (including regenerative farming systems, permaculture, traditional seeds, and the on-site production of seedlings) it

³¹ The project of the Ecosolidary Garden is part of the Environmental Plan of UdG.

³² Child Development and Early Intervention Centres.

³³ It is called La Sopa because, from the very beginning, soup has been served there every evening meal.



must still be able to guarantee a weekly supply of food. Each year, around 250 boxes of fresh organic vegetables are delivered to La Sopa, depending on production yields.



33. Figure: Left: Vegetable baskets ready to be supplied to La Sopa. Right: Volunteers preparing cultivation beds. Source: (Canyelles, 2025) Blog de l'Hort Ecosolidari (<https://hortecosolidari.wordpress.com/>. Accessed in April 2026).

In addition to these hours, which are agreed between the volunteers and the garden supervisor, a group of 7 to 12 young people from the FRN attend on Thursday mornings to carry out garden maintenance and care activities. These tasks are adapted to their circumstances and may include selecting seeds, transplanting planned crops, removing weeds, or taking part in workshops suited to their needs (Figs. 9 and 10).



34. Figure: The users of the FRN during their activity in the garden. Source: Fundació Ramon Noguera.

- Distribution of organic produce

When harvests are more abundant, particularly during September, October, and November, La Sopa collects produce from the Ecosolidary Garden on a weekly basis in order to supply its social dining service with fresh organic food. During the colder winter months, collection takes place every two weeks, and whatever produce is available is taken. As Adrià explained,

“the idea is to adapt to whatever the garden produces: for example, the lettuces have grown a great deal, so they will be harvested on Friday 13 March” – statement from the interview with Adrià, 11 March 2026.

Even if the usual two-week interval has not passed, the supervisor contacts La Sopa so that the produce can be collected.

According to the interview with La Sopa’s director, Carles Fàbregas, the organisation is very pleased with everything it receives from the Ecosolidary Garden because it is fresh food. In general, the aim is to maintain a high level of production so that supply can be provided regularly and in sufficient quantity.



Initially, the relationship with La Sopa was closer, as some of its users took part in activities at the garden and worked there. This served as a way of re-entering the social fabric through contact with other volunteers; they were not left isolated from society and, in addition, they learned practical skills. At present, this type of involvement has disappeared for logistical and accessibility-related reasons, and it is not known whether there are plans to resume it in the near future. As Adrià also noted,

“The Ecosolidary Garden includes varieties that may not be conventional, and the way they are produced gives them a much higher nutritional value. Providing organic and sustainable food in a social dining service is quite unthinkable unless it is through a project like this. In fact, it is something that greatly enriches the project” – statement from the interview with Adrià, 11 March 2026

- Cultural, educational and dissemination activities

Links have been established with the University of Girona’s Agroecology Group³⁴, which carries out some outreach activities on agroecology in the garden. One particularly noteworthy aspect is that the space is open to primary and secondary schools, with which various collaborative activities have been organised. Cultural and outreach activities have also been held in the garden during Nature Week, summer schools, and similar initiatives.

At a cultural level, and as an example of a recent initiative, for the 2026 Correllengua events³⁵ the Agroecology Group is preparing seedlings and organising a talk on local varieties. The collective Eixarcolant³⁶ will take part in order to present these local varieties and the different types of seeds. On previous occasions, Eixarcolant also provided seeds of different varieties for planting in the garden. These are varieties that may not be highly productive or yield large harvests, but they provide La Sopa with a wider range of high-quality food.

- Research and experimentation activities

The Ecosolidary Garden is a space for experimentation aimed at generating biodiversity through the promotion of different crops and a variety of seeds. Different agricultural techniques are being tested, including wool mulch, leaf mulch, straw mulch, and plant-based mulching³⁷. If it were a conventional garden, it would achieve higher levels of

³⁴ It is a group linked to the university, and its purpose is to bring agroecology closer to the university environment. Nevertheless, it builds networks with many other organisations and individuals who may not be connected to the university. At present, however, all those actively involved in the group are affiliated with the university, whether as teaching staff, doctoral researchers, master’s students, or undergraduate students, as is the case of the current supervisor.

³⁵ Cultural events in defence of Catalan language and in support of Catalan culture developed in universities across Catalonia.

³⁶ Eixarcolant is an association primarily concerned with forgotten plants, including both medicinal herbs and so-called weeds, their properties, and the botanical value that can be derived from them. One of its lines of work has been the recovery of seeds from plant varieties that used to be cultivated but have since fallen out of use.

³⁷ Mulching is a system that is currently being trialled and is not yet widely established in conventional horticulture.

production. Even so, value is placed on the fact that experimentation with these methods, even at a slower rate of production, brings numerous social and environmental benefits and contributes to a more sustainable and resilient model. Within the Ecosolidary Garden, participants learn collectively and seek to work in a new way because they believe in it.

Links with university teaching staff and research groups are also present. Some lecturers use the garden as an educational and pedagogical space beyond the classroom. Their research, for example on soil quality and microbiology, helps to generate data about the project site (Figure below).



35. Figure: Microbiology and Environmental Toxicology class of UdG taking place in the Ecosolidary Garden site.
Source: Blog de l'Hort Ecosolidari (<https://hortecosolidari.wordpress.com/>. Accessed in April 2026).

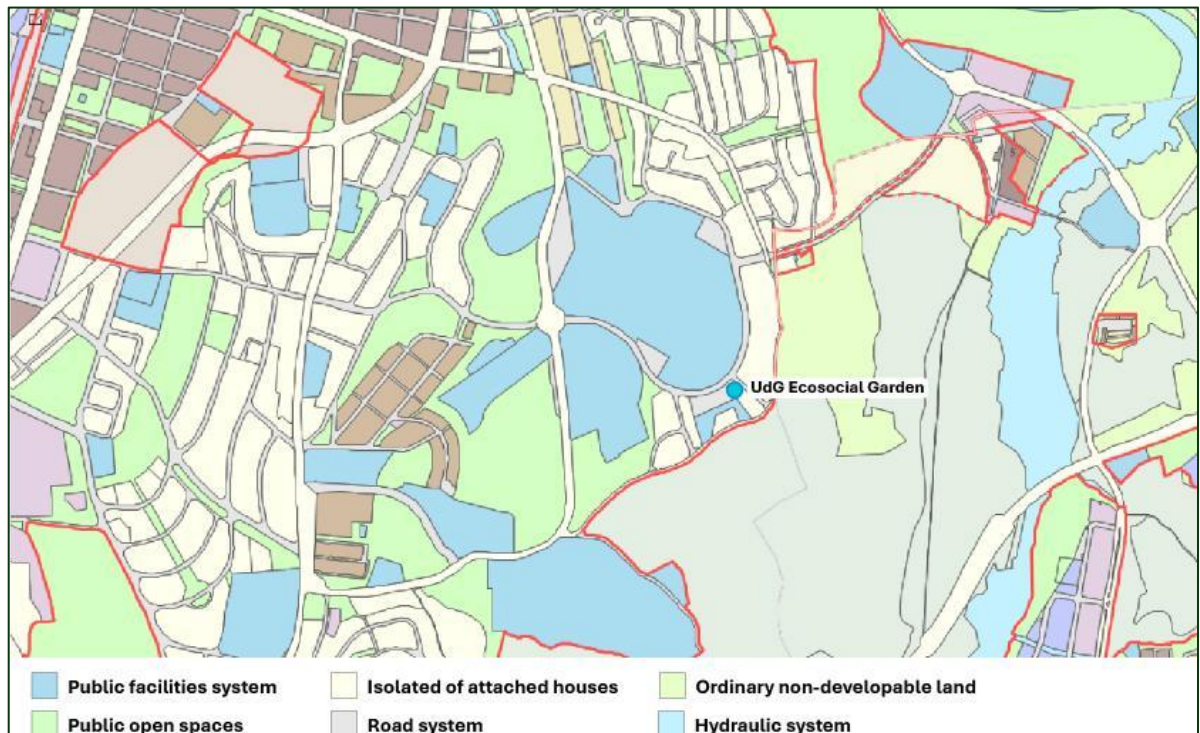
Main challenges that face the project

- Site on developable land

Because the garden is located on land designated for future development, the project is in a vulnerable position, as it will most likely come to an end if construction on the site eventually goes ahead. The uncertainty surrounding the project's continuity creates a degree of insecurity among those involved. The current supervisor does not know to what extent the garden will continue to operate or whether it will do so indefinitely. Reflecting on the existence of the Ecosolidary Garden, he commented:

"... there will come a day when they say that's enough of the little garden, and now we're going to build a faculty of architecture here (for example), because we need architects..." – statement from the interview with Adrià, 11 March 2026).

According to the municipal planning framework, the current situation is that the garden plot is classified as residential developable land, while the adjacent woodland is designated for parking and facilities (Figure below).



36. Figure: Land-use qualification of the site. Source: Mapa Urbanístic de Catalunya, 2026.

- A project sustained through volunteering

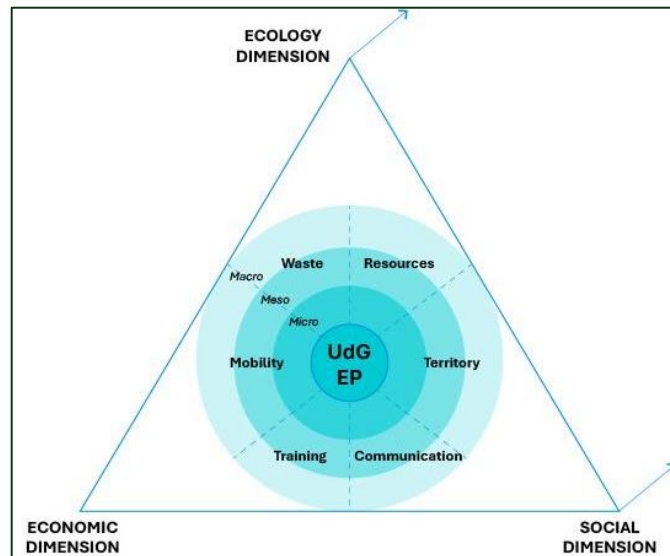
The maintenance and day-to-day functioning of the Ecosolidary Garden depend on student volunteering and on the commitment of those willing to become involved. The supervisor, who is also a university student, is the only person employed by the university on a part-time basis, as this role involves coordinating the volunteers. This situation contributes to the project's vulnerability. Although the volunteers describe their relationship with the garden as highly enriching, it is temporary, since once they complete their hours, they disengage from the project. This short-term nature of involvement limits the strengthening of relationships both among the volunteers themselves and between them and the collaborating organisations.

- Innovation in cultivation methods

From an environmental perspective, the Ecosolidary Garden is framed within agroecology and regenerative production. This cultivation approach has considerable potential in the current global context. As Adrià stated, "Having this small project at the University of Girona is an example of the need for an agri-food transition, because the current system is not at all sustainable and is not resilient in the face of what may happen in the coming years. At the global level, there are many actors and factors that will need to work together in order to withstand the coming storm" (statement from the interview with Adrià, 11 March 2026). In order to move towards this transition, the role of the university is significant, as one of the actors on which the primary sector can rely. A project of this kind also makes it possible to carry out applied research, teaching, outreach, and related activities.

- Contribution to the socio-environmental challenges of UdG Environmental Plan

The conceptual framework of the UdG Environmental Mainstreaming Plan, of which the garden project forms part, is based on an interdisciplinary perspective for addressing the socio-environmental challenges it sets out. This involves progressively creating synergies between the Plan's own strategic lines of action so that each project can respond across the three dimensions of sustainability (Figure below).



37. Figure: Application of the sustainable approach to the UdG Environmental Plan (UdG EP). Source: Adapted from (Udg, sd) *Històric de l'Hort Ecosolidari de la Udg*.

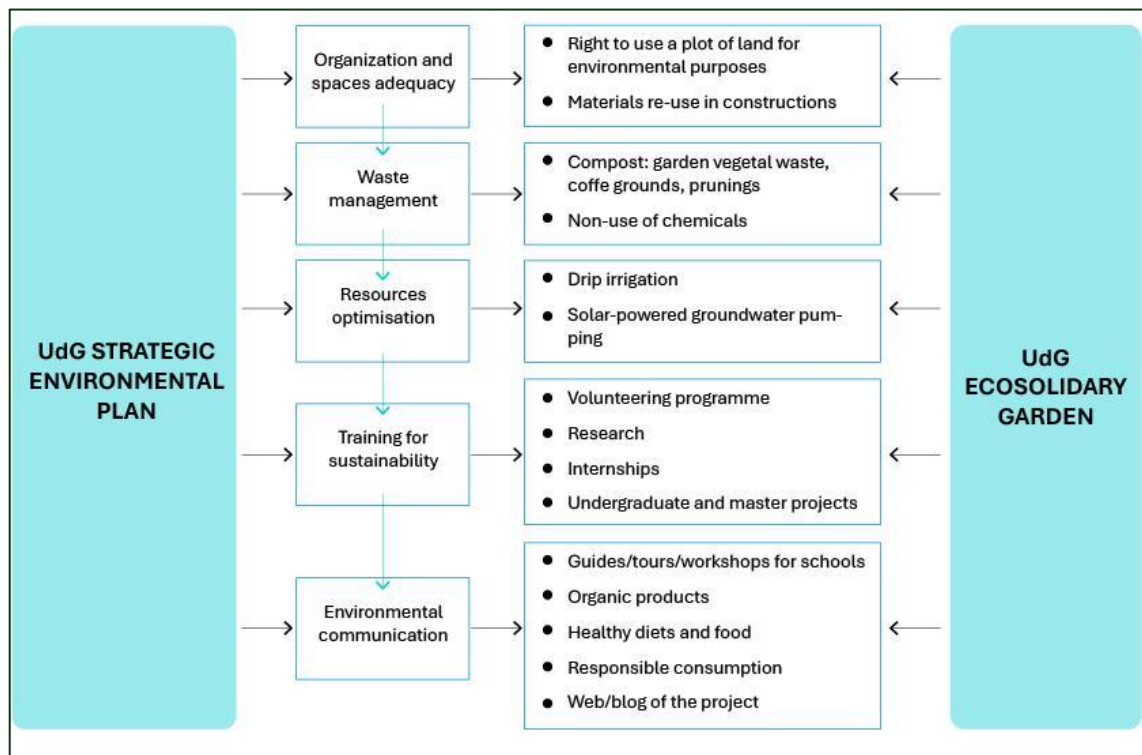
In this sense, the Ecosolidary Garden project addresses the cross-cutting nature of the Environmental Mainstreaming Plan, since, by bringing together different actors around a common objective, it allows for action to be taken through different strategic lines and some of the projects derived from them (Figure below).

- e. Social inclusion and food security

The Ecosolidary Garden contributes to the challenges of social inclusion and food security through the production of high-quality food for social dining services, based on the joint work of people at risk of marginalisation and university volunteers.

Among the functions of the Sustainability Area, as part of the University's Unit for Social Commitment, is the aim of

"giving priority to the integration of work groups arising from training programmes for socially disadvantaged groups." – UdG, n.d. a, p. 1



38. Figure: Synergies between the strategic lines of the Strategic Environmental Plan of UdG and the Ecosolidary garden. Source: Adapted from (Udg, sd) *Històric de l'Hort Ecosolidari de la Udg*.

Within the lines of action of the Cooperation Office, the project is aligned with the objective of:

"Carrying out and supporting development cooperation activities in those fields and areas where it can most effectively exercise its capacity to transform and improve people's living conditions. For this reason, it prioritises its field of action in countries with lower Human Development Index (HDI) levels, in situations of severe social imbalance, and among the most disadvantaged sectors of the population in our immediate environment." – UdG, n.d. a, p. 2

A fundamental aspect is not to lose sight of the origins of a form of agriculture that is non-aggressive and free from toxic products. Within these parameters, it is possible to practise regenerative agriculture, organic agriculture, among other approaches.

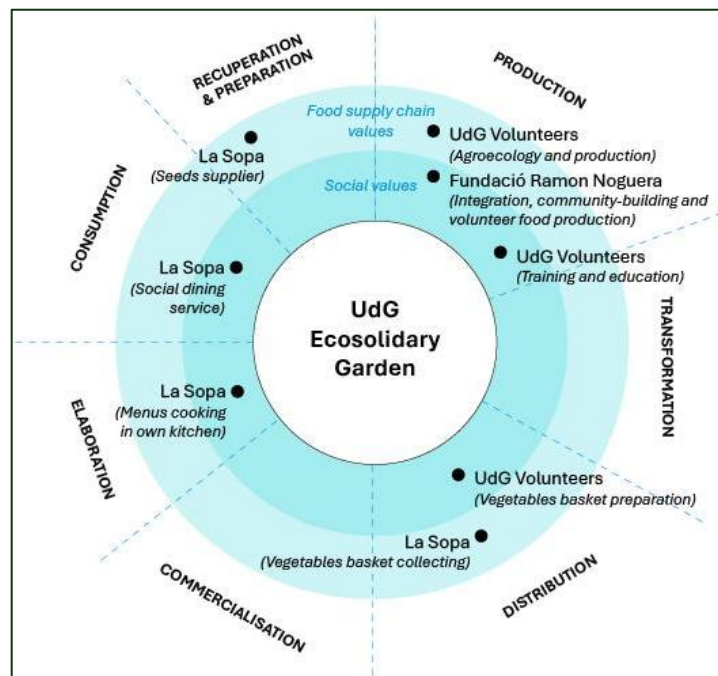
Summary of the project's role and position within the food system

The different actors involved in the Ecosolidary Garden project play a range of roles within the food system.

- Within the **Ecosolidary Garden**, the supervisor selects the varieties to be planted, while remaining fully open to any proposals put forward by volunteers or members of the Agroecology Group. It should also be noted that there is no formal monitoring or follow-up of the new varieties that are planted. Its role may therefore be described as that of a small-scale producer. All the seeds purchased are obtained, under agreement, from the Agrobotiga Can Morera, according to the supervisor's own criteria and the availability of the shop, although it has never been specified whether they are organic seeds. The

remaining seedlings are provided by La Sopa. The Ecosolidary Garden supervisor also seeks to pass on his knowledge to all volunteers, explaining the reasons behind these practices and the rationale for cultivation itself. This is therefore also an educational role, as the general principles of the Ecosolidary Garden are conveyed to everyone, whether they have joined in order to experiment or simply to try it out.

- **Fundació Ramon Noguera (FRN)** may be considered a voluntary producer, as it contributes to the tasks carried out in the Ecosolidary Garden, including weeding, harvesting food, planting, and removing waste. For those who take part, there is both a community-engagement dimension and an educational one, although the Foundation itself considers the educational aspect to be the primary domain.
- In the case of **La Sopa**, it may be regarded as a distributor (to its network of users), a food preparer, and a consumer, because its staff must collect the food from the Ecosolidary Garden and use it to prepare meals in the centre's own kitchen for its users. According to the data provided by the interviewee, the centre serves up to 110 meals per day. During Ramadan, use of the dining service decreases, as many of its users are Muslim. On an annual basis, it provides between 20,000 and 29,000 lunches, 4,700 afternoon snacks, 27,880 evening meals, and 12,775 sandwiches. In the case of some users living in supported accommodation, part of the food is delivered to them. At the beginning, La Sopa also participated as a producer within the Ecosolidary Garden, but this is no longer the case due to issues of distance, accessibility, and users' ability to travel. This is a relationship that could be re-established in the future because, as the interviewee acknowledged, *"it was quite a valuable experience for our users"* (statement from the interview with Carles, 5 March 2026). It also contributes to production by providing seedlings to the Ecosolidary Garden free of charge.



39. Figure: Role and position of each involved stakeholder within the food supply chain. Specially, La Sopa and UdG Volunteers develop different roles, both related to food supply chain and social values, while the Fundació Ramon Noguera's role is more based on social values. Source: AiT (UdG), 2026.

NEB Compass



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Beautiful	Sustainable	Together
<i>Ambition III: Regenerate</i>	<i>Ambitions II: Connect</i>	<i>Ambition III: To transform</i>
The UdG Ecosolidary Garden activates an empty plot of land within the university campus to transform it into an agroecological space (I) from which to promote training and practice in agroecology, permaculture, and regenerative agriculture (III). Through the transformation of the space, soil quality and biodiversity have been improved, creating a living environment within the campus. Chemical-free crops contribute to the health of both the environment and the people who produce and consume the food grown there. On-site compost generation promotes circularity and the revalorization of organic waste produced by the garden itself (II). The project also supports the recovery of traditional varieties by planting seeds recovered within the project or provided by other related organizations.	The recovery of an empty plot to transform it into a vegetable garden (I) has enabled an agricultural and social space within the university campus, in an area where residential fabric and academic buildings coexist (II). The space and its management is being possible thanks to the voluntary work of university students, which helps strengthen a sense of belonging to both the project and the university community, turning it into a place for gathering and social cohesion. Collaboration with other organizations enriches participants with diverse realities through connecting people and place.	The UdG Ecosolidary Garden has a dual social inclusion (I) and ecological purpose. Built through relationships of solidarity and cooperation, the food produced in the garden supports and nourishes people experiencing homelessness, contributing to the creation of support and care networks (II). At the same time, it includes the participation of people with intellectual disabilities, who collaborate with university students in caring for the garden, breaking stigmas and prejudices while building new connections and bridges between people to create a better future (III).
Participatory	Multi-Level	Transdisciplinary
<i>Ambition II: To co-develop</i>	<i>Ambitions II: To work across-level</i>	<i>Ambition III: to be beyond disciplinary</i>
The UdG Ecosolidary Garden involves the university, the Fundació Ramon Noguera, which works with people with intellectual disabilities; and La Sopa, a shelter service for homeless people (II). The project was initially conceived and developed within the university (I) from a sustainability perspective. The involvement of these two organizations has allowed the project to evolve by incorporating a social and community dimension with impact at the city scale (II). As social projects supporting people in vulnerable situations, both La Sopa and the Fundació	The UdG Ecosolidary Garden involves various stakeholders from the city (non-profit organizations, the university, and public administration) (I). Its strong integration within the university campus is notable, as the garden is made possible thanks to volunteer work. Its experimental nature makes it a space used for studies linked to university teaching, opening it up to the broader educational community and research projects (II). The participation of the associated social organizations allows the project to have an impact at the city and provincial level (II), as they are key reference entities. There is also a commitment to networking with	The UdG Ecosolidary Garden brings together volunteers from the academic sphere - students from different fields and teaching staff- with users of the social organizations linked to the project: people experiencing homelessness and people with intellectual disabilities (I). Beyond its role in food production, it serves as a space for experimentation to share and generate knowledge around agroecology, permaculture, and regenerative agriculture, while recovering traditional



Ramon Noguera face changing and complex circumstances that influence the intensity and type of participation they can offer. The UdG Ecosolidary Garden adapts to these needs and co-evolves according to the shared reality at each moment. It promotes co-development, exchange, joint steps, and co-creation, in line with collaborations carried out with both organizations (II).	other related organizations, extending the project's impact beyond the local level (II). The recent opportunity provided by the Redesign project, which directly involves the coordination of the Hort Ecosolidari, has enabled connections with other projects and stakeholders at national and European levels (II).	and culturally rooted knowledge (II). From a transdisciplinary perspective, academic and scientific knowledge is connected with the experiential and informal knowledge of its users, contributing both to environmental improvement and to social transformation (III).
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21. table: UdG through the lens of the NEB Compass

Governance structure:

Main actors involved and roles performed

Until March of this year, Pep Juandó coordinated the University of Girona's Green Office for Sustainability. A public recruitment process has now been opened to fill the post. As Pep explained, "The intention is to expand the project so that new people can gradually become involved" (statement from the interview with Pep, 12 February 2026).

Luca Kelly acted as the transitional link between Pep Juandó's departure, the arrival of the new coordinator, and the establishment of Adrià Canyelles in the supervisory role. At present, Luca no longer has a significant role in the Ecosolidary Garden, although she does collaborate in the Redesign project with the Living Labs of Salt as a stakeholder.

Adrià Canyelles is currently responsible for managing the Ecosolidary Garden. He is employed for 20 hours per week as garden supervisor: he coordinates fieldwork, prepares boxes for La Sopa, and oversees the volunteers. He will soon also become the University's coordinator for the project, taking on the administrative tasks and overall responsibility for ensuring that the Ecosolidary Garden functions properly. He also leads visits to the garden for children. The field supervisor makes decisions regarding the garden itself, as well as the organisation of external activities promoted by the University, such as visits by lecturers or events held with the Agroecology Group. Other activities are carried out jointly with members of the Agroecology Group, with Professor Moritz in Microbiology, with the lecturer in Plant Physiology, or with the teaching staff of the *Environment and Society* modules, which are taught within the Environmental Sciences programme. University of Girona volunteers also prepare boxes for La Sopa.



La Sopa, a socially oriented organisation, provides seeds for the garden and collects the food baskets produced there. In some moments, the users may contribute to cultivation tasks.

The FRN is an organisation with an educational and employment-focused role, as well as a community-building function around intellectual disability. Its users attend on a voluntary basis in order to learn and to assist with basic gardening tasks.

Coordination and relationships among the main actors

The coordinator of the Sustainability Area is the line manager of the Ecosolidary Garden supervisor, and the relationship between them is a contractual one. The supervisor is entrusted, on the basis of his professional judgement, with decisions concerning the types of crops grown, cultivation methods, and the management of the Ecosolidary Garden itself. One of the key objectives is to ensure weekly production so that La Sopa can receive food boxes for its users. Even so, the proportion covered is small and mainly serves to provide salad ingredients and fresh food, helping to support more balanced meals. Another objective is to provide weekly support for the people attending from the FRN. In addition, the supervisor may put forward proposals to animate and develop the space itself, whether through activities led by the university, such as guest teaching sessions by different lecturers, or through the organisation of events related to agriculture.

With regard to University of Girona volunteers, the university itself establishes a formal link through placement contracts, which are administered and overseen by the Ecosolidary Garden supervisor.

In relation to La Sopa and the FRN, there are no formal agreements in place; rather, these are open collaborative arrangements:

"They are formal relationships, but beyond that I do not have further information"
– statement from the interview with Luca, 16 January 2026.

It is also worth noting Carles's reflection, as the person responsible for La Sopa, on the difficulty of carrying out in-depth work with the Ecosolidary Garden supervisor because this key point of reference changes quite frequently.

Project networking with the municipality and other organisations

The Ecosolidary Garden is not part of any productive network. However, through activism it is connected with initiatives such as *Menja't Sant Narcís*, *Ciutats Comestibles*, and *Easy Cooking* (an initiative aimed at making cooking more accessible for people with disabilities). It is also linked to the University of Girona's Agroecology Group, which in turn connects it to other gardens, such as the Salt gardens. Through the *Redesign* project, a new opportunity has emerged to connect with other European projects of a similar nature.

Active participants in the project



Firstly, within the Unit for Social Commitment (and more specifically within the Cooperation Area and the Sustainability Area) the University of Girona staff responsible for these areas are the technical staff who oversee the Ecosocial Garden.

Secondly, within the volunteering scheme, each semester there is one supervisor and five or six new volunteers. This turnover means that some leave just as others begin. This year, there were 13 student volunteers from the University of Girona in February and 15 in March.

Thirdly, between 15 and 20 different people from the FRN attend over the course of the year. However, the regular Thursday group consists of 8 or 9 users, together with 1 staff educator responsible for the group. Coordination is overseen by the coordinator and takes place within the Foundation's own organisational structure. The Foundation therefore mobilises around 10 or 11 people each week for the Ecosolidary Garden project.

Finally, from La Sopa, 2 users carry out the weekly collection of produce from the garden, in addition to the director, who organises the users' visit. La Sopa therefore involves 156 people annually and 3 people on a weekly basis.

Stability and turnover of volunteers

The university's associative environment means that student life typically lasts between four and eight years, which illustrates the degree of turnover involved. Each volunteer completes a set number of hours over a three-month period, amounting to 25 hours in total. In the interview, the supervisor illustrated this by explaining that one placement student had been unable to attend for two or three months and, since the end of February, has been attending every day; another volunteer was able to attend every afternoon for two or three weeks and had already completed all of the required volunteer hours. The coordinator keeps an Excel spreadsheet in which each volunteer's hours are recorded, while volunteers themselves log their hours and describe the tasks carried out through an online form available on the website.

Volunteers mainly come through the range of academic credit recognition activities offered by the University of Girona. This activity is particularly attractive and fills up quickly because it combines community-based projects with academic credit recognition. Students complete 25 hours in exchange for one credit or half a credit, up to a maximum of six credits, although there is a limit of four credits per activity. In addition, some interested participants arrive through other routes, as Adrià explained in the interview. One example arose from the *Microbiology and Environmental Toxicology* classes taught by Professor Moritz, after which two students contacted the supervisor and are currently volunteering in the Ecosolidary Garden. Another possible scenario would be if someone external to the University of Girona wished to volunteer without a university placement contract; in that case, it would be necessary to determine whether third-party insurance would provide cover and to establish the terms of that involvement.

The garden therefore also becomes a resource for the University of Girona itself, in line with the previously mentioned idea of the teaching campus, both in terms of students'



holistic education (since the volunteering programme enables interaction between the university community and other groups) and in relation to teaching and research more specifically, as the garden makes it possible for different departments and research groups to become involved, and for undergraduate and master's projects to be developed around topics such as organic agriculture, local horticultural varieties, soil, and water resources, among others. In terms of knowledge transfer, it is also an interesting field as a pedagogical resource for promoting values related to responsible consumption, healthy eating, local production, and similar issues.

Another case is the Agroecology Group, which has become linked to the project because the Ecosolidary Garden is regarded as a strong and value-added initiative, particularly given the existence of such a space within the university where different activities and workshops related to horticulture can be carried out.

Decision-making

With regard to the Ecosolidary Garden, decisions are taken unilaterally within the organisational structure of the University of Girona by those responsible for the project.

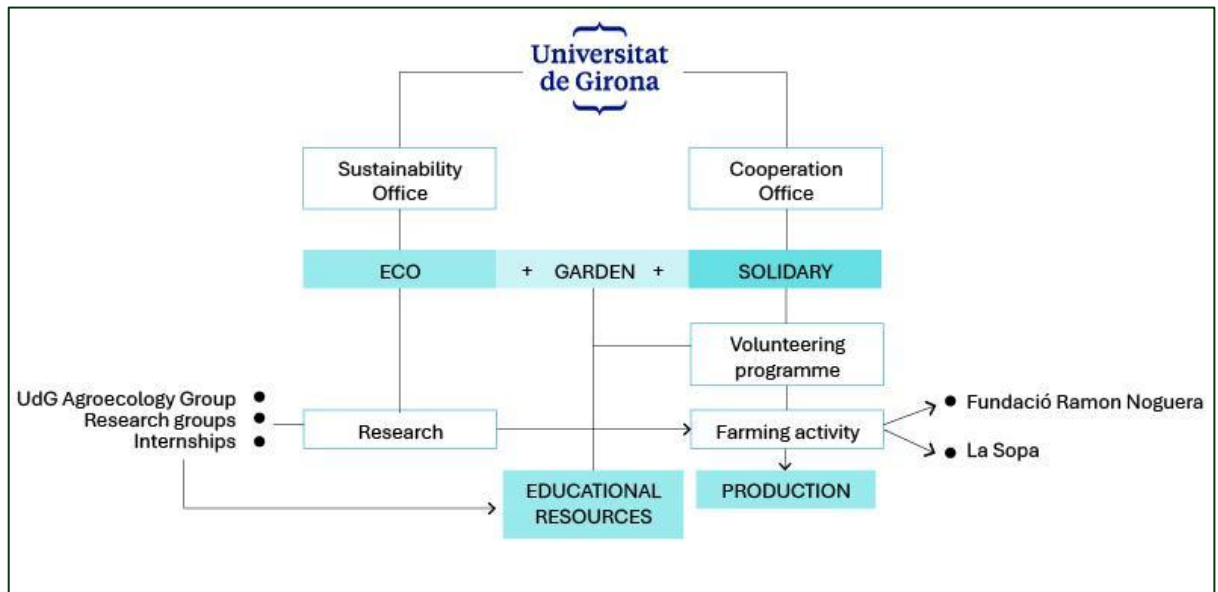
As for the attendance of people from the FRN, participation is entirely voluntary, as they join on the basis of their own interest in nature, because they may have a family garden, or for similar reasons. They are volunteers because the users themselves wish to take part in the activity; when they no longer wish to continue, they stop and new volunteers join. However, the Foundation does ask for a degree of commitment once they have signed up.

In the case of La Sopa, there is a director as well as a board in which all consortium members participate and where important decisions are taken. Since it is a public consortium attached to Girona City Council, some decisions may be taken at municipal level.

Organogram of the governance structure

Summary organisational chart of the governance structure of the Ecosolidary Garden, according to the figure.





40. Figure: Organizational chart of the project's roles and governance structure. Source: Source: Adapted from (Udg, sd) Històric de l'Hort Ecosolidari de la Udg.

Legal and financial framework:

Legal form

Pep Juandó did not register the Ecosolidary Garden under any independent tax identification number separate from that of the University. He also states that there are no signed agreements in place with either La Sopa or the FRN.

Financial structure

The University of Girona's budget is approved annually by the Social Council, enabling the institution to establish priorities and assess the achievement of its objectives. Within the programme-based budget, actions relating to environmental sustainability and awareness-raising are included. Among these are measures linked to the environmental management of the University of Girona's different spaces. This set of actions reinforces the University's institutional commitment to environmental sustainability and ecological transition through measures aimed both at improving energy infrastructure and at promoting good environmental practices within the university community.

Section 7 of the overall budget (UdG, n.d. b) details the 2026 environmental impact report, which amounts to €20,684.43, of which €9,000.00 is allocated to the placement student for the Ecosolidary Garden project. Within the University of Girona, therefore, the budget line invested directly in the Ecosolidary Garden is that relating to human resources.

The remaining structural costs, some consumable and non-consumable materials, utilities, and staff resources are covered by the University of Girona through other lines in the general budget. Examples include the need for running water and the coverage



of occasional needs, such as repairs or refurbishment, the installation of a canopy, or fencing for the garden.

With regard to garden materials and tools, there is an agreement with the Faculty of Economics for their storage. Luca explains that, some years ago, there was a woman supervising the garden who managed to speak with different companies that had nurseries containing plants that were close to dying, and these were planted in the garden. These private companies also donated tools.

Finally, the garden is based on the principles of the circular economy, which makes it possible to obtain resources and materials through reuse and recycling, the closing of the organic matter cycle, and the proper management of waste:

- The material used to build the garden's perimeter fence came from a donation by a company specialising in the reuse of pallets and the recovery of wood.
- Reeds (*Arundo donax*) from the surrounding area are also used as a bioconstruction material to reinforce enclosures and pathways.
- A small shaded shelter enables rainwater to be collected and reused for irrigating the seedlings.
- In terms of waste management, all the coffee grounds generated in the cafeterias on the Montilivi Campus (3.7 tonnes per year), together with the grass cuttings and pruning waste from campus maintenance (2.9 tonnes per year) and the garden's own plant waste, are composted in the garden using thermocomposters (reused from the pilot project of the Faculty of Science), while any surplus is composted using the traditional heap system. The resulting compost is then used as fertiliser for the garden itself.
- In addition to compost, manure from a nearby organic farm (km 0) is also used as fertiliser.
- No synthetic chemical products are used in the organic garden; for prevention and treatment, mixtures and herbal infusions are prepared using species collected from the area around the garden (nettles, aromatic plants, etc.).
- All the boxes and materials used to transport products destined for the social dining services are continually reused.
- A major company based in Girona (km 0) donates materials and display equipment that can no longer be placed on the commercial market.

Project expenditure

According to the supervisor, expenditure is relatively limited. The breakdown may be as follows:

- Irrigation is provided through a drip system, which is fairly efficient. As the amount of water used is so small, this cost is covered by the University of Girona.
- For seedlings, there is an agreement with La Sopa and with Can Morera, with each entity paying half of the cost. In fact, La Sopa also finances seeds and other supplies needed to support the Ecosolidary Garden.
- As for fencing materials, signs, and similar items, when the Ecosolidary Garden was first established, efforts were made to approach companies that sponsored its construction.
- If the supervisor identifies a particular need, this is discussed with the project management in order to secure the necessary resources. There is an attempt to ensure that materials are recycled or reused as far as possible. For example, plastic for the greenhouse has been purchased, while seed trays have been reused, pallets are recycled, some tools are

provided by the University itself, and others are brought by the supervisor or another volunteer.

- The supervisor's remuneration is established through an agreement with the University of Girona. He is not aware whether this is paid directly by the University or whether it comes from a broader grant linked to a sustainability project.

Engagement and collaboration

Main methods of participation in the project

a) Events

Assemblies have occasionally been held, although not very frequently. Looking ahead, there are plans to organise a community paella, paint the fences of the garden, and develop other forms of community participation. However, as those involved are students and also have academic commitments, these initiatives are difficult to carry out.

b) Size of the community, involvement of the target public, and number of participants

Within the FRN, the service works with around 100 to 105 people, although only 10 or 11 take part on a weekly basis. The objectives are therapeutic, and participants attend as volunteers. There is a group of people from occupational therapy who take part in these volunteering activities, working alongside others on an equal basis and within the same volunteer framework as University of Girona volunteers. This exchange is intended to foster relationships and promote social inclusion. Attending the Ecosolidary Garden helps them to connect with everyday realities, while also learning basic things such as what food is and how nature works. According to Luca, this is both a learning experience and a form of therapy, which is what gives the activity its meaning.

The main challenges faced by La Sopa in relation to the homeless people it supports are the lack of housing needed to facilitate social reintegration; dual diagnoses involving mental health conditions and addictions, together with organic illnesses such as diabetes and blood pressure or circulatory problems; and the fact that existing resources are insufficient to deal with these situations, making the creation of new ones a key challenge. There is also a need for more resources for people who do not wish to change their situation. In addition, the facility itself is an old house that has been gradually adapted, but it is far from ideal and lacks a coherent architectural layout. As Carles stated,

"Girona is a very classist city, and more than one person would prefer La Sopa not to be in the centre, in the old quarter, the postcard part of the city." – a statement from the interview with Carles, 5 March 2026

There are increasing numbers of people living on the streets, and the public often finds it difficult to understand this situation. There is also a gap in services, which do not cover all profiles; for example, people who do not fit the centre's admission criteria or are unable to attend. This year, in broad terms, 1,144 people have been supported:



92% men and 8% women. The main age group is 30 to 64 years, although there is an increasing number of young people aged 18 to 29, who now account for 33% of the population served.

As for University of Girona volunteers, there were 10 during the first term; from March onwards, and for the second term, there are 15. After Easter, however, the participants change again as new places open up. The 10 are not added to the 15, because each person completes a set number of hours over a three-month period, with each volunteer carrying out a total of 25 hours. Between 40 and 60 people take part each semester.

c) Community diversity

With regard to University of Girona volunteers, no particular inclusion or selection criteria are prioritised. Anyone who wishes to volunteer is able to do so; no one is given priority over anyone else.

In relation to the FRN, there is no specific community diversity criterion, because attendance at the Ecosolidary Garden is based on each individual's personal interest. In other activities, a more targeted form of support may be sought, for example through specific therapies. In this case, however, participation is driven solely by the interest of the person taking part in the volunteering activity. At the same time, therapeutic issues are also addressed, alongside objectives aimed at fostering relationships with the wider community, dialogue, and interpersonal relations. In the interview, Esther, the Foundation's coordinator, commented that: "They cannot take part in an ordinary environment unless the objectives of commitment and consistency in the task are worked on. We go to the garden to do a job, not to go for a stroll" (statement from the interview with Esther, 2 March 2026).

In relation to La Sopa, the participants are homeless people, and they attend to collect the food boxes according to the organisation's own criteria.

All parties involved view positively the relationship with the community and with other people from more vulnerable backgrounds — namely those attending through the FRN and La Sopa.

d) Relationship between the project and the municipality or local council

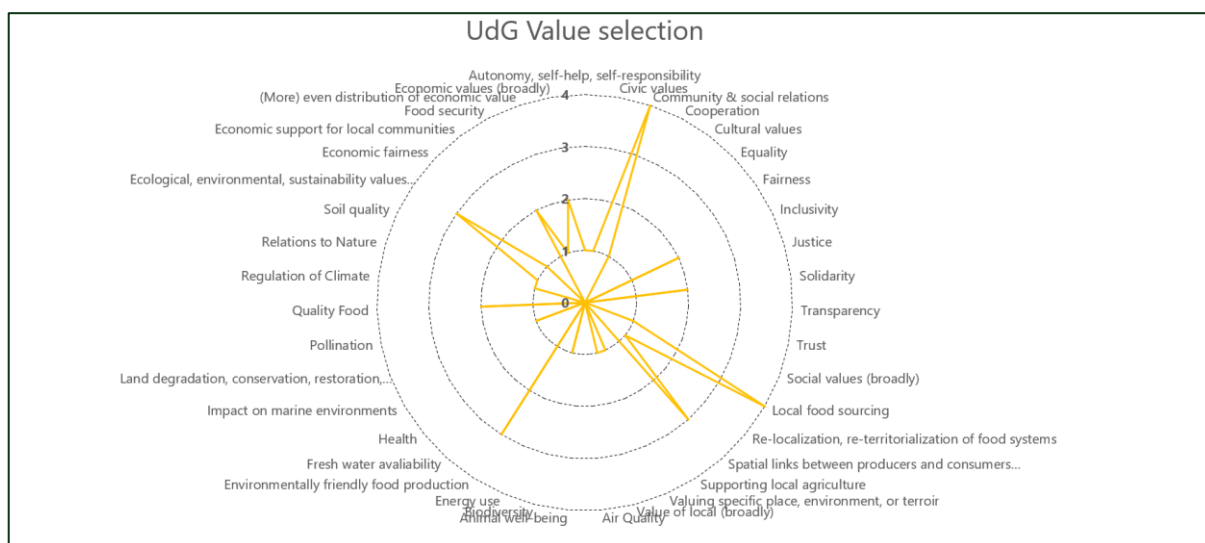
The interviews suggest that the University of Girona functions somewhat like an isolated enclave, with limited interaction with the surrounding neighbourhood. The Ecosolidary Garden fits within this same dynamic: the campus is theoretically open, but in practice it remains closed off to local residents, even though there is a desire for it to become a meeting space for the neighbourhood community. Nevertheless, there are open public awareness-raising events. In this way, the project does have a certain degree of visibility and outreach. On the other hand, local residents have asked to buy food boxes, which indicates that there is interest among neighbours. However, in order to supply both La Sopa and families through a weekly box scheme within a shorter supply chain, a broader rethinking of the current model would be needed in order to assess its real feasibility.



The relationship established with the University of Girona café is based on the composting of coffee grounds, which are collected and placed in the garden's four composters. One future idea would be for the garden to supply vegetables to the café, although in reality production is not currently high enough.

There is no monitoring committee on the part of Girona City Council. Even so, the Council is aware of the project, and occasional forms of collaboration do emerge. For example, during *Temps de Flors*, all the flowers used in university spaces are brought in and then reused both for display and for composting.

Impact – according to the Urban Food Value Framework



41. Figure: Value Selections for The Ecosolidary Garden in the FVF.

As part of the interview process, the FVF vignette was shown to five interviewees in order to identify the values they associated with the UdG Ecosolidary Garden. The table below presents the values selected by the interviewees, organised according to the Urban Food Value Framework categories: social, spatial, ecological and economic values. The frequency column indicates how many interviewees selected each value, while the descriptions provide a brief interpretation of how these values are expressed in the project. The following sections on social, ecological, economic and spatial/local impacts build on these selected values and further elaborate them through the qualitative findings emerging from the interviews.

