



Innovation in Urban Agriculture

Catalogue of Current Innovative
Urban Agricultural Systems



FOODCITYBOOST.EU

30+ Urban
Agriculture
Initiatives

2025



Funded by
the European Union

Catalogue of Current Innovative Urban Agricultural Systems selected for their promising impacts in cities

Authors

Maylis Leblanc¹, Charlotte Liborio-Cornet², Guillaume Morel-Chevillet², M.Haïssam Jijakli¹

¹ Centre de Recherches en Agriculture Urbaine, University of Liège, Belgium



² ASTREDHOR, Marseille, France



Date

31 July 2025

Acknowledgement



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



30 +
Innovation
in Urban
Agriculture

CONTENTS

Welcome	06
FoodCityBoost	08
Methodology	10
Innovation in Urban Agriculture	16
Agronomic Innovations	18
Economic Innovations	34
Environmental Innovations	50
Social Innovations	66
Territorial Innovations	82
References	99
Publishing Notes	100

WELCOME

Growing populations in urban areas and increasing pressure on food systems and urban life quality present significant challenges for European cities today. By producing food locally, cities are re-establishing connections with the food system. While cultivating land in urban and peri-urban areas is not a new practice, Urban Agriculture is now gaining more and more attention.

Urban Agriculture is defined as the development of practices in urban and peri-urban areas involving the growth, processing, and distribution of a variety of food and non-food products for urban areas, alongside associated services. It encompasses a variety of agricultural practices that serve a range of purposes, from social objectives to economic profitability and environmental concerns. This diversity can be summarized into 6 different types, which demonstrate its adaptability and complexity:

 Urban Farm Commercial farm in urban and peri urban areas	 Community Park Public edible landscape combining food production and social services	 DIY Garden Family garden for self-consumption
 Zero Acreage Farm Off-ground production that maximises space efficiency and integrates with buildings	 Social Farm Professional farm focusing on providing health and social care	 Community Garden Common space to develop sense of community

EFUA, 2022

Urban Agriculture is continually innovating, modifying its forms to adapt to local territories and evolve alongside practices and demands. Supporting its development requires an in-depth understanding of the current situation in this field across Europe.

“An innovation is a new or improved product or process (or a combination of the two) that differs significantly from the previous products or processes of a unit and has been made available to potential users (product) or brought into use by the unit (process).”

Oslo Manual 2018, OECD

Objective

Although the concept of 'innovation' is widely used in agriculture across the globe, Urban Agriculture stands out as a field where innovation is grounded in practice and responds to real urban needs.

This idea lies at the heart of this catalogue, which showcases over 30 innovative Urban Agriculture initiatives from across Europe. These initiatives demonstrate how cities are already cultivating change locally, creatively and effectively. The catalogue provides a comprehensive overview of these projects, which were selected for their originality, relevance, maturity, and potential to address today's urban challenges, demonstrated by several years of successful operation. The rich diversity of urban farming systems is presented, along with their potential to transform cities into more sustainable, inclusive, and resilient places.

Whether you are a researcher, practitioner, policymaker or citizen interested in starting, improving or learning about Urban Agriculture initiative, this catalogue is designed to inspire, inform and encourage action.

We hope you will enjoy exploring these projects, and that they will inspire you to develop innovative food systems in cities across Europe!

The authors

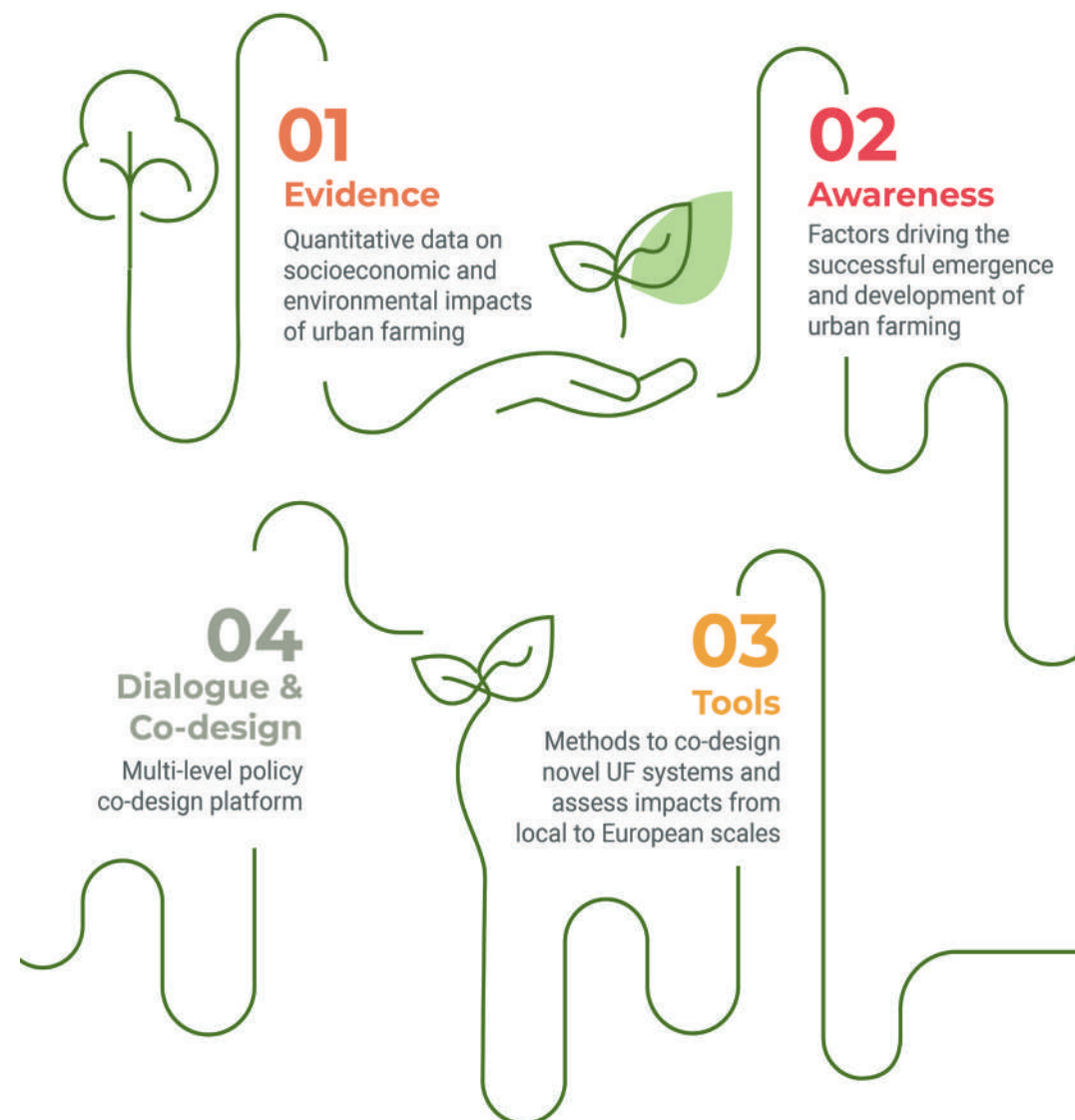
Maylis Leblanc, Charlotte Liborio-Cornet, Guillaume Morel-Chevillet, M. Haïssam Jijakli