Categories	Values	Frequency	Indicators	Interpretation
Social values	Autonomy, self-help, self-responsibility	1	No formal, qualitative informal	Value as core identity, Value in practice
	Civic values	1	No formal, qualitative informal	Value as core identity, Value in practice

	Community & social relations	4	No formal, qualitative informal	Value as core identity, Value in practice
	Cooperation	1	No formal, qualitative informal	Value as core identity, Value in practice
	Inclusivity	2	No formal, qualitative informal	Value as core identity, Value in practice
	Solidarity	2	No formal, qualitative informal	Value as core identity, Value in practice
	Social values (broadly)	1	No formal, qualitative informal	Value as core identity, Value in practice
Spatial values	Local food sourcing	4	No formal, qualitative informal	Value constraint, Value as an aspiration
	Re-localization, re-territorialization of food systems	1	No formal, qualitative informal	Value constraint
	Spatial links between producers and consumers	3	No formal, qualitative informal	Value constraint, Value as an aspiration
	Valuing specific place, environment, or terroir	1	No formal, qualitative informal	Value constraint, Value as an aspiration
	Value of local (broadly)	1	No formal, qualitative informal	Value constraint, Value as an aspiration
Ecological values	Biodiversity	1	No formal, qualitative informal	Value as core identity, Value in practice
	Environmentally friendly food production	3	No formal, qualitative informal	Value as core identity, Value in practice
	Land degradation, conservation, restoration, de/reforestation	1	No formal, qualitative informal	Value as core identity, Value in practice
	Quality Food	2	No formal, qualitative informal	Value as core identity, Value in practice



	Relations to Nature	1	No formal, qualitative informal	Value as core identity, Value in practice
	Soil quality	1	Temperature, humidity, CO2 concentration	Value as core identity
	Ecological, environmental, sustainability values (broadly)	3	No formal, qualitative informal	Value as core identity, Value in practice
Economic values	Economic fairness	1	No formal, qualitative informal	Value as core identity, Value in practice
	Food security	2	No formal, qualitative informal	Value as core identity, Value as an aspiration
	(More) even distribution of economic value	1	No formal, qualitative informal	Value as core identity, Value in practice
	Economic values (broadly)	2	No formal, qualitative informal	Value as core identity, Value in practice

42. Figure: List of chosen UFVF values, their frequencies, indicators, interpretations and descriptions

Social values

The supervisor of the Ecosolidary Garden describes its social impact on the people from the FRN as being high, on the assumption that they are probably not very accustomed to taking part in an activity so closely connected to nature and the outdoors. It is observed that the activity is highly meaningful for them and offers them a valuable period of disconnection. As they work in a group, they support one another in carrying out the required tasks, and seeing the outcome of their work is rewarding because of the cooperation they show among themselves and the work they undertake. Both the supervisor and the volunteers find it very encouraging to observe and experience this process with them.

From the perspective of the FRN itself, in the interview with the coordinator, she explains that it is a way of enabling its users to build relationships outside a protected environment, since they often find it difficult to establish social relationships with others. They experience considerable difficulties in their private lives in this regard, and taking part in this activity is therefore closely linked to social inclusion.

The social impact on the volunteers arises from the moment in which people who did not previously know one another come together and share a common space of interaction. Volunteering is undertaken in exchange for academic credits, but also because participants have a genuine interest and a desire to learn, whether because



they have a garden at home or because they want to see what is done there. They come to learn and to share, and in doing so they take that learning back home with them. The volunteers who attend on Thursdays also interact with the people from the FRN. It is therefore a space of encounter.

A concrete example took place on Wednesday 11 March of this year, when a seedling activity was carried out with the Agroecology Group, involving 8 or 9 people working together. Mid-morning, 3 volunteers arrived to work; at midday, the interview took place; and meanwhile 3 additional female volunteers also came. It was a day on which several activities unfolded in succession. This serves as an indicator that the space is active and that things are constantly happening there.

Ecological values

The practices carried out within the project are deeply rooted in ecological and sustainability principles and are closely aligned with the direction the initiative seeks to pursue. There is biodiversity, crop rotation, and everything that this way of working entails. Biodiversity is the main issue. In relation to pollinators, there is an effort to further diversify through the introduction of local species and varieties. From within the university, research is also undertaken to monitor pollinators. In relation to the volunteering activities involving the FRN, participants become more aware of the entire process: for example, with tomatoes and planting, they observe the full development cycle, from the seed to the tomato plants, the time involved, the work required, watering, and so on. In this way, the labour behind food production comes to be valued. In short, it is an ecosocial project.

Economical values

With regard to its economic impact on the city, the neighbourhood, and the University of Girona, it should be noted that, spatially, the project cannot grow any further, given that there is woodland surrounding the Ecosolidary Garden on one side and a road leading to a residential area on the other. Adrià indicates that unless the University of Girona commits to expanding cultivation in order to provide food through catering for the university community, the Ecosolidary Garden will not grow. On the other hand, it does not generate a direct economic impact for La Sopa, beyond the value and enrichment represented by the project itself. From the perspective of the FRN, the impact is considered impossible to quantify, since its contribution is very specific and limited.

Spatial impact

It is considered that the Ecosolidary Garden could be used more extensively for technical and scientific classes, allowing topics to be discussed on site rather than solely in the university classroom. According to one lecturer, this is sometimes achieved. However, many other subjects — including pedagogy, psychology, and teacher education — could also be connected to the garden, although in practice it is used relatively little, despite its positive value for students. As a result, few students are familiar with it. If stronger networks were developed, this would have an impact within



the university itself, allowing the space to be used more effectively and enabling stronger links and connections with other urban gardens.

Future of the project/initiative/organisation

Future plans

At present, no construction work can be undertaken, nor can anything be planted that cannot later be removed. As a result, trees cannot be planted in case building work is carried out on the site in the future. This is further constrained and made more difficult by the fact that the site is located on north-facing land where the soil is predominantly stony. As of today, Adrià has permission from Pep Juandó to plant two trees. In the long term, however, it is not possible to plan future planting because it is not known what will happen to the Ecosolidary Garden, given that the University of Girona is considering building works in different spaces and the supervisor believes this may be one of them. His perception is that the Ecosolidary Garden is currently at a standstill: "We are not moving forward. Not all students are interested. But there is always a core group of students who are" (statement from the interview with Adrià, 11 March 2026). He believes that maintaining it is worthwhile in itself for the university, while at the same time more and more lecturers are holding classes there. He considers that the project is not currently under threat, but does not know whether future urban development will eventually take place.

In a realistic scenario at the present time, it is still possible to experiment with new cultivation techniques. The current focus is on agroecology and on enabling people to do less physically demanding work, while ensuring that the garden can be maintained in accordance with the principles of organic agriculture and agroecology. Some undergraduate dissertations have already been carried out, but broader support and belief in the project are still needed. The agronomists at the University of Girona do not fully incorporate this perspective, tending instead to focus only on the technical dimension in isolation. The Ecosolidary Garden is a space where people can learn; it is a welcoming place. Even if it did not function as a garden, it could still be a beautiful place simply to spend time in. The space is small and, rather than remaining enclosed, it could become more integrated into the university if more aromatic plants were introduced, thereby generating new benefits. Biodiversity and the productive use of the space could always be further enhanced from within the university. However, the supervisor considers that a very different way of thinking would be required for something like this to change.

Between 40 and 50 lettuces are planted each week, which means that there is a regular weekly output. Placement students are able to experiment, but only within certain limits: planting must be done properly and production must be sufficient in volume to guarantee supply. Production must therefore be aligned with need.

From the perspective of the FRN, there is a clear desire to continue collaborating and participating in the Ecosolidary Garden project, as the two have worked together for many years. They indicate that when the supervisor remains in the role over a longer period, the relationship that develops and the network that is built become

increasingly stronger. The relationship with the person in charge, together with the involvement of the young people who attend, leads them to feel that the garden belongs to them: they watch over it, harvest from it, and say things such as, “Don’t step there! Oh no, what’s happened here? Some other volunteers have come and harvested this already, and we wanted to harvest it ourselves!” (statement from the interview with Esther, 2 March 2026). Everything that is created in this way is enriching, because these are people who, from an early age, have experienced difficulties in social relationships and often end up relating only among themselves in a very closed circle. The young people from the Foundation say that Adrià is very kind. This is important because it allows them to get to know another person and broaden both their social connections and their view of the world.

Sustainability of the project’s continued existence

For the FRN, the project should continue to exist because it is regarded as a large and comprehensive initiative whose purpose is highly meaningful. They consider that, at the beginning, when their Thursday visits coincided with the visits of La Sopa users who came to collect food, and the Foundation’s young people had harvested that food themselves, they were able to see the full journey of what they had worked on. At present, the group knows that the food is destined for a social initiative with a social purpose, and that it is not produce intended for sale.

The role of the garden is more educational and community-oriented than it is productive and distributive. This is similar to the bicycle loan scheme, in which bicycles are recovered from the municipal depot through social economy enterprises, and where the objective is not only sustainable mobility but also the recovery of waste materials. The same would apply to the gardens: creating another plot — such as using the plot opposite the student residence — with an objective other than that of the Ecosolidary Garden would amount to a different project altogether.

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GROWTH4CHANGE

AUTHORS: EVE FLORENCE PALMER & ALLISON SERMARINI

Introduction

Growth4Change (G4C), is an initiative, which operates in Nairobi's informal settlements. They seek to address the local structural inequalities of the city by uniting changemakers and promote community-led solutions for urban transformation. They offer opportunities to their ecosystem members of grassroots initiatives to co-create innovative actions for change, grounded in local knowledge that are resource and economically efficient. Their activities include the provision of business guidance, financial support, mentorship, and training. Additionally, they organise community-based events that raise awareness of food-related injustices and rights, encouraging citizens to act autonomously as 'Agents of Change', and promote food sovereignty within their communities. It is supported by Voices4Change, a Swedish-based foundation which provides a platform for culture and media activism, to promote free and inclusive societies.

G4C strives to create lasting, community-driven change by placing low-income communities at the heart of identifying challenges, shaping solutions, and improving livelihoods through a bottom-up approach. Their flexible internal and financial structure enables them to work this way. Accordingly, this case study report aims to describe the mechanisms to how G4C successfully transforms the food value systems within Nairobi, with a predominant focus on community collaboration and social cohesion that makes these transitions successful.

Methodology

A mixed qualitative methodology was adopted for the configuration of this case study report, in the form of a literature review and semi-structured interviews. The review was made primarily relying upon grey literature available by Growth4Change online, coupled with internal resources from previous collaborations. In addition, 4 interviews were conducted with Growth4Change, selected by the organisation's founder. These included the founder, the coordinator, and two technical associates - which also are founders of one of the ecosystem groups. This was able to give us a balanced representation on the organisation from multiple sectorial perspectives.

The interviews ranged from 60-90 minutes timeframe, utilising a semi-structured interview method. The literature review, combined with the REDESIGN Case Report Guidelines, aided as a guide in the construction of interview question guides, which were tailored to Growth4Change and each participant's role to identify gaps of knowledge.

Prior to conducting the interviews, the interviewees were provided with ethical forms and information sheets. The information sheet served as a basis on why the research was being conducted, the expectation of the interview and possible areas of focus. The



ethical form's purpose was to confirm that the participant had an adequate understanding of the interview, further, to ask for permissions of the further use of the information gained during the interview. All interviewees consented to the interviews being recorded and transcribed to be used for the preparation of this report.

The interviews were analysed using two methodologies aligning with the research question: Thematic analysis facilitated the identification of recurring patterns, perceptions, and narratives emerging from the interview data, ensuring that findings remained closely aligned with the research question. The pilot testing of the Urban Food Value Framework, focusing on the impacts of the organisation, was analysed using a Framework analysis methodology, allowing for a more structured and systematic approach which was replicated over other studies.

General description

Despite these statistics, Nairobi is faced with multiple precarities and threats which ultimately shapes the broader urban network. There is a notable strong income inequality which create a divide in living conditions within the city, naturally reinforcing the socio-economic inequalities and infrastructural constraints experienced.

One of the biggest issues is rapid urbanisation, which has heavily impacted the economic and social trajectory of the city. Migration to urban areas, combined with the projected expansion, has created an unprecedented demand for accessible, formal residential options. Expansion of urban areas is furthermore a difficulty, especially in recent years, as the Kenyan riparian reserve rules present a restriction of 6-30 metres to permanent buildings of the surrounding area. Due to the lack of these options available, informal settlements have been expanding, with an estimate of over 60% of citizens living within them. These areas are additionally characterised by overcrowded conditions, with limited accessibility to essential amenities, such as clean water, and waste management.

Environmental precarity represents another central constraint shaping agricultural and food system interventions in the area. Most predominantly is the Dandora dumpsite, the largest in Kenya, which is a major source of soil, air, and water pollution through open burning, waste decomposition, and leachate. As a consequence, soil quality is too degraded to support conventional cultivation, while both air and river systems are heavily contaminated, limiting traditional forms of urban agriculture. Water scarcity and inefficiency are also key challenges, coupled with poor sanitary conditions, adds to the threat of disease within these communities.

The inequalities displayed are naturally also deeply embedded within and replicated through its local food systems. Issues related to the proximity of food production are particularly evident, as limited space and a lack of land ownership result in food systems characterised by extended supply chains that rely on produce transported from rural areas. The main markets, where these products are sold, remain at a distant from most settlements, posing constraints to the accessibility of most citizens to fresh



produce, who can only go 1-2 days per week. Even so, there continues to be some hazards to the produce acquired. Due to inadequate information on the produce sold, traceability is a perceived threat, with little known about the growing conditions, in particular, the fertilisers, pesticides or soil quality. Quality issues also pertain to the physical standard of the products, which tend to be degraded after these long trips to the market and usually arriving in the early hours of the morning. Some conventionally grown food within the city is contaminated due to poor soil quality.

Aligned with these precautions, Growth4Change primarily aims to curate solutions to these urban and food system related issues, which are specifically designed to respond to the realities of Nairobi. This is achieved through innovative, grassroots approaches to urban planning based on small-scale interventions with the potential to catalyse wider transformation, an approach that Growth4Change refers to as urban acupuncture. Within this context, these solutions are made with locally available resources, utilising minimal amounts of energy and low-tech solutions, to simultaneously match the areas' capacity and work efficiently. Growth4Change describes this approach as "ghetto engineering", emphasising locally driven, low-cost innovation that responds to the realities of informal settlements. As their core values rest upon the philosophy that people can be agents of their own lives and change, this can be achieved through the correct support and guidance. Citizens can then act with autonomy to improve their livelihoods. To this extent, our research focus is to assess how G4C can successfully drive structural changes through these methods.

"We call it urban acupuncture concept whereby we support maybe with small amounts to see if they can showcase their idea in a pilot or a demonstration phase."

Case description

The origins of Growth4Change, first arise with the establishment of Voices4Change in 2016, which initially had the ambition to operate within the Swedish and European context in the realms of culture and media activism. More operational capacity was gained in 2018, and the focus was primarily on collaborating with creatives, combining artistic expression with activism and communication of political issues. This focus led to engagement with creatives from Nairobi's conscious hip-hop scene, who use music to highlight local issues and advocate for social change. Through these engagements, Voices4Change developed a deeper understanding of the food insecurity and everyday challenges faced by residents of Nairobi's informal settlements, where many households struggled to afford three meals a day and food was often cultivated in highly contaminated soils surrounding the Dandora Dumpsite.



In response, a small demonstration site was established together with a local urban farmer showcasing a simplified ebb and flow hydroponic system. Drawing on the experience of Erik Lundgren, a founding member of Ljusgårda, an indoor hydroponic farm in Sweden and a board member of Voices4Change, the Urban AgTech Demo Project was launched towards the end of 2019. Demonstrating a low-cost, soil-free cultivation system as a safer alternative for urban food production, the project laid the foundation for what would later become Growth4Change.

Today, the initiative has expanded widely across Nairobi, working as an 'ecosystem of changemakers'. By fostering collaboration and shared learning, the network works towards systemic food system transformation across the city. Growth4Change deliberately prioritises support for youth-led initiatives that are often excluded from conventional funding opportunities because they are newly established or face discrimination and structural barriers linked to the communities they represent. Through the supplement of small, manageable grants, these organisations are given the opportunity to showcase their potential to carry out community projects and build capacity. This enables initiatives to test and demonstrate their ideas through pilot or demonstration phases. The support is not just limited to financial assistance, but also includes support in managing finances, engaging relevant stakeholders, and strengthening organisational capacity through skills developments, such as advocacy and grant writing support. This is seen, for example, through connection of ecosystem groups with relevant government spaces, enabling youth participation in policy briefings and public events. Ultimately, it aids these groups to work with agency and autonomy in shaping their own futures.

Naturally, their outreach continues to expand as new connections are fostered, and capacity of their ecosystem members grows. Although their focus is to become a consolidated body within Nairobi, connections have also been made with organisations situated in other Kenyan cities, such as Kisumu and Mombasa.

These opportunities for collective change are not solely restricted to ecosystem members but extend outwardly to the community in the forms of educational activities surrounding urban and food related issues. G4C ultimately recognises that one of the consistent structural problems is the lack of awareness of surrounding food-related rights and nutritional health. Providing the necessary learning opportunity gives community members the possibility to have agency and create a more prosperous future for themselves.

Educational activities are primarily delivered through the G4C Learning Lab. Established as an inclusive community learning space, the Learning Lab enables participants to explore and gain hands-on experience with innovative, low-cost, and low-tech soilless cultivation systems, including hydroponics. Coined as ghetto engineering, they utilise repurposed materials for their systems, thereby enhancing accessibility for adapting similar approaches. The introduction of hydroponic systems



therefore seeks to re-localise food production while strengthening community agency to address food production challenges.

"We have set up a learning lab whereby all the community members have access to all these technologies, whereby they can familiarise themselves with it"

Additionally, the Learning Lab is designed to accommodate participants with diverse levels of knowledge and experience, ensuring that its educational activities are inclusive, accessible, and relevant to learners from different backgrounds. The development of a hands-on approach to learning has aided this objective, ultimately generating a higher amount of engagement. These sessions are specifically designed with the relevancy of contextual scenarios in mind, addressing the "unique challenges in African low-income urban and peri-urban environments".

The training and capacity building activities moreover extend their community engagement and outreach of impact, predominantly with schools. This, in turn, helps with one of their core focus communities, the younger generation.

"The knowledge transfer and exchange programs [help] to advance our systems based on the solutions that the community is proposing"

Returning to their roots of activism, the campaign #FoodIsPolitics was curated to encourage an active dialogue pertaining to food system issues within local communities. The campaign blends the realms of artistic expression and food system-related issues to foster a dialogue for both discussion and education for whoever wishes to join. Locally in Nairobi, this has been seen in the past through collaborations among passionate, local hip-hop groups that use lyricism to convey food-related topics. Online educational resource methodologies for food-based activism help ensure that the campaign flourishes and builds a following.

Aligning with these core activities, the organisation predominantly functions as a community builder and educator. The network guides its partners and enables them to grow as, for example, agricultural producers, policy actors, and researchers.

As Nairobi's informal settlements are shaped by systemic injustices and environmental precarities, it fundamentally influences the projects Growth4Change invests in and the topics which they wish to promote during campaigns. Predominant environmental topics are commonly centralised around pollution and waste, including the burning dump site in Dandora and riverbed encroachment. Others, include focusing on the improvement of sanitation and clean water within communities. Further educational activities strive to bring awareness to the sectorial links between these problems, which can be translated to other communities and adapted to generate systematic change.

For example, the importance of waste management and separation is one area that is focused on, to promote the reuse of materials and generate circularity.

Despite its strong capacity for action, the organisation encounter several challenges. Securing funding opportunities that align with Growth4Change's core objectives, values, and commitment to genuine, community-driven change has proven difficult. The current funding landscape remains heavily oriented towards project-based support, with limited availability of flexible funding mechanisms, which are what the organisation prioritises. As a result, securing resources to sustain operations whilst simultaneously maintaining fidelity to the organisation's core values and approach, has proven difficult.

A further challenge relates to working with communities facing severe economic insecurity. Many of the individuals the organisation engages with are navigating daily pressures to meet basic needs, such as feeding their families or paying rent. In this context, prioritising longer-term goals which could help to foster food sovereignty and future resilience can be understandably difficult to communicate. The goal of allowing individuals to become such active agents of change within their community and understanding their rights is complex when many are operating in a state of constant short-term survival.

Timeline

2016	Voices4Change was founded in Sweden.
2018	Engagement begins in Nairobi through collaboration with local creatives and community groups.
2019	Urban AgTech Demo Project was launched leading to the establishment of Growth4Change.
2021–2022	Expansion of urban agriculture, circular economy initiatives, and the network of grassroots organisations across Nairobi.
2023	The G4C Learning Lab model was introduced, with Technical Associates



2024–2025	trained to deliver peer-to-peer capacity building. Growth4Change evolves into a broader ecosystem, convening independent organisations to support community-led food systems and urban resilience.
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NEB: New European Bauhaus

Beautiful	Sustainable	Together
<i>Ambition II: to connect</i>	<i>Ambition III: to regenerate</i>	<i>Ambition II: to consolidate</i>
The G4C network creates opportunities for connection between Kenya and Sweden to support local engagement and advance food sovereignty [II]. Through hip-hop, it fosters dialogue on political and social issues, encouraging community participation and awareness [I]. G4C operates as an ecosystem of changemakers that brings together diverse community groups engaged in social activism, circular waste management, and urban agriculture training for vulnerable communities, such as teen mothers [II].	G4C adopts a holistic approach to sustainability, integrating circular practices and promoting proper waste management. Its work focuses on improving food production through soilless cultivation systems, which enhance food quality, nutrition, traceability, and community health [II]. Through initiatives like #FoodIsPolitics, practical food-growing projects are combined with community engagement to promote awareness of sustainable food systems [I]. The organisation also improves urban environments by creating green spaces that enhance air quality, support biodiversity, and restore native plant and pollinator species [III].	G4C transforms communities through an “urban acupuncture” approach, providing targeted small-scale support, grants, training, and educational opportunities to individuals and organizations that might otherwise be ineligible for assistance [II]. Focusing on marginalized groups, particularly youth- and women-led organizations, G4C seeks to strengthen community capacity in areas affected by severe economic insecurity [I]. G4C hopes to empower residents to become agents of change by equipping them with the skills, knowledge, and resources needed to achieve greater food sovereignty and long-term resilience.
Participatory	Multi-Level	Transdisciplinary
<i>Ambition II: to co-develop</i>	<i>Ambition II: to work across levels</i>	<i>Ambition III: to be beyond-disciplinary</i>
G4C prides itself on a complete bottom-up approach, which prioritises the needs of the community foremost. This translates into which projects are proposed by the ecosystem members and given the appropriate tools to disseminate them when they reach the right	G4C originates from the organization Voices4Change which is a culture and media activism platform within Sweden and Europe. V4C powers G4C through funding and collaboration with academic	G4C involves a wide variety of transdisciplinary actors, whom can come together to overcome community challenges and drive social change. The involvement of different perspectives aids to tackle issues both thoroughly and



capacity. This ultimately encourages the community to act with autonomy. G4C's coordinator identifies community groups and innovators interested in strengthening Nairobi's food system [I]. These actors are encouraged to present their ideas and explain why they should receive funding. Once a group has been assessed and demonstrated sufficient capacity, governance, and financial management structures, the coordinator can confidently seek approval to proceed with the and implementation. This consultative process enables initiatives to join a broader ecosystem of changemakers, creating a network of grassroots organizations that can collaborate and communicate with each other [III].	and other strategic partners within Europe. In Kenya, thirteen different initiatives concerning topics on women's empowerment, economic independence, youth activism, environmental stewardship, waste management, and sustainable agriculture are operating and funded by G4C [I]. Their focus is to support marginalised groups that may not have many opportunities to participate or operate within the food system such as women and youth. Small-scale support is provided to test and demonstrate their ideas through pilot or demonstration phases. This collective of initiatives has fostered growing connections that have expended to other Kenyan cities such as Kisumu and Mombasa [II].	finetuned for the context of the community. Perspectives for projects and topics of conversations in food-related dialogues are taken directly by the community as informal actors, to try and reach the maximum impact. Collaboration is even extended to the aquapuncture activities, especially with the soilless cultivation systems being implemented, to meet the needs of the community.
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22. table: Organisation G4C through the lens of the NEB Compass

Governance structure

G4C is classified as a community-driven initiative powered by V4C. The level of community participation is heavily reflected within its internal governance structure, utilising a predominantly bottom-up approach to prioritise the needs of local citizens first. As opposed to operating as a conventional organisation or membership-based network, they function as a collaborative platform and enabling ecosystem. It therefore connects and mobilises individuals and organisations around shared goals and opportunities for collective action.

An intentionally lean organisational structure is adopted, so there is a higher flexibility to act. There is one full-time staff member, the coordinator, who serves as the initiative's formal representative in Kenya. The coordinator is responsible for the day-to-day management of operations, as well as coordinating partnerships, identifying emerging needs and opportunities, and supporting the implementation of activities. The strategic governance, financial oversight, and long-term stewardship are provided by V4C.

Rather than expanding its permanent workforce, G4C mobilises the human resources and expertise available within its wider ecosystem of changemakers. This flexible model allows the initiative to mobilise the skills most relevant to a particular context or



challenge, whilst keeping administrative costs low, enabling the organisation to adapt to changing needs. The role of G4C is therefore primarily one of connecting, convening, facilitating, and strengthening actors, rather than directing or managing them.

The G4C Learning Lab serves as the initiative's capacity-development unit, coordinating learning, technical training, mentorship, and knowledge exchange across the ecosystem. Through the Learning Lab, G4C identifies community groups and changemakers working on urban challenges and supports them according to their specific needs and stage of development. This can include capacity building, knowledge exchange, technical training, mentorship, and connections to other actors with complementary skills and expertise.

Different roles exist within the ecosystem depending on the nature and duration of the collaboration. Community members with specialist knowledge may be commissioned as community trainers, delivering peer-to-peer training through the Learning Lab in areas such as waste management, urban agriculture, entrepreneurship, or advocacy. Individuals who collaborate with G4C on a more continuous basis may serve as technical associates, contributing specialised expertise and, where appropriate, representing G4C externally. National and international professionals may also contribute remotely through mentorship and technical support. These contributors are therefore not classified as employees of G4C.

"So we train a group and when we feel like there's people who have a particular knowledge, then we assign them to train other groups and so on. So we are just convening and facilitating those connections."

This illustrates the decentralised nature of G4C's approach. By utilising ecosystem member's knowledge to facilitate learning, knowledge and skills can circulate between groups and create opportunities for collaboration beyond a single intervention.

The organisations participating in the ecosystem remain fully independent. They retain their own governance structures and chose to collaborate through G4C where shared interests and complementary expertise create added value. The ecosystem includes community-based organisations, social enterprises, research institutions, and informal groups, alongside individual changemakers such as artists, activists, researchers, entrepreneurs, policymakers, and technology specialists. Additional, less formal collaborations may also emerge around specific needs, including technical support, research, or digital and AI expertise.

The ecosystem encompasses actors working across a diverse range of urban and community challenges. Partners work across a range of focus areas, including women's empowerment, youth development, environmental stewardship, creative expression, human rights, and economic empowerment. Through their actions, they promote food

system related activities also, including circular economy approaches through waste management, urban agriculture, climate-smart livelihoods, and sustainable food systems, transforming environmental challenges into income-generating opportunities.

Together, these initiatives foster environmental awareness, create safe and supportive spaces for children and young people, strengthen community resilience, and equip vulnerable groups with practical skills and livelihood opportunities.

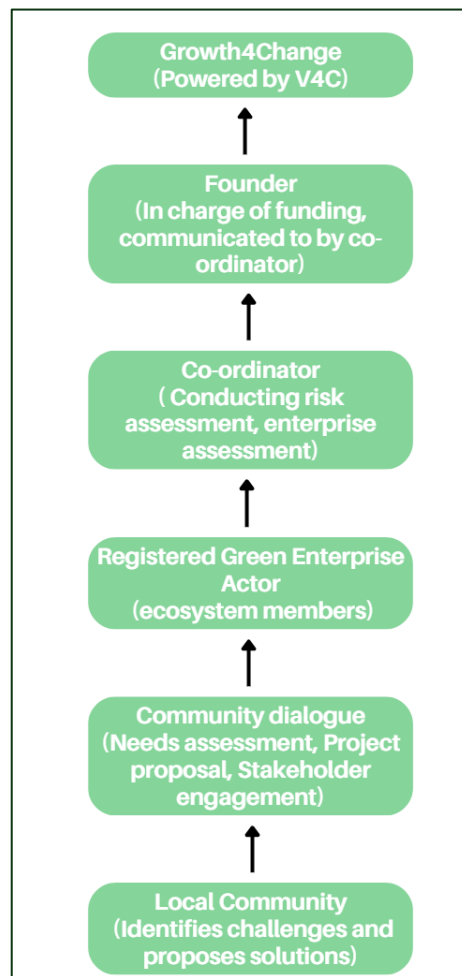
"We are really diversified and widespread [across Nairobi]."

Accordingly, a lean, non-bureaucratic model aims to heighten impact on the ground while maintaining flexibility. This structure also remains intentionally informal and flexible, enabling action without rigid hierarchies to which to be accountable. Without the responsibility of reporting to donors and with a limited structure, decisions can be made and enacted efficiently through informal conversations between the main actors. The coordination between actors can therefore be described as both efficient and highly effective.

When pertaining to decisions on funding opportunities to ecosystem members and proposed projects, a different approach of communication and coordination is enacted, consolidating their bottom-up approach. Actors are encouraged to pitch their ideas to the co-ordinator on why funding should be given firstly, and once a group is appropriately assessed as having the sufficient capacity and structure for managing funding for their goals, the co-ordinator can speak to the founder confidently to discuss the budget and the enactment. In contrast to traditional NGO models, support is enacted through the provision of small grants aligned with what youth-led groups can realistically manage. This installs a degree of trust within the groups, which is not often provided, giving full responsibility for implementation. Alongside this, it offers guidance to help groups establish internal systems for transparent and collective decision-making, to strengthen autonomy and accountability. It intentionally embraces a degree of risk, recognising that learning through experience is essential for the growth and maturation of these groups. Establishing this level of trust between ecosystem actors and G4C's internal team additionally fosters traits of transparency and honesty on the project's outcomes, especially if they have not turned out as expected. It changes a negative narrative into a learning opportunity that fosters an encouraging environment for growth, which can help with success in future grant applications.

"Most of our groups that we have supported, they have now attracted more grants, but we were the first one. So they first showed that they are trustworthy. And then when they can show they have consistency in their activities, they have attracted other grants from other bigger NGOs."





43. Figure: Organogram of structure of decision making within G4C.

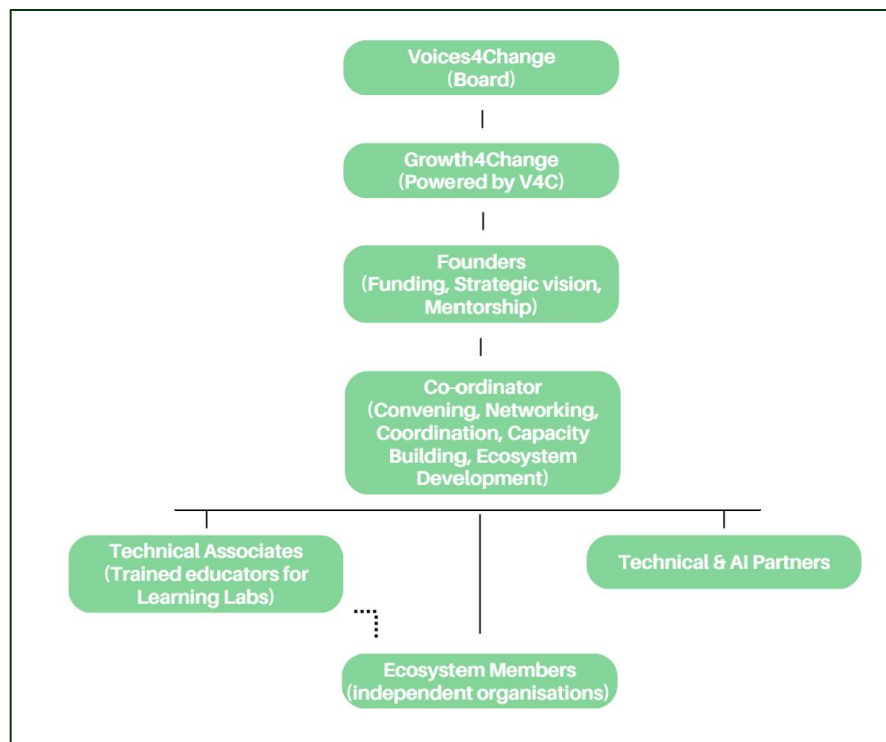
In terms of consistency within the G4C core team, there has been high stability and no turnover, due to their collaborative and co-creative approach. A high degree of commitment to G4C's mission and desired outcomes creates an environment in which actors can meaningfully influence and guide the direction of the work.

"The team, but they have been consistent and very, very loyal... I'm so grateful and happy for that, the commitment they show, but I think it's because we are mission driven, they feel they own it and they can create and they have room to drive change"

Formal volunteers have not been incorporated into the organisation at this point, as there is an understanding of the resources required to facilitate a meaningful volunteer programme, amount of time and provision of mentorship which are required is not currently available. Instead, volunteering is spoken about in the sense of collaboration with established professionals, which do not require the guidance at their position and have the aim to give back to their community. With this logic, all actors aside from the co-ordinator, can be considered as working on a volunteer basis. The community is able to engage in the activities presented by the organisation and ecosystem

members, and interviewees have expressed how there is always consistent help when needed.

“our work has been on a voluntary basis...before we advanced to the technical associates, we just shared the knowledge, because we were growing an ecosystem that was non-existent at first. The community are taking [hydroponic technologies] positively because they see the positive changes that they are bringing. So most of them, when we have activities, they come on a voluntary basis. Even though the ecosystem partners have their own members, the community also come on a voluntary basis because they see the value that it's bringing to the community.”



44. Figure: Organogram of the internal structure of all the Growth4Change actors.

Legal and financial framework

G4C operates as a project under V4C, which is a foundation. This decision has allowed a full ability to act with a bottom-up approach, which directly prioritises the needs of the community within Nairobi. As a result, the impact of overheads and bureaucracy is limited ensuring that resources reach their ecosystem members more effectively. The board therefore remains in Sweden for the operation of V4C, whilst its main operations are held in Kenya.



However, this decision, of not formally being registered in Kenya as a foundation, has some limitations on how effectively they can act and apply for funding. For this reason, steps are being made to see whether there is an opportunity to formally recognised in Kenya, to increase their eligibility.

Collaborations with public institutions and other formal actors are not a prerequisite for Growth4Change's work but are pursued where they create mutual value. Such collaborations include research partnerships, joint project implementation, and participation in policy dialogues and government processes. Examples include implementing specific community projects, facilitating the registration of new groups, and supporting participation in local planning and decision-making processes. Involvement with the local municipality, is seen in the form of moral support after the registration of community-based actors, however this is the extent of their involvement.

"You receive support from [the municipality]. You do not get financial support, but at least you have their goodwill. You have someone behind you backing you."

G4C has deliberately positioned itself in a way that challenges conventional funding models of how donors operate with funding. This is because they were founded with the intention of enabling genuinely transformative approaches, rather than replicating traditional project-based interventions that is the common practise. To do this, they moved away from standard donor frameworks, which are often characterised by tightly defined, linear project cycles and rigid indicators of success. The prioritisation of flexible, unearmarked funding that allows it to respond to the needs, priorities, and conditions defined by the community. This approach seeks to avoid externally imposed agendas and instead centres local ownership and agency. However, this strategic choice presents a significant challenge, as the opportunities are much more scarce.

The primary funding sources of the organisation are gained through private bodies, giving a higher flexibility when it comes to enacting. Additional funding is gained through business sponsors which are interested in the activities and ecosystem members of G4C. Occasionally, application to project funding is granted; however, as the operation is often within precarious contexts, groups may face immediate challenges, making long-term planning and commitments difficult. The expectation to agree to multi-year projects can therefore be somewhat unrealistic in environments shaped by instability. To counter this, an avoidance of imposing these formalised programmes for funding is often avoided or approached with caution, and to only proceed if the projects align with the lived realities. Any potential partnership is carefully assessed to ensure alignment with the organization's mission and responsiveness to community-defined priorities, rather than introducing externally driven agendas. Maintaining integrity is a central principle, as G4C does not prioritise scaling through funding that could compromise its values. This includes critically challenging approaches perceived as top-down or extractive, and safeguarding against reproducing unequal power dynamics. Ultimately, the organization seeks to balance



access to resources with a strong commitment to autonomy, trust, and community-led change.

Engagement and collaboration

Open events organised by G4C do not target specific demographic groups, reflecting a commitment to inclusivity and a broader intention to support anyone within the local community with a willingness to learn. This, is normally the first step of engagement with a community, to reach a point of contact before collaborating in further activities and supports their bottom-up approach of assessing the needs of the local actors. Once this has been established, coordination with groups already active in the community can be established, or alternatively, coordination between like-minded community members to form a new group of changemakers.

"our events are very open, as we invite any community member who is keen to get to understand the real issues that is going on in the community. So we don't like close on anyone...we have children there, we have adults, and every session is designed in such a way that we will have the engagement with everyone."

"The transparency comes after we have like engaged [the community] first. Before we set our foot in an area, we first go to the local administration, to tell them what we intend to do in the area. After that, we tend to host like community dialogues whereby we invite anyone and everyone who is available for us."

These learning events can be held through their #FoodIsPolitics campaign, striving to foster community dialogues on food-related challenges to increase mutual understandings of food rights. The effort demonstrates how integrating local cultural and social contexts into dissemination efforts can strengthen engagement with these issues.

For this example, there are collaborations with local hip-hop artists and creatives, who communicate the dialogue of local food issues, appealing to young people and inviting them into the conversation. Approaches to increase engagement within these events are continuously forming, based on feedback. Utilising their bottom-up approach to gain the highest relevancy and collaboration with the community, topics for discussion are usually posed by local actors on topics such as structural injustice of food access and affordability.

"We have been holding community dialogues, whereby we are preaching our campaign, which is Food is Politics, whereby we are now enabling all these community members to at least get to air their issues, and we tend to offer them the most immediate solutions around it. The community engagement builds that trust and also is a platform whereby we get to share the knowledge on the technologies."

The outcome of these events helps to spark curiosity into alternative methods of food production and the soilless systems which are promoted by ecosystem members practising urban agriculture. By exposing participants to these technologies through

dialogue and practical demonstrations, Growth4Change generates curiosity and encourages wider community participation. This illustrates how knowledge sharing not only helps with the education on food related matters but contributes to the diffusion and application of sustainable food production practices across the ecosystem.

"People have been truly like intrigued by this kind of system, and they've been approaching us and other people that we train so that they can also be able to have that technicality to run their own kind of food systems."

Despite this, interviewees expressed how there is sometimes initial scepticism to the operation of the organisation from the community. This may reflect a broader scepticism about whether projects can generate meaningful and lasting impact beyond short-term interventions. Prior to suggesting solutions, it is fundamental to understand the community's dynamics, their needs, as well as communicating the model of operation of G4C. Once this is achieved, a formation of trust and transparency can be established, and the integration of local actors becomes a lot smoother.

More specific events are directed towards certain community groups, which allows the trainers to specifically tailor sessions for their target audiences. This includes engagement with the younger generation, such as schools. With engagement being fostered in schools, it aids in decreasing the disconnect between the youth and farming practises, offering a modern alternative form of cultivation to traditional methods. Engagement with youth groups has been one of the most active demographics within the community, adopting these novel technologies.

"We had some success stories where some people have taken it up [hydroponic farming] and are still doing it in various schools and other a community-based organisation."

In terms of communication of events, G4C use a combined approach of both online and offline communication channels to enhance event inclusivity by ensuring broader, more equitable outreach, thereby expanding engagement. Other events, include those which are coordinated by the ecosystem groups within the community, that can be supported by G4C. For the dissemination of these events specifically, the idea of encouraging the members to act autonomously is also applied, aligning with their slogan 'Power to do it'.

"They have the power to do it, to tell their own stories and reach to their community, people that are seen [as] active [in the community]. So first we encourage that, for them to do that internal, transparent communication among themselves so that we remove any barriers."

However, the collaborative nature of the network is extended to events led by individual initiatives are disseminated across their respective social platforms, thereby enhancing engagement, extending outreach, and broadening access to diverse social groups. Opportunities for collaboration between members on events are also

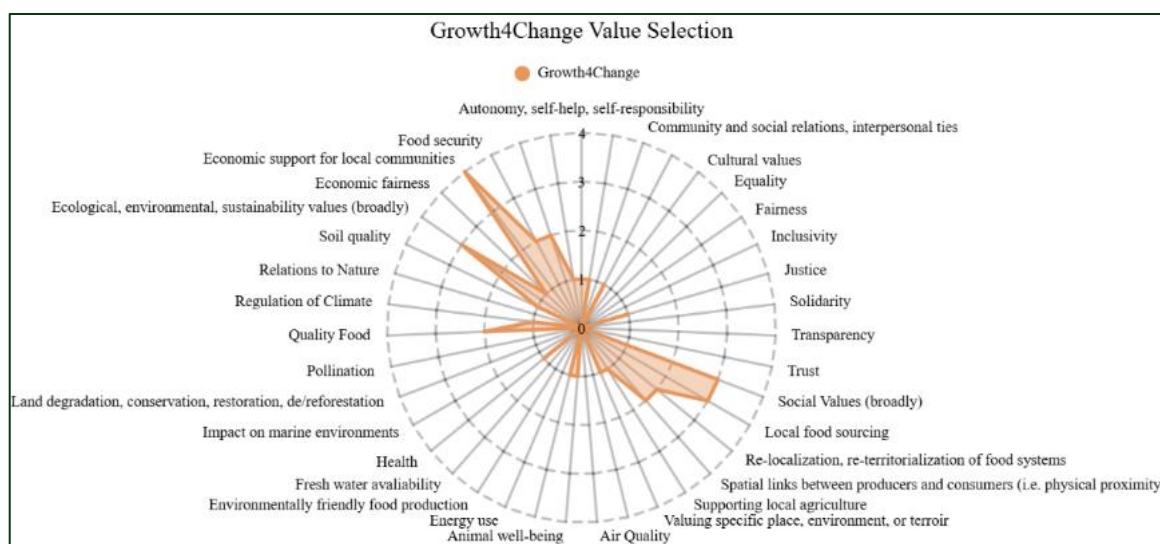


encouraged, fundamentally promoting social cohesion and adding a multidisciplinary lens to specific topics.

When it comes to collaboration on a broader scale of its operations, a key focus of consideration is given to the empowerment of vulnerable populations, as evidenced through collaborations with youth-led initiatives and women-led organisations.

“We are building on the concept of urban acupuncture to create urban areas that can become increasingly self-sustaining. From the production side, we began engaging more ecosystem actors—people who share our vision but operate across different parts of the food value chain. By bringing these actors together, we are building an ecosystem that strengthens collaboration and helps ensure that food is distributed to the communities where it is needed most, improving both availability and access.”

Values of the organisation – using the Urban Food Value Framework



45. Figure: Value selections for G4C within the UFVF

Categories	Value	Frequency	Indicators	Interpretation
Social values	Autonomy, self-help, self-responsibility	1	No formal indicators; qualitative evidence of impact through observation: the degree of agency, the degree of self-determination, the degree the groups are mission-driven	Value in practise; Value tied to identity
	Civic values	2	No formal indicators; qualitative evidence through engagement & observation; qualitative evidence	Value in practise; Value tied to identity

			through rate of attendance on civic education processes.	
	Community & social relations	1	No formal indicators; qualitative observations - the level of health among community members, engagement with youth to give purpose has led to reduced cases of insecurities; seeing proof of practise from community members in transformed green spaces.	Value in practise; Value tied to identity
	Cooperation	1	No formal indicators.	Value in practise
	Social values (broadly)	2	No formal indicators; qualitative signs from previous insecurities and signs of engagement, such as transformed dump sites to productive green spaces.	Value in practise
Spatial values	-	-	-	-
Ecological values	Animal well-being	1	No formal indicators available	Value in practise
	Biodiversity	1	No formal indicators available	Value constrained; value in practise
	Health	1	No formal indicators available; qualitative indicators through observation seeing level of health, such as malnutrition in children, their performance levels in schools.	Value constrained; value in practise
	Quality Food	2	Informal qualitative indicators, observation of limiting food to Nairobi from rural areas	Value linked to identity.
	Regulation of Climate	1	Informal qualitative indicators, observation of local groceries approaching people practising climate smart farming and sourcing locally.	Value in practise; value constrained.
	Soil quality	1	N/A	Value linked to identity
	Ecological, environmental, sustainability values (broadly)	3	No formal measurements currently, potential for the future.	Value in practise; value constrained.
Economic values	Economic fairness	1	No indicators currently present	Value in practise, value constrained
	Economic support for local communities	4	Informal quantitative indicators of measuring the economic sustainability at both an individual and group level.	Value in practise, value as an aspiration (no return on investment yet)
	Food security	3	Informal qualitative indicators of observing levels of malnutrition, performance level of children in school.	Value as an aspiration

	(More) even distribution of economic value	2	Informal quantitative indicators of measuring the economic sustainability at both an individual and group level.	Value in practise, value successful.
	Economic values (broadly)	1	Informal quantitative indicators of measuring the economic sustainability at both an individual and group level.	