FOODCITYBOOST

FOODCITYBOOST is a four-year European research project funded by the Horizon Europe program. Bringing together twenty partners from nine countries, it operates through six Living Labs across Europe, in the cities of Almere, Wrocław, Sofia, Riga, Valladolid and the Flanders-Brussels region. The project aims to evaluate the environmental, social and economic effects of Urban Agriculture, and to examine how policies could promote sustainable development more effectively by linking urban, peri-urban and rural areas.

FOODCITYBOOST is developing tools and indicators to help policymakers, practitioners and citizens to better understand the multiple functions and benefits of urban farming. By collecting and analysing data from a variety of Urban Agriculture systems, the project provides evidence-based guidance for designing innovative food systems adapted to future cities. It follows the following main stages:



Co-design of innovative urban agricultural systems

Led by University of Liège (Centre de Recherche en Agriculture Urbaine) and ASTREDHOR, Work Package 6 (WP6) of the FOODCITYBOOST project involves the design of innovative urban farming systems that address current needs and anticipate future challenges. Drawing on current practices and stakeholder needs, WP6 explores how innovation can support the development of resilient and sustainable Urban Agriculture in a variety of settings.



The inherently multifunctional and context-specific nature of Urban Agriculture requires a cross-disciplinary approach to fully capture its complexity. WP6 operates at the intersection of the project's various fields of expertise, placing innovation at the heart of its strategy. The aim is to provide a holistic vision for the future of urban farming that integrates social, ecological, and economic dimensions.

METHODOLOGY

What Do We Mean by Innovation?

Innovation refers to the development, introduction, and successful adoption of new or significantly improved ideas, methods, products, or services that bring added value and address real needs (OECD, 2018). In agriculture, innovation goes beyond technical improvements - it can also relate to economic models, marketing strategies, social practices, organisational structures, or governance approaches. Whether simple or complex, effective innovation leads to positive change and can be shared and scaled within society (Opitz et al., 2016).

Urban Agriculture (UA) is often described as innovative, particularly when compared to conventional agricultural systems (RUAF, 2014). While its historical roots in cities are well established, it is increasingly recognized today for its ability to respond to modern urban challenges with creative, adaptive, and community-driven approaches (Sanyé-Mengual et al., 2019).

In the context of FOODCITYBOOST, we define innovative urban agricultural practices as:



Innovation Criteria

- Already operational and established;
- Addressing a concrete need in their local context;
- Generating a positive environmental, social, and/or economic impact;
- Demonstrating sustainability in line with the [Doughnut Economics model](#), balancing planetary boundaries and social well-being;
- Introducing novelty - whether through new techniques, fresh combinations of existing practices, or by rethinking traditional approaches - across all areas of innovation to address today's challenges.

Five Key Dimensions of Innovation in UA

To gain a deeper understanding of how innovation evolves in urban farming, five primary innovation categories have been identified. These dimensions help us to classify and analyze the various ways in which Urban Agriculture projects generate new value, whether through technology, organization, environmental practices, social engagement, or interaction with urban space.



These dimensions are linked to a number of challenges that need to be addressed to strengthen and sustain the development of urban agriculture.



Agronomic

Maximize available land
Enhance soil issues
Optimize production time
Increase product diversity & quality



Economic

Ensure economic viability
Ensure decent remuneration
Facilitate access to financing & funding
Make UA products accessible



Environmental

Prevent soil pollution
Improve maintenance practices
Ensure water accessibility
Strengthen sustainable resources management



Social

Guarantee food security
Promote positive health impacts
Develop & share knowledge
Reconnecting people



Territorial

Strengthen supportive policy frameworks
Facilitate access to land
Develop outlet & distribution networks
Ensure food security

METHODOLOGY

Research and Catalogue Development Process

The creation of this catalogue followed a structured research and selection process to ensure the identification and representation of truly innovative Urban Agriculture systems across Europe.

01

Exploration

A broad literature review, combined with stakeholder insights and the analysis of more than 100 cases, was used to capture the diversity of innovative practices in Urban Agriculture. This included both a general review to establish the state of the art and a targeted review to understand current challenges and the role of innovation in addressing them. These findings were complemented by a global survey of UA stakeholders across Europe and interviews with international experts, providing a comprehensive overview of innovative practices.

02

Selection

Through defined criteria and expert review, we selected 30 of the most impactful and innovative Urban Agriculture initiatives. Each of the 100+ cases was assessed against indicators such as novelty, implementation, responsiveness to needs, impact, and sustainability. With expert input (page 101), six innovations were chosen per category, complemented by four atypical or international examples to broaden diversity.

03

Insights

Each of the 30 cases was documented through direct contact with project leaders, combining interviews and tailored questionnaires to collect detailed information on the innovation. Specific lists of indicators and data points were designed to ensure consistent and precise descriptions across all initiatives. Project leaders were actively involved in shaping their responses, which were then integrated into the catalogue.

Inside Each Initiative

This catalogue showcases 30 innovative Urban Agriculture initiatives from across Europe. Each initiative is thoroughly documented to highlight its uniqueness, its implementation and its impact. By exploring these case studies, you will discover a variety of mature practices, challenges addressed and inspiring solutions that could be adapted or replicated in different contexts.

The following pages provide an in-depth look at each initiative, supported by first-hand exchanges and detailed data shared by the projects themselves. Each Urban Agriculture initiative is presented on a two-page spread: the left page offers a clear overview, while the right page explores the specific details of how the innovation was implemented.

On the **left page**, you will find key information to help you quickly understand the project's context and identity:

	Location		Urban Agriculture Type
	Date of creation		Total area
	Legal status		Main Crop

To give you deeper insight into how each project works, you will also find background information on:

Goals & History

This section explains the origins of the farm, including who founded it and why, as well as how it has grown and changed over time. It also outlines the project's main goals and objectives.

Other Activities

This section outlines the other activities that the project runs, how they work in practice and the results they deliver for the farm and its surroundings.

Main Value Proposition

This part includes information on what the farm produces, how much it produces, where its crops are grown, the level of technical expertise required and how accessible the farm is to people and the local community.

Business Model & Governance

This section provides an overview of how the farm is managed and staffed, its legal status, its income generation, and its business model, including product or service sales.

METHODOLOGY

Innovation Overview

On the **right page** of each initiative, you will find a closer look at the main innovation. This section explains how it was implemented, what makes it unique, and the practical steps involved. It also includes an evaluation of its strengths, challenges, and impact-helping you to understand both what was done and how it was achieved.

Goals & Implementation

This section explains how the innovation emerged, why it was developed, how it was set up, and what goals, challenges, and impacts it involves.

Outcomes

This section demonstrates how the innovation operates on a daily basis, who is involved, the benefits it brings to the project and the results it has achieved.

Main Issues & Next Steps

This section highlights current limits and explores how the innovation could be improved, adapted, or scaled to address other challenges.

Who can set it up

This section shows who can replicate the innovation: citizens, organization, farmers, researchers, businesses, or public authorities.

Within each innovation page, the section **Innovation Details** provides practical insights related to the specific practice implemented. This visual summary was created based on a self-assessment completed by each initiative, following discussions with the project leaders. It includes key aspects such as:

Set-up Cost

An estimate of the cost of implementing the activities, ranging from low to high investment

Financial Support

How the project was funded: self-financing, public or private funding, or a mix

Complexity

How easy or difficult it was to put in place, from very simple to highly complex

Timeline

How long it took for the innovation to be fully operational, from a few months to several years

Maintenance

The level of autonomy of the practice, from requiring regular manual work to being nearly self-sufficient

Replicability

Whether the innovation can be easily adapted elsewhere, from highly replicable to not replicable at all

Innovation Assessment

One of the key objectives of the work was to evaluate the impact of each innovation, in relation to the different challenges it aims to address. As these challenges differ according to the innovation category, as presented above, we developed an assessment grid for each category. To do so, we first conducted a comprehensive literature review to identify existing evaluation frameworks and methods applied to Urban Agriculture projects. This helped us understand the diversity of approaches already in use and informed the shape of our own evaluation criteria. Based on this preliminary work, each innovation was assessed according to the specific assessment criteria of its innovation category, ensuring a relevant and contextualized evaluation.



The diagram tool used reflects a qualitative assessment of the key insights gained from discussions and exchanges with the initiatives. It offers a clear and accessible way to evaluate the impact of each innovation.

Agronomic

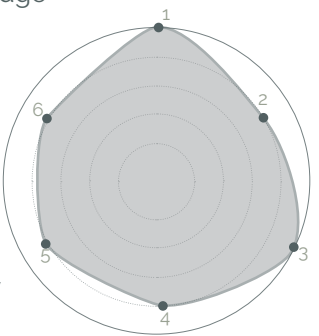
1. Value of space
2. Soil or substrate quality and fertility
3. Agricultural management practices quality and efficiency
4. Production quality
5. Resources circularity
6. Production of agronomic knowledge

Environmental

1. System circularity & sustainability
2. Use of local resources
3. Biodiversity, crops and ecosystem diversity
4. Energy consumption
5. Water management
6. Waste management

Economic

1. Stable and autonomous income
2. Income diversification
3. Production quality & value
4. Marketing & sales techniques efficiency
5. Reduced costs
6. Local economic development



Territorial

1. Local development
2. Local acceptability
3. Territorial anchorage & land management
4. Heritage preservation
5. Access to quality local food
6. Multi-stakeholders approaches

Social

1. Education & training
2. Inclusivity
3. Social cohesion
4. Fair organisation & governance
5. Access to quality local food
6. Improved quality of life

GLOBAL OVERVIEW



AGRONOMIC INNOVATIONS

- **Metabolic Greenhouse** Comprehensive Aquaponic Platform
- **La Ferme du Chant des Cailles** Multifunctional Circular Agriculture
- **Opéra 4 Saisons** Rooftop-Grown Hops
- **Tower Farm** Medicinal & Exotic Indoor Farming
- **Swegreen** Smart Farming Environment
- **PermaFungi** Coffee Fungi Materials
- *Prototypes Examples*



ECONOMIC INNOVATIONS

- **Tiers Paysage** Part-Time Farming Model
- **Cycle Fleurs** Self-Harvest Floral Farming
- **Les Pousses Poussent** Urban Grower Hybrid
- **La Milpa** Agri-Design Dual Model
- **ONZE** Under-Glass Garden
- **Refresh Brussels** Circular Rooftop Agri-Business
- *Atypical & International Examples*



ENVIRONMENTAL INNOVATIONS

- **Rotterzwam** Circular Urban Waste
- **Urban Farm Ixelles** Circular Seedling System
- **Dakakker** Smart Water Roof
- **Stadtacker** Solar Irrigation System
- **Our Yard at Clitterhouse** Community Compost
- **Symbiose** Circular Heat Exchange
- *Atypical & International Examples*



SOCIAL INNOVATIONS

- **Graines de Paysans** AgriTest & Support Program
- **Le Paysan Urbain** Inclusive Agri-Training
- **Moestuin School** Urban Growers Academy
- **Ninewells Community Garden** Green Hospital Grounds
- **Interkulturelle Garten** Intercultural Healing Garden
- **Horts al Terrat** Inclusive Rooftops
- *Atypical & International Examples*



TERRITORIAL INNOVATIONS

- **Allmende Kontor** Community Garden Network
- **Wroclaw City Farm** City Farm Alliance
- **Groot Eiland** Inclusive Local Food Ecosystem
- **Doulon Gohards** AgriUrban Synergy
- **Quartiers Fertiles** UA Financing Program
- **Cascina Biblioteca** Territories of Inclusion
- *International Examples*

AGRONOMIC INNOVATIONS —





METABOLIC GREENHOUSE

GENERAL PRESENTATION



Amsterdam,
Netherlands



Urban Farm



2014



80 m²



Private institute



Leafy greens, herbs

CONTACT

www.metabolic.nl
andrei@metabolic.nl



©Andrei R. Beca

Goals & History

The Metabolic Institute, a non-profit research organization, joined De Ceudel, a cleantech playground on a former shipyard with heavily polluted soil, to explore sustainable living on polluted land, focusing on food production as a key challenge. This led to the creation of an evolving aquaponics system designed to test water-efficient, soilless growing methods. The aim is to develop replicable solutions and share knowledge to support sustainable urban farming.