23. table: Growth4Change through the lens of Urban Food Value Framework

Social Aspects

Social values were revealed as the most prominent and resonating category of those presented in the UFVF. With this respect, most values were spoken about in a holistic sense and interconnected, with stressed importance for all social values in a broad matter of speaking. The general understanding was that one value may not be possible without the implementation of another. Impact on the local community is measured through an informal, qualitative sense, seen through the observation of changes, such as the degree of self-determination and degree of collaborating groups which are mission driven. It was noted that through educational activities and promotion of rights related to food, noticeable changes within the community have been observed.

Despite this interconnectedness, some values arose which gained a higher prominence in focus for G4C, than others. Autonomy, related with agency, are values which G4C aims to promote to their ecosystem members and throughout their activities, encouraging actors to become 'agents of change'. The idea of autonomy is also extended inwardly within the organisation, as without having to appease donor's expectations, they can act more freely. Civic values and justice are other strong area of focus, especially within their rights-based activism approach, promotion of food sovereignty, and advocacy of marginalised groups. Furthermore, the facilitation of collective dialogues and interpersonal relations is seen as integral, as it enables the community to act more cohesively and support change. Cooperation is also seen as integral, and is understood more in the sense of collaboration with public/private bodies for driving bottom-up approaches towards a common goal.

Spatial Values

The informal ownership for land in Nairobi ultimately shapes how the spatial values were perceived in the UFVF. Ecosystem members engaged in urban vertical farming practises stress the importance of mobility of their systems, to adapt to these barriers of land-use. Informal settlements within Nairobi are presented with "highly dynamic and unpredictable contexts", facing informal land grabbing and conflicts over space. The impact G4C has is the production of innovative, compact and mobile systems, which can aid in adaptation to these changeable conditions. This can include balcony and container gardens, for example, which can reduce the competition for land use.

Ideas of cooperation were also explored in the spatial element, through the ideals of local support for producers and value of proximity. Here, it was expressed through resilience of local communities, and gestures such as locally trading seeds.



Values were therefore mainly understood as currently constrained and as a general aspiration for the neighbourhoods collectively, with no measurements of success specified.

Importance was also stressed to the localisation of the food chain, addressing the persisting issues of the distance of the market from settlement areas, as well as the quality of produce. By the encouragement for community members to take charge of their own agricultural production in soilless systems reduces the overall reliance on these markets.

Environmental Values

It was recognised that a holistic viewpoint on environmental and sustainability topics should be adopted for the promotion of circular practises that are embedded in their work. For this specific reason, most participants chose the broad value element, which led to in-depth dialogues pertaining to the relational contexts of each value.

Soil quality was predominantly highlighted for its importance, in line with G4C's core origins of working with soil-less cultivation systems. The impact of their work directly aligns to solving issues currently faced with cultivation within the city, with the improvement of health concerns of produce grown. This directly links to other values which were expressed, such as quality food and health. Production of localised, organic produce aids in establishing their traceability and an improvement in nutrition content, furthermore, starts conversations of why it is important to have these guidelines in place to grow food. As the dialogue is further promoted through #FoodIsPolitics, the two activities work synergistically to engage the community in both a practically and through conversation. The success of these implementations is therefore more apparent through observation of changes within the community, such as improvements in health, including shifts in malnutrition among residents.

The impact of values which regard the environment are mainly expressed through the coordination of community projects that contribute to their revival/upkeep. This could be projects to conserve the riparian wetland areas, for example, or the transformation of a derelict area into a usable community allotment.

Work which is focused on the transformation of the urban environment is ultimately related to the ecological values here also. Impact is seen through the creation of green spaces, aiding the local microclimate and air quality. Further, it provides some provision to the biodiversity of the area. Indigenous plants are reintroduced to the area to support the restoration of land, and the conversion of space into community gardens supports the return of many pollinating species.

Economic Values

Relations to the economic section are closely linked to values from the social category, such as those pertaining to justice, especially when speaking of a more even distribution of economic value. The idea of food sovereignty is explored here also, with their goal for local communities to achieve control over their own financial food structures.

A centrality of the economic values focuses on the support for the local communities, with the aspiration of achieving a localised sense of sufficiency. In regard to local food systems, this would mean the community growing their own produce, then being able to sell any excess free from market conditions. Support towards this vision is implemented through the capacity building activities and supplement of small grants to their ecosystem members to establish growth. Observation of progress towards these goals is apparent through observing economic sustainability at both an individual and a collective level.

Future of the project/initiative/organisation

G4C's future goals are mainly centralised around the support of the groups and their respective goals which are within the ecosystem, that can be generally categorised into creating the internal infrastructure for projects, gaining financial stability, and providing the required materials for their aquapuncture projects. This upscaling will aid with the viability of the initiative and help to generate a higher impact on its target communities.

"Because that's our mission to support them to achieve their goals. So we have our own goals in terms of, wishing to have impact"

More specifically to the development of their organisation, there remains some goals to create a physical hub, which can establish some meeting points, and provide a permanent area for the learning lab activities, to partake in experimental and training activities. Another milestone identified is the registration of G4C as an African foundation, which will enhance their ability to act within Kenya and expand their operations further. Related to this is the impact of which their activities, projects and groups create for the community, especially through the upscale of conversations fostered within #FoodIsPolitics.

Finally, an expansion of outreach, to become established in other cities within Kenya, is a goal which they aspire to achieve. Possibilities of branching outside of Kenya to other countries, such as Uganda and Tanzania has been expressed as a possibility after work has been consolidated within Kenya.

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CHRISTCHURCH CASE STUDY 1: CANTERBURY COMMUNITY GARDENS ASSOCIATION (CCGA)

AUTHOR: ANDREAS WESENER, LINCOLN UNIVERSITY (LU)

RESEARCH CONTRIBUTORS: JIABEI XU, YUAN XU (LU)

Introduction

This report outlines context, research design and selected findings of the first of two inspirational cases located in Christchurch: Canterbury Community Gardens Association (CCGA). For each case, a set of broad research aims was developed. While the broad research aims are distinctive for each case, there are substantial overlaps between the two cases in terms of research design and findings. While this report focuses on case 1, it is recommended to read it alongside the report for case 2 to get a fuller picture of local food systems in Christchurch.

The report is structured into six parts. It starts with a summary of the research context – New Zealand, the Canterbury region and Greater Christchurch – including key challenges with regard to local food systems followed by an outline of research aims and methods. The fourth section provides a descriptive overview of the case, key stakeholders and associated study locations. This is followed by a detailed findings section analysing case context, governance structures, legal and financial frameworks, engagement and collaboration, impact, and future plans based on data from qualitative interviews with key stakeholders.

Research context and key issues



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Aotearoa New Zealand is a major international exporter of food and fibre with an estimated total export revenue of NZ\$ 60.4 billion (ca. 30.8 billion Euros) in 2025 (McClay, 2025). However, community food security, defined as a “situation in which all community residents obtain a safe, culturally acceptable, nutritionally adequate diet through a sustainable food system that maximizes self-reliance and social justice” (Holben, 2010, p. 1369), has become an increasing concern across New Zealand. Food insecurity is strongly linked to socioeconomic status and “co-occurs with a number of risk factors, particularly those associated with other aspects of poverty and material hardship. [...] Food insecurity has been increasing in New Zealand as the cost of living escalates” (Te Whatu Ora - Health New Zealand, 2022, p. 6).

Food insecurity has also a qualitative dimension. Healthy diets such as vegetables and fruits, whole grains and lean protein, and less sodium, sugar, and unhealthy fats (Lim et al., 2021) play an important role in reducing obesity (Rush et al., 2019). Currently, about 34% of adults and 12.5% of children in New Zealand are considered as obese (Ministry of Health, 2024). Associated direct healthcare costs have been estimated between NZ\$1.3 billion and NZ\$1.8 billion annually (Barton & Love, 2021). High obesity rates in New Zealand have been linked to socioeconomic deprivation (Cammock et al., 2021; Clough & Destremau, 2015); almost half of the adult population in the most deprived areas are obese, compared with less than 26% in the least deprived areas (Ministry of Health, 2024). In obesogenic environments, costs for healthy food are often higher than for unhealthy options (Cammock et al., 2021; Public Health Advisory Committee, 2024).

New Zealand is largely urbanised, with 87% of the population living in urban areas (World Bank Group, 2023). New Zealand cities, like most cities worldwide, rely almost solely on profit-driven commercial food distribution. The current land use approach regards food production and residential development as separate entities. Habitable land is largely classified as either rural or urban, a zoning approach that poses challenges to the management of food flows from rural commercial agriculture to urban areas (Davis et al., 2023; Davis et al., 2024).

Christchurch is the second largest city in New Zealand, the capital of the Canterbury region, and the largest – and regionally most important urban settlement – in the South Island of New Zealand with a population of ca. 412,000 in 2024 (Christchurch City Council, n.d.). The city’s Gross Domestic Product (GDP) has been estimated as ca. NZ\$87,300 (ca. EUR44,450) per capita in 2025 – which is higher than the national GDP per capita of ca. NZ\$81,070 (Infometrics, 2026). Looking at Greater Christchurch including Christchurch City, Selwyn and Waimakariri Districts, the economy encompasses almost 10 percent of New Zealand’s national GDP and almost 45 percent of the South Island’s GDP. While the city’s manufacturing, construction, professional, scientific, and technical services sectors are the main pillars of Christchurch’s economic output, the “agricultural hinterland of Greater Christchurch is a foundation of the regional economy and the region’s dominant export base, with the top export commodities being dairy, meat and forestry products” (Greater Christchurch Partnership, 2023, p. 22). Despite its strong agricultural economy, food insecurity is



experienced by a significant number of households in Canterbury and common for those with a low household income. Māori are more likely to be food insecure than those of European ethnicity. Food insecurity has been identified as a serious issue for public health and wellbeing in Canterbury, and improved policy interventions have been called for (Te Whatu Ora - Health New Zealand, 2022).

Christchurch is also known as the 'Garden City' featuring a large number of public parks and gardens within predominantly low-density suburban development patterns (Wesener, Davis, & Chen, 2025). In 2010 and 2011, the Canterbury region was struck by two major earthquakes causing 185 casualties; about 90 percent of residential properties were damaged (Brand et al., 2019). Shortly after, a range of bottom-up urban gardening initiatives sprung up (e.g., Montgomery et al., 2016; Wesener, 2015); policy frameworks such as the Food Resilience Policy (Christchurch City Council, 2014) and network organisations such as the Food Resilience Network were created. Christchurch offers the most supportive regulatory framework for urban agriculture in New Zealand (Hanna & Wallace, 2022). The Christchurch City Council's (CCC) Food Resilience Policy, which is currently under re-development, promotes a vision for Christchurch to become the "best edible garden city in the world" with the goal to provide "physical and economic access, by all people, at all times, to enough food to maintain an active and healthy life" (Christchurch City Council, 2014).

As a concept, food resilience overlaps with community food security, e.g. regarding equitable access to healthy, affordable, safe and culturally appropriate food supplies. In addition, food resilience relates to a "local food production and distribution system based on ecological sustainability, able to withstand natural and man-made shocks" (Christchurch City Council, 2014). Based on the devastating experience of the Canterbury earthquakes, local food systems in Christchurch are contextually interwoven with the region's disaster history. However, "discussions around food resilience have broadened and become inclusive of a range of environmental, socio-economic and cultural processes and challenges" (Wesener & Morris, 2025) as part of a more comprehensive resilience narrative around "urban social-ecological systems" (Chan et al., 2015, p. 632). This has raised questions of how local food systems need to respond to a variety of crisis scenarios, and what role urban community gardens have or could have in such scenarios (Wesener & Morris, 2025).

Community gardens in New Zealand provide a variety of social and health benefits (Earle, 2011). The first community gardens in Aotearoa New Zealand were founded during the Great Depression as 'worker's gardens' to support workers and their families suffering from the world economic crisis. More community gardens developed during World War II as a war effort to support national food supplies (Morris, 2020). Since the 1970s, community gardens have continued to thrive in urban centres due to growing urban populations, densification, the need to strengthen community networks, and a growing interest in urban food production (Trotman & Spinola, 1994). In the twenty-first century, a general revival of urban food production was observed following the 2008 Global Financial Crisis (Morris, 2020).



Official statistics, e.g. about the number and distribution of community gardens in New Zealand do not exist. However, based on a recent national survey of 216 community gardens, more than 60 percent were established since 2010 (Morris & Koiki, 2025). CCC have widely supported the development of urban community gardens and encouraged “community gardens throughout the city” (Christchurch City Council, 2016). A recent survey found 37 active community gardens within the urbanised areas of Christchurch (Wesener, Davis, Xu, et al., 2025). Internationally, urban agriculture has been linked to healthy food access in low-income areas (DiDomenica & Gordon, 2016), and a recent systematic literature review found that community gardens have the potential to “contribute to urban resilience by fostering food security [...]” (Huq & Deacon, 2025, p. 12). Regarding New Zealand, Cammock et al. (2021, p. 233) argued that urban farming “as long as it was conducted appropriately, could contribute to improving urban food systems”. There is little evidence that community gardens in Canterbury have reduced food insecurity quantitatively. However, “positive outcomes such as increasing the number of fruit and vegetables consumed for those participating, and mental wellbeing benefits” have been attributed to community gardens (Te Whatu Ora - Health New Zealand, 2022, p. 20).

Research aims

Two RED-N inspirational cases are located in Christchurch, Aotearoa New Zealand. For each case, a set of broad research aims was developed. While the broad research aims are distinctive for each case (see below for case 1 in *italics*), there are substantial overlaps between the two cases in terms of research design and findings. While this report focuses on case 1, it is recommended to read it alongside the report for case 2 to get a fuller picture of local food systems in Christchurch.

Canterbury Community Gardens Association (CCGA)

Local RED-N partner: Sandi Bobkova (Georgina Stanley, former Chairperson of CCGA, had this role before she left the organisation in February 2026)

This case study explores spatial and social connectivity of urban community gardens in low-income urban neighbourhoods in Christchurch. Aims to create stronger citizen connection to food, include urban food production as part of urban design, and connect food to local cultural values.

The Canterbury Community Gardens Association (CCGA)³⁸ is the main umbrella organisation for community gardens in the Canterbury region of the South Island of New Zealand. The former CCGA chairperson, Georgina Stanley, was our local RED-N partner for this case study. She left the CCGA in February 2026. The new CCGA chairperson, Sandi Bobkova, was appointed as the new local RED-N partner for this project. The research design of this inspirational case was developed in close collaboration with our local RED-N partner. The broad research aim above provided guidance for the selection of specific research focus areas, study locations,

³⁸ <https://www.ccgga.org.nz>

stakeholders for interviews, research methods and the development of interview questions.

Based on the broad research aim above and intense discussions with our RED-N partners, we identified the following key focus areas for our research:

1. **Diversity of people** – who are the people engaged in local food systems including low-income groups?
2. **Policy and funding** - successes, challenges and learnings
3. **Story and context** - situating the RED-N case in its respective context (e.g. geographical; sectoral; problem-based)
4. **Stakeholder mapping** – identifying the different actors engaged in the operation of the case, their role and their relation to each other.
5. **Governance** – describing respective structures and their embeddedness in its larger environment (e.g. local food systems).
6. **Local impact** – analysing the impact of cases regarding food value framework aspects (e.g., socio-cultural; economic; health; environmental) including identified barriers & enablers.
7. **NEB (New European Bauhaus) principles** – aligning local impact criteria with NEB principles.
8. **Future plans and scenarios** – describing and analysing potential future plans and scenarios for the local cases, e.g. based on impact and identified barriers & enablers.

This report focuses on **selected findings** from the above key focus areas related to context, governance, legal and financial frameworks, engagement and collaboration, impact, and future plans.

Research methods

Findings in this report are based on **contextual research** – including reviews of academic and ‘grey’ literature (e.g. policy documents, government and NGO publications and materials, websites), gathering of local contextual information, e.g., about study locations, spatial observations and site-based photographs, and participation in local events relevant to local food systems to gather first-hand experience and to learn about how local food system networks and activities are co-created. Examples are two “Growing a Fair Food System—Together” workshops in September 2025 and April 2026, organised by the Christchurch City Council. The workshops intended to “co-create strategies to foster equity, sustainability, and food resilience in Canterbury” (workshop invitation draft) by gathering various stakeholders involved in local food systems with the idea to re-develop the food resilience policy for Christchurch. The author of this report, alongside other LU researchers, participated in the workshops and assisted the organisers with workshop planning and workshop activities.

Empirical data has been gathered through semi-structured in-depth **qualitative interviews** with key stakeholders who are involved in and have an in-depth knowledge of best practices and initiatives around local urban food systems in Christchurch. Qualitative interviews are an effective method to gather rich, detailed and context-

specific data. Based on the discussions with our local RED-N partner, we identified study locations suitable for carrying out interviews with leaders (e.g. chairs, coordinators, managers of community gardens who are familiar with governance, leadership and/or management functions. Each of the locations has distinct features, e.g. in terms of their geographic location, social embeddedness, spatial characteristics, activities, and/or users that make them relevant for our key focus areas.

Key stakeholders were contacted and invited for interviews. Interviewees were provided a research information sheet outlining key aspects of the research and a consent form for them to sign. Activities involving human participants (e.g., interviews) are considered an ethical issue. We sought approval for carrying out the interviews and for the accompanying documents (information sheet and consent form) from the Lincoln University Human Ethics Committee (LUHEC). The research received written approval by LUHEC (14 October 2025; Application-No. HEC2025-46). The approval encompasses both Christchurch case studies.

The interviews were conducted in November and December 2025. They were recorded and fully transcribed. Transcriptions were produced with the help of a dedicated recorder/transcription device (iFLYTEK Smart Recorder), that performs offline AI-enhanced transcriptions (real-time voice-to-text conversion without internet or cloud connection to ensure data security for sensitive content). Interview transcripts were manually checked for accuracy and corrected where needed. They were analysed following qualitative thematic analysis methods with the support of the qualitative data analysis software NVivo15. The software supports systematic coding, theme development, and management of qualitative data as well as the visualisation of patterns across participant responses. All transcripts were analysed to identify information regarding the key focus areas (see above). Emerging themes were identified via inductive coding.

Case, key stakeholders and study locations

The case was selected for three key reasons: First, community gardens in Christchurch have played a vital role in supporting local food systems and community resilience (e.g., Shimpo et al., 2019; Wesener, 2020; Wesener et al., 2020; Wesener & Morris, 2025). Second, there is a sufficiently large number of community gardens within Christchurch to serve as potential study locations (Wesener, Davis, Xu, et al., 2025). Third, while urban community gardens in Christchurch provide already various benefits to regular participants and visitors, they may have the potential to increase their beneficial role even further, e.g., with regard to fostering urban resilience (Wesener, 2020; Wesener & Morris, 2025) or enhancing local food distribution (Wesener, Davis, & Chen, 2025).

We interviewed seven key stakeholders (SLO1 -7) from four study locations and two stakeholders from the CCGA (NGO1-2). In total, we interviewed nine key stakeholders; one of them (SLO1) was also interviewed for case study 2 (see case study 2 report). Four of the five interviews were conducted with two participants (see table below). Each interview lasted between 1.5 and 2.5 hours.



Interviewee Pseudonym	Organisation / Study location
NGO1	Canterbury Community Gardens Association (CCGA), Christchurch
NGO2	
SLO1	Ōtākaro Orchard Urban Farm, Christchurch City Centre
SLO2	New Brighton Community Garden, New Brighton, Christchurch
SLO3	
SLO4	Linwood Resource Centre, Linwood, Christchurch
SLO5	
SLO6	Richmond Community Garden, Richmond, Christchurch
SLO7	

24. table: Qualitative interviews conducted for case study 1

Findings

Case description / Context

The Canterbury Community Garden Association (CCGA) was founded in 2001 to create an umbrella organisation for community gardens. Around that time, several gardening groups had been established in Christchurch including some community gardens (NGO1).

The **Ōtākaro Orchard Urban Farm** (Figure 1) consists of two sites. The main site (orchard) was established in 2015 on Cambridge Terrace along the Avon River in the Christchurch CBD after earthquake-damaged office buildings had been demolished. It received a long-term lease from the (central) government in 2016 (RNZ Radio New Zealand, 2016). The Ōtākaro Orchard was developed as a key project of the Food Resilience Network (FRN; see case study report 2) in response to experienced and anticipated food resilience issues. It has remained closely aligned with the network until today (cf. case study report 2; Wesener & Morris, 2025). The second site (urban farm), which is about 5 minutes walking distance from the main site, had been taken over from 'Cultivate Christchurch', an organic urban farm that combines urban food production with social work (Wesener & Morris, 2025). 'Cultivate' ended their operations on the site in 2021, and Ōtākaro took over in 2022: *"[...] Live in Vacant Spaces³⁹ [...] approached one of my colleagues [...] she was actually offered the site. [...] [W]e ended up signing the contract with her, Edible Canterbury Food Resilience Network [...] we took it on like about [...] September 22" (SLO1).*

The **New Brighton Community Garden** was established in 2005 in a public reserve (Rāwhiti Domain) in New Brighton, a coastal suburb of Christchurch (cf. Shimpo et al.,

³⁹ Life in Vacant Spaces (LiVS) <https://lives.org.nz/> was founded after the Canterbury Earthquakes as a charitable trust and site brokerage organisation to link owners of vacant land to individuals and community organisations that want to use vacant spaces for creative, non-for-profit or entrepreneurial, often temporary, projects.



2019). Previously, the land belonged to *“the woman's bowling club many years ago, and they closed down, and some local people saw the benefit of making this into a community garden”* (SLO2).

The **Linwood Resource Centre** was established in 1997 “as a joint project between the local Linwood community and the Linwood Service Centre/Hagley Ferrymead Community Advocacy Team”. It became a charitable trust in 1999 (Christchurch City Council, 2002). Being located in a socio-economically deprived suburb in East Christchurch, it has provided a range of community services including an organic community garden since 2001 (Law, 2025). *“The context of the Linwood community garden is a closed garden [...] only open certain hours [...] open to the public, to both grow food [in a] community and an allotment system. It's part of a greater resource centre, which includes two other staff, a community woodworking shed and a community drop-in centre. The garden's kind of history is [that] council land was donated to a charitable trust – the Linwood Resource Centre – 25 years ago [...]. It has yet been a community garden and drop-in centre ever since”* (SLO4).

The **Richmond Community Garden** started in 2014 in the residential red zone, a vast 602-hectare Crown-owned area established after the Canterbury Earthquakes in the East of Christchurch, also known as the ‘Ōtākaro Avon River Corridor’ (Wesener & Morris, 2025). The garden was established *“at the back of Avebury house, which is the historical house just behind the paddling pool. [The] board of trustees started attending for the land there once a week [...]”* (SLO7). The first documented working bee took place on 1 April, 2015 (Richmond Community Garden & canterburystories.nz, 2015).



46. Figure: Ōtākaro Orchard Urban Farm, (urban farm site). Photo: Jiabei Xu, November 2025



47. Figure: New Brighton Community Garden. Photo: Jiabei Xu, November 2024

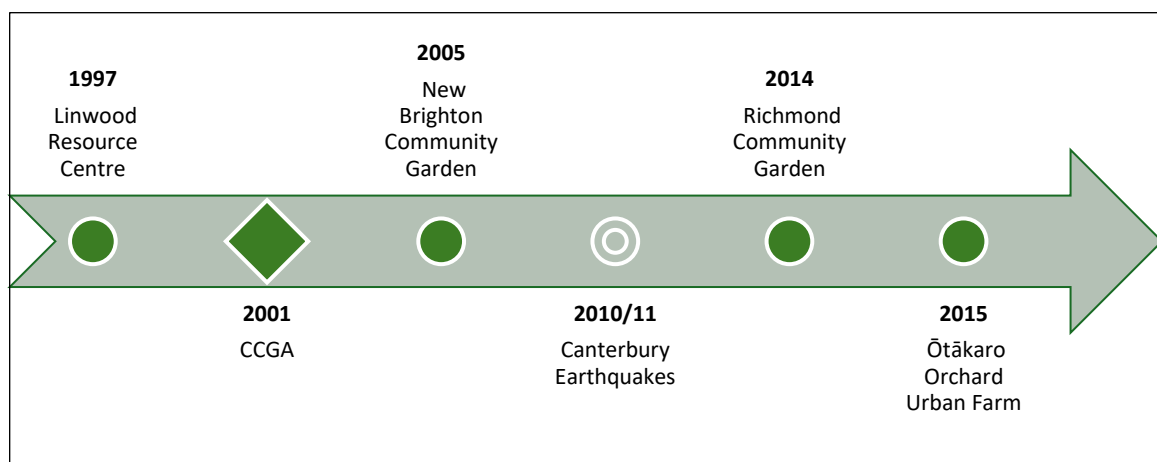


48. Figure: Linwood Resource Centre. Photo: Yuan Xu, December 2025





49. Figure: Richmond Community Garden. Sign informing about the garden's greywater system. In the background the 'Riverlution' Café that is run by the garden. Photo: Yuan Xu, December 2025



50. Figure: Case study 1 timeline

The organisation's establishment

CCGA was founded in 2001 for two key reasons: First, community gardens in Christchurch and wider Canterbury did not have a distinct umbrella organisation to advocate for community gardens: *"[T]he community garden association or the people who are practicing community gardening wanted to run their own ship, so they formed [the] association, and then they advocated for community organizations to get their own funding"* (NGO1). Second, the CCGA was established to provide a platform for bringing diverse people together and encouraging exchange and discussion. Coordinators of

existing gardens *“formed the CCGA and they had different ethics [...]. It is a Kaupapa Māori⁴⁰ way of gathering people together” (NGO1).*

Narratives around the establishment of the study locations (gardens) responded mainly to food resilience-related and socio-economic motivations, or a combination of these. Specific opportunities arose after the Canterbury earthquakes, when large parts of the city's built environment was demolished and new ideas for the re-use of urban space emerged (cf. Wesener, 2015). The earthquakes were also an opportunity to re-think the resilience of local food systems in the light of future disasters (cf. Wesener & Morris, 2025):

“So after the earthquakes, the city council had a share an idea campaign and they invited lots of people from all over Christchurch to say what they wanted to see with the rebuild. And it was like food resilience is so important because our supply chains go down, food doesn't come in. This is an issue. And so we need to have lots of food producing hot spots interwoven within the fabric of our community. And so all these organizations came together, to create this proposal for that site over there. And [...] then at that stage too, with all these talks, Edible Canterbury, the organization was formed. And there was an Edible Canterbury Charter, with the vision of Christchurch being an edible garden city. [...] It's also the food resilience network that [...] was formed [...]. So they put forward the proposal for this cool project and they won the tender for this land from CERA⁴¹.” (SLO1)

From a socio-economic perspective, gardens were established to provide opportunities for people to socialise, learn new things, and address socio-economic needs: *“And some people see community gardening as a way to create community and address inequality” (NGO1).* Participating in community gardening allows people to take home some of the produce and reduce their spending on food: *“So I think it's a real need in the community. Yeah. It's the people that come here are able to get their own veggies through doing a bit of work. And that's quite a necessity to a lot of them” (SLO 5).* Working in the garden means also learning about gardening, and to enable people to grow their own food: *“[P]eople are coming for advice, [...] but they're a little bit nervous, hesitant, still because you never know what story people [...] got” (SLO2).* The Richmond Garden was established around ideas to create a social enterprise: *“I guess the next key [...] cause [was] actually, [that] we were gonna do a cafe before getting [...] the hub. So, they were already thinking about starting a social enterprise before even having a physical house or places to operate from” (SLO7).*

⁴⁰ Kaupapa Māori is a concept or theoretical approach to “Māori values, practices, language, and views of the world” (Tāhūrangi - Te Whāriki Online. (2026). *Kaupapa Māori Theory*. Retrieved 31 March 2026 from <https://tewhariki.tahurangi.education.govt.nz/kaupapa-m-ori-theory/5637189664.p>.) In this context, it was used to illustrate a process to bring people together that was, however, not exclusively designed for Māori.

⁴¹ In March 2011, the Canterbury Earthquake Recovery Act (CERA) was passed by parliament. CERA, under the direction of Gerry Brownlee, Minister for Canterbury Earthquake Recovery, took comprehensive top-down control over Christchurch's recovery and rebuilt process (cf. Wesener, 2015).

The narratives reveal overlaps of food system-related, educational and socio-economic aspects. Food security includes educational and socio-economic factors; they are intertwined.

Key moments

We asked participants to give us examples of key developments moments of their organisations and divided them into four categories: infrastructure development, functional and financial diversification, network and organisational integration, and staff & volunteers.

Gardens invested heavily in developing more and infrastructure over a longer period of time. Infrastructure development requires extensive funding, and it takes many years to achieve specific infrastructure goals. For example, the Ōtākaro Orchard Urban Farm developed slowly from a vacant earthquake “rubble” site into a green urban agricultural space: *“All those things happened from 2015, 2016. The first trees were planted. [...] obviously before that it was big, corporate buildings, they were all cleared away, the whole site was excavated, 50 centimetres of hardcore brought in. And then about, I think there was something like 20 [...], 30 centimetres of soil, something like this. [...] And then 2019, the foundations of the building were put on. But unfortunately, at that stage, they ran out of money and the whole project came to a screaming halt” (SLO1).*

The New Brighton Garden invested in special garden infrastructure for disabled people. They designed their own garden beds accessible for wheelchair users and raised the necessary funds to build them (SLO2). The Linwood Garden built a “Men’s shed”, a specialised woodworks workshop to build things for the garden, but also for the wider community: *“It’s a real balance of community projects in both in the gardens and out of the gardens and also a space to provide personal projects. So currently, we’ve got volunteers working on their own projects, building tables, restoring furniture. But then last year was a big year for our gardens. They built five, very big, beautiful macrocarpa garden beds” (SLO4).* The Richmond Garden continuously extended their diverse infrastructure, including securing the initial land, planting a food forest, opening a café and a fungi farm: *“But the key moment was nearly 5 years ago when we secured the hub. So, this house is a red zone house, and it was meant to be demolished. We were already quite friendly with the people living there [...] We kindly ask them to donate to us the hub and with a lot of persistence [...] they agreed and they donated it to us for \$1. So that was a key moment, because we finally had a place where we could put all of our stuff and start, actually expand some of the projects” (SLO7).*

Next to the development of infrastructure, gardens have diversified the functions and services they offer while exploring additional sources of income. This includes the manufacturing and sale of products: *“We make things out of the produce as well. So a lot of chutney, a lot of homemade good quality stuff, which tastes good and has much less, no preservatives, all of that” (SLO3).* Some established a marketplace (SLO1) or a café where they sell produce: *“So, the real fruit ice cream machine [in the café] uses the fruits from the garden [...] (SLO7). “We’ve got all the chutneys and sauces, and those kinds of things that we make is so what whatever we can from the land we will use. And*



Jenny [anonymised], one of the board members, does a lot of preserving in bottling fruit and all kinds of bits and pieces. It can be herbs, we've got salad, greens, we've got tomatoes, we've got salad, bits, and pieces for the cafe as well as the condiments. And we're looking constantly at how we can utilize more" (SLO6). The Richmond Garden has established a unique recycling scheme, where they collect recycling materials via drop off stations and use them to manufacture new products in a specialised workshop: *"I worked in the waste industry [...] and my role was minimizing waste [...] and what I realized is that a lot of the smaller recycling would get tossed. [...] I realized that there was a loop that we could kind of get going here. And so, we started those drop off stations. [...] And we had different things that we collected, but, yeah, we wanted something that the community would feel like they had an impact. And we now have over 30 [drop off stations] around the city. [...] And so the workshop at the back, also a key moment, I guess, getting the proper workshop for it with all the machines [...] other groups that are collecting [...] across the city will be able to come here, make their own products and generate an income for their own entity, because it's quite hard for charities to generate income [...]" (SLO7).* The Richmond Garden also runs pest trapping and composting projects.

Like the Richmond Garden, other study locations have created partnerships with external partners including NGOs, government agencies, and schools. For example, the Linwood Garden uses its "Men's shed" for projects with other organisations: *"So, they also have projects working with Kāinga Ora and the Estuary Trust. So, it's a balance of personal projects and community projects" (SLO4).* The New Brighton garden works frequently with schools, and school children have become volunteers in their spare time: *"We have school children we connect with and they actually come in on the way home with their bikes and they wanna do some volunteering [...]. And so they will do some work in exchange for carrots, and so that connection [...] with schools, children, those old school programs [...] you grow that rather than waiting till they're grown up [...] that can come actually to a community garden wherever they are and feed themselves" (SLO3).* Gardens have become (founding) members of food networks and charters such as the Food Resilience Network and the Edible Canterbury Charter (SLO1).

Finally, the investment in staff and volunteers have been critical milestones for gardens to extent their scope of activities: *"[W]e managed to employ Kate [anonymised] just to look after the production side and then I could just worry about everything else in the market. So that was good" (SLO1).* Administrator roles have also been vital for the development of gardens: *"The biggest key moment was when SLO3 started, truly. So that was how many years ago? 6 years ago. For me personally and for the garden, because now we've got real direction [...]" (SLO2).* However, managing larger numbers of staff and volunteers comes with additional burdens: *"We're doing little bits as we can. Turns out that having 22 employees takes a fair amount of time, so we just focus on it" (SLO7).*

Geographic scale of operation (Local / Regional / National / Transnational)

The gardens operate mainly at local level (Christchurch); the CCGA operates at both local and regional level. Our interviewees expressed great passion for local food

systems and the role of urban agriculture for local food security: “And so we need to have lots of food producing hot spots interwoven within the fabric of our community” (SLO1). “I know what this place provides, so I’m very passionate about community gardens, I’d love to see one in every suburb, everywhere. *I think there’s so much to offer as a community space and for the local food security [...]*” (SLO2).

Role and place in the food system

Stakeholders considered their role and place in the (local) food system as producers, distributors, processors, waste management supporters, and educators. All community gardens grow and distribute food across the community. Some of them are acting as semi-professional distributors by selling their produce at market stalls (SLO1) or selling processed food via the garden-owned café (SLO7).

The Richmond Garden became active in waste management by setting up waste disposal and composting schemes for neighbouring communities: *“Because in Christchurch, businesses need to pay for green waste disposal [...]. Businesses or organizations will come and drop off certain materials. So we’ve got cardboard being dropped off by the local organizations in the neighbourhood. Coffee grounds, we’ve got horse manure, we’ve got guinea pig poo”* (SLO7). The garden explored collecting green waste from households: *“The other thing that we’ve done actually recently is there’s a lot of high-density housing has been going on in Richmond. Through various connections, we’ve been able to actually go on site and before they just scrape everything back and take it to landfill, we have been able to take the green material, chip it and use it for our composting so that it isn’t completely wasted”* (SLO6). They plan to create a circular system where composted waste gets returned to the community; however, that has not been realised yet: *“And I guess to close that loop long term, the goal of that project was to be able to give back some of the compost to the community. We’re far from that. [...] We don’t have the capacity [...]*” (SLO7).

Education was the most frequently mentioned role for organisations in the food system. All interviewees mentioned the relevance of food education, e.g. with regard to learning skills that may strengthen overall food security: *“So giving that knowledge, I think our knowledge sharing is a super form of the food security [...]. It doesn’t have to be big, it can be a small thing to do. I would say to people just starting with a pot of parsley or something like that”* (SLO2). The garden is conceptualised as an outdoor classroom, open for everyone to learn about food systems: *“I think the food forest over there is an amazing education resource on permanent food systems, farm culture, soil building, water catch up. So education all the way and also inspiration [...]*” (SLO1).

The organisation’s vision and goals

Organisations’ visions and goals revolved around the following topics: Collaboration, long-term sustainability including infrastructure investment, resilient local food systems, education and upskilling, and social justice and community wellbeing.

Encouraging and enabling more and better collaboration between different organisations and actors was the most frequently mentioned vision of stakeholders: *“[...] if we were able to get excess money, then we are supporting other organizations in*

the food resilience field. And then that would be able to help stop the competition and rather work more towards collaboration, which is what I imagine the food resilience network is all about: collaborating, working together to have an edible garden city" (SLO1). The CCGA envisions a shift "from growing and adding gardens" to creating a support network of existing gardens and other community members "who want to get involved and do projects and all sorts of things that's much more networking. This is really practice-based like exchange. [...] It's a community-wide building of practice" (NGO1).

Long-term sustainability was another relevant vision for organisations. This included strengthening existing gardens (NGO1), achieving financial stability and independence (SLO1), expanding the garden and getting long-term leases to secure the land (SLO7). Gardens communicated their goals for infrastructure development to extend their role within the local food system. For example, the New Brighton garden planned a professional industrial-scale kitchen to extend their services with regard to food processing and education: *"[...] one of the big projects that we have as far as like for a vision, is that we are going to make [...] this amazing kitchen that's going to have different benches, heights as well so that children can actually work from a low height, up to right the taller people" (SLO2).* The garden secured most of the funding from four different funders and completed the design.

Creating resilient local food systems was regarded as a high-level vision: *"I guess one of our visions was to see Christchurch as an edible garden city. And Edible Canterbury, which is also the Food Resilience Network, is to be ideally like if you look at our charter [...] not only [...] like looking after this food forest in it, but the idea is to get about higher level. [...] To keep that food conversation going, and that food resilience. So that's definitely a part of my mahi, our Kaupapa" (SLO1).*

Education and upskilling for community garden leaders was considered a main goal for CCGA: *"I guess the big one will be the garden coordinators, and up skilling them in a variety of things like managing people" (NGO2). "So we've got a program or like a series of workshops that are funded, and they're gonna be led by a community development leadership guy [...], and he's going to offer eight places for community garden coordinators to go through a series of active learning modules, where they sit in a circle and share their experiences of community, this the issue, the experiences, the challenges, the opportunities, they are having in the garden" (NGO1).*

Gardens considered supporting local communities – particularly vulnerable ones – as part of their vision: *"I'd like to see food going out into this community, because there's a lot of needy people" (SLO5). "[...] we are here for vulnerable people. From homeless people to mental health people" (SLO1).*

The main issues the organisation is facing

Key issues mentioned were a lack of funding (see 'Legal and financial frameworks' below for more details), issues to get a long-term lease, inadequate facilities and infrastructure, leadership succession, and lack of (funded) time.

The lack of long-term land security can be a constraint for gardens to grow and secure funding: *"So, the lease that we currently have is until 2028, yeah. I am currently working on securing a 10-year lease so that we can actually redo part of the hub and the café. So, until we have that, I can't put [in] a bigger funding application [...]"* (SLO7). Inadequate facilities and infrastructure put constraints on work flows and growth: *"We don't really have the space for a lot of our projects. I don't really have an office. I'm in the middle of everything all the time. [...] the kitchen is not made for a purpose either. It's not really practical to be able to host some of the events. [...] So, we would like to work on expanding the hub to fit our needs. So that would be a bigger funding application to redo some of that. And to have actual space that fits the long-term goals of the entity"* (SLO7).

Leadership succession is an issue in terms of long-term sustainability: *"[...] succession planning is so important, like with SLO2 we are so lucky, but reality is we won't find ever anyone who's paid 15 hours a week and works 50 hours a week unpaid"* (SLO3). The latter statement points to another problem: Garden leaders are often overworked and only get paid for a fraction of their time. The CCGA is aware that garden coordinators often lack time to participate in other activities: *"I think it's going to be whether the community garden coordinators themselves can see the value in us [CCGA activities] and whether they've got time and resources to attend; would love to have paid them"* (NGO1).

Governance (GVN)

CCGA has a leadership committee of six people. Three of them (Chairperson, treasurer and secretary) have executive roles. These are voluntary positions. They employ one paid part-time staff in a community builder / capacity developer role, who stays in close contact to individual gardens. The gardens have usually a Board of Trustees as a governing body that oversees the organisation, and one or two, often part-time paid coordinators, managers or administrators that run day-to-day activities and projects, secure funding and revenues and provide strategic direction. Some gardens (e.g. SLO2) were able to employ more than two staff; the Richmond garden with 22 staff (SLO7) is an exemption due to their size, diverse activities and revenue streams.

The number of volunteers varies from garden to garden and often from week to week. The Ōtākaro Orchard Urban estimated between 4 and 7 volunteers average per day; the New Brighton garden recorded around 16 volunteers per day (SLO2), whereas the Linwood garden estimates around 30 volunteers a week (SLO4). Gardens do rarely keep exact records of volunteers; however, they felt positive about volunteer retention: *"We've got huge retention of volunteers like through winter on cold hideous days; there could be 17 people who have turned up to work"* (SLO6).

The main role of volunteers is to maintain the gardens and help with day-to-day activities. *"So we have some volunteers that I know come not for the vegetables, but they're coming to help create a really lovely space for the other people that come here"* (SLO2). The Richmond Garden runs different projects with volunteers (SLO6 & SLO7). Volunteers are diverse, some are retired, some are tackling mental illnesses and received "green prescriptions" from their psychiatrists (SLO1). The work in the garden is



part of their recovery programme. Some volunteers come through the New Zealand Department of Corrections and have been assigned community service which they can do in a community garden (SLO4).

Volunteers are often from the local neighbourhood. They come to the garden to learn how to grow healthy food, and to socialise: *"I see a bit of a change, there's a lot more like local volunteers, so people coming to learn. That's a big one. People coming for company. This is a very big part"* (SLO2).

Main actors

Organisations have usually a governing body that oversees the organisation (e.g. Board of Trustees) and an executive team (e.g. garden coordinator, manager, administrator) that communicate with and report to the governing board. They are responsible for running the organisation with regard to the day-to-day activities including managing staff and volunteers, securing funding, and developing future strategies and projects. At the next level are staff without executive functions, interns, and volunteers. These are managed by one or several people of the executive team. Some organisations have external contractors (e.g. cleaners) that are also managed by the executive team (SLO7).

Intricacies of effective communication

Relationships between governing body, executive team, staff and volunteers are based on formal reporting structures and informal communication. Effective coordination and communication between groups within an organisation has been described as relying on trust and collaboration. For example, SLO1 described the triangle of Board, Chairperson and garden manager as the "project control group" with its members regularly communicating, planning and coordinating projects together. Trust between Board and management was considered vital to get projects done: *"they [the Board] trust us [management] enough [...] that we do get a little bit of freedom [...] if it was going to be too many roles and we had to ask for every little thing we did, we would never get anything done"* (SLO2). Garden coordinators have usually *"a lot of freedom to direct the garden"* (SLO4).

The CCGA makes many decisions collaboratively between the three executive committee members – Chair, treasurer, and secretary. They meet monthly but if there are important issues outside the regular schedule, they *"circulate that through three and then hopefully get to some agreement"* (NGO1). Governing bodies of gardens such as Boards of Trustees are formally responsible for making key decisions. From there, decision-making follows the organisational hierarchy: *"We have a constitution. The trustees have to make decision on certain things, and then they gave basically me the authorization to go ahead for the various projects or money to be spent right accordingly, and then I trickle it down to do"* (SLO7). However, garden coordinators or managers often make basic operational decisions themselves. They report regularly to their Board of Trustees, e.g., every six weeks (SLO2), and ask for approval for major strategic decisions, particularly if funding is needed: *"If it's like a financial decision, I go through the board to get clearance if I'm gonna spend a bunch of money on one thing."*

But in terms of like the day to day, what plants I'm growing, what we done pulling to keeping it organic. That's all [...] me" (SLO4). Volunteers may get involved in decision-making processes, and garden coordinators may let them make certain decisions: "Essentially [I] just check and say, 'Hey, what are you planning on doing with these garden beds?' [...] And then essentially, they say, 'I'm wanting to make raw fish with spring onions. So, can we do spring onions?' And so, I guess I facilitate by making sure I've got spring onion seedlings. So, in that situation, they're making the decisions, and I'm just facilitating it happening" (SLO4).

Stakeholders held different opinions around turnovers at governing body level. The CCGA was in favour of a rotating Chairperson's role, however, preferred to keep key 'specialist' positions in place for a longer period of time: *"The idea is to have turnover [...]. I think that our constitution looks like secretary and treasurer could stay stable, and the chair could rotate on and out, and that would keep the operational work stable. [...] people who have all that specialist knowledge as they have a place in the organization, it's not just handed over every few years, because it's a lot of work to know how to do. [...] It's okay if you've done it before, but sometimes it takes like 7 years to learn how to do that" (NGO1).* SLO1, SLO2 and SLO3 stated that their Boards have been stable for years and that such a stability has been advantageous for garden coordinators. In terms of volunteers, most gardens have a mix of regular and changing volunteers. Regular volunteers stay often for years: *"They are stable [...] there's quite a core group of regulars who you'd be worried if they don't turn up, which is another really nice thing" (SLO4).*

Connections to councils

Our stakeholder mapping exercise showed that all organisations are well connected and entertain diverse networks of external stakeholders including other gardens, community organisations and NGOs, CCC and other governmental organisations, funders, schools, universities, businesses and artists. They collaborate frequently with the municipality and other government organisations who are seeking their input and advice: *"[...] we helped the City Council with their food resilience policy, and we do still work in that realm. A lot we work with the District Health Board, a lot all the different organizations. [...] We were doing a lot on behalf of the Council, because then they would put all these ideas into their food resilience policy" (SLO1).* On the other hand, gardens benefit from (non-monetary) network support: *"We can get a bit of support from the red zone team, from Christchurch City Council. [...] there's a few charities around that you can ask for support. [...] one that you can ask for governance support or policies. You've got one for accounts as well. So, there's a few early ways that you can go to if you need" (SLO7).* Keeping good relationship with external stakeholders also helped recruit volunteers such as student interns from university community programmes: *"[...] it's great with the interns because we'll get them, they'll either do 70- or 140-hours internship so we might get them for several months [...]" (SLO1).* Gardens have regular exchange with other community groups and NGOs to share information and resources: *"And so, we meet once every month and our respective groups and just have a quick rundown, 'what's going on in your centre? Do you need support?'" (SLO4).* The New



Brighton garden works with a local artist: *"And then we've just started up a little art group [...] doing mosaic and art groups. So it'll be every Wednesday"* (SLO2).

Larger network

All gardens are members of the CCGA, and some have been involved with the Food Resilience Network. The Ōtākaro Orchard Urban Farm is an embedded key project of the Food Resilience Network (SLO1). The Richmond Garden is part of the Civil Emergency Response network for the neighbourhood and supports climate resilience action: *"I think a big part of what we do is climate resilience. So, regulation of the climate is quite big for all aspects of what we try to achieve here. [...] So we've got grey water systems, storm water catchment at the hub. So, we installed that. We've got two big tanks, we've got storm water catchment across the site, so the chicken have their own storm water catchment. Tunnel houses have that as well. We need to implement more because we don't have access to water everywhere. So, I think that's quite important. [...] this is gonna be a key element because there's not many other places [...] to have that if we don't have access to city water anymore"* (SLO7).

Legal and financial frameworks

The CCGA is an incorporated society (Canterbury Community Gardens Association Incorporated), registered with the New Zealand Charities Register⁴². Its charitable purpose and structure is described as "a networking organisation for community gardens across Canterbury promoting the growth of new and existing initiatives" and "a network of community gardens, who work together to promote and strengthen social, ecological and food justice initiatives across the region" (New Zealand Charities Register, 2026). The organisation operates under a formal constitution that defines its democratic structure and educational goals: *"Our constitution highlights that the CCGA is open, democratic, and dedicated to enabling community gardening through education, resources and bringing people together"* (CCGA, 2026). The CCGA constitution was established through engagement with the community: *"We had two engagements, a few engagements with the wider community, gardens and gardeners around what our constitution looks like. That was whipped with a lawyer and went through during iterations with legal"* (NGO1).

The Ōtākaro Orchard Urban Farm is run by the Food Resilience Network (FRN), an incorporated society registered with the New Zealand Charities Register. The New Brighton Community Garden, The Linwood Resource Centre and the Richmond Community Garden are Charitable Trusts incorporated under the Charitable Trusts Act, registered with the New Zealand Charities Register.

The legal form of the organisations has not changed over time. However, gardens have had different experiences regarding the operational stability of their respective Board of Trustees. For example, in the New Brighton garden, SLO3 reported that when they started, *"[...] the whole trust went poof [...]; there were no trustees, and then they really struggled, so they had to [do] shoulder tapping"*. However, the situation stabilized and

⁴² <https://register.charities.govt.nz/>

now they have a supportive Board. SLO3 emphasised that there had been a problem in the past of having the “wrong kind of people” on the Board. The Richmond garden, on the other hand, has seen a very stable Board since the garden’s inception: *“And they’re still the same trustees of ten years [...] actually almost 12 years. But they’re still the same people, quite unique and not for profit”* (SLO7). The CCGA has seen frequent changes of Board members and executive roles in recent years (see also ‘Governance’ above).

All organisations are non-for-profit. None of our interviewees related the legal form of their organisations directly to the ability to act. The ability to act was mainly enabled or constrained by the amount of funding at their disposal and the ability to create additional revenues: *“[...] it’s quite hard for charities to generate income, like you do events, you do sausage sizzles, but there’s not a lot of things that groups can do across the city”* (SLO7).

The legal form of all organisations is not formally linked to any public or private institutions. There are dependencies on public institutions (municipality and other government agencies), e.g., with regard to funding, land leases, building permits, etc. (SLO7). However, these are not related to the organisations’ legal form.

The CCGA receives income from membership fees (\$685 in the 2024/2025 tax year ending 31 March 2025) and general grants (\$38,000 in the 2024/2025 tax year ending 31 March 2025). The total income for the 2024/25 tax year was \$38,685 (New Zealand Charities Register, 2026): *“We get about \$40,000 to \$50,000 a year as an organization [...]. It’s regular and consistent”* (NGO1).

The gardens receive the bulk of their income from (smaller) grants. They apply for different funds from different funders including RATA, Lottery grants, Community Organisation Grants Scheme (COGS), City Council grants, and other charities like the Red Cross (SLO3) or WWF (SLO7): *“There’s not a single fund we apply for we could ever get \$70,000. So, we talking \$5,000 here, \$10,000 here, \$20,000 here – the highest”* (SLO3). The Linwood Resource Centre receives funding from several sources: *“We get RATA and Catalytic⁴³, we got Lotto, Council. But the Council cut right back on their funding”* (SLO5). Likewise, the Richmond garden receives funding from a range of funding organisations: *“So, we get a little bit of money through Christchurch City Council for the strengthening communities [fund]. But it’s getting smaller and smaller because there’s more and more people that want [it]. So, we know that it’s not gonna be forever, but that pays for SLO6’s role [...] for part of the year. And then we’ve got DIA lottery, COGS and RATA foundation. But that has gone smaller and smaller”* (SLO7). The Richmond garden also receives funding from Meridian, an electricity provider, for installing solar panels on their site to generate electricity (SLO7). The above selection of funders indicates that community organisations are limited in their options and often apply for funding from the same funders, which have often cut back on their funding: *“It’s unfortunately quite competitive within NGOs and charities for funding at the moment”* (SLO4). This raises questions about the sustainability of funding. Gardens also generate income by selling produce and providing services (see below).

⁴³ <https://catalytic.org.nz/>

Charitable organisations provide detailed and publicly accessible financial reports as part of their annual reporting obligations. It goes beyond the scope of this report to provide details for each organisation. The figure shows an example from the New Brighton Community Garden Performance Report 2024/25. The overall revenues were \$189,697, of which about 62.5% came from general grants, 24.8% from government service delivery grants & contracts, 11.3% from donations and fund raisers, and 1.3% from commercial activities. These include, e.g., sales of seedlings, calendula products, jams, tea and scones (SLO3).

Performance Report			
Entity Name	New Brighton Community Gardens Trust		
For the year ended	30 June 2025		
Rounded to	Nearest Dollar		
FINANCIAL INFORMATION			
Statement of financial performance			
Revenue	Note	Current year \$	Last year \$
Donations, koha, bequests and other general fundraising activities	1	21,406	18,278
General grants		118,499	70,000
Capital grants and donations		-	-
Government service delivery grants/contracts		47,000	39,860
Non-government service delivery grants/contracts		-	-
Membership fees and subscriptions		-	-
Revenue from commercial activities		2,401	1,877
Interest, dividends and other investment revenue		391	1,315
Other revenue		-	-
Total revenue		189,697	131,330
Expenses			
Expenses related to fundraising	2	527	1,130
Employee remuneration and other related expenses		145,742	123,513
Volunteer related expenses		-	-
Expenses related to commercial activities		1,141	-
Other expenses related to service delivery		22,242	21,959
Grants and donations made		-	-
Other expenses		-	-
Total expenses			169,652
Surplus/(Deficit)		20,045	(15,272)

51. Figure: New Brighton Community Garden Performance Report 2024/25 (dated 25 March 2026) for the year ending 30 June 2025, page 3 (financial information). Source: New Zealand Charities Register <https://www.register.charities.govt.nz/Charity/CC21869>

While the CCGA is financed entirely by general grants and membership fees (see above), the gardens show a diversification of revenue streams. While they depend on general funding to finance their base operations, they have explored other business models. This includes the sale of produce and (processed) products, for example in the form of fundraiser events (SLO4) and open days (SLO3), or more regularly at their own market stand: *"Every Wednesday 12:30 to 2:30, we'll sell the produce"* (SLO1). The Richmond Garden sells produce and processed food products at their own café, which has been self-sustaining, but *"hasn't generated a huge amount of profit"* (SLO7). The

Ōtākaro Orchard Urban Farm have almost completed their building and plan to open a café soon (SLO1). The Richmond garden generates additional funding through a range of social enterprises such as an olive oil co-op, courses and workshops. Some of them are not yet profitable (e.g., the plastic recycling project), however, their plan is to create more diversity and continuously expand their scope: *"I would say, yes, not just a garden anymore!"* (SLO7).

Current shortcomings of and barriers to funding

Organisations stated they had limited options to get funding: *"All have tried all sorts of funding as people won't fund community gardens, because there's too many in the area"* (SLO5). Community groups compete for the same (limited) amount of funding rather than collaborate with each other: *"So then it can create competition, which is a shame, because then it's not conducive to collaboration and that's what we want"* (SLO1). This can create rancour and division amongst community groups: *"[...] the bitterness that can come along with it because you're applying for the same thing as me. And I've been here longer than you, or I feel like we need it more [...]. It brings in this competing. I don't like it. It's not helpful"* (NGO2). The competition may create feelings of inequity and injustice: *"And I think sometimes it's because they've been there a long time. So, there are a stable, trusted group. Sometimes maybe it's the person that's applying is either really bloody good at applying for grants or they're a well-known figure. So, they get looked at faster [...]"* (NGO2).

A lack of continuous long-term funding may stop organisations from completing projects disrupting ongoing activities: *"[T]hen when they stop giving us funding, how are we gonna do these things?"* (SLO1). In addition, organisations complained about increasing accountability and bureaucratic barriers. Applying for funding and managing funds have become more burdensome and time-consuming: *"And now the accountability and the applications... like [the] previous funding manager, he has said to me [...] this funding application I would love it for 1 page and [...] that has changed [to] 7 pages [...]. Accountability is huge and [it] depends who sits there. And they're very strict sometimes and they give you hell"* (SLO3).

The current shortcomings of funding have an impact on organisations, their staff and volunteers. Interviewees frequently reported about work overloads for existing (part-time) funded staff (SLO3; SLO4) and an overreliance on volunteer work: *"They don't want to pay for wages. They want the projects to be done, but all on volunteer hours and no admin. Apparently admin gets done magically these days"* (SLO7). While gardens try to diversify their income streams, they rely on base funding to run day-to-day operations and develop capacities: *"[...] setting up [a] social enterprise takes quite a bit of time to actually generate income that would sustain the entity [...] we're not yet in a place that we can operate without the funding. So, there's like a bit of a chicken and eggs situation. We need to be able to have those in place so that we can generate more income so that we can give back to expanding some of the areas of the projects"* (SLO7).

Desired improvements to the funding system



Collaborative instead of competitive funding models could bring systemic change and lead to a more collaborative funding system (SLO1). Community gardens could apply for funding as a collective and distribute the money through a funding pool: *"[...] something like funding pools for growers or emerging food systems stuff. [...] I think collaborative funding where there's not all the money, but there is some money put up with community gardens" (NGO1)*. Collaborative funding events could be used to fund specific projects that get selected via democratic processes: *"And then people get together and [...] bring some money and then they pitch an idea and then that idea was voted on and then that idea gets \$500 to fund. [...] The arts foundation does a funding thing every year where a bunch of funders come together and artists do a little video about what they want funded, whether it's a magazine or some materials or a project. And then that dollar for dollar is matched by the public and the funders" (NGO1)*.

Continuous (long-term funding) would provide security for projects that are created over a longer period of time: *"[...] because at the moment you get chunks, so you're good for 6 months or 12 months, but they do not like a four years [funding]. It's something a bit more regular, so people aren't always like, oh, are we gonna be paid off enough?" (SLO1)*. The focus could be changed from "new" projects to long-term sustainability: *"I would change the fact that they have to do new projects every year for projects to be sustainable. It takes multiple years. So, I would give the opportunity for groups to just apply across multiple years. And if they come back and they're like, this is what we've done. This is what they achieve. We need a bit more to get it to the next stage" (SLO7)*.

Dedicated start-up funding could help diversity commercial operations and help organisations become a social enterprise less dependent on (public) funding: *"So originally we got a little bit of funding [...] to be able to move it and get the foundations redone [...] Other than that, it's been mainly out of our own pocket from incomes that we've generated from other social enterprises. [...] we're lucky enough that we can generate income, but a lot of them don't have the choice" (SLO7)*.

Finally, excessive reporting was considered an issue: *"I don't think the general accountability is an issue, but it's the small and often reports of accountability that seem excessive for the small amount of funding per grant [...]" (SLO4)*. *"It just takes time to do. [...] Accountability is a big thing" (SLO5)*.

Engagement and Collaboration

Events

The gardens provide a range of different events across the year. Routine activities include regular working bees including "harvesting, prepping and selling the veggies" on market days (SLO1) or shared daily lunches (SLO2; SLO4). The Richmond garden features about 30 different interest groups that use the garden for regular activities or workshops: *"So, we have a compost club, which is once a month. We try and encourage people to come, and we just make large, hot compost and piles" (SLO6)*. Gardens provide as well specialised courses, e.g. for disabled people (SLO7) or art education (SLO2). There are specific regular public events such as open days (SLO3) or plant sales (SLO4).



that are used for fundraising purposes. Gardens provide educational programmes and events for schools and community groups: “[...] lots of school groups, community groups coming through for education, but you see people are like learning so much [...] and seeing and doing [...] like [the] food forest; you do [...] food forest workshops. *So, it has a massive educational impact to see and experience it*” (SLO1). Tertiary education students use gardens for practica and studies, for example studying nutrition (SLO2).

Target community

Across all gardens, the key target community are people who are *“really interested to learn to grow food and they don’t know how, so they can come along and learn as they go with us”* (SLO1). However, the range of people is highly diverse and so are their respective motivations to visit and work in the gardens. The table below provides an overview on the diversity of community groups who visit community gardens.

Reported community groups	Reported by stakeholder
Corporate groups / business people	SLO1; SLO7
Homeless people	SLO1; SLO4; SLO7
Pasifika and Māori groups	SLO4
Community service workers / People coming through the Police or the Department of Corrections	SLO2; SLO3; SLO4; SLO5
People new to the city	SLO7
People looking for social contacts	SLO4; SLO6
People with addictions and substance abuse histories	SLO2
People on low incomes; unemployed people	SLO1; SLO4; SLO6; SLO7
People with mental or physical challenges and disabilities	SLO1; SLO2; SLO3; SLO4; SLO5; SLO7
Retired people	SLO1; SLO4; SLO7
School groups and tertiary education students	SLO1; SLO2; SLO3; SLO4; SLO6; SLO7
Transgender people	SLO6

25. table: Diversity of community groups visiting community gardens

Some gardens, like the New Brighton garden and the Linwood Resource Centre, monitor visitor numbers, e.g., *“[...] the latest report we had on a day between 5 and 49 [people] per day, yes, and so it can be like on a rainy day it can be 5”* (SLO3). The Linwood Resource Centre counted 265 visitors in November 2025 (SLO5). However, not all gardens count visitors or monitor volunteer attendance systematically. Interviewees provided some information, and the majority experienced up to 35 visitors per day (SLO1; SLO2; SLO3; SLO4; SLO5), e.g., *“[It] really depends on the season and all sorts that does fluctuate. But anyway, from like 4 to 10, maybe on a good day, on a very good day. But likely 4 to 7 average”* (SLO1). *“The other day, we probably had 35 people for a shared lunch”* (SLO4).

Some gardens accommodate larger (school) groups (SLO2; SLO7), e.g. *"We are one of the only gardens that are the size that can care for big group groups as well. In the last year also, we've had the biggest group we had on site was 280 midways. [SLO6 corrects] 180. 180 sorry, there were 180 kids plus the teachers. So, I put it out 200 plus"* (SLO7).

Diversity

As illustrated in the table, community gardens experience a highly diverse community: *"It's incredibly varied – age, background, nationality, gender, you name it. They come from all walks of life and they're not necessarily just within Richmond; people come from further afield to come and spend time and volunteer and give their time and energy, which I was surprised about when I first started. It's all ages and stages"* (SLO6). Our interviewees confirmed the importance of community diversity and how they approach it: *"[...] everyone's coming for different reasons and we don't always know the reasons. [...] Now one thing we do well here is to try and welcome everyone and try and find a place and space for everybody that comes [...]"* (SLO2). This is particularly important with regard to vulnerable groups: *"[...] there are definitely people that feel isolated, not necessary because they're just at home alone, but just in terms of where they sit within society. And I think that we try and foster that everyone is welcome - no matter background, whatever, just everyone"* (SLO6).

Garden staff talk to visitors and volunteers to find out about their motivations and what they expect from being or working in the garden: *"I try and work out what each person is, what's their raison d'être for being here. And it's hugely different; some it's social interaction, its loneliness, some it's fitness, some it's learning, just connection. And I think for a lot of people it is belonging"* (SLO6). Garden coordinators become aware of minority groups and their specific needs: *"[...] people dealing with mental illness, anxiety all those things, and it's been a real big stick for them to come and get involved here, and now it's like a little fun and it's a really good healing environment for them. [...] they do 'green prescriptions', so like people with mental health, just to be in the garden, in the green space gardening [...] it's part of people's recap. Like, one of our volunteers [...] she's just one who had a lot of traumatic experiences [...] she's on ACC⁴⁴ for that sort of thing [...] this is all part of her recovery program as a volunteer"* (SLO1). If garden staff become aware of specific needs of community (minority) groups, they try to accommodate these: *"I never get like super deep and engaged in their personal issues, but I have families who are like 'I can't afford these types of things in the supermarket. I was wondering if I could try and grow it.' I guess my job is to teach them. If I can, like the specifics on what they're interested in growing"* (SLO4). They design volunteer work to accommodate specific individual needs: *"So even with every session that I run, we try and mix it up and vary it and I tailor jobs to how people are feeling on the day. Some people just wanna take themselves off in a corner and just read quietly and that's fine,*

⁴⁴ ACC (Accident Compensation Corporation) is New Zealand's universal no-fault insurance scheme covering personal injuries caused by accidents. It provides medical, rehabilitation, and financial support (up to 80% of income). ACC gets financed through compulsory levies paid by everyone who works, owns a business, or drives and general tax.

right? Or they can be in with the throng. [...] And I can accommodate whatever people are feeling, who they want to hang out with" (SLO6).

Some community groups come regularly, e.g. following weekly schedules: *"On Friday there are people with disabilities" (SLO5)*. Unexpected interruptions to regular schedules have been difficult for some minority groups, e.g. during the COVID-19 lockdowns: *"COVID time was really challenging. We were not allowed to be in here. And we've lost a lot of volunteers back then. Some of our strong volunteers had dementia. We didn't get them back on site because they've forgotten about us. And their whole mental health went down the drain, because they didn't have that weekly consistency" (SLO7).*

The relationship of the organisation / garden with the local municipality / council

Our stakeholders' relationship with the Christchurch City Council (CCC) is partly collaborative, but mostly CCC has got a supporting function. An example for collaborative action is that organisations take on advisory roles, e.g. for developing local policy or providing educational input (SLO1). The Linwood Resource Centre developed a collaborative model with CCC to establish a Pasifika gardening group within their garden. While the initial kick-start funding has run out, CCC supports the garden with a liaison officer who looks after the group: *"We've established two people within the group that are leaders and happy - very regularly coming. [...] Sandra [name changed] as a pacific liaison, is also [a] very like strong relationship there and is not wavering anytime soon. The gardens are in place in a maintained [manner] with irrigation and plants from us. So, everything's kind of in place to keep things moving forward" (SLO4)*. Gardens receive Council support in the form of funding (SLO1; SLO2; SLO3; SLO7), land leases (SLO4; SLO5; SLO7) and staff support – a Pasifika liaison officer (SLO4) and "support from the red zone team" (SLO7).

Impact

The CCGA as a networking organisation for community gardens considers its impact as bringing *"people into the movement of community gardening and sharing resources and knowledge and experience and help [with] problem-solve stuff. Like I think those are the things, that's the impact" (NGO1)*. However, they consider themselves in an intermediate situation where *"our outward impact from all that planning and preparation won't really be known until another 5 or 6 years [...]"* with the long-term goal of building *"a culture of support and collaboration and solidarity" (NGO1)*.

Interviewees emphasized their organisations' positive impact on local communities and how they connect and support each other: *"I just feel there's so much going on in the food resilience space at the moment. [...] it's really important and it's a whole community thing really. The connection with each other has become more" (SLO2)*. The gardens provide places for communities to grow and support each other: *"This job to me has been like the way that I learn what community is. [...] Nobody can be self-sufficient; you shouldn't be self-sufficient. You need a community of around you, and it takes a village to get there. And I think that's what we provide to people" (SLO7)*. This notion of impact was supported by anecdotes about individual community members: *"And like Carla [name has been changed] was saying the other day, that she [...] started coming to this*



place when she got made redundant years and years ago, more than 10 years ago. [...] She said 'I'd be lost without this place', and I think for her it's mostly about the social connection and feeling of support" (SLO4). The gardens have become part of people's daily lives (SLO6).

Organisations support vulnerable communities with services to meet basic needs: *"The people that come here that have allotments need it. The people that come here just to get vegetables still need them" (SLO5). They also provide many services that go beyond food-related needs: "I think that also the impact of having someone [not] in an authority [role], but staff like Gina [name changed], she's not a social worker, but in the social workspace for a very long-time, community development, someone who knows how processes work, knows like, 'okay, you need a place to sleep tonight. I know you go this place or call this number', or 'we've got a food parcel system at city mission. Let's get you in line for that.' So, like just having someone to guide and filling in forms into something, using a printer and a scanner" (SLO4).*

In the Richmond garden, the environmental impact was highlighted: *"For me, it's the impact that I've seen in the last seven years is like where I first started as a volunteer here, I planted and weeded an area in the native forest - you can't walk through it anymore. This is grown so much. And you can see that with your own eyes. And I think the impact for me is seeing the people looking at that, and they are like, this wasn't like this a few months ago. This has grown so much" (SLO7).*

Most significant impact

While gardening activities and the food produced in the gardens were considered as highly relevant and needed, particularly by vulnerable communities, all interviewees emphasized the social impact of their organisations: *"The veggies are great and very needed. But I don't know, I guess maybe I see the most reward from sending two volunteers off to do a patch of weeding and they get chatting. [...] Like that's quite special to me" (SLO4). The educational impact of organisations and gardens on both children and adults was also highlighted by several interviewees (NGO2; SLO1; SLO2; SLO4; SLO7), e.g., teaching community members to grow their own food, to do composting, to repair things: "This is all these skills in life that I've never learned in school" (SLO7).*

Impact evaluation

Besides internal conversations, the CCGA is not collecting feedback or data on their impact: *"Only we feedback and debrief with each other" (NGO2). Gardens collect qualitative data about impact in the form of feedback from participants (e.g., stories or letters), or they conduct interviews with community members or seek reactions from them after events. Some gardens use the data for reporting and funding applications: "Oh, we have lots of stories like that and SLO3 collects; some people offer up their story and that goes towards our funding" (SLO2). SLO3 collects letters and stories systematically: "I have a little book, and I get them to write something in there. [...] I often say to people look, I can tell the story but actually having a voice in there not with a name, but, you know, kind of it's more important. [...] so, every so often we share [that]*

as part of our funding report; I might share that with the trust. I feel like this is quite impactful for them" (SLO3).

Not all gardens collect feedback systematically or frequently, but rather if needed, e.g., for strategic purposes, or if there were particular opportunities such as events: *"We did [...] that for impact documents. So, every 3 years, we redo our impact strategy document. And we do talk to the community. Then, for example, we had a 10-year celebration the other day. White boards out with certain aspect of the projects, so people can write things of what they want to see. After each event, we collect data from what was their favourite thing when they took out of the day. We do that, but it's more of like the people record" (SLO7).*

They emphasized that impact is often a long-term process, and particularly social impacts are not easy to 'measure': *"It's a hard one to collect [on] the mental health. [...] Like coming here is that you see all those changes in people that are quite hard to put on paper" (SLO7).* Collecting feedback and data is time consuming. Some gardens collaborate with other organisations: *"It's actually mostly collected through the city mission [...]. I do a monthly garden report. Just to the Trust, which is quite casual, just what's going on in the garden [...]" (SLO4).* If they find other resources, they may delegate such tasks: *"We just had our last intern, [that] was a lady called Sandra [name changed]. And she...and this was something actually that we were working on with Healthy Families and the District Health Board, was doing like these Kai⁴⁵ stories. Our last intern did do some of these Kai stories. [...] I think she interviewed people and I think it's gonna be on our website or something like that" (SLO1).*

What is most inspirational (for others) regarding local food systems in Christchurch?

Answers about what interviewees found most inspiring regarding local urban food systems in the light of their own work and contributions fell into three categories. First, they considered community gardens as inclusive and inspiring spaces: *"[...] the other thing I will say is actually inspirational is that in the space of [the] community garden it's very easy to have someone who wants to fulfil themselves. [...] That actually people feel like they can build something" (SLO3).* The Richmond garden highlighted the variety of activities offered to visitors: *"On my end, the fact that we fully open the variety of things that goes from fungi farm to a café to a precious plastic project. [...] you bring your recycling, you have a human connection, you get a great coffee and an ice cream that was grown here on site by volunteers" (SLO7).*

Second, stakeholders highlighted social connections and wellbeing as most inspiring: *"The most inspirational thing about community gardens are the people who participate. The generosity, I've seen over my lifetime of people giving up their time to better themselves in the community is just phenomenal. [...] People do it to beautify an area and to make a space beautiful with somebody else. It's gifting. People come together to do stuff with their neighbours" (NGO1).* Interviewees highlighted the camaraderie and

⁴⁵ 'Kai' is a Te Reo Māori word for food.

confidence that drive the culture of the space: “[...] *companionship, the kind of relief of social isolation*” (SLO4).

Finally, interviewees recognised their gardens as spaces for community empowerment where people can grow and develop capacity: *“People, they don't know to build, grow a city or a neighbourhood that's more beautiful than it was when they got there. [...] there are often people trying to solve really challenging economic problems or isolation problems”* (NGO1). People grow confidence and address problems: *“And the empowerment gives people to think I can actually grow my own food, rely on myself”* (SLO4). Human value-based leadership skills were highlighted as one of the most inspirational aspect: *“I mean to me, SLO2 is the most inspirational person [...] I'm gonna say civic award winner. Well deserved. But the inspiration is [...] people management and [...] how you actually change [things]. I mean, obviously you teach the gardening and all of that. But [...] you teach actually other people how to communicate with people they probably don't know how to communicate with”* (SLO3).

Urban Food Value Framework (UFVF): Values selected by participants

As part of the interview, participants were presented with Brumm and Fukushi's (2024) Food Value Framework (FVF), a list of specific values categorised in groups (environmental, societal, health, personal). The FVF values (presented in the table below) formed an important part of the Urban Food Value Framework, which was developed as part of the REDESIGN project. In the process of designing the UFVF, it was considered to fully adopt Brumm and Fukushi's FVF and develop a new and innovative way to use it for the project's case studies and their comparison and evaluation. By the time this approach was abandoned, more than half of this study's interviews had already been conducted. Therefore, it was decided to use Brumm and Fukushi's version for the remainder of the interviews and their subsequent analysis in this report. While there are substantial overlaps between the two versions, it was considered methodologically unfeasible to 'transfer' interview-based findings from the first version to the new format.

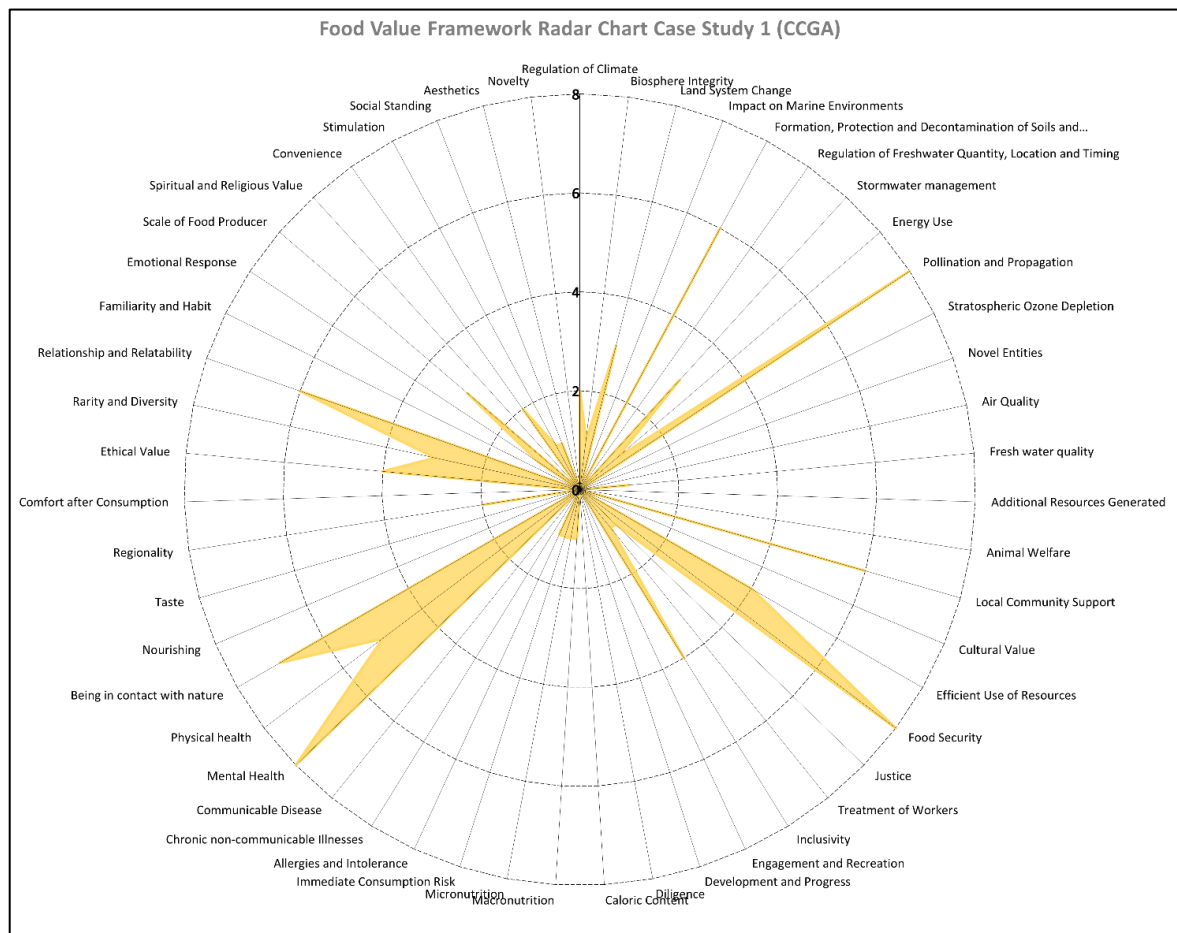
Participants were asked to select their top three values for each category (environmental, societal, health, personal) by circling or underlining the value on the sheet presented to them (table below). They were allowed to add values if they thought that specific values were missing on the list. SLO2 & 3 selected the values together. The radar chart shows the frequencies of all values selected across the four categories.

Environmental	Societal
13. Regulation of Climate	13. Additional Resources Generated
14. Biosphere Integrity	14. Animal Welfare
15. Land System Change	15. Local Community Support
16. Impact on Marine Environments	16. Cultural Value
	17. Efficient Use of Resources
	18. Food Security

17. Formation, Protection and Decontamination of Soils and Sediments 18. Regulation of Freshwater Quantity, Location and Timing 19. Stormwater management 20. Energy Use 21. Pollination and Propagation 22. Stratospheric Ozone Depletion 23. Novel Entities 24. Air Quality	19. Justice 20. Treatment of Workers 21. Inclusivity 22. Engagement and Recreation 23. Development and Progress 24. Diligence
Health 11. Caloric Content 12. Macronutrition 13. Micronutrition 14. Immediate Consumption Risk 15. Allergies and Intolerance 16. Chronic non-communicable Illnesses 17. Communicable Disease 18. Mental Health 19. Physical activity 20. Being in contact with nature	Personal (related to your role) 16. Taste 17. Regionality 18. Comfort after Consumption 19. Ethical Value 20. Rarity and Diversity 21. Relationship and Relatability 22. Familiarity and Habit 23. Emotional Response 24. Scale of Food Producer 25. Spiritual and Religious Value 26. Convenience 27. Stimulation 28. Social Standing 29. Aesthetics 30. Novelty

26. table: Brumm and Fukushi's Food Value Framework





52. Figure: Radar chart showing frequencies of values selected across all four categories

Urban Food Value Framework (UFVF): Analysis of how participants described and interpreted selected values

Participants were asked to explain why they selected their top three values and how they considered them incorporated in their respective organisations. Their interpretations (INT) of values and respective indicators (IND) of organisational incorporation were evaluated against a set of predefined criteria (see table). The tables below provide an analysis of values, sorted by the four categories (environmental, societal, health, personal), their interpretations and associated indicators. The description column includes contextual information from paraphrased quotes taken from the interview transcripts, e.g. why a value was considered relevant, how it was perceived by the interviewee or represented by the organisation.

INT: Value as aspiration	Value is desired but not yet successful.
INT: Value in practice	Value is enacted through concrete actions.
INT: Value constrained	Value is limited by barriers (time, money, capacity).
INT: Value tied to identity	Value linked to mission, ethos, organisational identity.
INT: Value tension	Conflicts or tradeoffs between values.
IND: Qualitative indicators	Stories, feedback, observations.
IND: Quantitative indicators	Numbers, outputs, sales, yields.
IND: Success = participation	Success is defined by engagement.
IND: Success = impact	Success is defined by outcomes or change.

27. table: Set of predefined interpretations (INT) and indicators (IND) of UFVF values

Environmental values

Value element	Selection frequency	Indicators	Interpretation	Descriptions
Biosphere Integrity	1	qualitative indicators (observations)	value in practice	Landscape diversity across suburban–urban environments; preservation of inherent ecological qualities; access to soil biota, insects, and avian species as expressions of biosphere integrity (SLO4)
Formation, Protection and Decontamination of Soils and Sediments	6	qualitative indicators (observations) (NGO2; SLO4) no formal indicators (SLO1; SLO2&SLO3; SLO5; SLO6)	value in practice (NGO2; SLO1; SLO4; SLO5) value tied to identity (SLO2&SLO3) value as aspiration (SLO6)	Reclamation and restoration of marginal urban soils (NGO2); decontamination and reconstitution processes to enable productive use under intensive urban conditions (NGO2); building soil, holding water and they're inspiration for education (SLO1); show looking after soils and good use of land (SLO2&SLO3); Concern over soil erosion in New Zealand context (SLO4); adoption of composting and organic practices as practical measures for soil restoration and protection (SLO4); Recognition of soil formation, protection, and decontamination as essential practices (SLO5); Central importance of soil in gardening practice (SLO6) ; ongoing commitment to demonstrating and



Value element	Selection frequency	Indicators	Inter-pretation	Descriptions
				reinforcing soil stewardship within the local environment (SLO6)
Land System Change	3	qualitative indicators (observations) (NGO2) no formal indicators (SLO1; SLO2&SLO3) success=impact (SLO2&SLO3)	value in practice (NGO2; SLO2&SLO3) value as aspiration (SLO1) value tied to identity (SLO2&SLO3)	Urbanisation-driven land system transformation (NGO2); integration of food production within urban environments through the establishment of large-scale gardens, particularly in red zones (NGO2); hope to be a great example of what a permanent food system can look like (SLO1); focusing on the gardens here (SLO2&SLO3); change sandy land by composting (SLO2&SLO3)
Pollination and Propagation	8	qualitative indicators (observations) (NGO1; NGO2; SLO2&SLO3; SLO4; SLO6; SLO7) no formal indicators (SLO1; SLO5)	value in practice (NGO1; NGO2; SLO2&SLO3; SLO4; SLO7) value as aspiration (SLO5; SLO6) value tied to identity (SLO1)	Active support of pollination and propagation through diverse planting (NGO1); enhancement of ecological diversity within garden environments (NGO1); Promotion and implementation of pollination and propagation practices (NGO2); active advocacy and application within community gardening contexts (NGO2); / (SLO2&SLO3); Facilitation of pollination within urban environments through provision of habitat (e.g., beekeeping) (SLO4); recognition of spatial requirements for sustaining pollinator activity (SLO4); Pollination and propagation as aspirational practices (SLO5); Fundamental role of pollination and propagation in sustaining garden systems (SLO6); recognition of their necessity for successful cultivation (SLO6); Essential role of pollination and propagation in plant production (SLO7); it's hard to choose because they're sort of similar (Stormwater management/Energy Use /Pollination and Propagation) (SLO1).
Regulation of Climate	2	qualitative indicators (observations) (NGO1; SLO7)	value in practice (NGO1; SLO7)	Climate regulation through community gardening practices (NGO1); increased vegetation and localised food production contributing to reduced carbon footprint (NGO1); Climate resilience as a big objective (SLO7); climate regulation embedded across multiple aspects of garden practice despite ongoing management challenges (SLO7)

Value element	Selection frequency	Indicators	Interpretation	Descriptions
Regulation of freshwater quantity, location and timing	1	qualitative indicators (observations)	value as aspiration	Freshwater as a critical and limited resource; aspiration towards more efficient irrigation and water use practices (SLO6)
Stormwater management	3	qualitative indicators (observations) (NGO1; SLO7) no formal indicators (SLO1)	value in practice (NGO1; SLO7) value tied to identity (SLO1)	Have stormwater management within community garden systems (NGO1); use of gardens as sites for water retention and basin functions (NGO1); Implementation of integrated stormwater and greywater systems (SLO7); use of distributed catchment infrastructure to enhance water access across the site (SLO7); it's hard to choose because they're sort of similar (Stormwater management/Energy Use /Pollination and Propagation) (SLO1).
Energy Use	1	no formal indicators	value tied to identity	It's hard to choose because they're sort of similar (Stormwater management/Energy Use /Pollination and Propagation) (SLO1).