Main Value Proposition

The system produces leafy greens, microgreens, edible flowers, hot peppers and fish off-ground using low-tech setups inspired by professional standards. Despite simple tools, it delivers good production levels and demonstrates that accessible systems can match high-tech performance.

Other Activities

In addition to research, the Greenhouse hosts guided tours, workshops, and training sessions to share aquaponics and water-saving techniques. It also supplies fresh produce to Café De Ceudel and is a pilot site of the European FoodE project.

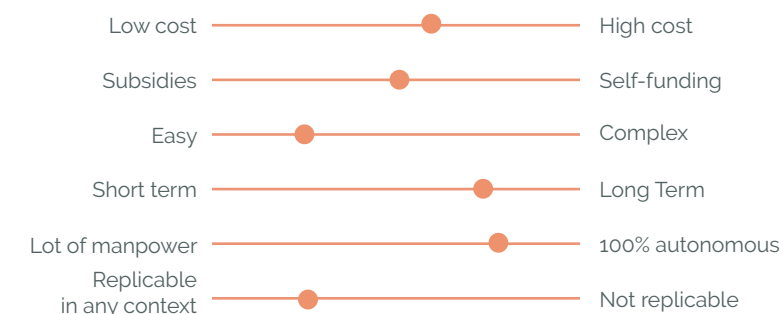
Business Model & Governance

The Greenhouse is managed by the Metabolic Institute. The business model relies on income from workshops, tours, and small-scale produce sales, which cover basic operating and maintenance costs, including stipends for three interns over the past years. The project has created one full-time job and three intern positions. Staff costs are self-funded by the Institute. While primarily supported by Metabolic and the De Ceudel community, the project has also received two grants: one from the Municipality of Amsterdam and a larger one through the FoodE project.

Outcomes

The project demonstrates that low-tech systems are capable of delivering effective and reliable results that meet professional requirements. Pest control relies on Integrated Pest Management with e.g. beneficial insects and neem oil. Monitoring faced tech challenges, but low-cost data loggers offered viable solutions. Smart greenhouse design ensures year-round performance, while fish feed uses insect-based proteins and black soldier fly trials.

Innovation Details



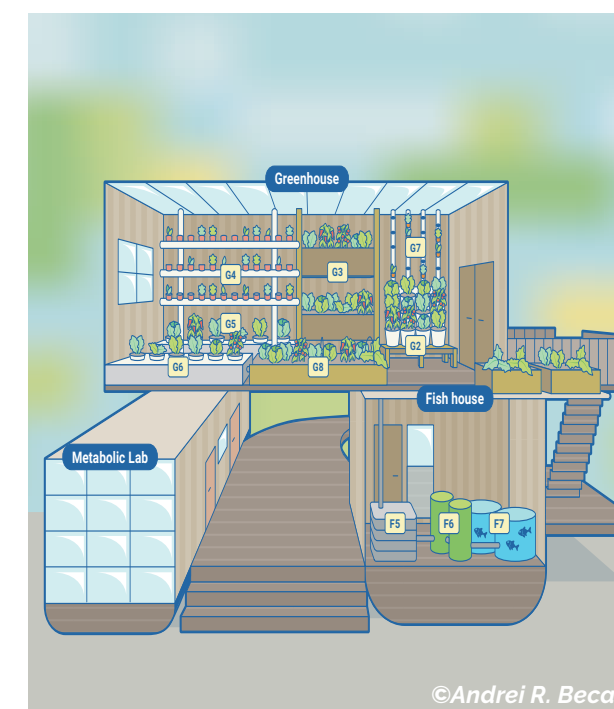
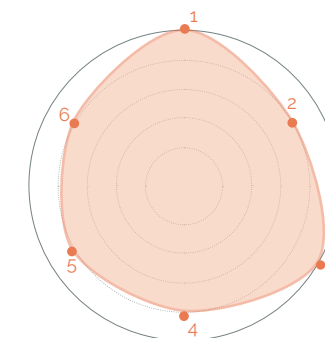
COMPREHENSIVE AQUAPONIC PLATFORM

Goals & Implementation

The Metabolic Greenhouse key features include energy-efficient irrigation, water-retaining plant beds, and a smart backup to protect fish. Built with accessible materials, the system encourages low-cost replication. Developed for under €30,000-including trials and iterations-the project was initially funded by the Metabolic Institute with municipal support and, in 2020, an European Union (EU) grant through the FoodE project to upgrade the systems. Now part of the FoodE's citizen-driven pilot project, it continues to operate with Metabolic's own funding.

Impact Assessment

1. Value of space
2. Soil or substrate quality and fertility
3. Agricultural management practices quality and efficiency
4. Production quality
5. Resources circularity
6. Production of agronomic knowledge



©Andrei R. Beca



©Andrei R. Beca

Main Issues & Next steps

The main challenge was ensuring stable software and connectivity for the monitoring system. Upcoming steps include improving sensor reliability, expanding the use of accessible data loggers, and continuing trials with sustainable fish feed alternatives.

Who can set it up



Farmer



Researcher



Association



Private company



LA FERME DU CHANT DES CAILLES

GENERAL PRESENTATION



Brussels, Belgium



Urban Farm



2012



9 ha



NGO/Association



Vegetables & Fruits

CONTACT

www.chantdescailles.be/
antoine@chantdescailles.be



©La ferme du chant des cailles asbl

Goals & History

The Chant des Cailles began in 2012 as a citizen-led dream to transform an abandoned field into a community-supported Urban Agriculture project. With support from real estate company Le Logis and local residents, it grew into a shared space combining market gardening, sheep farming, herbalism, and collective governance-anchored in agroecology, collaboration, and local food resilience.

Main Value Proposition

The farm offers a diverse, low-tech and open-ground production combining vegetables, herbs, fruits, and sheep dairy. With minimal mechanisation, the farm produces 70 tonnes of vegetables and herbs, 45,000 dairy products (cheese, yogurt,...), 7,000 icecream bowls, 500 kg of lambmeat, and 1.5 tonnes of apples annually. The open site strengthens ties between farming and the neighbourhood.