28. table: Analysis of FVF environmental values

Societal values

Value element	Selection frequency	Indicators	Interpretation	Descriptions
Efficient use of resources	4	no formal indicators (NGO2; SLO1; SLO6) qualitative indicators (observations) (SLO4)	value in practice (NGO2; SLO4; SLO6) value as aspiration (SLO1)	Emphasis on efficient resource use through practical, low-cost production (NGO2); optimisation of outputs within constrained conditions (NGO2); commercial thing helps with running costs (SLO1); Protection of fertile land from urban development (SLO4); prioritisation of land-use efficiency to support food production (SLO4); Efficient resource use through waste reduction and optimisation (SLO6); maximising limited resources to support food security (SLO6)



Value element	Selection frequency	Indicators	Inter-pretation	Descriptions
Food Security	8	success=impact (NGO1; NGO2) quantitative data (number of seedlings and new gardens) (SLO2&SLO3) qualitative indicators (observations) (SLO4) no formal indicators (SLO1; SLO5; SLO6; SLO7)	value as aspiration (NGO1; NGO2; SLO1) value in practice (SLO2&SLO3; SLO4; SLO5; SLO6; SLO7) value tied to identity (SLO1)	Food security positioned as a longer-term goal (NGO1); prioritisation of justice as a more immediate concern, with inclusivity and equity as guiding aspirations (NGO1); Food security framed as an aspirational outcome (NGO2); prioritisation of justice and inclusivity as foundational steps towards achieving it (NGO2); young education about food security (how to start a garden) (SLO2&SLO3); people buy seedlings and create their own gardens (SLO2&SLO3); Food security framed through crisis preparedness (SLO4); local food production enhancing resilience to environmental and systemic disruptions (SLO4); Food security recognised as a fundamental concern in practice (SLO5); Food security supported through resource efficiency and equitable access (SLO6); ensuring availability across diverse circumstances (SLO6); Food security embedded in everyday practice despite limitations (SLO7); ongoing learning and adaptation (SLO7); the education and demonstration for food security, and also local food growing (SLO1); need to encourage a country to be food sovereign (SLO1).
Inclusivity	4	qualitative indicators (observations) (NGO1; SLO4) qualitative data (a sharing story about Japanese participant) (SLO2&SLO3) no formal indicators (SLO7)	value as aspiration (NGO1) value tied to identity (SLO2&SLO3) value in practice (SLO4; SLO7)	Inclusivity as an aspirational value (NGO1); current limitations in achieving culturally representative participation (NGO1); free sharing and everyone's equal (SLO2&SLO3); Inclusivity as a practiced value (SLO4); provision of welcoming spaces for individuals outside dominant social groups (SLO4); Inclusivity as a core operational value (SLO7); emphasis on universal access and belonging (SLO7)
Justice	1	success=impact	value as aspiration	Justice foregrounded over food security; emphasis on equitable outcomes as a prerequisite to achieving broader food system goals (NGO1)

Value element	Selection frequency	Indicators	Inter-pretation	Descriptions
Local Community Support	6	qualitative indicators (observations) (NGO2) no formal indicators (SLO1; SLO2&SLO3; SLO5; SLO7) qualitative indicators (observations) (SLO6)	value in practice (NGO2; SLO2&SLO3; SLO5; SLO6; SLO7) value tied to identity (SLO1)	Active engagement in local community networks (NGO2); participation in wider organisational structures to support collaboration and capacity-building (NGO2); try and support local where possible (SLO1); do local community support and lots of advice (SLO2&SLO3); emphasis on awareness and participation (SLO5); Importance of community connections and sense of ownership (SLO6); contribution to long-term sustainability and garden continuity (SLO6); Community support as a collective necessity (SLO7); recognition that self-sufficiency relies on shared effort and collaboration (SLO7)
Treatment of workers	1	no formal indicators	value in practice	Fair treatment of workers as an ethical priority; concern over exploitation and inequitable labour conditions (SLO5)

29. table: Analysis of FVF societal values

Health values

Value element	Selection frequency	Indicators	Inter-pretation	Descriptions
Allergies and intolerance	1	no formal indicators	value in practice	Health concerns related to allergies and intolerances recognised within everyday experience (SLO5)
Being in contact with nature	7	no formal indicators (NGO1; NGO3; SLO2&SLO3; SLO6; SLO7) success=impact (SLO1) qualitative indicators (SLO4)	value in practice (NGO1; NGO2; SLO1; SLO4; SLO6; SLO7) value tied to identity (SLO2&SLO3)	Being in contact with nature as a key mechanism linking physical activity and overall health benefits (NGO1); nature as a key mechanism linking physical activity and overall health benefits (NGO3); people with mental health are getting green prescriptions in the green space gardening (SLO1); community garden spaces provide a safe and supportive environment where people naturally experience improvements in mental wellbeing (SLO2&SLO3); Direct contact with nature through routine garden activities (SLO4); physical movement and interaction with soil and vegetation (SLO4); Being in contact with nature as a contributor to mental health and overall



Value element	Selection frequency	Indicators	Inter-pretation	Descriptions
				wellbeing (SLO6); Being in contact with nature as an aspect of wellbeing (SLO7)
immediate consumption risk	1	no formal indicators	value in practice	Attention to immediate consumption risks associated with food safety (SLO7)
Macro-nutrition	1	no formal indicators	value as aspiration	thinking of the whole health, the whole system like healthy soil, able to provide the food with the nutrients it needs. (big picture) (SLO1)
Mental Health	8	no formal indicators (NGO1; NGO2; SLO2&SLO3; SLO5; SLO6; SLO7) success=impact (SLO1) qualitative indicators (SLO4)	value in practice (NGO1; NGO2; SLO1; SLO4; SLO5; SLO6; SLO7) value tied to identity (SLO2&SLO3)	Mental health benefits derived from physical activity and engagement with nature (NGO1); community gardens supporting integrated wellbeing (NGO1); Mental health benefits derived from physical activity and engagement with nature (NGO2); community gardens supporting integrated wellbeing (NGO2); have volunteers with mental health issues who do green prescriptions here (SLO1); community garden spaces provide a safe and supportive environment where people naturally experience improvements in mental wellbeing (SLO2&SLO3); Mental health as a primary benefit of garden spaces (SLO4); social interaction and shared environments supporting psychological wellbeing (SLO4); Mental health identified as a significant and present concern (SLO5); Mental health benefits derived from engagement with garden spaces (SLO6); interaction with nature and social environments contributing to wellbeing (SLO6); Mental health recognised as a central value within practice (SLO7)
Micro-nutrition	1	no formal indicators	value in practice	Focus on micronutrition; provision of highly nutritious food as a key objective for supporting health (SLO6)
Physical health	5	no formal indicators (NGO1; NGO2; SLO2&SLO3; SLO5) success = participants (SLO2&SLO3)	value tied to identity (SLO2&SLO3) value in practice (NGO1; NGO2; SLO2&SLO3; SLO4; SLO5)	Physical health supported through active engagement in gardening and contact with natural environments (NGO1); Physical health supported through active engagement in gardening and contact with natural environments (NGO2); gardening in New Zealand is always like class as a sport, a gardening nation (SLO2&SLO3); 95 children from school chose the garden (as a sport)



Value element	Selection frequency	Indicators	Inter-pretation	Descriptions
		qualitative indicators (SLO4)		(SLO2&SLO3); Physical health supported through gentle, everyday activities (SLO4); engagement in gardening tasks promoting mobility and contact with soil and plants (SLO4); Physical activity recognised as an important component of overall health (SLO5)

30. table: Analysis of FVF health values

Personal values

Value element	Selection frequency	Indicators	Inter-pretation	Descriptions
Convenience	2	qualitative indicators (SLO4; SLO5)	value in practice (SLO4; SLO5)	Convenience associated with local food access (SLO4); reduced economic cost and immediacy through direct harvesting and consumption (SLO4); Convenience achieved through self-production (SLO5); growing food reducing time and access barriers (SLO5)
Emotional response	1	no formal indicators	value in practice	Emotional responses as key to place experience; interaction between individual feelings and shared social environments (SLO6)
Ethical Value	4	no formal indicators (SLO1; SLO2&SLO3; SLO4; SLO7)	value tied to identity (SLO1; SLO2&SLO3) value constrained (SLO4) value in practice (SLO7)	one of current work is caring for the earth, for people and for future (SLO1); Ethical values help create a welcoming environment that connects diverse people (SLO2&SLO3); Ethical value expressed through preference for small-scale, organic, and locally produced food (SLO4); critique of mainstream agricultural systems (SLO4); Ethical values reflected in personal engagement and alignment with place-based practices (SLO7)
Rarity and Diversity	3	no formal indicators (NGO1; SLO6) qualitative indicators (observations) (NGO2)	value in practice (NGO1; NGO2; SLO6)	Diversity and relational networks as foundations for resilient communities (NGO1); emphasis on collective capacity and shared resources in crisis contexts (NGO1); Recognition of place-specific conditions and diversity of needs (NGO2); differentiation across regions despite shared challenges (NGO2); Ambiguity in rarity and diversity across social and spatial dimensions (SLO6);



Value element	Selection frequency	Indicators	Interpretation	Descriptions
				recognition of both ecological and community-related diversity (SLO6)
Regionality	2	no formal indicators (NGO2; SLO1)	value in practice (NGO2) value tied to identity (SLO1)	Regionality shaped by spatial fragmentation and connectivity (NGO2); need to consider resilience at a broader regional scale in urban contexts (NGO2); maybe regionality is local (support local where possible) (SLO1)
Relationship and Relatability	6	qualitative indicators (observations) (NGO2; SLO7) no formal indicators (SLO1; SLO2&SLO3; SLO5; SLO6)	value in practice (NGO2; SLO5; SLO6; SLO7) value tied to identity (SLO1) value as aspiration (SLO2&SLO3)	Importance of relational networks and institutional connections (NGO2); physical and organisational spaces enabling collaboration and knowledge exchange (NGO2); have built a lot of relationships across the board (SLO1); try to maintain peaceful social environment (SLO2&SLO3); Central importance of relationships (SLO5); relationality as a foundational value in practice (SLO5); Relationship and relatability as integral to both spatial and social experience (SLO6); connections shaping roles and emotional engagement (SLO6); Relationship and relatability as essential for collective action (SLO7); strong social connections underpinning participation and contribution (SLO7)
Scale of Food Producer	3	no formal indicators (NGO1) qualitative indicators (SLO4; SLO7)	value constrained (NGO1; SLO4) value in practice (SLO7)	Community gardens perceived as limited or symbolic responses to food resilience challenges (NGO1); insufficient scale to address systemic food supply issues (NGO1); Tension in scale of food production (SLO4); balancing small-scale growing with time constraints, alongside critique of large-scale, convenience-driven food systems (SLO4); Scale of food production linked to collective effort (SLO7); integration of small-scale producers and community-based food networks (SLO7)
Social Standing	1	no formal indicators	value in practice	Social cohesion and relational diversity as key components of resilience; importance of interconnected community structures (NGO1)
Stimulation	1	no formal indicators	value tied to identity	Stimulation of the sense, including both tasting food and touching the ground (SLO2&SLO3)

31. table: Analysis of FVF personal values



Future Plans

Organisations highlighted the importance of future networking and collaboration. For the CCGA, their focus is *“a shift from growing and adding gardens to having something more substantial underlining that [...] support network”* (NGO1). This shift includes capacity building activities like upskilling community garden coordinators with management skills: *“So we've got a program or like a series of workshops that are funded, and they're gonna be led by a community development leadership guy [...] and he's going to offer eight places for community garden coordinators to go through a series of active learning modules [...]. So, I think the impact that we are trying to build is strong relational impact and professionalism. And what's that? We will build a culture of support and collaboration and solidarity [...] (NGO1). Collaboration between community groups was considered an important step to share resources: “Yeah, we struck up a bit more of a strong relationship with them [Union Church] last year. The Council decided, because the Council still own this building, [...] to do renovations here, which meant we were out 15 weeks. [...] We could go and use their [the church's] rooms anytime we needed, and we kind of got a bit of a more engaged relationship. [...] It's just making sense to work together. We see a lot of the same people”* (SLO4). In order to expand their scope and size, organisations rely on the collaboration with others: *“The long-term vision is expanding, probably the park, but not necessary just from our resources and our people; it's the collaboration with others to make sure that we secure the land and expand on some of the biodiversity project”* (SLO7).

The expansion of services and related infrastructure improvements and extensions were also frequently mentioned as future plans. This includes a new kitchen (SLO3), a shop (SLO7), and completing the café with the idea to promote local produce: *“And also the original idea, what we were thinking to have a greengrocer in the café. So we could also sell the vegetables, but [...] maybe it's better just to [...] feed the produce into the café, and for our little shop which we will have in there it will be more like [...] about promoting local producers [...]”* (SLO1).

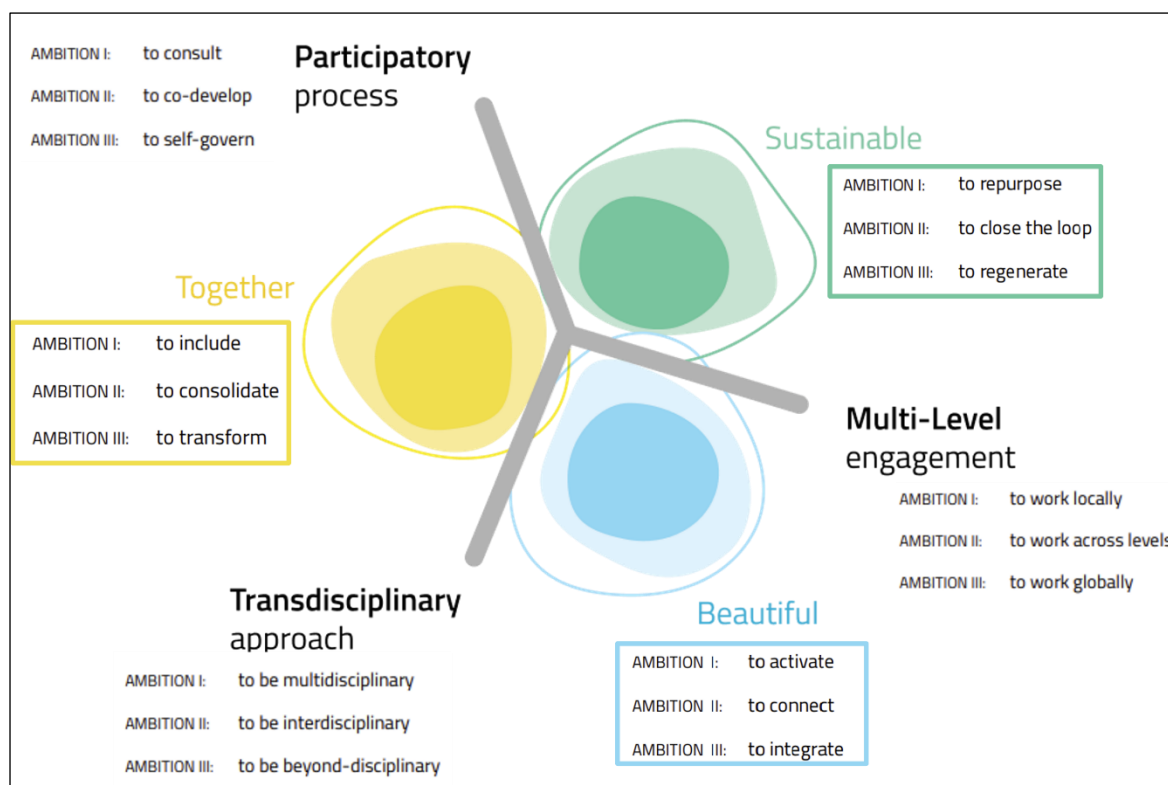
Financial sustainability and more independence from (public) funding were mentioned frequently. Changing roles from the receiving to the giving end was considered a long-term goal: *“Then we would be able to get off the funding well ourselves. And then hopefully if we were able to get excess money, then we are supporting other organisations in the food resilience field”* (SLO1).

None of the organisations considered themselves at immediate existential risk. However, interviewees showed awareness for existing and potential future risks that might undermine the sustainability of their respective organisations. These included over-dependency on (shrinking) resources such as (public) funding (NGO1; SLO4), land insecurity (SLO1; SLO7), and risks around governance and succession planning (SLO3).

NEB Compass

The New European Bauhaus (NEB) compass provides a framework to self-assess the achievements of projects against three guiding values (beautiful, sustainable, together) and three working principles (participatory process; multi-level engagement;

transdisciplinary approach). The degree of achievement for each value and working principle is evaluated against three “ambition” levels – baseline (ambition I) to ideal end state (ambition III) (European Union, 2026). Ambition levels build upon one another; in order to reach the highest level (III), previous levels have to be achieved first. The following is a self-evaluation of the case study through the lens of the NEB values and working principles.



53. Figure: NEB compass – values, working principles and ambitions (Source: WP2 lead; Inspirational cases writing workshop, March 2026)

Values

Beautiful	Sustainable	Together
<i>Ambition III: to integrate</i>	<i>Ambition III: to regenerate</i>	<i>Ambition II: to consolidate</i>
The organisations in this case study provide a network of safe, local, green open spaces that provide a diversity of activities, sensory and emotional experiences (I). The spaces bring diverse people together including vulnerable communities by providing diverse opportunities to socialise, learn, and explore new ideas through gardening and various other activities, e.g., arts & crafts; composting; shared lunches; cooking; recycling. They	The gardens provide the space and resources to educate people, e.g. to grow and prepare their own organic food and learn about the food cycle including waste management and soil health (I). Participants work collaboratively on sustainable projects including waste management, renewable energy, storm- and wastewater management, or recycling. The practical engagement with sustainable practices and circular	The gardens are inclusive and provide free access to diverse participants including vulnerable communities (I). Particular projects (e.g., designing open spaces that respond to the needs of disabled people) address community segregation issues and provide equal opportunities for participation. Fair processes, e.g., around the distribution of produce within and outside the gardens, respond to principles of social justice (II).

invite participants to collaborate in shared activities and engage with their social, cultural and natural environment (II). Participants are provided with opportunities to reflect on their own habits and change them, e.g., through collective experiences of gardening and learning. Such experiences respond to participants needs (e.g., in relation to economic hardship or mental health issues) with transformative and potentially life-changing effects on daily habits and resilience (e.g., by learning to grow their own food) (III).	economy principles encourages systemic thinking with the ability to develop holistic ecological worldviews and to change engrained patterns of behaviour (II). Gardens have a direct effect on the regeneration of depleted soils (e.g., by composting or crop rotations), the restoration of land (e.g., by developing gardens on post-earthquake vacant sites formerly occupied by demolished buildings or planting native vegetation in the residential red zone), and biodiversity (e.g., by planting for pollinators) (III).	
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32. table: NEB compass – assessment of values

Working Principles

Participatory process	Multi-level engagement	Transdisciplinary approach
<i>Ambition II: to co-develop</i>	<i>Ambition I: to work locally</i>	<i>Ambition III: To be beyond-disciplinary</i>
The CCGA as an umbrella organisations consults regularly with participating gardens and employ a community builder / capacity developer role for this purpose. All organisations provide a forum for information and dialogue, e.g., via their website and social media (I). Gardens apply co-creation processes involving governing bodies, coordinators and managers, volunteers and external stakeholders such as the municipality, NGOs, funders, schools, and others. While strategic directions are mainly developed in the form of semi-formal processes between coordinators and board, projects are often co-developed with volunteers and external stakeholders (e.g., schools, community groups or artists). Fundraising campaigns and open days enjoy the support of the wider community (II). However, despite increasing efforts to become less dependent on	While the CCGA has a regional focus, gardens are locally rooted and interact predominantly with local networks, stakeholders and communities. While some projects have potentially a regional or even global dimension, e.g., by addressing systemic issues including food resilience, they influence mainly the local living environment (I).	The organisers, stakeholders and volunteers of organisations come from diverse professional and disciplinary backgrounds (I). They bring in diverse expertise to co-create projects which, in some cases, span across the entire food cycle integrating various functions within the food system and beyond (II). The integration of socio-culturally diverse forms of knowledge (e.g., by engaging with Pasifika and Māori groups and fostering indigenous gardening techniques and crops) and the collaboration with knowledge partners (e.g., schools and universities), creates open and diverse learning environments. Collaborative peer-to-peer learning allows for socially and culturally inclusive approaches to both formal and informal knowledge creation (III).



(public) funding, organisations are not (yet) financially self-reliant.

33. table: NEB compass – assessment of working principles

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CHRISTCHURCH CASE STUDY 2: CHRISTCHURCH CITY COUNCIL (CCC) AND FOOD RESILIENCE NETWORK (FRN)

AUTHOR: ANDREAS WESENER, LINCOLN UNIVERSITY (LU)

RESEARCH CONTRIBUTORS: JIABEI XU, YUAN XU (LU)

Introduction

As part of the REDESIGN project, two REDESIGN Network (RED-N) ‘inspirational case studies’ were conducted in Christchurch, Aotearoa New Zealand. This report outlines context, research design and selected findings of the second inspirational case located in Christchurch: Christchurch City Council (CCC) and Food Resilience Network (FRN). For each case, a set of broad research aims was developed. While the broad research aims are distinctive for each case, there are substantial overlaps between the two cases in terms of research design and findings. While this report focuses on case 2, it is recommended to read it alongside the report for case 1 to get a fuller picture of local food systems in Christchurch.

The report is structured into six parts. It starts with a summary of the research context – New Zealand, the Canterbury region and Greater Christchurch – including key challenges with regard to local food systems followed by an outline of research aims and methods. The fourth section provides a descriptive overview of the case and key stakeholders. This is followed by a detailed findings section analysing case context, governance structures, legal and financial frameworks, engagement and collaboration, impact, and future plans based on data from qualitative interviews with key stakeholders.

Methodology: Research context and key issues

Aotearoa New Zealand is a major international exporter of food and fibre with an estimated total export revenue of NZ\$ 60.4 billion (ca. 30.8 billion Euros) in 2025 (McClay, 2025). However, community food security, defined as a “situation in which all community residents obtain a safe, culturally acceptable, nutritionally adequate diet through a sustainable food system that maximizes self-reliance and social justice” (Holben, 2010, p. 1369), has become an increasing concern across New Zealand. Food insecurity is strongly linked to socioeconomic status and “co-occurs with a number of risk factors, particularly those associated with other aspects of poverty and material hardship. [...] Food insecurity has been increasing in New Zealand as the cost of living escalates” (Te Whatu Ora - Health New Zealand, 2022, p. 6).

Food insecurity has also a qualitative dimension. Healthy diets such as vegetables and fruits, whole grains and lean protein, and less sodium, sugar, and unhealthy fats (Lim et al., 2021) play an important role in reducing obesity (Rush et al., 2019). Currently, about



34% of adults and 12.5% of children in New Zealand are considered as obese (Ministry of Health, 2024). Associated direct healthcare costs have been estimated between NZ\$1.3 billion and NZ\$1.8 billion annually (Barton & Love, 2021). High obesity rates in New Zealand have been linked to socioeconomic deprivation (Cammock et al., 2021; Clough & Destremau, 2015); almost half of the adult population in the most deprived areas are obese, compared with less than 26% in the least deprived areas (Ministry of Health, 2024). In obesogenic environments, costs for healthy food are often higher than for unhealthy options (Cammock et al., 2021; Public Health Advisory Committee, 2024).

New Zealand is largely urbanised, with 87% of the population living in urban areas (World Bank Group, 2023). New Zealand cities, like most cities worldwide, rely almost solely on profit-driven commercial food distribution. The current land use approach regards food production and residential development as separate entities. Habitable land is largely classified as either rural or urban, a zoning approach that poses challenges to the management of food flows from rural commercial agriculture to urban areas (Davis et al., 2023; Davis et al., 2024).

Christchurch is the second largest city in New Zealand, the capital of the Canterbury region, and the largest – and regionally most important urban settlement – in the South Island of New Zealand with a population of ca. 412,000 in 2024 (Christchurch City Council, n.d.). The city's Gross Domestic Product (GDP) has been estimated as ca. NZ\$87,300 (ca. EUR44,450) per capita in 2025 – which is higher than the national GDP per capita of ca. NZ\$81,070 (Infometrics, 2026). Looking at Greater Christchurch including Christchurch City, Selwyn and Waimakariri Districts, the economy encompasses almost 10 percent of New Zealand's national GDP and almost 45 percent of the South Island's GDP. While the city's manufacturing, construction, professional, scientific, and technical services sectors are the main pillars of Christchurch's economic output, the "agricultural hinterland of Greater Christchurch is a foundation of the regional economy and the region's dominant export base, with the top export commodities being dairy, meat and forestry products" (Greater Christchurch Partnership, 2023, p. 22). Despite its strong agricultural economy, food insecurity is experienced by a significant number of households in Canterbury and common for those with a low household income. Māori are more likely to be food insecure than those of European ethnicity. Food insecurity has been identified as a serious issue for public health and wellbeing in Canterbury, and improved policy interventions have been called for (Te Whatu Ora - Health New Zealand, 2022).

Christchurch is also known as the 'Garden City' featuring a large number of public parks and gardens within predominantly low-density suburban development patterns (Wesener et al., 2025). In 2010 and 2011, the Canterbury region was struck by two major earthquakes causing 185 casualties; about 90 percent of residential properties were damaged (Brand et al., 2019). Shortly after, a range of bottom-up urban gardening initiatives sprung up (e.g., Montgomery et al., 2016; Wesener, 2015); policy frameworks such as the Food Resilience Policy (Christchurch City Council, 2014a) and network organisations such as the Food Resilience Network were created. Christchurch



offers the most supportive regulatory framework for urban agriculture in New Zealand (Hanna & Wallace, 2022). The Christchurch City Council's (CCC) Food Resilience Policy, which is currently under re-development, promotes a vision for Christchurch to become the "best edible garden city in the world" with the goal to provide "physical and economic access, by all people, at all times, to enough food to maintain an active and healthy life" (Christchurch City Council, 2014a).

As a concept, food resilience overlaps with community food security, e.g. regarding equitable access to healthy, affordable, safe and culturally appropriate food supplies. In addition, food resilience relates to a "local food production and distribution system based on ecological sustainability, able to withstand natural and man-made shocks" (Christchurch City Council, 2014a). Based on the devastating experience of the Canterbury earthquakes, local food systems in Christchurch are contextually interwoven with the region's disaster history. However, "discussions around food resilience have broadened and become inclusive of a range of environmental, socio-economic and cultural processes and challenges" (Wesener & Morris, 2025) as part of a more comprehensive resilience narrative around "urban social-ecological systems" (Chan et al., 2015, p. 632). This has raised questions of how local food systems need to respond to a variety of crisis scenarios (Wesener & Morris, 2025).

Non-governmental advocacy organisations have demanded to 'redesign' New Zealand food systems by prioritising social agendas that put "food and health at the centre of all related policies, ahead of the commodification of food, and ensuring the right to food in legislation" (Taptiklis et al., 2025). Such suggestions go beyond the concept of food security; they support community-oriented food systems and associated values such as collective commitment, solidarity, social justice and shared responsibilities, e.g., linked to food sovereignty concepts (Wittman, 2023). Demands for national policy changes include "support for thriving, viable local food economies (including incentives) with compliance and regulatory measures to match the risks and realities of local production for local sale" (Taptiklis et al., 2025). In September 2025 and April 2026, the Christchurch City Council invited various food systems-related stakeholders to two "Growing a Fair Food System Together" workshops to discuss opportunities and strategic directions for socio-economically and environmentally sustainable food systems in Canterbury (Te Papa Hauora, 2025). Related discussions spanned across food security, food resilience, food justice and food sovereignty concepts, which were often used interchangeably.

Research aims

Two RED-N inspirational cases are located in Christchurch, Aotearoa New Zealand. For each case, a set of broad research aims was developed. While the broad research aims are distinctive for each case (see below for case 2 in *italics*), there are substantial overlaps between the two cases in terms of research design and findings. While this report focuses on case 2, it is recommended to read it alongside the report for case 1 to get a fuller picture of local food systems in Christchurch.

Christchurch City Council (CCC) and Food Resilience Network (FRN)



Local RED-N partner: Sara Nourozi, Policy and Projects Advisor, CCC

Aims at identifying key lessons applicable to other communities aiming to co-create a more regenerative urban food system engaging a diversity of local people including low income and homeless groups, youth, local food artisans, artists and businesses.

The case study will observe

and analyse the benefits of having a local circular food system in a central city urban food hub, e.g. how it effectively educates, supports and engages a diversity of people.

The Christchurch City Council (CCC)⁴⁶ is the local government authority for Christchurch representing the people of Christchurch. The Food Resilience Network (FRN) was founded as a network of organisations committed to provide better access to food for all citizens (Morris, 2020) and “to identify common themes emerging and potentially collaborative actions that could address common needs” (Wesener & Morris, 2025, p. 158f.). The most prominent project developed by the FRN is the Ōtākaro Orchard⁴⁷ (cf. case study report 1).

The current Policy and Projects Advisor, Community Planning & Projects, Citizens and Community Group at CCC, Sara Nourozi, agreed to become our local RED-N partner for this case study. The research design of this inspirational case was developed in close collaboration with our local RED-N partner. The broad research aim above provided guidance for the selection of specific research focus areas, study locations, stakeholders for interviews, research methods and the development of interview questions.

Based on the broad research aim and intense discussions with our RED-N partners, we identified the following key focus areas for our research:

- i. **Diversity of people** – who are the people engaged in local food systems including low-income groups?
- ii. **Policy and funding** - successes, challenges and learnings
- iii. **Story and context** - situating the RED-N case in its respective context (e.g. geographical; sectoral; problem-based)
- iv. **Stakeholder mapping** – identifying the different actors engaged in the operation of the case, their role and their relation to each other.
- v. **Governance** – describing respective structures and their embeddedness in its larger environment (e.g. local food systems).
- vi. **Local impact** – analysing the impact of cases regarding food value framework aspects (e.g., socio-cultural; economic; health; environmental) including identified barriers & enablers.
- vii. **NEB (New European Bauhaus) principles** – aligning local impact criteria with NEB principles.

⁴⁶ <https://www.ccc.govt.nz>

⁴⁷ <https://otakaroorchard.org/>



- viii. **Future plans and scenarios** – describing and analysing potential future plans and scenarios for the local cases, e.g. based on impact and identified barriers & enablers.

This report focuses on selected findings from the above key focus areas related to governance structures, legal and financial frameworks, engagement and collaboration, impact, and future plans.

Research methods

Findings in this report are based on contextual research – including reviews of academic and ‘grey’ literature (e.g. policy documents, government and NGO publications and materials, websites), gathering of local contextual information, e.g., about study locations, spatial observations and site-based photographs, and participation in local events relevant to local food systems to gather first-hand experience and to learn about how local food system networks and activities are co-created. Examples are two “Growing a Fair Food System—Together” workshops in September 2025 and April 2026, organised by the Christchurch City Council. The workshops intended to “co-create strategies to foster equity, sustainability, and food resilience in Canterbury” (workshop invitation draft) by gathering various stakeholders involved in local food systems with the idea to re-develop the food resilience policy for Christchurch. The author of this report, alongside other LU researchers, participated in the workshops and assisted the organisers with workshop planning and workshop activities.

Empirical data has been gathered through semi-structured in-depth qualitative interviews with key stakeholders who are involved in and have an in-depth knowledge of best practices and initiatives around local urban food systems in Christchurch. Qualitative interviews are an effective method to gather rich, detailed and context-specific data. Based on the discussions with our local RED-N partner, we identified relevant stakeholders including leaders of community-based study locations familiar with governance, leadership and/or management (e.g. chairs, coordinators, managers of community gardens or urban farms), leaders of food-system relevant NGOs (e.g., Chair of the Food Resilience Network; Chair of CCGA) and government representatives (e.g., CCC).

Key stakeholders were contacted and invited for interviews. Interviewees were provided a research information sheet outlining key aspects of the research and a consent form for them to sign. Activities involving human participants (e.g., interviews) are considered an ethical issue. We sought approval for carrying out the interviews and for the accompanying documents (information sheet and consent form) from the Lincoln University Human Ethics Committee (LUHEC). The research received written approval by LUHEC (14 October 2025; Application-No. HEC2025-46). The approval encompasses both Christchurch case studies.

Interviews were conducted in November and December 2025. They were recorded and fully transcribed. Transcriptions were produced with the help of a dedicated recorder/transcription device (iFLYTEK Smart Recorder), that performs offline AI-enhanced transcriptions (real-time voice-to-text conversion without internet or cloud



connection to ensure data security for sensitive content). Interview transcripts were manually checked for accuracy and corrected where needed. They were analysed following qualitative thematic analysis methods with the support of the qualitative data analysis software NVivo15. The software supports systematic coding, theme development, and management of qualitative data as well as the visualisation of patterns across participant responses. All transcripts were analysed to identify information regarding the key focus areas (see above). Emerging themes were identified via inductive coding.

Case description and key stakeholders

The case was selected for three key reasons: First, CCC is one of the most important stakeholders with regard to local food systems in Christchurch. They provide policy support, funding and advice to various food-related organisations, community groups and projects. Second, the FRN is an important networking organisation regarding local food systems in Christchurch. Third, the Ōtākaro Orchard, the key project of the FRN, is an important central city community garden and food hub and potential incubator for systemic change (Wesener & Morris, 2025).

We interviewed three key stakeholders (NGO3-5) from food-system-relevant NGOs, four key stakeholders from government organisations (GOV1-4), and one stakeholder from the Ōtākaro Orchard Urban Farm (SLO1). In total, we interviewed eight key stakeholders; SLO1 was also interviewed for case study 1 (see case study 1 report). All eight interviews were conducted with one participant (see table). Each interview lasted between 1.5 and 2.5 hours.

Interviewee Pseudonym	Organisation / Study location
NGO3	Food Resilience Network (FRN)
NGO4	Eat New Zealand
NGO5	Rātā Foundation
GOV1	Christchurch City Council (CCC)
GOV2	Christchurch City Council (CCC)
GOV3	Christchurch City Council (CCC)
GOV4	Health NZ Te Whatu Ora
SLO1	Ōtākaro Orchard Urban Farm, Christchurch City Centre

34. table: Qualitative interviews conducted for case study 2

Findings

Case description / Context

The Food Resilience Network (FRN) was founded in 2013 (Wesener & Morris, 2025) in form of *“a post-earthquake Hui⁴⁸, and people came together in the food space and*

⁴⁸ 'Hui' is a Te Reo Māori word meaning meeting or gathering (<https://maoridictionary.co.nz/search?&keywords=hui>)

wanted to ensure that we were addressing food resiliency before we had another disaster. So that what came out of it was the establishment of the food resilience network and the edible canterbury charter. And the charter was co-designed with that network of people to sit in places, set up objectives, and that even agreed on in terms of working towards food resilient region.” – NGO3

Eat New Zealand was founded in 2015 by Giulio Sturla, a chef who opened a restaurant in Lyttelton, Christchurch: *„When he arrived to set up a restaurant in the harbour town in Lyttelton and went to buy some fish from the fishing boats that pulled into the wharf, for his restaurant, really to be told that he couldn't have any. So that started a really big conversation around why we have such poor access to our food, our own food.” – NGO4.*

The **Rātā Foundation** has its roots in the (neoliberal) deregulation reforms in New Zealand in 1989, when the banking sector was restructured including the creation of the Trust Bank Canterbury Community Trust. In 1996, the Trust Bank was disestablished, and parts of its reserves went into the new Canterbury Community Trust, which changed its name to Rātā Foundation in 2015⁴⁹.

The **Christchurch City Council (CCC)** was established in 1862 as the local government authority for Christchurch. In the 1989 local government reforms, the Council integrated the functions of several formerly independent Councils. In 2006, Banks Peninsula District Council merged with Christchurch City Council⁵⁰. The council currently consists of 16 elected Councillors in sixteen wards, and is presided over by The Mayor of Christchurch, Phil Mager, who was elected in 2022 and 2025.

Health NZ | Te Whatu Ora is a central government organisation responsible for the operational management of public health services across New Zealand. It was founded in 2022 replacing the previously 20 independent District Health Boards (DHBs). New Zealand has a public health system since 1941. The organisation's role is “to deliver quality, compassionate and affordable healthcare for everyone in New Zealand” leading “the day-to-day planning and delivery of publicly funded hospital, primary and community health services⁵¹.”

The **Ōtākaro Orchard Urban Farm** consists of two sites. The main site (orchard) was established in 2015 on Cambridge Terrace along the Avon River in the Christchurch CBD after earthquake-damaged office buildings had been demolished. It received a long-term lease from the (central) government in 2016 (RNZ Radio New Zealand, 2016). It is a key project of the Food Resilience Network (FRN) and has remained closely aligned with the network until today (Wesener & Morris, 2025). The second site (urban farm) is about 5 minutes walking distance from the main site (cf. case study 1 report).

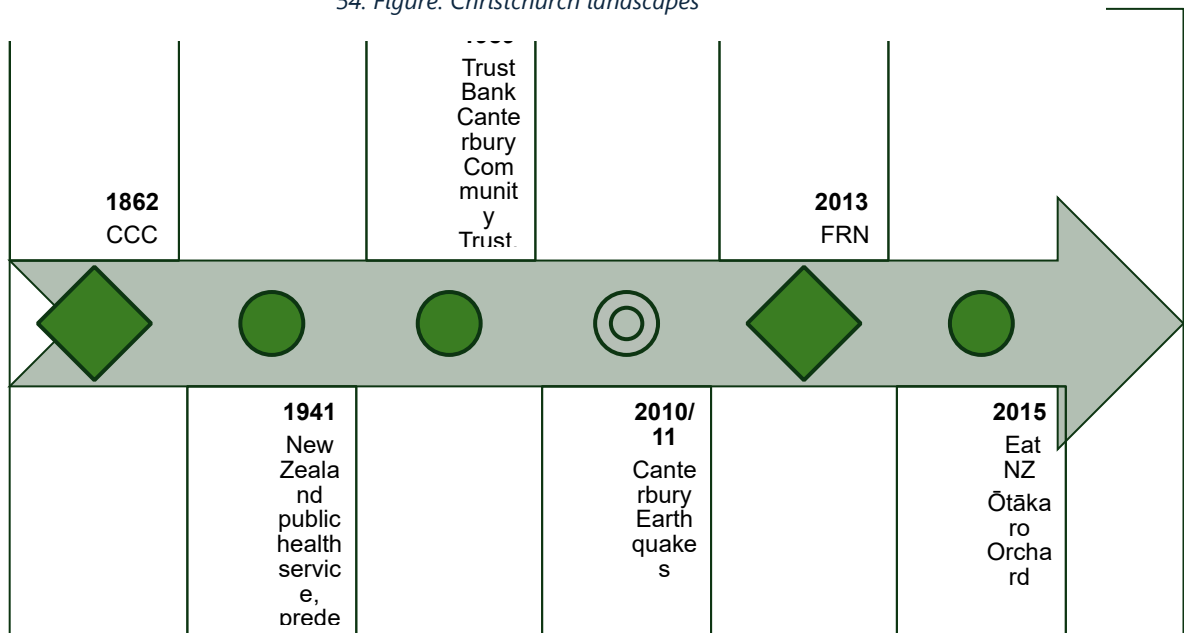
⁴⁹ <https://ratafoundation.org.nz/en/about/our-history/>

⁵⁰ <http://archived.ccc.govt.nz/CityScene/2006/March/MergerBusinessAsUsual.asp>

⁵¹ <https://www.healthnz.govt.nz/about-us/what-we-do/our-role-and-priorities>



54. Figure: Christchurch landscapes



55. Figure: Case study 2 timeline

Reasons behind the organisations' establishment

The FRN was established as a post-earthquake response

"to ensure that we were addressing food resiliency before we had another disaster" while "working towards [a] food-resilient region." – a NGO3



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FRN developed the 'Food Resilience Strategy', which was adopted by Christchurch City Council in 2014 to provide "healthy, affordable and locally grown food for all people" (Christchurch City Council, 2014a). The related 'Food Resilience Network Action Plan' intended to establish a "patchwork of food growing at local hotspots, linked together like a ribbon and woven into the fabric of our communities" (Christchurch City Council, 2014b) and "to strengthen the local food economy, e.g., by growing networks and partnerships, educating people, and developing supportive policy frameworks" (Wesener & Morris, 2025). In 2015, the 'Edible Canterbury Charter' was established to support "a sustainable local food economy" (Christchurch City Council, 2026). FRN's main focus has been a central city hub, the Ōtākaro Orchard, a tendered post-earthquake government project they won in 2015 (cf. case study 1 report): *"[...] we took on the site here that we're sitting in. So, in 2016, we broke ground in the orchard, so, turn that part of the site into an orchard on top of the rubble, which is thriving as you can see. [...] and then we lift the space to build an education hub, a place for people who are working here [...]."* – a NGO.

Eat New Zealand's original idea was to simply promote New Zealand food: *"And really the idea back then was how do we make New Zealand food famous? So, this idea that we understood that we had something unique to offer the world, we thought that by just promoting, that we would unlock this sort of mythical, magical moment where New Zealand food would be on the world stage."* – NGO4. However, over time, they realised that they struggled to tell the story without looking at problems around food access: *"[...] it's everything from colonization to food insecurity, to practices that aren't in keeping within our natural world, to economic systems that mean that we need to export most of our food and not be able to have access to it at all"* – NGO4

The organisation's aim is to build more resilient food communities including indigenous ones across New Zealand; their mission statement envisions *"a future where all New Zealanders will have access to their food in a connected way. This will be kai⁵² (food) which sustains us culturally, socially and nutritionally. It will be produced or collected in a way that supports the balance of our natural world; our land, fresh water and ocean."*⁵³ The Rātā Foundation was established as an independent community investment fund: *"So we manage an endowment fund of around \$700 Million. And we invest that, and the proceeds of those investments are distributed at the community for community benefit. [...] So, we have two sides of the business. One is to make money, and one is to distribute funding."* – NGO5

Key moments

We asked participants to give us examples of key development moments of their organisations and divided them into four categories: infrastructure development, functional and financial stability, and network and organisational integration.

The Ōtākaro Orchard developed slowly from a vacant earthquake "rubble" site into a green urban agricultural space: *"All those things happened from 2015, 2016. The first*

⁵² 'Kai' is the Te Reo Māori word for food.

⁵³ <https://eatnewzealand.nz/about/>

trees were planted. [...] before that it was big, corporate buildings, they were all cleared away, the whole site was excavated, 50 centimetres of hardcore brought in. And then about, I think there was something like 20 [...], 30 centimetres of soil.” – SLO1. The FRN’s vision for the Ōtākaro Orchard is strongly connected with completing their building on site, featuring a range of sustainability features such as the use of recyclable materials, a green roof, and a stormwater management system. The building is almost completed, and the key attraction will be a new café that sells local produce (cf. case study 1 report): “So then in 2019, we started building this building; in the end of 2020, it became quite apparent that we didn’t have the funding actually to keep it going. So, we stopped, we then went away and we reassessed our funding [...]. And then we came out of Covid, we ran a cold shell basically. [...] And then now we’ve just been funding for the fit out of the building. So, we’re now aligned. – NGO3. In terms of financial stability, the FRN has struggled to secure funding, which has delayed the works on the Ōtākaro Orchard building including the café: “So, at the moment it’s just fit out stuff. So, we’ve got about \$350,000 to go, about \$300K is figured out, and about \$50K to \$60K of activation costs that we need to fund since we were at today. [...] We need to please the bills and we need to make sure that we’ve got enough money to open the café.” – NGO3

NGO3 related the struggle for funding also to the organisation’s community- based non-commercial legal status: *“I guess people don’t understand us because we’re not [a] commercial operation, we can’t get funding from... the banks won’t touch us because they don’t wanna be seen, to be dependent on a community group.” – NGO3. However, they consider to be able to complete the project soon: “I think we’ll have that resolved. It’s all going well [...]. We’re basically looking for capital investment in the operations of the café, which will pay for some of it. We’ve got funding applications for elements we’ve pulled out, shaved off, and we were asking for sponsorship, put some of the food out. So, between those three things, we should be able to pull it.” – NGO3*

Networking, organisational integration and collaboration have been key development features of the FRN since its inception: *“And the [Edible Canterbury] charter was co-designed with that network of people to sit in places, set up objectives, and that even agreed on in terms of working towards [a] food resilient region.” – NGO3. FRN collaborates with other organisations such as ‘Cultivate’ to run the urban farm (cf. case study report 1): “The farm also is a training ground for youth in work scheme. Cultivate still run the element. We run the farm and they run the youth training. So, we work together on that one.” – NGO3. Likewise, Eat NZ has developed a broad interdisciplinary network: “Over the years, Eat New Zealand has really become the organization that sits across the food system. Our constituency is equal parts, farmers and chefs, which is quite unusual. But we also have a whole lot of other people within that, including media, other storytellers, people working at community level, people working at regional level, people working in food security [...] That is kind of the big picture history and story of Eat New Zealand.” – NGO4.*

Geographic scale

Organisations work at different scales. While the FRN is a local organisation that operates in and out of Christchurch, the Christchurch City Council has networks and



collaborates at local, regional, national and even international level: *"[...] we also created a national group because once we developed our local food policy, it was like, oh, well, actually this is the same for all councils across the country. How do we get together with them and maybe some others"* – GOV2. CCC joined the Milan Urban Food Policy Pact⁵⁴ and the International Urban and Regional Collaboration (IURC)⁵⁵ which allows them to collaborate with *"an international network of people doing similar things. We can learn from them. We could share and we can be more effective [...]. And so we're now meeting with 50 cities and clusters around energy and transport and food is one of those as well."* – GOV2. The Rātā Foundation works across two regions in the South Island of New Zealand and Chatham Islands: *"So, we distribute around about \$25 million a year in community. And that covers the regions of Canterbury, so Waitaha, Nelson Marlborough, so Te Tau Ihu o te Waka a Māui, and then Rēkohu Wharekaui Chatham Islands as well. So those are the regions that we cover."* – NGO5. Health NZ | Te Whatu Ora operates at a national level and has regional and local offices. They collaborate with community partners at the local level (GOV4).

Role and place in the food system

Stakeholders considered their role and place in the (local) food system as advocates, funders and organisational supporters, growers & distributors, and educators.

The most relevant role considered by stakeholders was the provision of advocacy, funding and organisational support across food systems and organisations. For example, GOV4's *"keen interest is in systemic food systems, and the inequities of access to health and food as part of that. Te Whatu Ora or the National Public Health Service has a shared responsibility of addressing determinants of health, and one of which is food environments."* – GOV4. Her support includes relationship building with public actors across Canterbury *"encouraging our local councils that they have a responsibility and duty of care in space because of some of the policies and land access, things that are pivotal in space."* – GOV4. Health NZ also support local community groups including food rescue organisations, food banks, community gardens and others: *"[...] we might support them with a piece of work they want to do. Or we might act as their agent or advocate to the likes of the Council [...] It's a little bit of a position of power that we have our advantage as the health system over a volunteer in a community organisation, and that we have direct relationships with the Council or ECan⁵⁶ or whoever there might be."* – GOV4.

CCC provides policy support, organisational support and funding, even if they do not have a dedicated staff position for food systems: *"I pick up lots of different projects across community development area. So, one of the areas that I'm picking up is the food resilience work within Council [...] And it's part of the work that I do; looking at food resilience mainly. And it's more from the planning and the strategy and the updating of the food resilience policy [...]. We also fund groups. So, looking at how we're funding and*

⁵⁴ <https://www.milanurbanfoodpolicy pact.org/>

⁵⁵ <https://www.iurc.eu/>

⁵⁶ ECan stands for Environment Canterbury, the regional council for the Canterbury region (<https://www.ecan.govt.nz/>)

what we're funding, will be some one of the outcomes of this work [...]." – GOV1. CCC and the Rātā Foundation are major funders of community-based food projects: *"[...] under our community wellbeing approach, we fund across five kind of key areas, which help us to kind of define what the key areas of [...] community wellbeing are. So those are briefly learn, support, connect, participate and sustain. And for us, the food, these community food projects, can fit into a couple of those areas."* – NGO5 .

The Rātā Foundation helps community organisations, e.g., *"to engage in things like governance, training, and from time to time fundraising capability."* – NGO5. They help organisations *"develop specific capability. Some of the food projects that we funded have benefited from [that] very tailored support [...]."* – NGO5. The Ōtākaro Orchard Urban Farm sees its role in the production and distribution of healthy and affordable food while promoting local food systems: *"[...] here it's like a bio intensive market garden style, which gives people a look at something of a different system which is more annual based, a lot more labour intensive. [...] we produce beautiful fresh organic food, which is pretty cheap, like we're selling it cheaper than supermarket prices. [...] so we are making available really healthy fresh local produce and it really costs a good cost for people."* – SLO1

The role of education for food systems was highlighted by several stakeholders: *"I think the food forest over there is an amazing education resource on permanent food systems, farm culture, soil building, water catch up. So, education all the way and also inspiration [...]."* – SLO1

The organisations' vision and goals

Organisations' visions and goals revolved around the following topics: Collaboration and sustainable and resilient local food systems including funding, social justice, community wellbeing and education. There was a shared perception that food system related organisations and initiatives were fragmented, and more targeted collaboration was needed: *"I would like a more coordinated and organized sector. First of all, [...] things are really scattered and disconnected, and we're not really working towards certain goals, specific goals like we want to achieve [...]."* – GOV1. Stakeholders envisioned a more strategic approach to coordinated collaboration: *"The whole system is so disconnected at the moment. So, you have lots of people working in very isolated areas and it's very hard to form ways I would love to see them joining up. [...] I would like to see, I guess, and we'll join that up in a coordinated strategy"* – GOV3.

Suggested coordinated approaches included more targeted collaboration at regional level, between councils and between funders: *"[...] doing something about the Christchurch food system [is] to really recognize that Christchurch needs to better connect with its neighbours to actually enable a functioning food system. [...] we need our funders to talk to each other a bit more about what we are funding over the next 5 years. We need a long-term approach. [...] I'd love a local council to talk to each other, because otherwise, we just constantly trapping funding applications to have to come and have to be supporting within the boundaries of the council."* – GOV4

Stakeholders provided their visions of sustainable local food systems and strategic moves towards growing them. On the one hand, systemic changes were considered necessary at national level: *“So we need to change policy at national level. We need to stop our exporters exploring overseas. We need to make sure that's supporting our people first before they export.”* – NGO3. On the other hand, the regional and local level were considered equally relevant for achieving systemic change: *“I think that there are some global, big directions that don't serve us like the financialization of our food, which means that our food isn't really designed to feed us anymore. It's designed to make money from it. And those systems can be quite overwhelming. And they are very difficult to change, because they are really embedded in very large existing economic frameworks and power and resource frameworks. If you put those down and move to regional and local solutions to some of the problems that our current food system delivers us, I find that you have much more ability to have traction, and you also have the ability to have impact. I think that's the value in local and regional systems. And I think as an organization, we are much more interested in working at that level. [...] In terms of how we think change will come about, we believe it will come from local and regional food systems, not from central food systems.”* – NGO4.

At the local level, the establishment of local Food Policy Councils was considered as a strategic goal: *“Another thing in terms of being more strategic would be to have a Food Policy Council. So, I'd like to see big players in the food systems, the ones that actually make decisions on things, like within different government sectors. It could be like Te Whatu Ora [Health NZ], it could be ECan, then got every representative from the supermarkets and see them talking to the council, and you come and have councillors on board too, like people who [are] the elected members within the council, they actually sit around a table and try to tackle some of these big problems together.”* – GOV1. Another vision related to the idea of supporting local circular food economies: *“And we've got a few examples of that, unfortunately, one of the great ones was 'Cultivate Christchurch'⁵⁷, which no longer exists in its old form. But at the time I really loved it, because it took youth who would slip through the cracks, teach them how to grow food, grew food in the central city, collected that food up, and sold it to local cafes and restaurants by bike, and then picked up food scraps, took that back to the site and composite it on the site. What an extraordinary regenerative economy solution! So that's I'd love to see more of that. What the vision that to me is a really good example of regenerative economy where you've got this virtuous cycle of good for people and for the planet [...]”* – GOV2.

Strategic long-term approaches to funding and resources were considered an important part of establishing sustainable and resilient food systems. Supporting (small) growers with national subsidies (GOV3), and diversity funding strategies from single-focussed initiatives (GOV1; GOV4; NGO3; NGO4) such as food rescue and food bank operations (for more details see the sections on shortcoming of and desired improvements to the funding system). In general, it was felt that more money should

⁵⁷ 'Cultivate Christchurch', an organic urban farm that combines urban food production with social work, ceased their central city based operations at what is not the Ōtakaro urban farm in 2021 (cf. case study 1 report).

be spent on long-term solutions: *"I'd love to see more money pumped into this. [...] we spend quite a bit of money on like food rescue and like trying to tackle the surface level challenges rather than tackling like long term problem. So I'd love to see more money being put into like long term solutions over a few years."* – GOV1

At the operational level, more capacity was needed: *"So, if we had a full-time person who was devoted to this area, perhaps we could get further. But often it's capacity. Nobody has time to take on extra things."* – GOV3. The Rātā Foundation saw it as a goal to found projects that connect food systems with social justice and community well-being perspectives such as the New Brighton Community Garden (see case study report 1) or Cultivate Christchurch (NGO5). Their goal is also to support educational projects including indigenous iwi (tribe) or hapu (sub-tribe)-led projects: *"they are joining together to develop a food security project, which will help to educate whanau around how they grow food, etc. So, I think the growth of iwi-led."* – NGO5

Main issues

Key issues mentioned were around funding (see the sections on shortcoming of and desired improvements to the funding system for more details), a lack of policy support, a lack knowledge and understanding of food systems, a lack of collaboration, and development capacity constraints. With regard to policy support, participants identified a lack *"of policy from central government around food. That is about limiting for us."* – GOV2. Existing policy focusses mainly on commercial food systems, and not local food systems: *"It's [policy] influenced it by having an overwhelming focus on our export food system. That's the influence that policy has on our local food system, by not focusing on our local food systems. [...] It's so culturally embedded, and how we talk about our food, this idea that that we should expect the crumbs or the least quality food. So yeah, regulation and policy are really set up to deal with how we export our food, not how we eat our own food."* – NGO4.

Others think that there is not a lack of local policy but rather a lack of implementing and resourcing it: *"I definitely think policy from a local government perspective is really important. I just think it needs to be supported to be enacted. Otherwise, it's just dusty paperwork. There's lots of global examples of good policy. The best ones like partnership policies, like a food policy council that might be held by the local council, if you like, governed and facilitated by them in a way of resourcing it."* – GOV4.

Regarding knowledge and understanding, participants noticed a general lack of understanding systemic issues around food systems: *"[...] there is not currently an understanding or an acknowledgment that the problems are actually systemic and that we won't change that by funding food banking."* – GOV4. This is connected to a lack of understanding of food systems from a community diversity perspective including indigenous communities: *"So, I think there's an opportunity to remember that when we talk about a food system, we're not actually talking about a food system. We're talking about many food systems, and that every food system, particularly at a regional and local level, should reflect the community for whom it serves."* – NGO4.



Community-based food initiatives are often not well understood: *"I guess people don't understand us because we're not commercial operation [...]"* – NGO3. The reliance of commercial food systems has caused systemic knowledge gaps, e.g., with regard to food growing and processing: *"We're being more and more reliant on food provided to us or products from supermarkets, ready meals, and losing the ability to or knowledge of how to grow, how to prepare food and how to eat up in healthy ways. [...] So that's an indication [that] we're not able to make informed choices because we're being provided all these unhealthy options."* – GOV2

This may affect the perception and value of food systems, even within an organisation: *"It's just not that straightforward like people might not see the value [...] you're really just trying to get people buy in and that this needs to be formed."* – GOV1. There were also concerns about a lack of understanding how regional and local food systems work, e.g., around the "infrastructure of the middle" (distribution): *"So, the bit that sits between the people who are making the food and the people that are eating the food, it also doesn't address the fact that you can more closely connect these two parts of the food system, but there are embedded power imbalances. That means that unless you change demand for local food that [they] are trying to supply, it will always come up against the same barriers. So, it's the tipping of the whole system in favour of local food. Yeah, or the development of some demand drivers [...] that will create transformation and local food systems."* – NGO4.

A perceived lack of collaboration and engagement was expressed: *"I feel like things are really scattered and disconnected and we're not really working towards certain goals, specific goals [...]. I feel like there might be a lack of engagement or not. Why? I feel like when you bring all the different players together, they'll still not know what can be achieved and people's times limited as well [...]"* (GOV1). *"We need to work with the entire food sector and health sector and education sector, business sector to enable the regenerative food system that we're thinking about."* – GOV2.

With regard to development capacity constraints, a lack of critical infrastructure for small producers regarding the "last mile distribution" such as transport and storage was seen as a barrier: *"I need to be able to send it directly to where it's going to be consumed."* – NGO4. A perceived general lack of time was another main issue for organisations: *"[...] people seem to be very time poor [...] and so they have lots of competing demands for their time."* – GOV2. The reliance on a few "committed and passionate individuals" and problems with succession planning were identified as another barrier: *"I think that is a chance to strengthen and grow those organisations and enable leadership to continue over time. Some of that is part of the natural cycle of community organizations, but I think that is a real challenge."* – NGO5

Governance structure

The Christchurch City Council employs about 2,500 Staff (GOV2); however, they do not have a dedicated person for food resilience or food systems. Food resilience had first been sitting with the climate resilience group before it was shifted to community development: *"It's very under-resourced. It's not necessarily top priority. I mean, there's*



no position for it. It's just kind of weaved into everything that we do and sometimes needs to be like reminder that this is important." – a GOV1. The Food Resilience Network is run by a volunteer board of four trustees (SLO1) and they have two paid employees who run the farm (NGO3; SLO1). Eat New Zealand has a board of seven and two paid staff (NGO4). The Rātā Foundation has a board of 12 Trustees and 15 staff⁵⁸ working in team-based leadership and support roles (NGO5). With more than 90,000 employees⁵⁹, Health NZ | Te Whatu Ora is the biggest employer in New Zealand. With regard to food systems, they employ regional teams for nutrition policies and nutrition support for education settings; these are currently three staff in Christchurch and several others across the Canterbury region (GOV4). The FRN has about 4 to 10 volunteers per day (NGO3; SLO1) who help run the Ōtākaro Orchard Urban Farm. They run regular volunteer sessions to get *"people through volunteering."* – NGO3. Volunteers help with growing and selling food, e.g. on their weekly market days (SLO1). EatNZ relies on a network on volunteers who *"just show up when we put out the call"* (NGO4).

Main actors

Food-related roles in the Christchurch City Council are dispersed across different units or teams: *"All teams (related to their area of activity) provide advice to managers and councillors and manage relationships with the community and other stakeholders and advocate to government where needed"* – GOV2. GOV2 provided an overview of food related roles, teams or units at CCC and their (perceived) relative impact for addressing food related issues and opportunities. The table shows the roles, teams and units with a perceived high impact.

Role, team or unit	Food-related roles
Mayor	Civic leadership, governance and decision making. Signing local or global collaborations such as the Canterbury Food Resilience Charter and the Milan Urban Food Policy Pact. Regional collaboration through the Canterbury Mayoral Forum that is collaborating on a regional emission reduction plan, regional energy strategy, economic development plan, waste minimisation. All these regional programmes related to some extent to farming and food systems in the region.
Councillors	Civic leadership, governance and decision making. Representation on local community boards, being champions of local food related activities, hearing public submissions and deputations. Attending community events.
Managers	Organizational governance / decision making and leadership. Managers of the advice given to councillors, council budgets, resource allocation, corporate processes and policies, setting organisational directions and priorities, appointing staff to roles within the council.
Strategic Policy and Resilience	Develop council policies, strategies and plans including the Food Resilience Policy, Climate Strategy (which has a food workstream), Healthy Food Action Plan. Encourages a health in all policies approach. Helps draft the community outcomes and strategic priorities for the council.

⁵⁸ <https://ratafoundation.org.nz/en/about/our-people/>

⁵⁹ <https://www.healthnz.govt.nz/publications/employed-workforce-quarterly-reports-2025-26>

Parks	Ownership, planning, design and maintenance of parks and greenspaces that often are locations for community gardens and food / fibre gathering sites. Overseeing leases and licences for community food projects. Fostering community partnerships to help care for public spaces, waterways and biodiversity. Encouraging and managing community volunteers for example for weeding, planting and litter collection. Providing education for school students (learning through action) that includes composting / worm farms.
Community Development	Planning and enabling with community partners community health, wellbeing, resilience and social inclusion, often with a focus on the most vulnerable populations. Annual allocation of the Strengthening Communities Fund.
District Planning	Shaping the long-term form of the city (setting out the location of residential, commercial and public spaces) through District Plans, city planning rules and enforcement. This can include the protection of productive spaces and the creation of villages throughout the city (the location and size of activity centres). They are able to manage the negative effects of commercial activities on neighbouring properties, but not determine which activities can take place at each location (e.g., fast food, supermarket or greengrocer is determined by market forces).
Economic Development (ChristchurchNZ)	Regional economic development agency with a focus on supporting a regenerative economy, fostering innovation through business clusters (including food, fibre and agritech business cluster) and helping to drive a shared mission for a regenerative food system (with a focus on economic opportunities).

35. table: Food-related roles within the Christchurch City Council with a perceived high relative impact for addressing food related issues and opportunities (GOV2)

The lack of a dedicated person (champion) with more time to spend on food systems was described as a barrier to achieve outcomes more quickly: *“At the moment, I'd say [I spend] like half my time [...] but there's always things I can't ignore, the other things. [...] I would love to just focus on it. [...] I have these other things that my unit wants from me [...] but [...] one of the things from our workshops was really having someone who's an advisor in the space like someone who focuses on it, and I would love to do that. That's something [...] leadership would have to agree to it”* (GOV1).

The Food Resilience Network's main actors are the trustees, the Chair of the board, the garden coordinator for the Ōtākaro urban farm, and the farm production manager.

Intricacies of effective coordination

CCC's hierarchical governance structure makes effective coordination difficult: *“It's all trickle up and trickle down. So, I'm gonna go to my team leader and my unit manager and then general manager - a little bit crazy. So if they ask a question, it goes to the knees of us then down to me and a little bit back out. It used to be... we just [used to] have a conversation”* (GOV2). However, Council staff who know each other meet informally to discuss food related matters, and formally if it is about policy: *“So clearly we meet informally, but we are meeting formally around the revision of the [food resilience] policy. So that's the driver at the moment meeting these people as well”* (GOV2). For example, GOV2 works frequently with GOV1 and GOV3 considering them the “champions” with regard to local food systems. There is exchange and collaboration between Council departments and actors, e.g. *“Parks are working with community gardens and fruit trees”* (GOV3). Key actors in the food space try to bring



people together within CCC to create a structured discussion: *"So specifically my focus is on... just the writer of the policy work [...] and having those conversations within council to then put it into a sort of a structure trying to get more organized. So that's meant like bringing people together, facilitating those discussions internally [...]"* (GOV1).

Within the FRN, there is a core group of the Chair of the Board (NGO3) and the two paid staff – the orchard manager (SLO1) and the farm manager. These three work closely together within a certain hierarchy: *"The orchard person overseas the farm person"* (NGO3). NGO3 reports to the board and takes on additional roles if necessary: *"When we do [food resilience] network stuff, is our whole team really. I'm sort of running the communications project [...] because we don't have a network manager, I kind of assume that role. I'm almost like an unpaid staff"* (NGO3). Volunteers are managed by the orchard and farm managers.

Final strategic decisions, e.g., related to the support of local food systems, are made by the Council. Because of hierarchical communication processes (see above), Councillors cannot be approached directly, and therefore Council staff has limited, indirect influence on the decision-making process. GOV1 and GOV2, for example, would like to establish a food policy council for Christchurch: *"I mean, the biggest issue for Christchurch, I believe, is we don't have a food policy council or something like it. [...] We know that they [food policy councils] work; they could have a profound impact"* (GOV2). However, the Council is not yet convinced of that idea and Council staff feel they need to bring in external actors as advocates in order to influence this decision: *"No, we're not there. There's more advocacy [to] be done in the Council I think to get that over the line. I suspect that maybe we need to get some of the other actors to come in and advocate for it as well. So that it's not just staff, because I know that's gonna sound sad, but unfortunately the staff advice is noise [...]"* (GOV2).

For the Food Resilience Network, key decisions are made by the board, informed by their (wider) network of collaborators: *"The board makes, we make the decisions. So, we make decisions, but our network does as well. So, we are driven by our networks, but we haven't gone out to our networks. Because we are finishing the task [Ōtākaro Orchard building]. Once we've achieved the outcomes of the current strategy, we'll go back up to the network, and what is next, and the network will have a say in with the redistribution of funding and that kind of stuff. What our priorities will be, we're working on a list at the moment. When the time comes, we put it to the network and say, these are the things that we've identified as critical to Christchurch"* (NGO3). Operational decisions are made within a key team including board and orchard manager: *"We have like a project control group, which is the board and myself. And so we would get together maybe once a week, maybe once a month depending on... and we'll discuss everything, whether it's the decoration of the building, how this is gonna happen or what can we do here? All of those things [...] We'll talk about it"* (SLO1).

At EatNZ, the CEO leads the decision-making process collaboratively with the board: *"[...] it's a high trust model. Yes. And which I probably lead the direction of Eat New Zealand. But I put everything past them, but they generally step in if they think I'm not heading in the right direction, rather than them directing me"* (NGO4).



The FRN has a stable board of four members (SLO1) with potential changes ahead: *"Well, at the moment we're a volunteer board. We're a small team, because we're just so focused on getting this [the building] done. Again, onboarding new people at the moment, I think once we've got this finished, I think there will be a change".* In terms of volunteers, the Ōtākaro Orchard has got *"a solid crew, and then we've got others that come and go"* (NGO3). EatNZ relies on a network on volunteers who *"just show up when we put out the call"* (NGO4).

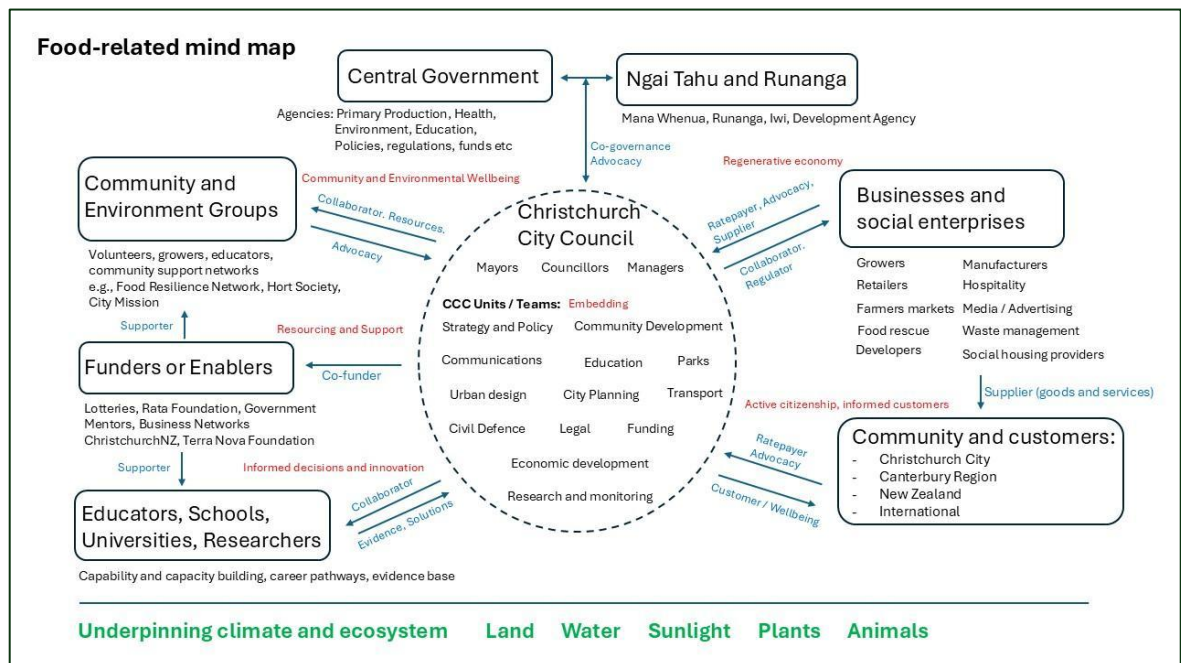
Connections to councils

The FRN has strong collaborative connections with the Christchurch City Council. They have received funding from the Council, and intend to strengthen their collaboration and partnership, for example with regard to urban parks: *"[... what] we want to do is to support CCC in planting in urban parks, because at the moment they don't have the resources or capacity to do it. But what we can do is work together to provide that. [...] we're wanting to work with CCC to do a partnership"* (NGO3). They also work together with CCGA, Health NZ | Te Whatu Ora and universities. Health NZ have strong relationships with city councils (including CCC) and regional councils such as Environment Canterbury (GOV4). The Rātā Foundation has strong relationships with CCC, however, not necessarily with a strong focus on food systems: *"[...] it's a collaborative relationship. So if we feel that so often with co-funding organizations there may be times when organizations need some additional support, we just try to keep in touch with what priorities are for them, and priorities are for us. So we may be referring projects to them from us. I wouldn't say we've got a very specific focus around food systems in that relationship"* (NGO5).

Larger network

With regard to food systems, CCC cooperates with a large network of external actors and organisations (provided by GOV2). The Rātā Foundation connect and collaborate with various government organisations including the Department of Conservation (DOC) and various ministries as much as individual community organisations including individual community gardens. They collaborate with other funders to align support for community organisations: *"[...] the way in which we communicate is often around how do we best support this organization. So we've seen an organization that isn't receiving lottery funding. We often fund the same organizations, so we might engage with them to understand if this is something that they might want to support, where I think the fund is all focused on trying to do... what we can to reduce burden and also collaborate as much as we can to ensure you get the best outcomes"* (NGO5). Eat NZ receives sponsorship from a range of organisations; they do not collaborate much with CCGA: *"Community gardens, it is interesting. Community gardens have never really... I know there is a huge focus on them in Canterbury. And that's cultural. That's the history of them and where they come from. And they don't really appear in a food systems way to us in terms of feeding people"* (NGO4). Health NZ | Te Whatu Ora (GOV4) entertains work relationships with a large network of various organisations, however, less direct relationships with individual community organisations such as community gardens.





56. Figure: Food-related relationships between CCC and external actors and organisations (GOV2)

Legal and financial frameworks

Christchurch City Council and Health NZ | Te Whatu Ora are government organisations. The Food Resilience Network (FRN) is an incorporated society registered with the New Zealand Charities Register⁶⁰. Eat New Zealand is “a not-for-profit food movement”⁶¹. They are not registered with the New Zealand Charities Register. The Rātā Foundation is “one of 12 community trusts in New Zealand” (NGO5), an “in perpetuity” trust incorporated under the Charitable Trusts Act 1957 and operates under the Community Trusts Act 1999⁶². It is registered with the New Zealand Charities Register⁶³.

The legal form of the Rātā Foundation has changed over time (see above). The legal form of the other organisations does not seem to have changed over time.

The legal form of non-government organisations are not formally linked to public or private institutions. There are dependencies on public institutions (municipality and other government agencies), e.g., with regard to funding; however, these are not related to the organisations’ legal form.

Main sources of income

The FRN receives its main source of income from donations and fundraising activities and some revenues from commercial activities related to the Ōtākaro Orchard Urban Farm (see below). The Rātā Foundation does not receive external funding but creates

⁶⁰ <https://www.register.charities.govt.nz/Charity/CC55124>

⁶¹ <https://eatnewzealand.nz/>

⁶² https://ratainvest.org.nz/media/cqddhh4w/s83852-consolidated-financial-reports_march-31-2024_v2_fa.pdf

⁶³ <https://www.register.charities.govt.nz/Charity/CC49724>

revenues “directly from the distribution of the income we earn annually from our investments”⁶⁴: *“So we manage an endowment fund of around about \$700 million. And we invest that and the proceeds of those investments are distributed at the community for community benefit. So we distribute around about \$25 million a year in community” (NGO5).* The organisation’s long-term strategy is “to invest in communities to enable a higher standard of community well-being”⁶⁵. Eat New Zealand’s funding includes “a combination of government funding, sponsorship and partnership money for projects” (NGO4). They do fundraiser events and run a paid membership scheme, which, however, hasn’t been stable: *“So, people who contribute a monthly amount to Eat New Zealand. And that’s actually decreased significantly over the last sort of 12 to 24 months. That’s just the kind of thing that people stop doing when they don’t have as much money” (GOV4).*

Business model

Registered charitable organisations provide detailed and publicly accessible financial reports as part of their annual reporting obligations. The figure shows the financial performance of the FRI for the year ending June 2025. The organisation created their main revenues from donations, fundraising and similar activities and some revenues from providing goods and services and membership fees.

⁶⁴ <https://ratafoundation.org.nz/en/about/our-history/>

⁶⁵ <https://ratafoundation.org.nz/en/about/>



Food Resilience Network Statement of Financial Performance "How was it funded?" and "What did it cost?" For the year ended 30 June 2025				
	Note	Actual* This Year \$	Budget This Year \$	Actual* Last Year \$
Revenue				
Donations, fundraising and other similar revenue*		214,226	250,000	200,000
Fees, subscriptions and other revenue from members*		112	200	575
Revenue from providing goods or services*		15,765	-	-
Interest, dividends and other investment revenue*		-	-	26,173
Other revenue		-	-	-
Total Revenue*		230,103	250,200	226,748
Expenses				
Expenses related to public fundraising*		-	5,000	-
Volunteer and employee related costs*		94,907	50,000	85,131
Costs related to providing goods or services*		2,389	18,000	-
Costs related to Building project - Otakaro Orchard				278,856
Grants and donations made*		-		-
Other expenses		88,547		21,514
Total Expenses*		185,843	73,000	385,501
Surplus/(Deficit) for the Year*		44,260	177,200	(158,753)

36. table: FRN Performance Report, financial statement for the year ending 30 June 2025, page 4. Source: New Zealand Charities Register <https://www.register.charities.govt.nz/Charity/CC55124>

While the majority of funding comes from fundraising activities, the FRN also create revenues from the sale of produce from the Ōtākaro Orchard Urban Farm. They have almost completed their building and plan to open a café soon, which will likely increase revenues from sale and service (NGO3; SLO1). Both FRN and Eat New Zealand create some revenues from membership fees. The Rātā Foundation have an investment-focussed business model (see above).

Current shortcomings of and barriers to funding

Stakeholders identified a range of key challenges when seeking funding for food-related projects: Limited or misaligned policy support, focus and impact, limited funding options, competitive funding models, and lack of continuous long-term funding.

With regard to policy, there was a strong perception of either missing or not effective enough national policy to supports local food systems (GOV2). Existing (national) food



policy and regulations would focus mainly on export-oriented food systems and standards, not local food systems (NGO4). Existing policy creates barriers for organisation to create revenues by selling produce grown on public land: *"So in terms of funds, [...] we've got some rules in place which might stop it [revenues]. [...] the Reserves Act means you can't sell produce from public land [...] You shouldn't be able to sell because this is not a commercial venture. [...] but my argument is, well hang on, they're taking the money and putting it back into the social good"* (GOV2). While enabling policy for local food systems was generally considered important, their impact was considered limited without appropriate resources: *"So, you can have a policy, but it has no funding next to it." If not well resourced, "a long-term plan becomes very silent"* (NGO4). This included a lack of dedicated staff to support action around food systems policy: *"I think one of the best things we could do as a council is to invest in staff that have this responsibility. [...] we've got maybe 10 people who have got an interest in it, but that's not a dedicated role. There's no dedicated champion, there's no lead, there's no[one] who's doing the monitoring reporting, who's doing the research to understand what it needs"* (GOV2). Funding should address systemic challenges, not only short-term problems: *"We spend quite a bit of money on like food rescue and like trying to tackle the surface level challenges rather than tackling like long term problems"* (GOV1). This might mean to encourage a *"shift away from funding the pointy end; less focus and kind of perpetuation of that food banking or food redistribution model. [...] We have to get into our heads that at some stage, we need to be brave enough to fund both" with not just "a singular focus on the 'now problem'"* (GOV4).

Limited funding options and competitive funding models were mentioned as a challenge: *"[...] the banks won't touch us, because they don't wanna be seen, to be dependent on a community group"* (NGO3). The current competitive funding model in Christchurch created *"tension and competitiveness amongst their groups. [It] doesn't build collaboration. [It] doesn't bring strength, it brings division"* (NGO3). The lack of longer-term funding options was considered as a barrier for completing ongoing projects: *"I think we struggling to get this last bit of funding because their fund is over us"* (NGO3).

The combination of funding shortages and competitive funding systems creates situations where funders make tough decisions about who to fund knowing that other projects would need funding as well: *"[...] one of the challenges that funders have is that we always receive more requests than we can fund. There's always a greater need and if our funding is being used in one area, then it's not being able to be used in another"* (NGO5). Staff continuously have to find additional revenues to finance their own positions: *"I have to actually find money for my job. So, I'm spending half my time finding money to pay me to do the work [...]"* (NGO3). This has an impact on operational as much as capacity building activities: *"[W]e feel there's a need to grow capability. Either that's because they want to grow or because they have facing challenges, we will provide specific grants to support them. [...] I'd say that capability and capacity within the food rescue space, there's a funding issue, right? And who should be paying for that? And I think there's a real question around where that funding should be coming from and in terms of whose problem is being solved there"* (NGO5).



Desired improvements to the funding system

Stakeholders suggested systemic changes from a competitive to a collaborative funding system (NGO3; NGO4; SLO1): “[I]f you start regionally, say every region has this pot of money, bring all of the stakeholders, pay them to be in the room, all the stakeholders that work in the food system together to co-create how they would use that money” (NGO4). More autonomy over funding decisions was advised including funding models that would allow communities to decide how to spend funding (GOV1; NGO4): “Let them decide where the money is needed. So, for some communities that might look like, ‘We have no access to fresh fruit and vegetables, so we’re gonna solve that problem’. [...] [For] some communities that might look like, ‘we’ve got a really major issue where [we have] discord in our community that we can solve by bringing people together around kai’” (NGO4).

Participants emphasized the importance of diversity regarding funding options and distribution, e.g. to support food systems in all their variety and not just parts: “So the equity leans; we’re putting more into resilience type [of] work [...] like education, cooking skills, and growing the land use, and also supporting our local food business. Our economy centres not just about growing.” (GOV1). Funding should address long-term systemic change alongside immediate needs projects such as food banks and food rescue operations: “We have to get into our heads that at some stage, we need to be brave enough to fund both.” (GOV4). Single-focussed distribution of funding should be avoided: “So, an example of that is [that] the previous government funded food waste initiatives. [...] Reducing food waste is so important. It’s important for climate outcomes, it’s important for food and security outcomes. It’s important for all sorts of environmental and productivity outcomes. But it skewed the whole food system into this food rescue, food waste space. It meant that other aspects of the food system couldn’t get traction. So, it was an unfair distribution. What that kind of tells me is that money is useful to a certain point. After that, too much in one place tends to tip the whole system out of balance” (NGO4).

Others suggested that funding should go where it’s needed most by establishing reliable criteria for fair funding decisions (NGO5). While this suggestion might be in conflict with suggestions around avoiding single-focused distribution of funding, equity was generally seen as an important decision-making criterium: “[...] finding a way to fairly distribute it. And within understanding the inequity that already exists [...]. Like if you look at the food and security statistics in New Zealand, they are terrible, they are awful, but the worst of all for Pasifika communities where one in two, 50% of families go without food on a regular basis and Māori families as well. [...] I think you have to address the inequity in the system and ensure [...] that funding addresses the inequity, but also that it’s distributed across the system” (NGO4)

The introduction of dedicated (Council) funds for food system projects was proposed: “[Y]ou could advocate for at council level to ask for a fund that specifically [has] to do with food [...]. And that could make a difference” (GOV3). It was suggested to have dedicated staff for food systems at the City Council to help food-focussed community organisations (GOV2; GOV3). Community organisations were advised to work with



specialised (funding) advisers to increase their chances for success: “[...] the biggest funding burden is when people put in applications and they're not successful. So having those conversations early and discussing with the advisor [...] can really help reduce that burden, because if you're putting in five applications and only one of them is successful, then perhaps [have] those conversations early with advisers. [...] some founders are more or less willing to have those conversations, but we're very keen to engage early, and save people some of that trouble” (NGO5).

The introduction of long-term funding options was recommended: “I'd love to see more money being put into like long term solutions over a few years. So that they can be supported to actually work like our sustainable farming” (GOV1). Long-term funding contracts could be given to organisations with a track record of achievements: “I look at the work of our group and go, well, the council [...] should be looking at our group's going well. [...] They've done this and this consistently for 12 years. Yes, it only costs 50 grand to run them. We should just give them a funding contract. And it's the same with [other funders]; all those things should just simply be going. [...] If we take that burden away from that group, that means that group can then do twice as much” (NGO3).

Self-funding and social enterprise strategies were suggested including start-up grants while encouraging long-term self-sufficiency: “So it's like pumping in a bit of money into where it needs to go. And I mean a lot of these things need a bit... They need a bit of funding, obviously, but they also need leadership and [to] identify who might wanna drive different pieces of work.” [...] Giving them enough to get going. And then once they're going, they don't need as much.” (GOV1). However, this suggestion might be in conflict with previous suggestions around long-term funding. The removal of legal and policy barriers that prevent organisations from creating self-funding options and revenues such as selling food grown on public land was recommended (GOV2).

Engagement and Collaboration

Events

The Christchurch City Council has organised and co-organised events around local food systems and food resilience. These are not regularly held but occur at times when collaborative action is required. The most recent examples are two “Growing a fair food system together” workshops in September 2025 and April 2026. These were organised by CCC and brought together participants from various parts of the food system including growers, distributors, markets, food-system related government and non-government organisations, researchers, educators, food waste managers, and many more. The events are stepping stones in (co-)creating a redeveloped food resilience policy for Christchurch (see also Research Methods section).

Following the Canterbury Earthquakes, CCC collaborated with a range of organisations and co-organised events around food resilience: *“So we worked with [...] Canterbury University [...] to host a session [...], which was a bit of envisioning session. The first part of it was to understand what is happening in Christchurch, in Canterbury, put it on a map, just show it just physically see where these things occur these initiatives, [...] and then we had a discussion about what makes your life easier, what makes your life harder.*



And basically just are you all struggling with similar things? And of course, the work, would it be helpful if we worked together to respond to those challenges? And everyone said, yes, please. So we also did a vision in process. Imagine what a food resilient city would look like. how would it feel? How would it function? How would it be different? And that vision process led to a Edible Canterbury Charter and the vision around that. And the collaboration method that was formed after that meeting was the Food Resilience Network" (GOV2).

The FRN did regular network events for a while: *"It was delivering network meetings regularly. During each educating the educators like we were doing it three times a year, a few years ago" (NGO3).* They were also organising practical events: *"We were distributing up to 500 trees every year. That kind of thing. So, we want to get back to doing that".* While the Ōtākaro Orchard building has consumed a lot of their resources, they still organise regular events: *"We still educate and still run workshops. We have two volunteer sessions a week in a month" (NGO3).* Once their building has been completed, they consider it as opportunity to share their facilities, e.g., for events: *"So we haven't stopped, but it just means we can escalate it and provide a space for other people to come and do it as well" (NGO3).* They also organise educational tours in the orchard: *"We do a lot of talking tours here. Even though the building is not finished, talk about storm water. Because a lot of people don't understand the storm water situation" (NGO3).* Other regular events at Ōtākaro Orchard Urban Farm include a weekly market day: *"[...] every Wednesday 12:30 to 2:30, we'll sell the produce" (SLO1)* and working bees: *"[...] we do our working bees, 9:30 to 11:30 and we always sit around have tea, coffee" (SLO1).*

Eat New Zealand organise regular networking events around food systems: *"So as an example, we have a national Hui or conversation where we bring together all different parts of the food system to see if we can cross pollinate and cross thread some of those aspects of food [...]" (NGO4).* They are also getting involved in food events organised by others: *"So we talk a lot about nature-lead solutions and we're involved in events, like [the] upcoming underground event, which is a festival of food and farming and food. Yeah, that kind of thing, as an example" (NGO4).* The Rātā Foundation organises regular educational workshops: *"So we provide ongoing governance training for organizations, so we partner with Volunteer in Canterbury, that's available. I think we've been running for probably 5 years now. So monthly governance training, and then, as I say, for organizations where [...] we feel there's a need to grow capability" (NGO5).*

Target community

In their *"Growing a fair food system together"* workshops, CCC addressed a highly diverse 'target community': *"The simple idea was, let's get the food actors in the food system together, enjoy some food, drink, socialize and then share stories and so sharing and connecting across locally" (GOV2).* The organisers were aware who they may not reach: *"We're missing actually the growers, commercial growers. We're missing retail. We're missing hospitality. and we're missing probably the waste side of things" (GOV2).* This issue was addressed in the second workshop in April 2026, where an even larger diversity of food systems actors participated.



Vulnerable communities including children living in lower socio-economic areas and homeless people are a key target group for organisations: *"We've got a school lunch program. So that's pretty cool. That's to all the lower socioeconomic areas, 25% of children, they're lower end receiving school lunches every single day"* (GOV1). School groups and their teachers are getting invited to learn about growing their own food: *"[...] school groups, they benefit a lot because they come for education, for workshops"* (SLO1). *"[...] they take it, then take them back to these schools and hopefully educate the other educators and the kids. That kind of thing in supporting school gardens with resources is impactful"* (NGO3). Homeless people use gardens for shelter: *"[...] we get them sleeping there, living there, hanging out there. And they feel real safe, they enjoy it. They often say, oh, thank you so much. I just like to come here. Sometimes I have to move them along, I put the tents up and I'm like well, sleepy at night but make sure it's gone by [...]"* (SLO1).

The Ōtākaro Orchard Urban Farm also supports unemployed people, particularly young ones: *"[...] those people on benefits, they're getting like work experience and getting back into the community finding some confidence all those things [...]"* And that between 18 and 26 [...] they sort of get onto this program because they want to, but it just helps them get out of their house, their room and meeting people. [...] like 6 to 8 people on each course, and they're all there first [...] and they're not talking [...but] by the end of it, they're best mates, sharing, talking, amazing. Some of them wanna go study horticulture [...] and it's only a 6 week course. And the shift I've seen and [...] it was so cool" (SLO1).

Māori and Pasifika groups are another target community: *"Māori and Pasifika in particular have issues around access to kai, the food [...]"* (NGO5). Organisations actively support these groups: *"We've got like a pacific garden that does it. My colleague drove that from the council. And that's been really cool to see, and it's been well supported, but that's where I feel like the strategy and the goals have to be focused on equity"* (GOV1). Other vulnerable target groups include people with mental health issues and retired people (NGO5; SLO1).

But vulnerable communities are not the only target groups. Corporate groups, e.g., are considered a quite important target group: *"I think having the corporate groups is impactful, being engaged in the project and actually learning about the stuff. [...] and hopefully they go, actually I'm gonna go to my farmers markets. So there's impactful and we do a lot of talking tours here"* (NGO3). Inviting people to places where they can collaborate around food was considered to strengthen the local food system: *"[...] providing a place for people to collaborate is the biggest motivation. And to be hopefully with it, scrolls on to build strength in our local food producers"* (NGO3). Everyone with an interest in local food systems is considered part of the wider target community: *"We bring together all different parts of the food system to see if we can cross pollinate and cross thread some of those aspects of food. [...] people who hold on to the idea that the future for New Zealand food sits [...] with everybody"* (NGO4).

The FRN / Ōtākaro Orchard Urban Farm estimates between 5 and 15 volunteers daily: *"we've got a volunteer day over in the farm only because it's our sales day, so we normally hear about 5 to 10, and in these days we have up to 15."*

Diversity

Diversity was considered highly important (cf. section on target community), and organisations were keen to connect and collaborate across sectors: *"We work with all sorts of organizations, nongovernment organizations, government organizations, community organizations, to advance the idea of a more fair, equitable food system that sits inside our planetary boundaries"* (NGO4). However, participants expressed an necessity to increase networks and include actors that were sometimes (willingly or unwillingly) left out: *"[...] we need to bring, it might be the agriculture sector into this conversation and connecting some of those dots, remembering to bring like or encouraging networks and community organizations to bring to life their responsibilities, under the Te Tiriti o Waitangi"* (GOV4). An inclusive cross-cultural inclusive approach was considered relevant: *"[Food] it's a great way of like bridging and between cultures. So bring together people from different cultures. [...] how do we put food at the centre of community so that it is not seen as food production over here, but it is a place where we're using food as a means to further other aspects that we're interested in around creating connections between cultures, ensuring people are supported"* (NGO5).

Establishing a food policy council was considered a way forward to ensure diversity and expertise for decision-making processes: *"I mean, the biggest issue for Christchurch, I believe, is we don't have a food policy council or something like it. So that reflects the whole food sector and we're getting to hear from them and collaborate with them. That's a big weakness. So if we were looking to revise the food policy and have an action plan around it, that would be certainly an action I want to put up there. Let's bring the sector together. And look at the issues and opportunities and work collaborative of those. [...] And so I think that's why we need that group form and start governing effectively that the food system in Christchurch and inclusive and equal way"* (GOV2). Increasing diversity in a structured way was seen as a strategic move towards better outcomes: *"Another thing in terms of being more strategic would be to have a food policy council. So I'd like to see big players in the food systems, the ones that actually make decisions on things like within different government sectors. It could be like Te Whatu Ora [Health NZ], it could be ECan, then got every representative from the supermarkets and see them talking to the council, and you come and have councillors on board too, like people who [are] the elected members within the council, they actually sit around a table and try to tackle some of these big problems together"* (GOV1).

Community diversity was also addressed through an equity lens: *"I feel like the strategy and the goals have to be focused on equity"* (GOV1). Equity was, e.g., related to (a lack of) ethnic or cultural diversity: *"[...] it's not addressing our food and security issue and accessing and engaging with modern pacific communities. We see a bit more of it now. We've got like a pacific garden that does it"* (GOV1). There were concerns that certain people or community groups were not 'reached': *"In the most cases, if you watch, the people that actually do need it aren't getting reached. Because the system is not working for them. [...] We've got to solve the other issues around there to make sure those people are reachable"* (NGO3). Equity had also a spatial dimension with concerns that resources were not always available where they were needed: *"[...] the one ongoing*



problem is this inequity of the people with the time and money and not in the areas we need it, and they don't want to work in the areas where they don't live. [...] Like the red zone is an example of where you do have a community and some very active community groups that do identify as eastern Christchurch. I'm really trying to support that area. So, that's a little bit that people do to help equity, but it's difficult to see" (GOV3).