Other Activities

Beyond farming, the Chant des Cailles hosts a participatory grocery shop, hen houses, and offers a range of educational and cultural activities including school workshops, open-air film screenings, conferences, and festive events-all reinforcing its role as a vibrant community hub.

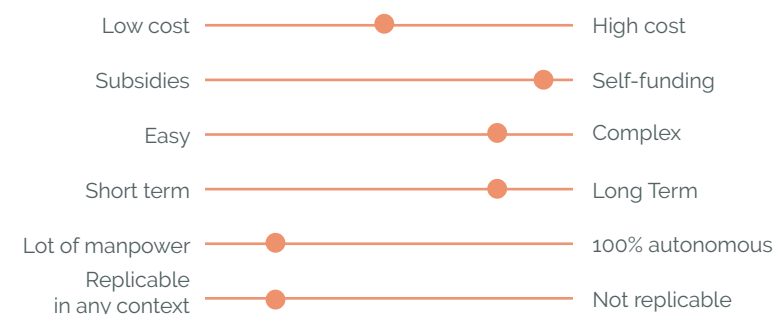
Business Model & Governance

The farm runs on prepaid subscriptions for local residents who harvest their own produce-reducing labour needs and building trust. The products are also sold more widely: for dairy, 35% is sold by subscription, the rest via markets (30%), on-site sales (15%), local shops (15%), and restaurants (5%). In 2024, the farm's turnover was €438,000 (excl. VAT): €167,000 from vegetables and herbs, €170,000 from dairy, €76,000 from eco-grazing services, and €25,000 in subsidies. The team counts 17 people, equivalent to 9 full-time positions.

Outcomes

Circular agriculture combines vegetable growing, sheep grazing, and collective composting to close nutrient loops and maintain soil fertility. Sheep manure and organic waste are reused as compost, while by-products like whey serve as natural treatments. The site mixes professional and community gardens, ensuring local food access through self-harvest, subscriptions, and on-site sales-all while boosting biodiversity and soil health in an urban setting.

Innovation Details



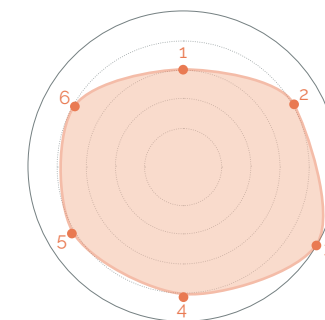
MULTIFUNCTIONAL CIRCULAR AGRICULTURE

Goals & Implementation

At Chant des Cailles, multifunctional circular agriculture means combining vegetable growing, sheep grazing, collective gardens, and composting to create closed nutrient cycles and enrich soil fertility naturally. The farm integrates food production with biodiversity, waste reuse, and local community involvement, showing how urban land can support sustainable food systems while strengthening social ties.

Impact Assessment

1. Value of space
2. Soil or substrate quality and fertility
3. Agricultural management practices quality and efficiency
4. Production quality
5. Resources circularity
6. Production of agronomic knowledge



©La ferme du chant des cailles asbl



©La ferme du chant des cailles asbl

Main Issues & Next steps

Chant des Cailles must secure long-term land access, improve soil and compost systems, and balance farming with community use. Next steps aim to upgrade infrastructure and ensure stable funding to keep the project resilient and inclusive.

Who can set it up



Farmer



NGO/
Association



Public official/
Administration



OPÉRA 4 SAISONS

GENERAL PRESENTATION



Paris, France



Zero Acreage Farm



2017



2 500 m² on roof
600 m² of facade



Private company



Vegetables, flowers
& hops

CONTACT

topager.com

info@topager.com



© Topager

Goals & History

Winner of Paris City Council's first Parisculteurs call for projects in 2007, Opéra 4 Saisons turned 2,500 m² of rooftop and 600 m² of facades at the Opéra Bastille into productive green spaces, with the aim to connect city life with fresh food and make greener cities. Vegetables, edible flowers and young shoots are picked daily for local restaurants and residents. Rare hops like Tardif de Bourgogne supply the project's brewery in the 17th district.

Main Value Proposition

Opéra 4 Saisons delivers fresh, high-quality vegetables, edible flowers, herbs, and hops from four rooftop terraces. In 2024, it produced 654 kg of vegetables, 55.7 kg of herbs, 3.4 kg of edible flowers, and 3.8 kg of hops. Using low-tech methods like manual weeding, drip irrigation, and organic amendments, it keeps production sustainable.

Other Activities

Initially, part of the harvest was sold weekly as produce baskets to Opéra staff, similar to a Community Supported Agriculture (CSA) model. After COVID, with many staff working remotely or moving to Opéra Garnier, it shifted. Today, the harvest mainly supplies several high-end restaurants nearby each week, and the hops are used for brewing. The site is open to staff only, except for scheduled visits.

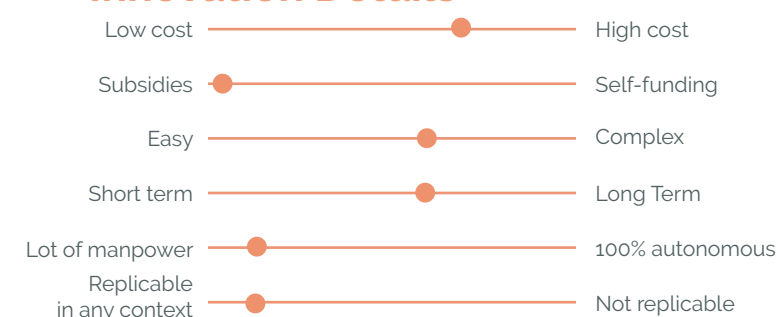
Business Model & Governance

Opéra 4 Saisons is run as a private company. The growing surface alone is too small to be profitable through production only, so additional services are essential to reach financial balance. These include paid visits for individuals and professionals, training workshops, and space rental for activities. The set-up cost was €350,000, supported by public funding from the Opéra and the City of Paris.

Outcomes

Each week, one or two farmers handle the harvest, site maintenance, and new plantings. Biodiversity surveys are carried out regularly, and a scientific study is conducted in partnership with AULAB Montreal. New growing methods are tested each year to save time and improve yields. The site also cultivates autumn crocus, a pollinator-friendly plant that emerges in June, is planted mid-summer and harvested in fall. It requires no irrigation or maintenance, thrives through winter, and supports bees before winter sets in.