Relationship with the local municipality / council

The FRN has benefitted from CCC funding and support; however, they would like to create a partnership relationship with them, e.g. around trees and food forests in public spaces: *"[...] what] we want to do is to support CCC in planting in urban parks because at the moment they don't have the resources or capacity to do it. But what we can do is work together to provide that. Yeah, so we're wanting to work with CCC to do a partnership. [...] We help, and boost it. So the CCC team would plant the tree and maintenance for 3 years established and while they're doing that, that group come to us to learn how to set up a food forest properly" (NGO3). They "originally [...] helped the city council with their food resilience policy, and we do still work in that realm" (SLO1).*

The Rātā Foundation has worked closely with Christchurch City Council and consider their relationship as collaborative, however, not necessarily around food systems: *"[...] it's a collaborative relationship. So we feel that so often with co-funding organizations and there may be times when organizations need some additional support. We also just try to keep in touch with what priorities are for them, and priorities are for us. So we may be referring projects to them from us. I wouldn't say we've got a very specific focus around food systems in that relationship" (NGO5). Health NZ | Te Whatu Ora collaborates with CCC via formalised plans and agreements: "[...] we had a 10-year anniversary of the joint work plan [...] And there's a website or portal, which is between us, ECan and CCC. We have various things that we all are working on. That we collectively agree to do, to give that to each other's standards, so to speak. [...] So that's now 11 years deep of having that formal joint work plan agreement with the three of us. I think conversations are continuing, but really they only started last year about formalizing something similar with [...] Selwyn and Waimakariri [Councils]. Because of that we do the kind of work, but not in the same formalized manner as with CCC" (GOV4).*

Impact

The Christchurch City Council considers its impact on the community as most relevant. This includes relationship building and working towards common goals: *"I think I've brought some people together and others might have no idea that this [is], whatever the works, happening, but I definitely think it's making some small changes" (GOV1). The impact could be strengthened in the future by formalising strategic collaborations: "I mean, from a more strategic level that the community might [benefit from], if we get good outcomes from like a food policy council, it could be quite impactful" (GOV1). The establishment of new community gardens was seen as a major impact factor: "So we've gone from, I think there was three community gardens when I started, and now there's 50, so just in terms of the number of community gardens" (GOV2). In terms of educational impact, the introduction of gardening programmes in schools was*

considered as hugely impactful: *"We've gone from almost no schools with community food growing and or outdoor classrooms and food to, I think, it's 80 schools now; so we've got 160 schools in Christchurch, [and] over half have some form of food growing" (GOV2).* Vulnerable communities have been positively impacted by the establishment of food rescue services: *"So we've gone from no food rescue services to now a network of food rescue services, looking after. So, there's the collection of food waste from hospitality, from supermarkets and from catering companies and so on going to the poor people" (GOV2).*

The introduction of city-wide organic waste collection was considered as having a considerable environmental impact: *"We've gone from wasting a huge amount of food to [...] composting it on the curb side service. We're collecting, I think it's 50,000 tons of organics every year and composting it. So that's an enormous amount of compost. [...] we have completely eliminated, or not, but almost, the food waste and we're collecting in fact more material than we probably wanted to [...]" (GOV2).* The developing of new funding opportunities was considered as potentially impactful for food systems as much as environmental sustainability: *"[...] the fund that we just set up, the environmental partnership fund, was probably the biggest thing [...] I'm not sure how many applications pertain to food, but that is one purpose of it and that was something the councillors decided they wanted this. [...] So that was probably a big thing that I did that did have an impact, but it's only the first year it's run. So, I don't know yet what the impact will be. But that was a million dollars a year, so it's not nothing" (GOV3).*

The other organisations considered that they had impact in raising awareness about local food systems and food resilience and reaching out to a wider audience: *"We're now having these conversations in more places and spaces and with a wider audience. [...] This topic is no longer so foreign to lots of institutions. [...] I do think, as being squeaky wheels, if you like, we started to see the wheels get oiled, which with any luck will lead to some more momentum. But we're not there yet" (GOV4).* Inviting corporate groups to experience local food production may create wider impact: *"I think having the corporate groups is impactful, being engaged in the project and actually learning about the stuff [...] they take that home and hopefully they go, actually I'm gonna go to my farmers markets. So there's impactful and we do a lot of talking tours here" (NGO3).* Inviting schools to experience an urban farm has an educational impact on both students and educators: *"And I guess bringing people together, sharing ideas [...] is impactful because they take it, then take them back to these schools and hopefully educate the other educators and the kids. That kind of thing in supporting school gardens with resources is impactful" (NGO3).* *"Lots of school groups, community groups coming through for education, but you see people are like learning so much, the learning situation, and seeing, and doing and like food forest, you do like food forest workshops. So it has a massive educational impact to see and experience it" (SLO1).* The work of the FRI has been inspirational beyond local boundaries: *"I think the fact that we've already gone through all that process inspired them to go away and they've now done it really rapidly. [...] They came to visit us, West Coast, Buller [...], Nelson [...], all the different regions have come to talk to us. [...] we've supported them with things. So I guess it's inspired people to actually go away and set that stuff up in the region" (NGO3).*



Supporting community groups directly (e.g., financially and organisationally) was considered as impactful with regard to the food itself and community building: *"In terms of the reach of the organizations that we support those community gardens and community projects that we support, the reach is pretty significant. I think for me the impact is about the food, is one aspect of that. So, the food – about providing people fresh kai – is one aspect, but also that wider community impact which is around the connections between cultures and between different people"* (NGO5).

Most significant impact

Social impact based on providing (community) support and raising (societal) awareness (GOV1; GOV2; GOV3; GOV4; NGO3; NGO4; NGO5) was considered as the most impactful area, followed by environmental impact (GOV1; GOV2; GOV3; NGO4). This was followed by impact on education (GOV2; NGO3). Impact on policy was also considered important (GOV4; NGO3): *"I think we probably have the most impact across the spaces of policy, because of our support for our partners. As they write their policies for local government, it might be their long-term plans and that sort of thing. So, we feed into those [...]"* (GOV4). Eat New Zealand considered also their economic impact: *"But we also speak to the livelihood of our food producers. So economic outcomes [...]"* (NGO4).

Impact evaluation

The Christchurch City Council have a range of formal evaluation approaches to measure their impact including health impact reports, community outcomes monitoring, and environmental monitoring: *"So, we have community outcomes monitoring, that says we want to be healthy, wealthy and wise. Okay, let's track progress over time. So, we've got a community reporting of our community outcomes"* (GOV2). However, there is no direct food-related impact measurement: *"Every part of council has levels of service. So that's our agreement with the community as to what we will do. [...] I don't know of any food, direct food indicators, but that would make a difference, because [...] then it gets reported and thought about, whereas if it's not even part of the system, that doesn't have the same attention"* (GOV3). The lack of specific impact measurement around food was identified as an issue: *"So that's something we should think about for the food policy. We need to try and map and track better the different aspects of the food system and how it's getting better or worse"* (GOV2).

The FRN uses qualitative data collection methods to create narratives of their impact: *"So I'm working with Sport Canterbury on a series called Christchurch Stories, and we've just got it underway and we've also got each of our objectives. We've done a bit of a story right here with the gardening people. So, we have interviewed them. We're just putting those videos together. They're not all community gardens, so [...] we interviewed like a bit from Te Whatu Ora from a nutritional health lens. We've got a sustainability lens, community lens, so we've done the videos, counting around each of the objectives, with the appropriate person"* (NGO3). As a funder, the Rātā Foundation monitor the impact of their work thoroughly: *"So we collect information on our, what we call a post grant survey, where we ask people to report on the people that they've been working with and*



also give us some narrative around what the impact has been for those people. So, we collect that on all these organizations" (NGO5).

Impact is not always measured formally or systematically: *"[...] we don't currently evaluate impact in any kind of formal way. I guess, anecdotal evidence of impact that we do [...]" (GOV4).* Measuring impact was considered as a challenge: *"Impact is always so difficult to measure and more difficult. And organizations like Eat New Zealand than just about any organizations I can think of, because what you're doing is culture changing, which is slow, long, deep work. I can measure things like social media reach [...]. I can probably count the number of times has been invited to contribute to research" (NGO4).*

What is most inspirational (for others) regarding local food systems in Christchurch?

Answers about what interviewees found most inspiring regarding local urban food systems in the light of their own work and contributions fell into three categories. First, they identified food spaces across the food system as inspiring places: *"And they [Richmond Community Garden] have [...] created a really nice environment for little kids to visit. And so they've got a big mud play area next to these chickens and stuff. [...] And I liked it because it was so clever. So, this sort of model, I love to see this. This is really exciting!" (GOV3).* The promotion of local food, not only at production, but also processing and consumption stage was seen as inspirational: *"I would say that the inspiring things are we actually have lots of really great food spaces and places that do showcase local food, products, local chefs like. [...] The new stadium has got something like 20 eateries that are all locally owned and because it's not McDonald's or whatever that's going in there. And they've made a really good conscious decision to host locally owned businesses. Like there's some good, inspirational things for supporting local business. And that is great!" (GOV4).* Inspirational spaces included places created by Māori utilizing indigenous knowledge: *"[...] I was gonna say the collaborative of the hapu on banks peninsula. [...] the work that they're doing is [...] pretty inspirational that in putting that indigenous knowledge as well. [...] things like the kai food forest" (NGO5).*

Second, interviewees recognised inspirational spaces for community empowerment where people can grow, create new concepts and develop capacity: *"I visited the New Brighton community garden, for example, and you go out and you like it's just an incredible thing, and all the work they've done for the disability access and supporting artists [...]. So, like the Richmond Community Garden and Ōtākaro Orchard, [...] they've created [...] self-sustaining models where they've got cafés, they've got recycling, they've got all of this going on, and so, they're creating their own funding models, which is really cool [...]" (GOV3).* Empowerment means as well to reconsider and rethink established (funding) models: *"And for me personally, one of the things that attract me to this project into Richmond is being able to actually show people how you can change their funding model, and not just be constantly asking for money. how you can actually... how you can change, how your organization is sustainable to the future. Cause the funding system gets smaller and smaller and more we put pressure on growing the space, the pots gonna get smaller and smaller as well" (NGO3).*

Third, the power of community, their openness and energy, and the willingness to collaborate and co-create local food systems was seen as highly inspirational: *"I'd say the current kind of openness and willingness to kind of come together and actually take action [...] like even just the workshop was quite inspiring, just shows the energy in the room to do, to work together to connect and how much leeway that we have. [...] I've been able to just kind of roll with it and just do things as I go. And I haven't had too many barriers along the way"* (GOV1). *"It's the power of community, it inspires me. We help them a little bit, they do an amazing amount. It's extraordinary what can be done just by bringing people together supporting those champions in whatever way we can and magic happens. It's amazing. So, the power of community and just the wonderful result, it's more than you can even imagine"* (GOV2). *"I with recently involved in a hui for my own community, so the Hurunui. [...] and we asked people who are interested in food to all come together. The room was packed [...] But then we created a sort of around the room situation, mixing people up to come up with a vision for what we wanted for our local food system. And I was absolutely blown away by the answers [...] I imagine that most people didn't understand how the food system worked and what they needed to be changed. But when I asked my community, they knew exactly what they needed and what needed to be changed"* (NGO4).

Urban Food Value Framework (UFVF): Values selected by participants

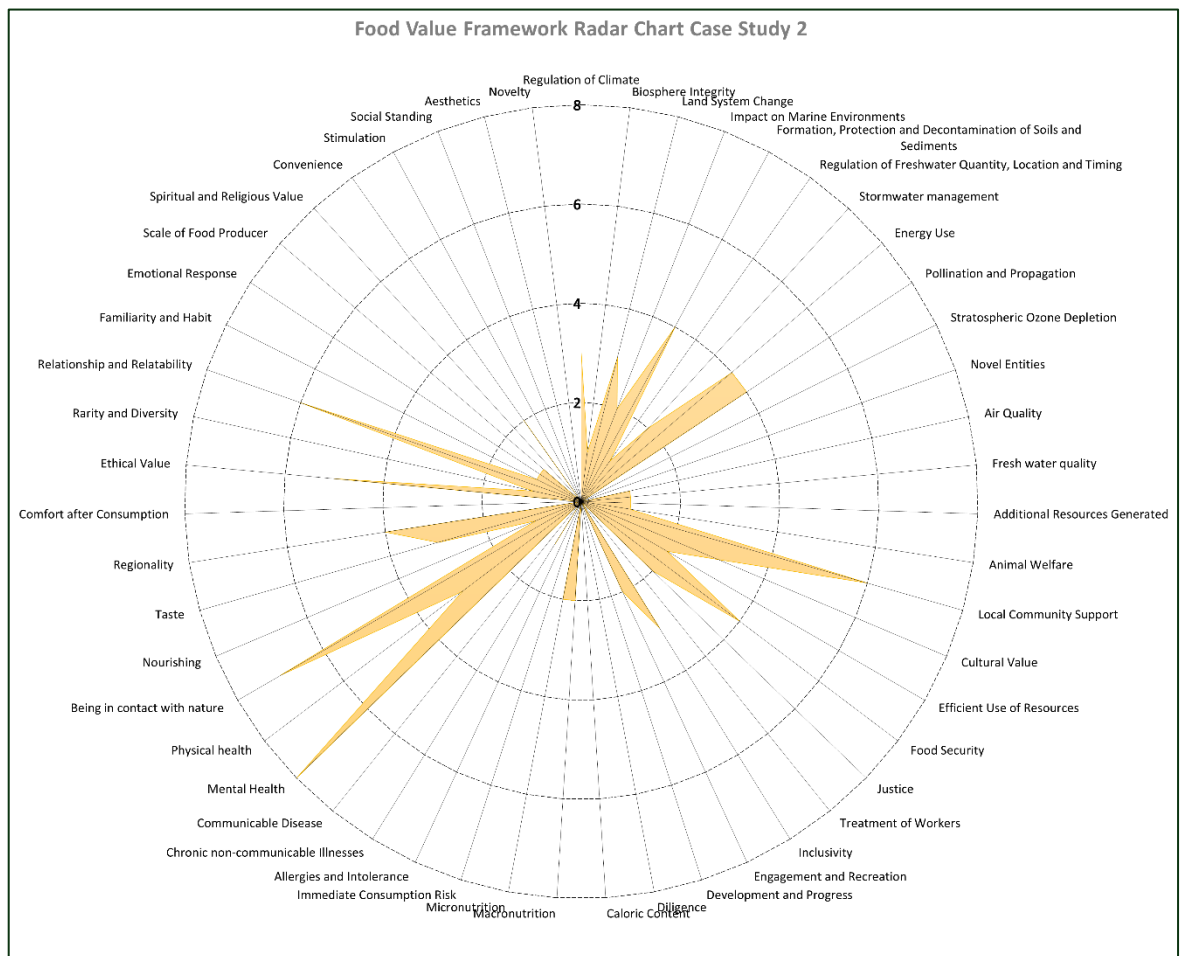
As part of the interview, participants were presented with Brumm and Fukushi's (2024) Food Value Framework (FVF), a list of specific values categorised in groups (environmental, societal, health, personal). The FVF values (presented in the table below) formed an important part of the Urban Food Value Framework, which was developed as part of the REDESIGN project. In the process of designing the UFVF, it was considered to fully adopt Brumm and Fukushi's FVF and develop a new and innovative way to use it for the project's case studies and their comparison and evaluation. By the time this approach was abandoned, more than half of this case study's interviews were already conducted. Therefore, it was decided to use Brumm and Fukushi's version for the remainder of the interviews and their subsequent analysis in this report. While there are substantial overlaps between the two versions, it was considered methodologically unfeasible to 'transfer' interview-based findings from the first version to the new format.

Participants were asked to select their top three values for each category (environmental, societal, health, personal) by circling or underlining the value on the sheet presented to them (table below). They were allowed to add values if they thought that specific values were missing on the list. The radar chart shows the frequencies of all values selected across the four categories.

Environmental	Societal
1. Regulation of Climate	1. Additional Resources Generated
2. Biosphere Integrity	2. Animal Welfare
3. Land System Change	3. Local Community Support

4. Impact on Marine Environments 5. Formation, Protection and Decontamination of Soils and Sediments 6. Regulation of Freshwater Quantity, Location and Timing 7. Stormwater management 8. Energy Use 9. Pollination and Propagation 10. Stratospheric Ozone Depletion 11. Novel Entities 12. Air Quality	4. Cultural Value 5. Efficient Use of Resources 6. Food Security 7. Justice 8. Treatment of Workers 9. Inclusivity 10. Engagement and Recreation 11. Development and Progress 12. Diligence
Health 1. Caloric Content 2. Macronutrition 3. Micronutrition 4. Immediate Consumption Risk 5. Allergies and Intolerance 6. Chronic non-communicable Illnesses 7. Communicable Disease 8. Mental Health 9. Physical activity 10. Being in contact with nature	Personal (related to your role) 1. Taste 2. Regionality 3. Comfort after Consumption 4. Ethical Value 5. Rarity and Diversity 6. Relationship and Relatability 7. Familiarity and Habit 8. Emotional Response 9. Scale of Food Producer 10. Spiritual and Religious Value 11. Convenience 12. Stimulation 13. Social Standing 14. Aesthetics 15. Novelty

37. table: Brumm and Fukushi's Food Value Framework



57. Figure: Radar chart showing frequencies of values selected across all four categories

Urban Food Value Framework (UFVF): Analysis of how participants described and interpreted selected values and their impact

Participants were asked to explain why they selected their top three values and how they considered them incorporated in their respective organisations. Their interpretations (INT) of values and respective indicators (IND) of organisational incorporation were evaluated against a set of predefined criteria. The table provides an overview of values, sorted by the four categories (environmental, societal, health, personal), how often values were selected by participants, their interpretations and associated indicators.

INT: Value as aspiration	Value is desired but not yet successful.
INT: Value in practice	Value is enacted through concrete actions.
INT: Value constrained	Value is limited by barriers (time, money, capacity).
INT: Value tied to identity	Value linked to mission, ethos, organisational identity.
INT: Value tension	Conflicts or tradeoffs between values.
IND: Qualitative indicators	Stories, feedback, observations.
IND: Quantitative indicators	Numbers, outputs, sales, yields.
IND: Success = participation	Success is defined by engagement.
IND: Success = impact	Success is defined by outcomes or change.

38. table: Set of predefined interpretations (INT) and indicators (IND) of UFVF values

Categories	Values	Selection Frequency	Indicators	Interpretation
Environmental values	Air Quality	1	no formal indicators	value as aspiration
	Biosphere Integrity	1	no formal indicators	value tied to identity
	Energy Use	4	no formal indicators (GOV1); no formal indicators (GOV2); qualitative indicators (observations) (NGO4); no formal indicators (SLO1)	value as aspiration (GOV1); value constrained (GOV2); value constrained (NGO4); value tied to identity (SLO1)
	Formation, Protection and Decontamination of Soils and Sediments	4	no formal indicators (GOV1); success=impact (NGO3); no formal indicators (NGO4); no formal indicators (SLO1)	value as aspiration (GOV1); value in practice (NGO3); value in practice (NGO4); value in practice (SLO1)
	Fresh water quality	1	success=impact	value in practice
	Impact on Marine Environments	2	qualitative indicators (observations) (NGO4); Quantitative indicators (NGO5)	value in practice (NGO4); value in practice (NGO5)



Categories	Values	Selection Frequency	Indicators	Interpretation
	Land System Change	3	Quantitative indicators (GOV3); qualitative indicators (observations)(GOV4); no formal indicators (SLO1)	value in practice (GOV3); value in practice (GOV4); value as aspiration (SLO1)
	Pollination and Propagation	4	quantitative indicators (number of trees) (GOV2); qualitative indicators (observations) (GOV4); success=impact (NGO3); no formal indicators (SLO1)	value in practice (GOV2); value constrained (GOV4); value in practice (NGO3); value tied to identity (SLO1)
	Regulation of Climate	3	Quantitative indicators (GOV3); qualitative indicators (observations) (GOV4); success=impact (NGO5)	value in practice (GOV3); value constrained (GOV4); value in practice (NGO5)
	Regulation of freshwater quantity, location and timing	1	Quantitative indicators	value in practice
	Stormwater management	2	qualitative indicators (observations) (NGO3); no formal indicators (SLO1)	value in practice (NGO3); value tied to identity (SLO1)
Societal values	Additional resources generated	1	no formal indicators	value in practice
	Animal Welfare	1	qualitative indicators (observations)	value in practice
	Cultural Value	3	value tied to identity (GOV4); qualitative indicators (observations) (NGO4); no formal indicators (NGO5)	value in practice (GOV4); value in practice (NGO4); value as aspiration (NGO5)
	Efficient use of resources	2	no formal indicators (GOV3); no formal indicators (SLO1)	value in practice (GOV3); value as aspiration (SLO1)
	Engagement and Recreation	2	no formal indicators (GOV1); qualitative indicators (stories) (NGO3)	value as aspiration (GOV1); value in practice (NGO3)

Categories	Values	Selection Frequency	Indicators	Interpretation
	Food Security	4	no formal indicators (GOV2); no formal indicators (NGO3); no formal indicators (NGO5); no formal indicators (SLO1)	value as aspiration (GOV2); value in practice (NGO3); value constrained (NGO5); value as aspiration (NGO5); value tied to identity (SLO1); value as aspiration (SLO1)
	Inclusivity	3	no formal indicators (GOV2); no formal indicators (GOV4); no formal indicators (NGO5)	value in practice (GOV2); value as aspiration (GOV4); value as aspiration (NGO5)
	Justice	2	no formal indicators (GOV1); value tied to identity (GOV4)	value as aspiration (GOV1); value in practice (GOV4)
	Local Community Support	6	no formal indicators (GOV1); no formal indicators (GOV2); no formal indicators (GOV3); no formal indicators (NGO3); qualitative indicators (observations) (NGO4); no formal indicators (SLO1)	value tied to identity (GOV1); value tied to identity (GOV2); value in practice (GOV3); value as aspiration (NGO3); value as aspiration (NGO4); value tied to identity (SLO1)
Health values	Being in contact with nature	7	no formal indicators (GOV1); no formal indicators (GOV3); no formal indicators (GOV4); no formal indicators (NGO3); no formal indicators (NGO4); no formal indicators (NGO5); success=impact (SLO1)	value as aspiration (GOV1); value in practice (GOV3); value in practice (GOV4); value constrained (NGO3); value in practice (NGO4); value tied to identity (NGO5); value in practice (SLO1)
	Chronic non-communicable illnesses	1	qualitative indicators	value in practice
	Macronutrition	2	no formal indicators (GOV2); no formal indicators (SLO1)	value as aspiration (GOV2); value as aspiration (SLO1)

Categories	Values	Selection Frequency	Indicators	Interpretation
	Mental Health	8	no formal indicators (GOV1); no formal indicators (GOV2); no formal indicators (GOV3); no formal indicators (GOV4); no formal indicators (NGO3); no formal indicators (NGO4); no formal indicators (NGO5); success=impact (SLO1)	value as aspiration (GOV1); value as aspiration (GOV2); value constrained (GOV2); value in practice (GOV3); value in practice (GOV4); value constrained (NGO3); value in practice (NGO4); value tied to identity (NGO5); value in practice (SLO1)
	Micronutrition	2	no formal indicators (NGO4); no formal indicators (NGO5)	value as aspiration (NGO4); value constrained (NGO5)
	Nourishing	1	no formal indicators	value as aspiration
	Physical health	3	no formal indicators (GOV2); no formal indicators (GOV3); no formal indicators (NGO3)	value as aspiration (GOV2); value in practice (GOV3); value tied to identity (NGO3)
Personal values	Convenience	2	no formal indicators (GOV3); no formal indicators (NGO5)	value in practice (GOV3); value constrained (NGO5)
	Emotional Response	1	no formal indicators	value tension
	Ethical Value	5	no formal indicators (GOV2); no formal indicators (GOV4); qualitative indicators (observations) (NGO4); no formal indicators (NGO5); no formal indicators (SLO1)	value as aspiration (GOV2); value in practice (GOV4); value in practice (NGO4); value constrained (NGO5); value tied to identity (SLO1)
	Familiarity and Habit	1	no formal indicators	value constrained
	Rarity and Diversity	1	no formal indicators	value in practice
	Regionality	4	qualitative indicators (tell local story) (GOV2); no formal indicators (GOV4); qualitative indicators (feedback) (NGO3); no formal indicators (SLO1)	value in practice (GOV2); value tied to identity (GOV4); value constrained (NGO3); value tied to identity (SLO1)

Categories	Values	Selection Frequency	Indicators	Interpretation
	Relationship and Relatability	6	no formal indicators (GOV2); no formal indicators (GOV3); no formal indicators (GOV4); qualitative indicators (observations) (NGO4); no formal indicators (NGO5); no formal indicators (SLO1)	value as aspiration (GOV2); value in practice (GOV3); value in practice (GOV4); value in practice (NGO4); value as aspiration (NGO5); value tied to identity (SLO1)
	Scale of Food Producer	1	no formal indicators	value constrained
	Taste	3	no formal indicators (GOV1); no formal indicators (NGO3); qualitative indicators (feedback) (NGO4)	value as aspiration (GOV1); value in practice (GOV1); value tied to identity (NGO3); value in practice (NGO4)

39. table: Overview of FVF values

The following sections provide examples of environmental, societal, health and personal impact based on the FVF values selected by the participants and associated descriptions. "Values in practice" were most commonly considered as these are based on concrete actions. Other value interpretations, such as "values tied to identity" that may have an impact, for example, by providing strategic direction for an organisation and justifying actions, were considered as well, however, less frequently than practice-based values.

Environmental impact related to selected FVF values

Organisations considered impact on the formation, protection and decontamination of soils and sediments by providing input into a Horizon Europe funded soil health project in the residential red zone (NGO3), through encouraging an experiential understanding of the fundamental importance of soil as the basis of food (NGO4), and by actively building soil through urban farming (SLO1). Impact on freshwater quality was considered through funding (community) projects that involve riparian planting to improve the water quality (NGO5). Impact on land systems changes was considered through continuous monitoring of regulation-based indicator-based metrics and standardised measures across stakeholder groups (GOV3). Impact on pollination and propagation was achieved by teaming up with the Canterbury branch of the New Zealand Tree Crops Association (NZTCA) to grow and distribute trees (GOV2), and through a 'protect our quinoa' campaign to increase populations of indigenous species (NGO3). The regulation of climate was addressed by continuous monitoring of regulation-based indicator-based metrics and standardised measures across stakeholder groups (GOV3) as much as funding climate-relevant regeneration projects (NGO5). The regulation of freshwater quantity, location and timing was supported through waterway-based partnerships and collaborative management (GOV3). Stormwater management impact was achieved by implementing a stormwater system



as a show case to demonstrate how to capture stormwater run-off from the roof of buildings (NGO3).

Societal impact related to selected FVF values

The CCC considered commonly recognised outputs of garden-related activities as impactful with regard to additional sources generated (GOV3). Embedding cultural values in practice, shaped by obligations and identity (GOV4), reflected in the recognition of diverse perspectives (NGO4), and shaped by a diversity of (cultural) viewpoints contributing to resilience and collective strength (NGO4) were considered impactful. Engagement and recreational values were demonstrated by projects that created spaces where people could meet and connect with the land, e.g. volunteer sessions to sit, talk and share food (NGO3). Values related to food security were addressed by growing local food and educating people about growing and preparing food (SLO1) including mahinga kai⁶⁶ (NGO3). Inclusivity values were met by supporting projects and places such as community gardens which are about growing communities and getting people together (GOV2) and removing barriers for participation (NGO5). Impact on justice was considered through a public health and equity lens by focussing on addressing systemic inequalities (GOV4). Impact on local community support was identified through the recognition of (public) responsibility for local community support and partnership (GOV1) and local engagement as a primary and recurring need (GOV3).

Health impact related to selected FVF values

Being in contact with nature was considered the most impactful contributing factor to overall health and wellbeing (GOV3) seen as a practical solution (NGO4) and key priority (NGO5), e.g., by accommodating people with mental health problems who are getting green prescriptions to do gardening (SLO1). A positive impact on mental health was frequently mentioned, e.g., with regard to providing better access to healthy nourishing food (GOV1; GOV2) and supporting projects that provide strong relationships between food consumption and mental health outcomes (NGO5). Physical health was impacted by providing spaces that support physical activity involved around growing food (NGO3).

Personal impact related to selected FVF values

Participants mentioned ethical value as a motivating and impactful force, e.g., by providing (public) critique of existing food systems and recognising systemic shortcomings and the need for change (GOV4). Ethical value was considered as embedded in almost any action including food choices and practices reflecting broader human values and identity (NGO4). Participants recognised their impact regarding rarity and diversity values, e.g., through their ongoing efforts to address diversity within park and green space management (GOV3). Regionality as a value was addressed by supporting local food artisans and growers (GOV2) and attempts to establish a distinct

⁶⁶ "traditional [Māori] food and other natural resources and the places where those resources are obtained" (<https://ngaitahu.iwi.nz/ngai-tahu/creation-stories/the-settlement/settlement-offer/cultural-redress/ownership-and-control/mahinga-kai/>)

Canterbury food identity (NGO3). Relationship and relatability values were operationalised by networking and relationship building – this was seen as a core function of organisations, essential to effective practice (GOV3) and central to ethical and social thinking (GOV4). Food was considered of having an impact beyond sustenance to shape interpersonal connections and relationships (NGO4; NGO5; SLO1). Taste was considered as impactful, because it makes something healthy taste good, helping to change unhealthy food habits, e.g. in school lunch programmes (GOV1). Taste was considered as an indicator for quality reflecting the underlying health and integrity of food (NGO4).

Future Plans

Plans for the future

The CCC highlighted plans for future networking and collaboration: *"We need to work with the entire food sector and health sector and education sector, business sector to enable the regenerative food system that we're thinking about" (GOV2)*. This included stronger connections with the food and fibre sector and associated organisations: *"ChristchurchNZ, which are actually part of the Council. So they're really focusing on the food sector and the food fibre innovation sector so that that is something I haven't been well connected into yet, but I will be" (GOV1)*. The fragmentation of different actors in the food system was considered as a barrier to overcome: *"The whole system is so disconnected at the moment. So, you have lots of people working in very isolated areas and it's very hard to form ways I would love to see them joining up [...]. I would like to see, I guess, we'll join that up in a coordinated strategy" (GOV3)*. The establishment of a food policy council was a key goal mentioned (GOV1; GOV2; GOV3). Increased international collaboration was also considered: *"So a future plan would be to be more active for the Milan urban food policy" (GOV2)*.

The re-development of the Council's food resilience policy and action plan were mentioned as key action points for the near future (GOV1; GOV2). Equity was considered a key driver for policy development: *"it's all about equity for me anyway, [...] part of it is reviewing what we're doing. And what should we be doing more of that will actually address equity issues. So that that's gotta be fundamental" (GOV1)*.

The establishment of a network or dedicated person at CCC to support and promote local food systems was considered important: *"The most fundamental one is that the council's food resilience policy gave us a mandate to act. The council then approved it and I could then go to managers and say we need to start acting on this, but I haven't really built up a network of champions within the organization. I'm trying to do that. We're getting there, but it's slow" (GOV2)*. *"If we had a full-time person who was devoted to this area, perhaps we could get further" (GOV3)*.

With regard to future infrastructure development, CCC mentioned a range of plans including an urban forestry plan, an open space plan to increase access to open spaces including food spaces, and an Avon river regeneration plan that includes mahinga kai strategies: *"So, mahinga kai is, It's about food and fibre, but it's also about caring for*



land or caring for nature. So they can provide, but [it's] also about the traditional ways of harvesting and then sharing that food as well" (GOV2).

The FRN mentioned plans (after the completion of the café) to establish a community funding programme based on the profits from their social enterprises: *"I think my goal is [... to] improve the concept that we can actually be a founder. [...] So our 25 year plan is to have a capital investment" (NGO3).* They intended to support CCC with setting up a food forest: *"[...] one of our funding streams that we want to do is to support CCC in planting in urban parks because at the moment they don't have the resources or capacity to do it. So the CCC team would plant the trees and maintenance for 3 years established, and while they're doing that, that group come to us to learn how to set up a food forest properly" (NGO3).*

At the community level, more collaboration between different groups was considered important: *"I've been starting a conversation with some other projects that may happen in the red zone where we can really connect. So I'm on the steering group, so that we can actually connect the dots around different projects [...]" (NGO3).* Establishing better regional networks was also mentioned as a future goal: *"Christchurch needs to better connect with its neighbours to actually enable a functioning food system. Christchurch is a metropolitan boundary area; it is not really a food producer with regard to making. We have community gardens and some backyards, but not enough to feed the population. And so, to really affect sustainable and equitable change for a Christchurch food system, we need to really think about where are the food that is bought and consumed in Christchurch comes from? What is the sort of the traveling path of that? And then who were the parties involved in that? What of those foods could be relocated, in which could we create a local circular economy, job creation, and all of the good stuff that comes from that? [...] I wish there was more I could do, but I think, because I understand the complexity of the food system and that you can't just pull one lever and hope for change. The best I can currently do is keep advocating and participating in things like this" (GOV4).*

Promoting systemic change was considered as a necessary course of action: *"The other thing I can do, and I guess do is steer conversations. And if it as much as possible towards what is actually system change. A lot of people talk about 'I'm working to fix or support the food system change', but actually they're working in food insecurity response mode. Food banking or food waste collection and redistribution, all those things are beautiful. But they're not changing the problems of how we got here" (GOV4).* Promoting local food systems would also imply to increase local demand: *"That means that unless you change demand for local food that are trying to supply, it will always come up against the same barriers. So, it's the tipping of the whole system in favour of local food. Yeah, or the development of some demand drivers or ignite, as that will create transformation and local food systems" (NGO4).*

How sustainable is the existence of the organisation?

While government organisations did not express direct existential concerns, they expressed concerns regarding the long-term sustainability of local food systems, e.g. around increased pressure on agriculturally productive land: *"[...] housing is such a*

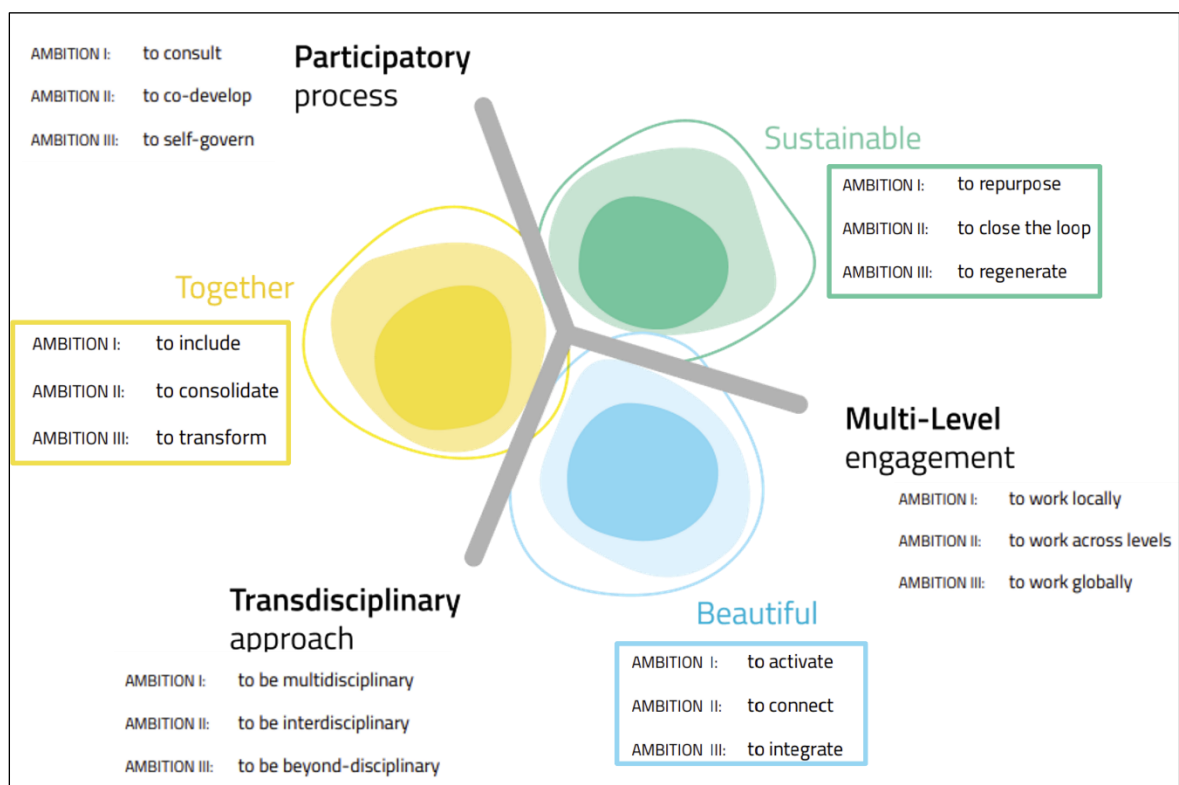


pressure in New Zealand that if anybody started suggesting we protect our productive land for food, I can't imagine they would get much traction" (GOV3). Realising systemic changes were considered as most challenging from an economic perspective: "And so at the moment we're serving international customers [...] because that's all being exported [...]. So I think that's a challenge for us to move from that sort of mindset of market to people and community and environment here locally" (GOV2).

Another sustainability concern was the public health system that is confronted with increasing economic challenges and related pressures: "[...] we are committed to working in and supporting equitable and healthy food environments. So that is that remains a health system priority, which is interesting when – as we talked about before – we don't have enough staff to actually bring it to last. Yeah, we're under resourced [...]" (GOV4). For the FRN, financial and land security risks posed challenges to long-term sustainability: "And [they] let us keep the site [urban farm] for at least another 2 years. But there's gonna be the next challenges. How do we duplicate the farm somewhere else close by because she's probably gonna want it back at some stage" (NGO3). "And they won't sign another contract [...] well, you've got it for at least 2 years, but after that it's likely it could like to go to development" (SLO1).

NEB Compass

The following is a self-evaluation of the case study through the lens of the NEB values and working principles.



58. Figure: NEB compass – values, working principles and ambitions (Source: WP2 lead; Inspirational cases writing workshop, March 2026) :

Values

Beautiful	Sustainable	Together
<i>Ambition II: to connect</i>	<i>Ambition III: to regenerate</i>	<i>Ambition III: to transform</i>
The organisations in this case study help communities develop places and processes that accommodate and support local food systems (I). Organisations support community engagement and collaborations by providing necessary resources, e.g., funding and policy support, to create connections between different cultures through food (II). Place-based connections between people and food are actively supported and built through social, cultural, educational and environmental initiatives (II).	The organisations reduce social and environmental impacts, e.g. by supporting school gardens and food education, or by funding food rescue programmes that repurpose food that would otherwise be wasted (I). Participants support local circular economies, e.g. with regard to food waste transformation by supporting local and city-wide composting programmes, and by strengthening locally owned and operated food businesses (II). Organisations support biodiversity through regenerative projects, e.g., by providing funding and expertise for food forests or extending native vegetation in the residential red zone (III).	Social impact based on providing (community) support and raising (societal) awareness is considered as most impactful. Participants show strong values around social equity, inclusivity and (social & cultural) diversity, embedded in collaborative action and demonstrated by projects that connect people, land and food while removing barriers for participation (I). Collaborative projects around growing local food and educating people about growing and preparing food address food security and food resilience perspectives (II). Initiatives such as the “Growing a fair food system together” and the re-development of the local food resilience policy address systemic inequalities showing ambitions to transform (local) food systems (III).

40. table: Christ Church City Council through the lens of the NEB Compass

Working Principles

Participatory process	Multi-level engagement	Transdisciplinary approach
<i>Ambition II: to co-develop</i>	<i>Ambition III: to work globally</i>	<i>Ambition III: To be beyond-disciplinary</i>
All organisations provide a forum for information and dialogue, e.g., via websites and social media (I). The CCC actively encourages the co-development of food system relevant processes and structures. For example, the “Growing a fair food system together” workshops brought together participants from various parts of the food system including growers, distributors, markets, food-system related government and non-government organisations, researchers, educators, and food waste managers. The events are stepping stones in (co-)creating a	Most organisations are involved in projects with a local or regional focus addressing specific or systemic issues around local (I) or regional food systems (II). While the FRN is a local organisation that operates in and out of Christchurch (I), the Christchurch City Council has networks and collaborates at local (I), regional (II), national (II) and international level (III), e.g. through the Milan Urban Food Policy Pact and the International Urban and Regional Collaboration (IURC). CCC are actively involved in international	Participants come from diverse professional and disciplinary backgrounds (I). The CCC actively engages and collaborates with various stakeholders, e.g. from the community, NGOs, the food system, and academia. They bring in diverse expertise to co-create projects which, in some cases, span across the entire food cycle integrating various functions within the food system and beyond (II). The integration of socio-culturally diverse forms of knowledge (e.g., by engaging with Pasifika and Māori groups and fostering indigenous gardening techniques and crops)



redeveloped food resilience policy for Christchurch (II).	research programmes such as Horizon Europe.	and the collaboration with knowledge partners (e.g., schools and universities), encourages informal and formal knowledge creation (III).
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41. table: NEB compass – assessment of working principles

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ABBEY PHYSIC COMMUNITY GARDEN

*AUTHORS: EVE FLORENCE PALMER, ALLISON SERMARINI,
KATA KEPES, BÁLINT SZŐLLŐSI*

Introduction

This report examines the case of the Abbey Physic Community Garden (APCG) in Faversham, United Kingdom. Originally established as a therapeutic gardening project, APCG has spent over 30 years supporting community wellbeing and social inclusion. In response to increasing mental health concerns, rising living costs, and food insecurity, the organisation has expanded its role becoming a vital hub for community gathering and support. Food is integrated throughout APCG's activities, from courses on growing, harvesting, and cooking to community lunch programmes that support those in need. Through these activities, food serves as a tool for building social connections, fostering inclusion, and developing practical skills, demonstrating how community-led initiatives can address interconnected social, environmental, and economic challenges while contributing to more resilient and sustainable local food systems. Accordingly, this case study aims to outline the functionality of APCG as a multifaceted community organisation. It specifically showcases how food is used as a tool for wellbeing, skill development, social connection, and community support.

Methodology

For the preparation of this report, a mixed qualitative methodology was utilised, with the combination of information from both online literature resources and semi-structured interviews. 2 interviews were conducted with staff members from the APCG, namely the manager, Suzanne Campbell, as well as the co-Project Lead of the Community Kitchen, Karen Franczak. Information was gathered from the online website of the project and their released annual reports, which aided in enriching and supplying quantitative detail to the insights gathered within the interviews. This approach, assisted in maintaining the focus on the report predominantly on food related topics which the organisation partakes in, increasing its overall relevancy for the project.

The interviews ranged from a 45-60 minutes timeframe, following a semi-structured interview guide to orient the contents discussed. These questions were formulated with the aid of the REDESIGN Case Report Guidelines, to follow the specific information aiming to be gathered. Following a review of contents of online materials, the questions were further specified by the researchers, which reduced unnecessary overlap and sought to gain deeper detail in the organisation and the specific areas of focus.

Before the interviews, an ethical form and information sheet was circulated for the perusal of the interviewees. The information sheet, functioned as an overview as to why the interviews were being conducted, a background on the project, and additionally



the inspirational case analysis task. The ethical form served to inform the interviewee on what associated ethical considerations were apparent when partaking, ensure there was an adequate understanding, and furthermore, gain permission for the utilisation of information, recording and quotations. All interviewees consented to the interviews and all the ethical considerations. The meetings were both taken place on Microsoft Teams, recorded and transcribed as a result of gaining this permission.

When pertaining to the analysis of the report, the first stage was for the researchers to familiarise themselves with the transcripts. Following this, additional sub-sections were created in each topic of the report, to reflect the contents gathered in both the interviews and the online materials. The interviews were then analysed using two methodologies, and aligned with the agreed structure and research question. Quotes and information was then gathered in each section to gain a wider understanding and provide some composition. From this, an identification of interviewee perceptions, narratives and recurring patterns was able to emerge. Sections of the report were then split up and written separately between the researchers, based on the sections which they knew the most relevant knowledge about. Additionally, the Urban Food Value Framework was analysed using a Framework analysis methodology, complete with a systematic table, which was comparable with other studies. This ensured that the methodology for the framework was both structured and systematic.

General Description

APCG is located in the historic market town of Faversham in the county of Kent, of south-east England. The town, as of the 2024 census, has an estimated population of 23,024 people living within a built-up area of 5.661 km², resulting in a population density of approximately 4,067 inhabitants per km². In 2023, Kent generated approximately £47.3 billion in Gross Value Added (GVA), equivalent to £29,379 per resident.

Since the mid-1990s, house prices have increased dramatically across the country. Between 1996 and 2018, average UK house prices rose by 161% in real terms, with London experiencing an even steeper increase of 292%. As housing has become increasingly unaffordable, home ownership has fallen significantly, declining from a peak of 70.5% in 2003 to 63.1% in 2016. This has led to the widespread consensus that the UK is facing a housing crisis reflecting a rise in homelessness, an insecure private rental sector, declined home ownership, and a sustained rise in housing costs.

In tandem with the housing crisis, the cost of living sharply increased in the UK during 2021 and 2022. This led to a peak inflation rate of 11.1% in October 2022; however, since then inflation has fallen to around 3.0%-3.8% remaining within this range from April 2025 to March 2026. Nevertheless, since the escalation of the Middle East conflict between Israel and Iran, households have noticed an increase in the cost of living reflected in food prices, fuel, energy bills, mortgages, rent, and other daily needs. Among those experiencing rising living costs, 62% reported reducing non-essential spending, while 37% had cut back on essential items such as food shopping.