Innovation Details



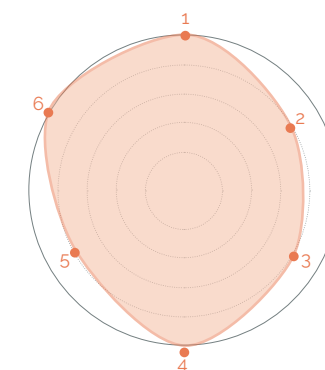
ROOFTOP GROWN HOPS

Goals & Implementation

In response to Paris City Council's first Parisculteurs call for projects, the Opéra needed to redo the waterproofing on parts of its roof and wanted to green the spaces. Topager, already running experimental rooftop farms outside Paris, saw an opportunity to test an urban farming model within the city and sell the harvest locally. Key challenges include complex logistics-four terraces on different levels with stair access only-and fully manual production techniques, which limit economies of scale.

Impact Assessment

1. Value of space
2. Soil or substrate quality and fertility
3. Agricultural management practices quality and efficiency
4. Production quality
5. Resources circularity
6. Production of agronomic knowledge



© Topager



© Topager

Main Issues & Next steps

Enhancing urban biodiversity, improving rainwater retention and building insulation, creating cooling zones, and strengthening residents' connection to local agriculture remain key priorities.

Who can set it up



Farmer



Private company



Public official/
Administration



TOWER FARM

GENERAL PRESENTATION



Saint-Nom-La-Bretèche, France



Zero Acreage Farm



2019



1 000 m²



Private Company



Medicinal & exotic plants

CONTACT

www.towerfarm.fr
celina@towerfarm.fr



© Tower Farm

Goals & History

The farm was initially created by three people to ensure sustainable plant production, but it quickly evolved towards medicinal plants to support European sovereignty in key industries. Its mission is to secure local, traceable, and high-purity botanical ingredients through indoor cultivation and advanced processing-delivering 100% plant-based actives for the pharmaceutical, nutraceutical and cosmetic sectors.

Main Value Proposition

The 1,000 m² facility includes fully controlled growing rooms, a nursery, post-harvest processing labs (drying, extraction), a micronization unit, and an analytical lab. This high-tech, BtoB (Business to Business) operation specializes in medicinal and exotic plants, offering quality, consistency, and full traceability.

Other Activities

Beyond production, the farm develops patented technologies to transform plants into ultrafine powders with preserved phytochemical integrity. Its expert teams oversee Research & Development (R&D) on plant sourcing, genetics, and extraction methods. The site also hosts educational programs and delivers both pilot and industrial-scale batches for the three sectors.

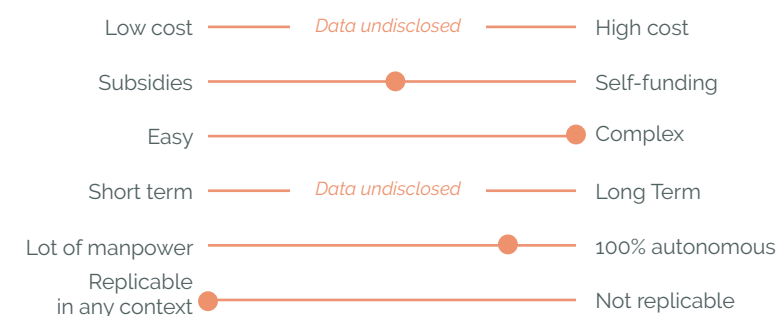
Business Model & Governance

The farm is a private B-Corp company committed to sustainability. It operates with a 15-person international team (60% women) and partners from top research institutes, universities and industry clusters. Its model combines exclusive R&D programs, on-demand production, long-term secured supply contracts (3–5 years), and specialized services like plant micronization or upcycling of vegetal waste.

Outcomes

This innovation secures high-quality, pesticide-free medicinal plant production while supporting the transformation of industries towards more sustainable and resilient supply chains. The aeroponic system enables precise, clean cultivation, fully valorizing both roots and aerial parts to maximize phytochemical potential. With 90% less water use, low-energy LEDs, renewable energy sources, and a zero-waste approach, the system offers a resource-efficient solution ideal for sovereign local production of high-value botanicals.

Innovation Details



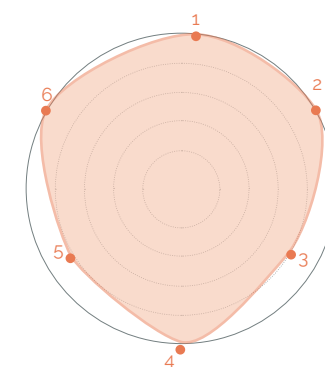
MEDICINAL & EXOTIC INDOOR FARMING

Goals & Implementation

Born from the ambition to merge nature and technology, this project evolved from edible plant production to a high-tech indoor farm focused on medicinal plants. It implements integrated aeroponic cultivation and patented processing to secure a pesticide-free, fully traceable, and high-purity production. The goal is to meet the growing demand for sustainable, sovereign, and consistent European supply of botanical ingredients for the pharmaceutical, nutraceutical and cosmetic industries.

Impact Assessment

1. Value of space
2. Soil or substrate quality and fertility
3. Agricultural management practices quality and efficiency
4. Production quality
5. Resources circularity
6. Production of agronomic knowledge



© Tower Farm



© Tower Farm

Main Issues & Next steps

The system is in constant evolution to improve yields, further reduce resource consumption, and integrate new plant species. Ongoing efforts also aim to align with changing client demands, regulatory frameworks, and sustainability standards.

Who can set it up



Private company



Researcher



SWEGREEN



GENERAL PRESENTATION



Sweden



Zero Acreage Farm



2019



Modular Units:
40-60 m² & 8-12 m²



Private company



Leafy greens, herbs,
brassica

CONTACT

www.swegreen.com/
salome.piederriere@swegreen.se



Goals & History

SweGreen was founded by agtech professionals to decentralize food production. Starting as a pilot, it evolved into a scalable, in-store farming model using modular units, circular systems, and AI to enable sustainable, hyper-local food growing.

Main Value Proposition

SweGreen's modular units enable high-yield, in-store food production with minimal space. The 40-60m² one produces up to 15,000 plants/month; the other 8-12m² up to 3,500. They grow lettuces, herbs, and brassicas using off-ground systems. The hybrid design blends automation and AI monitoring with easy operation. Units are visible in-store but operated exclusively by certified staff.

Other Activities

SweGreen delivers vertical farming as a service, integrating in-store units operated by staff and remotely monitored for performance. This boosts customer experience and store sales. An in-house R&D team drives innovation in plant science and AI, while technical and customer success teams ensure reliable operation and client support.

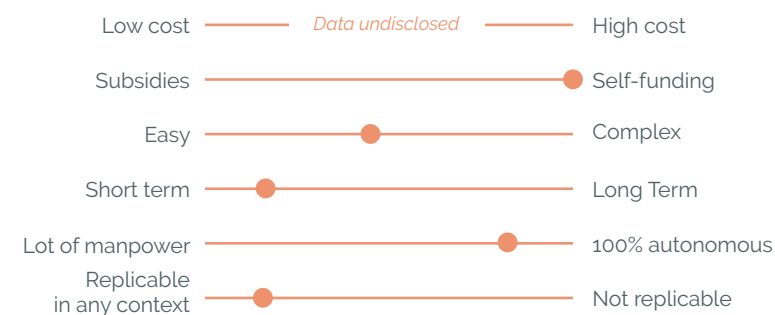
Business Model & Governance

SweGreen is a private company operating under a B2B subscription model. Clients—primarily supermarkets—pay only for successful harvests, with no upfront capital investment. All produce is grown and sold directly on-site, enabling a seamless, hyper-local supply chain.

Outcomes

Clients (e.g. supermarkets) operate the farms using AI-generated instructions, while SweGreen provides remote monitoring and regular servicing. This setup ensures fresh, predictable yields with minimal effort. Using soilless hydroponic systems (NFT and Ebb & Flow) paired with precision climate control and nutrient recirculation, the model is highly efficient and circular. AI manages environment, tasks, and harvest planning, enabling low-energy, low-input operation.

Innovation Details



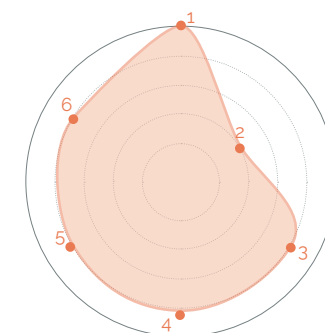
SMART MODULAR FOOD PRODUCTION

Goals & Implementation

SweGreen was created to shorten supply chains and improve food freshness, while enhancing the retail experience. Through modular, turnkey farming units, the system offers a sustainable, transparent alternative to imported produce—rebuilding consumer trust and bringing food production closer to the point of sale. All production is on-site, removing distribution needs.

Impact Assessment

1. Value of space
2. Soil or substrate quality and fertility
3. Agricultural management practices quality and efficiency
4. Production quality
5. Resources circularity
6. Production of agronomic knowledge



Main Issues & Next steps

The system offers strong potential for modification and enhancement. Its scalable and adaptable design allows retailers and restaurants to implement it directly on-site, while also supporting the integration of new crops, advanced technologies, and customization for diverse retail and hospitality settings.

Who can set it up



Private company



Researcher



Public official/
Administration



PERMAFUNGI

GENERAL PRESENTATION



Brussels, Belgium



Zero Acreage Farm



2013



2 000 m²



Private company



Mushrooms

CONTACT

www.permafungi.be/
info@permafungi.be



Goals & History

Founded by six young graduates who each invested €1,000 and a lot of work, Permafungi set out to give a second life to coffee grounds inspired by Asian models. Starting with handcrafted production, the project scaled up with better equipment and prizes with the aim to build a circular model that creates jobs for young people. Today, Permafungi recycles coffee grounds from Le Pain Quotidien to produce 300 kg of oyster mushrooms monthly and myco-materials for packaging, insulation or design.

Main Value Proposition

Permafungi produces about 3,900 kg of fresh oyster mushrooms each year at its Tour & Taxis site - a former industrial warehouse and office complex in Brussels - and develops myco-materials for packaging at its new 1,400 m² site in Forest, which includes offices, labs and production rooms. The Tour & Taxis site is open from Monday to Friday, offering on-site mushroom sales and guided tours.

Other Activities

Permafungi still runs its original mushroom farm at Tour & Taxis, producing edible mushrooms on a smaller scale alongside its growing myco-materials business, which will move to a new production site in Forest this year. The company also recycles production waste into natural fertilizer and offers visits and workshops at Tour & Taxis to share its circular approach.

Business Model & Governance

Until 2025, Permafungi operated as a cooperative. It is now a public limited company supported by investors, including the EU's LIFE project, a private investment fund, and Brussel Finance Invest. While rooted in the horticultural sector, the company is shifting its focus towards myco-based packaging materials. Internally, Permafungi maintains a participative governance model that values collaborative decision-making.

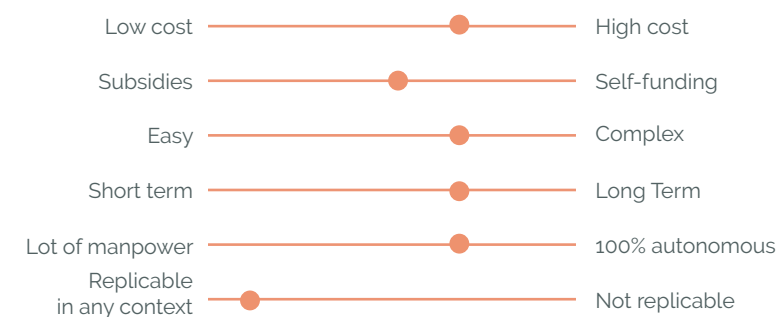


© Crédit

Outcomes

Permafungi plays a key role by recycling coffee grounds-an abundant urban organic waste-locally. In response to widespread food production delocalization, the company prioritizes bringing both food and eco-friendly myco-material manufacturing back to the city. A dedicated innovation manager and production supervisor lead ongoing improvements, while the production team actively contributes feedback. The company embraces a trial-and-error philosophy to refine new materials and practices, supporting continuous development and urban sustainability.

Innovation Details



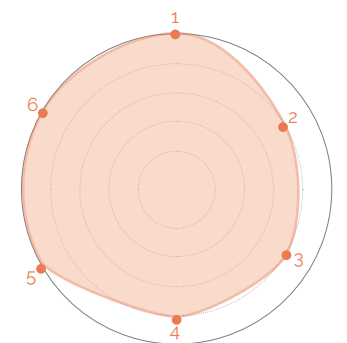
COFFEE FUNGI MATERIALS

Goals & Implementation

Permafungi produces myco-materials by transforming organic substances into sustainable alternatives to plastic for packaging, insulation, and design or construction. The process starts with recycling coffee grounds to grow edible mushrooms, then repurposes mushroom waste into bio-based materials. The 1,400 m² facility houses offices, labs, and production rooms to support R&D aims to scale this circular model, create local jobs, and reduce urban waste. Labour costs remain a challenge, but the project positively impacts the circular economy by reusing organic waste and promoting urban farming.