Furthermore, 39% reported using less energy at home, and 1% relied on support from charities, including food banks.

These national trends are reflected acutely in Faversham. Housing classified as "affordable" is often unaffordable for many Faversham residents. The Faversham Community Land Trust argues that housing designated as "affordable" is often not affordable for local residents, as it is typically priced at up to 80% of market rates. Many low-income households instead depend on social housing, which is generally rented at around 50% of market rates. They also report that since 2019 only 27 homes for social rent have been built within and around Faversham.

In addition to the housing crisis, the ongoing cost-of-living crisis continues to place pressure on local households. In North and West Kent, 44% of residents report experiencing financial hardship, resulting in repeated referrals to food banks. The combined impact of housing insecurity, rising living costs, and financial stress has contributed to growing demand for mental health support services.

Between April to October 2025 alone the Kent and Medway NHS Trust received 30,000 referrals for adult support which was about 5% higher than expected in East Kent. Several barriers to mental health services such as extended waiting periods for crisis support, poor coordination, or discontinuation between care services have been highlighted by researchers.

To address these challenges, APCG plays a vital role within the community by providing a safe and therapeutic environment. Their mission is "growing a health community," that helps vulnerable individuals combat isolation, build resilience, and develop a sense of belonging in a time of intense social and financial hardships.

Case description

APCG is a half-acre walled community garden that uses permaculture principles as a demonstration site for sustainable growing while supporting vulnerable groups and the wider community. It was officially established more than 30 years ago by local residents and practitioners, to create a space for people leaving institutional care to grow food, socialise, and regain a sense of purpose.

APCG's mental health mission is deeply reflected in its activities. Although gardening has always been a core activity, at first it was mostly used as a therapeutic tool to improve wellbeing, build confidence, reduce isolation, and foster resilience. This philosophy appears in programmes such as Gardening for the Mind, which focuses on mindfulness, sensory engagement, and connecting with nature, as well as dedicated gardening sessions for neurodiverse people and those with higher support needs.

APCG also hosts several physical activities, such as Qigong, meditation, and a self-defence group called the Kung Fu Pandas. Other regular activities include a poetry group, craft group and bongo sessions, as well as weekly music sessions. The Men's Shed focuses on targeting social isolation specifically among men. The core idea in all these activities is that anyone can participate without stigma, regardless of whether they were attending for mental health support or simply to enjoy the garden.



"So not kind of institutionalised, but where anybody can come here and nobody would know why or what for. It's none of their business, but everyone could come and participate at their level just to grow confidence, resilience, and because of the benefits, health benefits, health and wellbeing benefits of being outside in nature." – *Suzanne*

At the same time, food has increasingly become a means of bringing people together and strengthening the community. Volunteers at APCG can help out in the Coffee Cabin where the community can enjoy cakes and other sweets, as well as in the Community Kitchen where daily lunches are prepared using plants from the garden. Friday Community Lunch provides an opportunity for people to socialise over a shared seasonal meal, often including a barbecue. The Men's Breakfast Club similarly combines shared meals with opportunities for conversation and mutual support.

However, the UK's cost-of-living crisis and growing concerns about sustainable food systems have expanded APCG's focus beyond therapeutic gardening to include food security, food education, and sustainable food production. While mental wellbeing remains at the heart of the organisation's mission, food has become an increasingly important pathway through which these goals are achieved. The Hands on Gardening course places greater emphasis on growing edible crops, teaching participants practical horticultural skills that they can apply at home. Suzanne and Karen explained that these courses are tailored to participants' individual needs, helping them rebuild confidence while also equipping them with practical knowledge to cope with rising food costs.

Participants learn the complete growing process, from seed sowing and pricking out to harvesting and composting. The garden also runs practical sessions on composting, including innovative methods such as producing fertiliser from banana skins. Food education extends into the above-mentioned Community Kitchen, which is open five days a week. Here, volunteers and staff harvest seasonal produce from the garden to prepare meals while participants learn practical skills such as cooking from scratch, batch cooking, and cooking on a budget. The Mindful Kitchen, a six-week rolling programme, combines cooking with discussions on nutrition and mental wellbeing for participants who self-refer or are referred by GPs and social workers. Within the local food system, APCG therefore functions as a community builder by combining local food production, food consumption, waste management, and education within a single space.

"Trying to encourage people to cook from scratch, to gain confidence, to try new things, to look after their health and wellbeing through food." – *Karen*

Governance

APCG works with a combination of a small professional staff, extensive volunteer involvement and strong member participation. The organisation emphasises shared responsibility, responsiveness to community needs and participatory decision-making,



as opposed to a traditional, top-down management structure. This governance approach has evolved alongside the organisation's broader transition from a specialist mental health project to an inclusive community space, while remaining focused on its charitable objectives of improving health, wellbeing and social inclusion.

Firstly, there is a board of 7 active trustees, whose roles relate mostly to the governance and business side of operations. Ultimately, their role is to guarantee the garden brings a positive impact to the beneficiaries, promote the sustainability of resources, monitor performance and collaborate on ideas for improvement. One way this is achieved is by developing and reviewing their policies to be consistent with legislation, requirements of the Charity Commission and other corresponding bodies. Additionally, any staff problems are the responsibility of the board, as well as fundraising activities in collaboration with the Manager. To maintain functionality for covering such a broad variety of responsibilities, each member is responsible for a particular area.

The board is moreover supported by and acting in synchronicity with a staff team of eight, consisting of two full-time employees and six part-time staff members. They remain responsible more for the day-to-day activities within the garden, as well as the specific activities where their expertise come into play. Their roles are clearly defined roles and complementary responsibilities across horticulture, the community kitchen, community engagement and organisational management. The staff structure enables specialised activities while maintaining close collaboration between different parts of the organisation. For example, horticultural training, community kitchen activities, wellbeing programmes and outreach are interconnected, allowing participants to move easily between different activities according to their interests and needs.

Alongside the staff team, volunteers form the backbone of APCGs daily operation. They deliberately avoid viewing volunteers as unpaid staff, instead recognising that each individual participates voluntarily for their own reasons and should benefit from the experience as much as APCG.

"We wouldn't be able to run it in its present form without volunteers. They do all sorts of things – helping in the garden, the kitchen, the coffee cabin, running activities, being key holders. But it's also about making sure they're getting something out of volunteering themselves." – *Suzanne*

They undertake a wide variety of roles, including gardening, supporting the community kitchen and coffee cabin, leading activity groups, facilitating crafts and wellbeing sessions, acting as key holders outside normal opening hours and supervising specific areas of the garden. Importantly, these responsibilities are designed to be flexible. Individuals are encouraged to change roles as their confidence, skills and interests develop, creating opportunities for personal growth while ensuring that volunteering remains meaningful and enjoyable.

This broad understanding of volunteering also reinforces an emphasis on inclusion, participation and shared ownership of the garden. Formal member meetings are held

four times each year and are organised throughout an entire week to maximise participation from different user groups. These are also complemented by continuous informal conversations, activity-specific WhatsApp groups and ongoing feedback from members, volunteers and visitors. Staff members do not make assumptions about local needs, instead new activities generally emerge in response to expressed community interests, meaning that ideas either come directly from members or from community organisations offering activities that participants have requested. This setup enables the organisation to remain responsive while ensuring that programmes reflect genuine demand.

"It's always through members... There's just anything and everything happening. And it will be either due to suggestions from members or somebody from the community coming in and offering to put it on for us. That's how it works. And then it does work because there's a need for it rather than thinking or presuming this would be good." - Suzanne

Organisational coordination relies on clear internal communication and a strong shared understanding of Abbey Garden's charitable mission. Staff hold monthly meetings to review activities, discuss emerging challenges and coordinate future work, while maintaining regular day-to-day communication.

"What keeps us grounded is always coming back to our charity aims, the organisation aims. Why are we here? Who are we here for?" – Suzanne

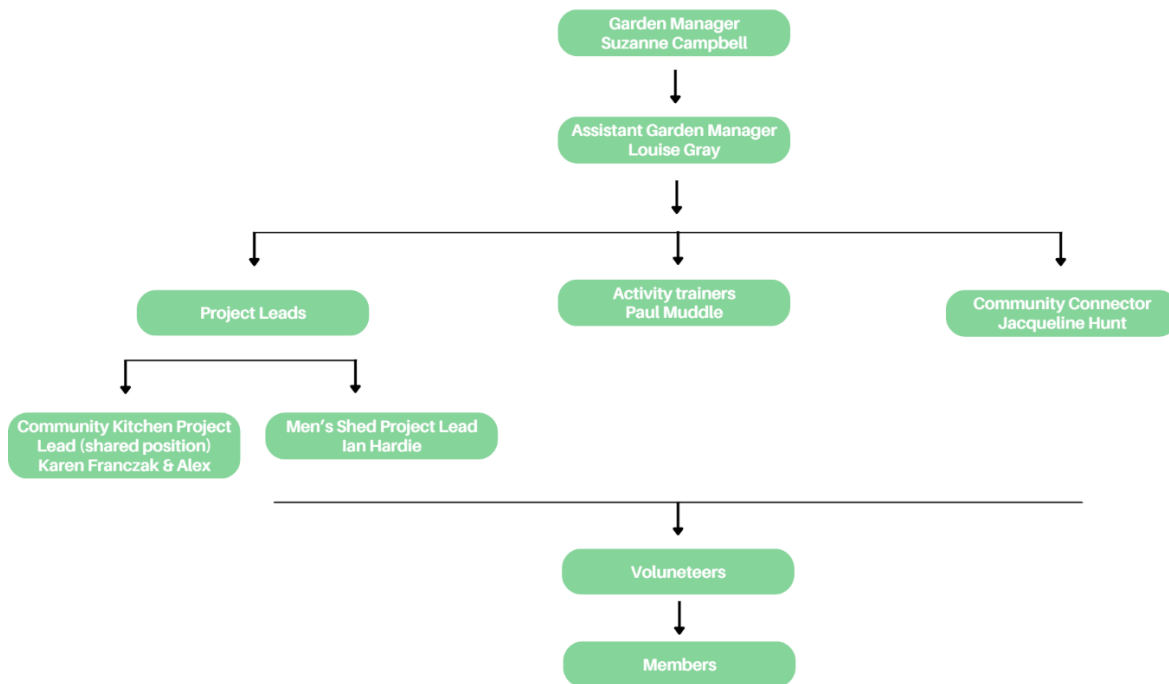
This emphasis on organisational purpose provides a consistent framework for decision-making while allowing staff to adapt programmes in response to changing community needs.

Similarly, the organisation is willing to refer individuals to more appropriate services where another organisation is better placed to meet their needs, which truly shows APCG's focus on participant benefit. They also demonstrate extensive collaboration beyond its own site, embedding APCG within a wider network of community organisations, referral partners and public services. Participants are referred through general practitioners, mental health services and numerous local organisations, while partnerships with community groups expand the range of activities available on site. The organisation also collaborates with local initiatives, such as food redistribution partners, to reduce food waste and improve access to healthy food. Dedicated staff, including the community connector, actively maintain relationships with external organisations to ensure that participants can either access APCG or be signposted to appropriate services elsewhere. This outward-looking governance model enables the Garden to operate as both a community hub and a connector within the wider local support system.

Overall, APCG's governance model combines professional coordination with extensive community participation. A relatively small staff team provides organisational continuity, while volunteers and members shape much of the organisation's daily life and future direction. Decision-making is intentionally participatory, communication is



both formal and informal, and collaboration with external organisations extends the garden's reach within the local community. Most of all, APCG seeks to remain responsive to its members, ensuring their ways of working continue to support their core aims of health, wellbeing, learning and community inclusion.



59. Figure: Organogram of the internal structure of APCG

Timeline

1994: The site opens as a mental health horticultural project, funded by the NHS to support people experiencing mental illness (NSF clients)

2006: APCG was incorporated as a Company Limited by Guarantee

2007: APCG officially became a registered charity, becoming independent after NHS funding priorities shifted towards employment-focused programmes

Mid 2010s: Development of the Community Kitchen, extending APCG's activities beyond gardening into cooking, nutrition education, food waste reduction and community meals

Late 2010s: Introduction of additional community initiatives (Coffee Cabin, men's groups, wellbeing activities, educational workshops, wider volunteering opportunities)

2020–2021: COVID-19 disrupted many face-to-face activities, but the organisation adapted its delivery while maintaining support for members

2022–2024: Continued organisational growth supported by a mixed funding model combining grants, earned income, and donations

2023: Extended opening hours into weekends, making APCG open 6 days a week

2025: APCG opens on Christmas Day for the first time

Legal & Financial Framework

APCG operates as a registered charity and company limited by guarantee, though this is the result of an organisational transition rather than its original status. The garden was initially managed by the Schizophrenia Fellowship and the charity Mind, with funding provided through the National Health Service (NHS). However, changes in NHS funding priorities prompted the organisation to become an independent charitable entity, as the NHS gradually restricted its support to projects focused on employment outcomes, which did not align with the needs of many APCG participants.

"... the National Health Service decided they were only going to fund projects where people were going to be supported to get back into work. And that just wasn't going to happen for lots of the people that were using the space here. So then they turned it into a charity, registered charity, company limited by guarantee." - *Suzanne*

This transition allowed APCG to broaden its mission from a specialist mental health service to a more inclusive community organisation focused on health, wellbeing, education and social inclusion with a diversified funding strategy and strong collaborative relationships with public institutions, including general practitioners, mental health teams and local referral organisations. These partnerships continue to shape participant referrals and programme delivery, but at the end of the day, APCG operates independently in terms of governance and funding decisions.

APCG funding model can be described as a mixed, blended income model that combines grant funding, earned income, community contributions, and partnerships to achieve financial sustainability. The model is primarily grant-dependent but increasingly seeks to strengthen unrestricted and self-generated income streams. Bigger grant opportunities, such as the National Lottery Community Funding, aid in providing a salary for the permanent staff of the garden. They further contribute to the successful running of programmes.

During the interviews, participants described their relationships with funding bodies, suggesting strong and sustained access to grant funding. Due to their reliability at producing measurable impacts and outcomes, a substantial bid can be submitted that often is successful. This can be demonstrated through their continuous National Lottery Community Funding collaboration over 3 years, which provided £270,000 to support their activities and objectives, as well as maintaining a 174% success rate in grant applications in 2025. However, some concerns were raised over recent competitiveness over grants, due to both an increase in quality of applications and necessity for the same funding opportunities.



Additionally, smaller funding opportunities remain easier to obtain, which can contribute towards the continuation of community projects, such as running the kitchen and cooking courses, and the Men's Shed activities. As they are advertised as appealing for the community's benefit, they remain attractive for donors to invest in.

"we adapt our approach to just try and be as financially sustainable as possible"
- Suzanne

Supplementary, earned income is derived from their activities within the garden, more specifically the Coffee Cabin, Lunches, and Garden Produce. The stability of these income sources is further verified by the surpassing of the 2025 income targets, at 190% for the Coffee Cabin, 220% for the Lunches (forecast of £8,000, actual income £17,629), and 119% for the Garden produce. Growth has also been dramatically substantiated within these business activities, particularly the coffee cabin, whose profit has steadily risen from £2,928 in 2023 to £10,908 in 2025. Notably, this growth was able to occur without placing additional demands on staff capacity, demonstrating the efficiency and sustainability of these activities, and their capacity to continuously deliver a high standard of healthy food to the community.

"And the really nice thing about that was it didn't impact in a negative way on staff time or being able to do it. It's really good value of food." - Suzanne

The coffee cabin and community lunches encourage community engagement, helping to attract new members and familiarise local residents with the activities of the APCG. Memberships therefore, are another way which the community can actively support the operations. Currently, the continuity of support is evidenced by maintaining 372 active members in 2025, further obtaining 171 new registrations at the start of 2026. Smaller contributions can moreover come from optional community donations, especially in the coffee cabin, and community food-related events. Contributions of around £1,000 can be generated from specific social events, which accumulate to create meaningful financial contributions.

Partnerships and corporate giving are a notable revenue stream for the APCG, which has likewise seen a growth in recent years. The income raised surpassed 230% of its expected targets in 2023, raising £11,480, instead of the projected £5,000.

Looking into future revenues of income, APCG would plan to also sell plants within the garden. They recognise the appeal of some of the varieties and species, which are not commonly known, that the community has shown a growing interest in. Most predominantly, in the perennial vegetables, where enthusiasm is drawn from their continuous lifecycle post-harvest. This will additionally facilitate the food resilience of local communities, and establish a sense of self-reliance.

Additional, future ways that funding is aiming to be utilised within the garden, is to increase environmental sustainability. This includes strengthening its approach to how both biodiversity and wildlife in general are viewed, in addition to the measurement of



environmental outcomes. It is perceived as a goal which will continuously improve over time, and generally contributes to successful applications to grants, with the proof of indicators of success within their work.



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Engagement and collaboration

Activities relating to nature and food, circular economy

Within the recent 3 years, the garden has seen the successful rerunning of 3 6-week courses: Gardening for the Mind, Hands-on Gardening, and Mindful Kitchen. The success in the engagement within their workshops has been demonstrated by impact on participant wellbeing. Attendees reported a 92% increase in mood, with an additional 75% improvement in confidence, as well as 73% increase in connection with other citizens.

As mentioned in previous sections, these courses reflect their recurring goal of commitment to mental health and inclusivity, exploring nature as a medium to support wellbeing, particularly in the Gardening for the Mind course. Participants are taught sensory-based activities to aid with the management of stress and anxiety.

The Hands-on Gardening additionally promotes a connection to nature, by providing more practical skills for participants, providing the basic fundamentals for gardening. Prominent activities include learning to propagate, plant and compost.

"So people come and learn how to grow things, but how to grow it in a way that suits them, whether it's no dig or permaculture or straw bale growing. Some don't have a garden, but they can still grow things or people can take food home that's grown here if it's not being used in the kitchen." - Suzanne

Notably, it also stimulates a similar sense of collectiveness, encouraging social relations and conversation throughout the sessions. Joe, one of the horticulture trainers, moreover specialises in supporting those that require specialised needs, or are neurodiverse. This supports participation by creating an engaging environment in which individuals can learn at their own pace.

"So we reserve a day for those people so they can still come, learn, get connected. It's just a nice way of getting them involved and noticing what they're doing or not doing." - Suzanne

APCG has in recent years diversified its practices for an inclusion of more direct, cooking related activities. Adapting to the needs of the community, these practices also offer practical solutions to generate agency, in light of recent problems such as the cost of living crisis. Additionally, they also are able to address the issues of health, wellbeing and inclusion, of which the garden already promotes as its core focus. An example of this is their Mindful Kitchen course, run in collaboration by Karen and Alex. The course itself, is designed to teach its participants about harvesting fresh garden ingredients, to create healthy and nourishing meals.

"So yes, trying to encourage people to cook from scratch, to gain confidence, to try new things, to look after their health and wellbeing through food." - Karen



People who come to the courses, are either self-referred or referred by the doctors or social workers, who recognise some assistance in eating habits to improve well-being. This ultimately means that each run of the course is different, and able to adapt to a diverse set of recipients each time.

"So I've developed a programme over the last couple of years now and I have a basic outline that I vary it according to what each individual is looking for, what they need, because it can vary from somebody who's never cooked anything to people who are very experienced cooks who just have lost their joy of cooking for different reasons." - Karen

Aside from the course activities, an additional way that APCG incorporates food-related practices into its space is with their community kitchen. The activities have proven their success and popularity, by transitioning from 3 open days in 2023, to 5 days in 2025.

It consists of bringing people to the garden to pick produce and cook for the day in the kitchen, creating a connection between what is grown and eaten. They promote a 0km supply chain in this respect, striving to incorporate as much produce as possible, in line with the seasonal availability. Although more produce is available in warmer months, new foraging techniques help to use more of the edible plants within the winter. An example of these are Babington leeks, which grow through the winter, as well as stinging nettles for tea.

The food that is cooked here, such as cakes, are then utilised by being sold in the coffee cabin.

The skillsets learnt here goes beyond just solely cooking skills, and extends to other practical elements that contribute to food resilience. This can include alternative ways of buying food, how to budget and cook in bulk, and how to store leftover meals in the freezer. Naturally, as more food is available from the garden during the summer months, new activities are also expanding to preservation techniques, such as freezing, dehydrating, pickling and fermentation. By preserving seasonal produce for later use, these practices help reduce reliance on purchased food during the winter months, mitigating the impacts of rising food and energy costs while strengthening household food resilience.

"They're learning, they might be learning cooking on a budget. They might be learning cooking skills from scratch, batch cooking, just to get the motivation back, to get connected with other people. And at the same time, they cook enough food for people to come and buy, buy a lunch and have a shared meal in the garden." - Suzanne

The coffee cabin additionally is a method which offers work experience and volunteering opportunities for individuals who may face barriers to employment in traditional workplace settings, enabling them to develop practical skills. The cafe is open six days a week.



The inclusivity demonstrated in the coffee cabin is further applied to the accessibility to meals. Although there is always a set price for the meals, there are also love lunches. This is a pay it forward scheme where members can buy a lunch, leave a ticket on an allocated wall, for another visitor to take and receive a lunch, who may not be able to afford it by themselves. The ticket collection process requires no direct human interaction, thereby preserving anonymity, reducing stigma, and ensuring that individuals are not singled out when accessing a free meal.

"We have the tickets up on a board so people can just take a ticket so they don't have to sort of ask, you know, they know that they can just take one and that's fine. There are times when we notice somebody's not eating and then we'll just give them some food without them having to go through the process of asking for a love lunch as well." - Karen

The coffee cabin additionally is involved in wider projects that encompasses wider themes explored within the garden, demonstrating its commitment for impact to the local community. An example of this is the Reaching Communities project, which strives to increase support surrounding food resilience from the cost of living crisis. Its primary goal was running the community cafe on the weekend, as it would increase accessibility for those who work in the week and could not attend. The cafe would be run by the volunteers, and act as an opportunity to also enhance their skills.

Beyond the cafe, on Fridays, a different format is seen from the other days, and instead strives to increase community engagement and create a social gathering setting. This community-led approach is proven to be successful by it becoming the busiest day of the week. In summer, this typically is in the form of a BBQ in the garden.

Other programmes within the gardens have also incorporated food-related activities as a means of creating shared experiences, using food as a medium to encourage social interaction and strengthen connections between participants. The Men's Shed, has opened a Men's Breakfast club, which operates every Tuesday. Meals are cooked by staff and volunteers within the community kitchen. Attendance to these events more than doubled, increasing from 18 participants in 2024 to 44 participants in 2025.

Extensions of the garden activities cater to the growing needs of the community also, continuing with the theme of promoting food resilience, food sovereignty and a reduction of waste. Teaching volunteers to compost, and explaining how to nurture these plants through their whole life cycle is a prominent exercise. The main idea here is to provide participants with the necessary tools which they can harness in their own personal settings. They also note, that the knowledge is transferred to other community members, encouraging the wider dissemination of sustainable growing practices through households and social networks. In doing this, the garden contributes not only to individual skill development but also to the broader diffusion of knowledge that can strengthen local food resilience.

"They also can get ideas that they take home. And we know they do this, whether it's a home culture bed or straw bale growing or just types of food and

vegetables that we grow that they didn't know you could grow or didn't know how to grow. We know they do do that, whether they'll take it home and grow it in their allotments or their gardens." - *Suzanne*

Foraging within the garden is another method which is incorporated, adapting the philosophy that every part of a plant could be utilised, whether for culinary, medicinal, or practical purposes. It remains another practical skill which people can incorporate within their own spaces, or out in nature. Health advantages of these methods, is a higher nutritional content than what could be bought in the supermarket, especially for produce which is not organically grown or pesticide free.

"So we very much go down the health and well-being route of especially people taking we want them to take responsibility for their health and wellbeing and just rely on stuff that's in the supermarket and it's cheaper and it's more fun and it's just incredible. And they pass it on to other people as well. That's, that's the crucial thing." - *Suzanne*

The notion of unshopping is therefore explored here within these activities to combat food poverty. It encourages people to use as much as they can from their produce or plants, to prevent having to purchase as much.

Recent surveys by the APCG to the community illustrated the interest in these foraging topics, encouraging them to incorporate greater emphasis on foraging within its educational activities. It signifies how employing a bottom-up approach to decisions on community activities can significantly heighten both engagement and interest. Previous events have included making cleaning products, nettle tea, and hand cream from plants found in the garden.

Collaboration and engagement with the community

Collaboration is approached by APCG in a more formal way, by having a specific employee, Jackie, whose position is a connector. Primarily, these are through joint initiatives and clubs locally in Faversham, that present community ties and connections. There was also an expression to foster higher levels of future collaborations and relationships to local food producers within the future, to support the shortening of the supply chain.

Pertaining to food, collaborations come in the form of a local charity called Umbrella Centre, that provides a lot of produce. By forming a continuous connection to the charity, APCG is able to collect a higher amount of food than is normally available. Together, with the produce from the gardens and from these charities, helps to decide what will be made on that week.

"It's great in terms of collaborating with another organisation and also helping to reduce food waste." - *Karen*

Engagement with the community is viewed by the interviewees as successful, which is noted most predominantly through the mixing of different social groups interacting, in

settings where they would not typically. This suggests that the gardens function as a form of social infrastructure, creating an accessible and inclusive environment where individuals from different backgrounds can develop relationships through shared activities and experiences.

"One of the interesting things is because it's such a diverse community and I think there is so tensions within the wider community in Faversham, especially as there isn't within the country at the moment, there's people trying to cause division, trying to separate. And one of the interesting things really is that people from very different backgrounds coming together and they find things in common and they become friends and they support one another. And it's just a way of encouraging some social cohesion in a small scale." - Karen

The strength of APCG's impact on the local community is demonstrated by its year-round popularity, despite unfavourable weather conditions. Even though there are higher numbers within the summer for lunches, courses run steadily all year round. An example of the collective support and social value generated by the garden was the Christmas meal held outdoors last December. Despite heavy rainfall, shelter was provided within the garden, enabling the event to continue and attracting 60 attendees, including elderly residents. This demonstrates the strength of social connections fostered through the space, with individuals continuing to engage despite challenging conditions.

Target group

The question of the target group at APCG is a complex one because, as it could be seen in the governance structure, the categories of beneficiaries, volunteers, members, and participants often overlap. One of the garden's key principles is that everyone who takes part is referred to as a volunteer. This is important because the garden deliberately aims to distance itself from the structure of a traditional mental health institution. Instead, everyone participates because they choose to, regardless of the reason they first came to the garden.

"Everyone's called a volunteer because everyone who comes here comes here voluntarily. Nobody's made to come here." – Suzanne

Suzanne explained that while staff are a clearly distinct group, the boundaries between volunteers, beneficiaries, members, course participants, and even people delivering activities are much less defined. This reflects the nature of the community garden itself. APCG relies heavily on volunteers, but volunteering is equally beneficial for those taking part, making it a genuinely two-way relationship.

As a membership-based charity, everyone is encouraged to become a member by paying the £20 annual membership fee. Some members support the garden financially without regularly attending activities, while others initially join for a single course and later become volunteers. People are also free to move between different roles and activities depending on what they enjoy or what they need at a particular time. For



example, someone might first volunteer in the Coffee Cabin to develop customer service and barista skills before deciding they would rather spend time gardening. As Suzanne explained, volunteers are never viewed as unpaid staff but as people with their own motivations, interests, and goals.

The people who come to APCG are highly diverse. As discussed above, the garden was originally established to support people experiencing mental illness, but over time its focus broadened to promoting mental wellbeing more generally. Participants may self-refer or be referred by GPs, social workers, or partner organisations, in 2025 alone, 17 organisations referred people to the garden. Beneficiaries include people experiencing mental health challenges, neurodivergent people, people with learning disabilities, retired people, and those struggling with loneliness or social isolation.

Karen explained that many participants come not because they need formal mental health support, but because they have lost important social connections through retirement, bereavement, or changes in family life. Others simply lack the motivation to cook or look after themselves when living alone. The garden therefore provides not only practical activities but also a sense of routine, purpose, and community.

"We also have people who are just retired who want to help and give back to the community... It's another way of reducing social isolation as well." – Karen

One group that APCG pays particular attention to is men. Staff recognised that men are often less likely to seek support because of stigma around discussing mental health. This led to the creation of the Men's Shed and the Men's Breakfast Club, which provide dedicated spaces where men can meet, learn practical skills, and build friendships in an informal environment before joining other activities if they wish.

"So it was sort of pinpointed as an area of need because, you know, women find it easier, I think, to come to our sort of organisations. I think it's quite a challenge for a man to walk through the door and say that they need a bit of support... that's where that's coming from." – Karen

Alongside mental health and wellbeing, socio-economic disadvantage has become an increasingly important focus. As many of the garden's participants have been affected by the cost-of-living crisis, food has become another important way of improving both wellbeing and resilience. Through gardening courses, the Community Kitchen, and the Mindful Kitchen programme, participants learn previously mentioned practical skills such as growing food, cooking from scratch, batch cooking, and preparing healthy meals on a limited budget. Karen also pointed out that some participants face additional challenges, such as not having proper cooking facilities or enough storage space at home, meaning that support needs to be adapted to each person's situation.

To make sure that financial hardship does not prevent people from accessing healthy meals, APCG also runs the Love Lunches pay-it-forward scheme.

Finally, APCG also supports people who are unemployed or otherwise disconnected from the labour market. Volunteering at the garden gives many participants a sense of

purpose and belonging, and becoming recognised as ‘someone who works in the garden’ can be an important source of pride and confidence.

“We try and get everyone to be a member because we're a member-based charity and they pay £20 a year and we just say that goes towards our public liability insurance and people love being a member, especially maybe long-term unemployed people. And when they go out into the town, people might say to them, oh, you work in the garden, don't you? And they love it's just a really purposeful thing for them to come and do and help out.” – *Suzanne*

These groups are far from separate categories, as often these issues can be intersectional. Many participants experience several challenges at the same time, such as poor mental health, loneliness, unemployment, or financial hardship. APCG's flexible model allows people to move between being beneficiaries, volunteers, members, and contributors to the community, reflecting the garden's philosophy that everyone has something to gain and something to offer.

Values and Impact - Urban Food Value Framework (UFVF)

Categories	Values	Freq	Indicators	Interpretation
Social values	Autonomy, self-help, self-responsibility	2	63-92% improvement in wellbeing/mood, confidence, connection to others and self-care	value tied to identity
	Community and social relations	2	Quantitative indicators (2025 - 154 people completing a short course; 63-92% improvement in wellbeing/mood, confidence, connection to others and self-care; qualitative responses in survey feedback on wellbeing) Qualitative indicators - case study reports for how community is interpreted among users of the garden.	value tied to identity
	Equality	1	Demographic indicators illustrate equal access to the space and the classes, (in 2025, 22% identified as having mental health issues, 4.5% as neurodiverse, 28% as being disabled, 15% as long-term unemployed, and 29% retired).	value tied to identity
	Trust	1	No formal indicators, seen in relations among visitors and between visitors and staff.	value tied to identity
	Social values (broadly)	1	63-92% improvement in wellbeing/mood, confidence, connection to others and self-care; qualitative responses in survey feedback on wellbeing	value in practice
Spatial values	Local food sourcing	2	No formal indicators	value in practise; value as aspiration
	Supporting local agriculture	1	No formal indicators	value in practise; value as aspiration
	Valuing specific place and environment	1	No formal indicators	value in practise



Ecological values	Environmentally friendly food production	2	100% peat-free (no insecticides/herbicides used in the garden for food production)	value in practise
	Health	1	for mental health, 63% of participants' mental health was significantly improved after participation in a 6-week course; case studies help to measure the impact the garden and its activities have on mental health. physical health, qualitative stories of improvements in nutritious cooking.	value tied to identity
	Quality Food	2	informal qualitative indicators	value in practise
	Relations to nature	1	No formal indicators	value tied to identity
	Ecological, environmental, sustainability values (broadly)	2	100% peat-free (no insecticides/herbicides used); 200+ species recorded in the garden, 11 trail-cams deployed to monitor species diversity.	value in practise
Economic values	Economic fairness	2	No formal indicators	value in practise
	Economic support for local economies	1	No formal indicators	value as aspiration
	Food security	2	193% increase in food provision from 2023-2025 from Love Lunches; extending opening hours of community cafe from 5 days to 6.	value in practise; value as aspiration
	(More) even distribution of economic value	1	No formal indicators	value as aspiration
	Economic values (broadly)	1	No formal indicators	value in practise

42. Table: APCG through the lens of the UVFV

Social embeddedness

Social impact is considered foundational for APCG, due to their central mission to improve and aid those with mental health conditions. Within the Mindful Kitchen, they combine practical food education with community building by developing cooking skills, nutrition knowledge and confidence, and encouraging participants to take greater responsibility for their own wellbeing. This reflects their commitment to autonomy, self-help and self-responsibility. The kitchen provides opportunities for participants to develop practical food skills, understand nutrition, prepare meals independently and take responsibility for their own wellbeing.

Alongside these educational activities, shared meals and volunteering create opportunities for people of different ages and backgrounds to meet, strengthening community and social relations. The interview also highlighted the importance of trust, as the welcoming atmosphere and emphasis on confidentiality enable participants to share personal experiences and build supportive relationships. As a result, the kitchen functions as both a learning environment and an inclusive community space.



Spatial embeddedness

APCG is strongly embedded within its local environment, acting as both a productive growing space and a shared social place where participants develop stronger connections with nature and with one another. Activities such as gardening, permaculture and foraging promote local food sourcing and encourage participants to value local ecosystems while learning about alternative gardening and food growth methods. Although not as many links are currently fostered with local producers at this moment, participants highlighted how they hope to incorporate this more in the future, speaking of it as an aspiration.

The organisation also seeks to strengthen local food networks by supporting local businesses, collaborating with community experts and increasing awareness of seasonal and locally produced food. Through these activities, the kitchen fosters a sense of stewardship towards the shared garden while reinforcing the importance of place-based food practices, and of valuing specific place and environment. The garden therefore functions not only as a site of food production but also as a community asset that supports environmental awareness, local identity and social resilience.

Ecological embeddedness

Environmental sustainability is embedded throughout the activities of the community kitchen. The organisation promotes environmentally friendly food production by growing food, composting organic waste and making productive use of surplus ingredients, reinforcing a circular approach to resource management, reducing waste wherever possible and returning organic material to the garden through composting. Learning opportunities emerge from practical challenges, such as finding productive uses for donated food that might otherwise be discarded, reinforcing principles of resource efficiency and circularity.

Health education is another priority, with participants encouraged to prepare fresh meals and reduce their reliance on processed foods, supporting the value of health. In addition, sustainability initiatives such as permaculture, foraging and exploring underutilised foods demonstrate a long-term commitment to ecological and environmental sustainability, while increasing participants' environmental awareness.

Nature is additionally interpreted as bringing community awareness to the world surrounding them, as well as the impact it can have on people. It is perceived as having a positive benefit to wellbeing and encouraging curiosity.

Economic embeddedness

Abbey Garden operates a pay-it-forward model that allows individuals to contribute towards meals for others while ensuring that everyone receives the same food regardless of their financial circumstances. This approach reduces stigma and reinforces the principle that access to nutritious meals should not depend on income.

Food security, then, is further strengthened through education and community resource sharing. By teaching cooking skills, promoting food growing, encouraging the

use of surplus food and introducing participants to foraging and other local food resources, the organisation seeks to increase people's long-term resilience and capacity to meet their own food needs. Success is monitored through participant questionnaires, feedback and qualitative case studies that capture changes in food knowledge, confidence and behaviour.

Indicators

Indicators of integration of values and successful representation are approached by APCG in a predominantly informal, qualitative setting. Usually, it pertains to listening to verbal cues in social settings. What is especially prominent is the change in how people speak about others and who they interact with, bringing together individuals who would not normally meet under other circumstances. Broadly speaking, societal impact can therefore be assessed in this way, accounting for equality, inclusivity, fairness and social ties for example.

"People talk about equality all the time, how they feel this place is really inclusive...They're amazed at the people they've met here and have conversations with or have had built relationships with that they never would have ordinarily met." - Suzanne

Impact can additionally be explored through changes in lifestyle patterns through the learned experiences in the activities and courses. This is especially prominent with the Mindful Kitchen course, where impact is extended to influencing the eating behaviours of participants and their families. One example provided, relating to a couple and their daughter, spoke about prior to the course, food preparation had largely been the responsibility of the husband. However, through participating together, they began to discuss and plan meals collaboratively. After making healthier options more accessible within their home, their daughter moved away from relying on convenience snacks towards preparing and taking packed lunches. This highlights how changes to the food environment within the home can shape everyday food choices and encourage healthier practices across generations.

Further, more formal ways for assessing impact include using surveys and case study interviews, mixing both quantitative and qualitative methodologies. Social success is measured through growth of the number of attendees to the workshops and activities offered, additionally by asking how wellbeing has improved after completing activities in the garden. Surveys at the beginning and end of the Mindful Kitchen course, helps to communicate how much has been learnt, and modify the course throughout for optimal relevance. To prove the impact of the gardens to potential funding bodies, ecological measurements have been collected, such as recording specific numbers of species diversity. Further collaborations with universities help to measure specific pre-defined indicators, to assess the impact also.

However, due to sensitivity of some information, particularly demographic questions, participants expressed how it was sometimes difficult to outwardly ask visitors to the gardens these questions in traditional assessments methods. Instead, informal

conversations and the development of trust were considered the most effective ways of understanding the garden's value and assessing its wider outcomes.

Specific indicators can be found in the table attached for the UFVF.

Future

APCG is looking at a stable future and a transition toward greater financial independence. Having recently secured a 10-year lease, the garden can now plan longitudinal impact studies to better understand its effects on the community. To support this, the garden aims to move away from having to rely heavily on grants by diversifying its income streams. As Suzanne explained, they for example aim to increase the sale of garden produce, jams, and unique perennial vegetables, as mentioned before.

Regarding community impact and food resilience, the garden is exploring new models to deepen member support, such as the creation of "shared supper clubs" to encourage collaboration among members who live alone in smaller spaces that are not necessarily set up for cooking.

"And we started to talk about whether we can do some kind of a club or some kind of a shared supper or to encourage people to collaborate together to maybe share a meal and cook for one another." - Karen

There is also a planned shift toward providing 100% seasonally produced meals using garden-grown food and foraged plants, part of the broader "unshopping" initiative designed to reduce reliance on supermarkets, as previously explained. While the garden mostly relies on its own produce at the moment, the staff aims to develop better relationships with local food producers in the future.

"I feel like, you know, we've been focusing on growing our own and then using food surplus. But I think that could be the next step is to try and make more contact with other local producers." - Karen

The garden's future also includes a stronger focus on environmental education and inclusive outreach. The APCG plans to expand its role as a unique space for sustainability education, offering workshops on topics like composting and recycling to the wider public. There is also a recognised opportunity to engage more deeply with minority groups, including ethnic minorities and the LGBTQ+ community, to reflect the changing demographics of Faversham. In terms of the garden's operation, APCG intends to improve its evidence capture for visitors by potentially using digital tools like QR codes to track how many people take sustainable gardening ideas back to their own homes or allotments.

While the garden is functioning great, increased demand for services also poses risks. Firstly, APCG wants to prevent members from developing over-reliance on the garden. For this reason, a once-weekly attendance model is being considered to empower individuals to utilise other community signposting and pathways. Moreover, the 2026

report describes a fear of overstretching its small staff. Therefore, developing a future human resource strategy is a key priority to ensure the organisation does not rely too heavily on a few key individuals.

NEB Compass

Beautiful	Sustainable	Together
<i>Ambition III: to integrate</i>	<i>Ambition III: To close the loop</i>	<i>Ambition III: to transform</i>
The APCG has been a longstanding institution for over 30 years, fulfilling an important community need by providing a space for people to gather and build social connections. Originally established as a National Health Service project, the garden became a charity when NHS support ended, enabling it to continue serving and responding to local needs [III]. Activities such as craft sessions, Men's Shed, strumming groups, Qi Gong, Tai Chi, gardening, and cooking bring together a diverse community in an inclusive environment where everyone is welcome [I]. Many of these activities are led by community members who contribute their own skills and expertise, helping to expand the range of opportunities available [II]. The demand for the garden has been so strong that, although it was initially closed on Sundays, volunteers stepped forward to support extended opening hours, ensuring continued access for local residents.	APCG is an accredited permaculture training site educating and promoting regenerative gardening. This includes practices such as rainwater collection and reuse, composting, using peat-free soil, avoiding all insecticides, and herbicides [I]. A recent 2025 initiative is the Wildlife survey and biodiversity analysis that revealed over 200 species existing within the garden. The analysis allowed APCG to gain a baseline understanding to create a future plan to support and improve the biodiversity within the garden. This includes placing bird feeding stations throughout the garden where trail-cams detected secretive birds [III]. For the community kitchen, they attempt to use fresh produce from the garden, while any food they cannot source comes from the Umbrella Centre, a nearby community cafe also aiming to improve mental health and loneliness. This partnership attempts to ensure no food waste and reduce food miles [II].	The APCG is a therapeutic community space open to the entire community of Faversham. The garden breaks down the stigma of mental health providing a space for learning, gathering, and inclusion. Many beneficiaries struggling with mental or physical health, isolation, and socio-economic disadvantages are referred [I]. Nevertheless, since the garden is open to the entire community people stemming from all different backgrounds come to attend activities and events such as cooking lessons, gardening, foraging, crafting, and meals [II]. Their implemented programs are fully targeted towards the needs of the community; an excellent example is their Men's Shed. The Shed exists to support Men's mental health giving them a space to share skills and knowledge. The initiative has been so beneficial it led to the creation of the Men's Breakfast Club in 2024 furthering fulfilling a community niche [III].
Participatory	Multi-Level	Transdisciplinary
<i>Ambition II: to co-develop</i>	<i>Ambition II: to work across levels</i>	<i>Ambition II: to be interdisciplinary</i>
APCG exemplifies a co-development approach by actively involving community members, volunteers, and partner organisations in shaping	APCG has developed an extensive community network comprising referral organisations, educational providers, and local groups. While some volunteers join	APCG originated as a therapeutic project aimed at reducing the stigma surrounding mental health. Its target beneficiaries include individuals experiencing mental health



its activities and priorities. The garden encourages participants to share ideas, identify emerging needs, and contribute to the design of activities. It hosts three six-week courses, including Gardening for the Mind, Hands on Gardening, and Mindful Kitchen, which are designed to build confidence, develop practical skills, and support wellbeing [I]. Alongside these structured programmes, many activities are initiated and led by local residents who wish to create opportunities for social connection and inclusion. Community members can propose activities to the garden, which then provides the space and support needed to bring them to life. As a result, a diverse range of community-led activities including yoga, Qi Gong, Tai Chi, poetry, resistance training (Kung Fu Pandas), strumming, foraging, and creative craft have been implemented [II].	independently, others are referred through organisations such as the National Health Service of Kent, RedZebra, Kent Enablement Service, and Laurel House, connecting individuals in need with the garden's activities and support network [I]. Beyond the local community, APCG secured over £270,000 through the National Lottery Community Fund's Reaching Communities grant (2023–2026) [II]. This funding has enabled the organisation to expand its reach, strengthen and diversify its activities, introduce new opportunities in response to members' interests, and enhance its long-term sustainability and resilience. As a result, APCG has been able to build on successful projects while increasing its overall capacity and community impact.	challenges, disabilities, long-term unemployment, and social isolation [I]. Through educational programmes such as Hands-on Gardening and Mindful Kitchen, participants develop practical skills, build confidence, and foster greater self-autonomy. The garden also works to address food insecurity through initiatives such as Love Lunches, which allows community members to anonymously pay for a meal for someone in need. In doing so, APCG creates opportunities for people from different social and economic backgrounds to interact, breaking down barriers and fostering mutual understanding [II]. This collaborative approach enables APCG to develop inclusive solutions that strengthen social connections and generate positive benefits for both individuals and the wider community.
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43. Table: APCG through the lens of the NEB Compass

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