Impact Assessment

1. Value of space
2. Soil or substrate quality and fertility
3. Agricultural management practices quality and efficiency
4. Production quality
5. Resources circularity
6. Production of agronomic knowledge



© Crédit



© Crédit

Main Issues & Next steps

Permafungi aims to become the European leader in myco-material packaging within five years, targeting sales of 10 tonnes per month. The focus will be on niche and luxury brands from sectors such as cosmetics, spirits, and jewellery.

Who can set it up



Farmer



Private company



PROTOTYPES EXAMPLES



© Intelligent Indoor Farm

INTELLIGENT INDOOR FARM

	Skopje, North Macedonia		Zero Acreage Farm
	2023		20 m ²
	Private company		Specific culture

Modular AeroFarm

Intelligent Indoor Farm developed a modular indoor aeroponic system for cities. With stacked tiers and IoT sensors, it grows microgreens and leafy greens year-round in a soilless, climate-controlled environment. The system uses 98% less water, requires no pesticides, and is remotely managed via smartphone or computer. Combining smart farming with urban farm hubs, it tackles food insecurity, reduces food miles, and supports local education and urban resilience.

CONTACT
<https://intelligentindoorfarm.link/>



© Air Farm

AIR FARM

	Jordania		Zero Acreage Farm
	2022		10-20 m ²
	Private company		Specific culture

Modular Inflatable Aeroponics

Midbar's AirFarm is a modular, inflatable aeroponic system for growing fresh greens anywhere, year-round. Using nozzle-less micro-mist technology, it eliminates soil and pesticides while saving up to 99% of water. Lightweight and easy to deploy, it's managed through IoT sensors and a simple app, bringing efficient, resilient food production to cities, remote areas, and harsh climates.

CONTACT
midbar.com/airfarm/

FLOATING ISLANDS

	Almere, Netherlands		Zero Acreage Farm
	2023		250 m ²
	Private company		Fish & Vegetables

FloatFarm System

Floating Food Islands is a Dutch project (2024-2027) that turns city waterways into floating farms using modular hydroponic units. Powered by solar energy and natural water systems, they grow fresh vegetables close to urban areas, saving land and cutting food miles while testing new ways to boost climate resilience and local food supply.

CONTACT
<https://floatingfoodislands.com/>



© Floating Islands

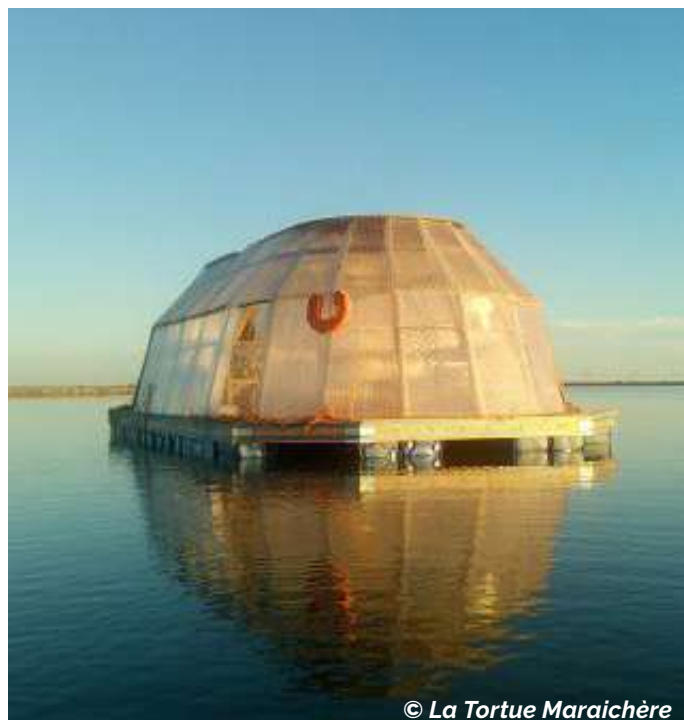
TORTUE MARAÎCHÈRE

	La Palme, France		Zero Acreage Farm
	2022		60 m ²
	NGO/Association		Market gardening

Floating Aquaponic Unit

La Tortue Maraîchère, led by the association Paysans Terre Mer, is a 60 m² floating aquaponic garden located on the La Palme pond in the Occitanie Region. Powered by solar energy, it grows vegetables, flowers, algae, and fish in a self-sustaining system that works on saline or unused gravel areas. This prototype tests energy and water autonomy while promoting sustainable farming and raising public awareness about eco-friendly agriculture.

CONTACT
paysansterremer.wordpress.com



© La Tortue Maraîchère

ECONOMIC INNOVATIONS —





TIERS PAYSAGE

GENERAL PRESENTATION



Lasne, Belgium



Urban Farm



2020



600 m²



Private Company



Vegetables, herbs, comestible flowers

CONTACT

tiers-paysage.com/
tierspaysage.be@gmail.com



© Cécile Gilquin



© Cécile Gilquin

Goals & History

Tiers Paysage was born in 2020 from a desire to re-connect with nature and produce differently. After experiences in collective farming and training in sustainable gardening, the founder launched her own project focused on edible flowers, wild plants, and forgotten crops. In 2023, the farm moved to expand production while staying true to its principles: no synthetic inputs and no mechanized tillage.

Main Value Proposition

Tiers Paysage is a low-tech, open-ground agroecological farm cultivating vegetables, herbs, and edible flowers on 600 m² without a tunnel or synthetic inputs. All crops grow outdoors, and wild plants are foraged in carefully chosen natural areas within an hour's range. Production is done by hand, by one person, valuing autonomy, quiet time with the plants, and deep ecological engagement.

Other Activities

Tiers Paysage sells its unique range of crops and wild edibles to professionals such as chefs, bakers, mixologists, and caterers. What sets the farm apart is its professional wild foraging offer-rare in Belgium-and its focus on multi-use and lesser-known plants, inspired by ethnobotanical research. The activity also includes plant transformation (drying, fermentation, propagation), as well as educational visits and workshops.

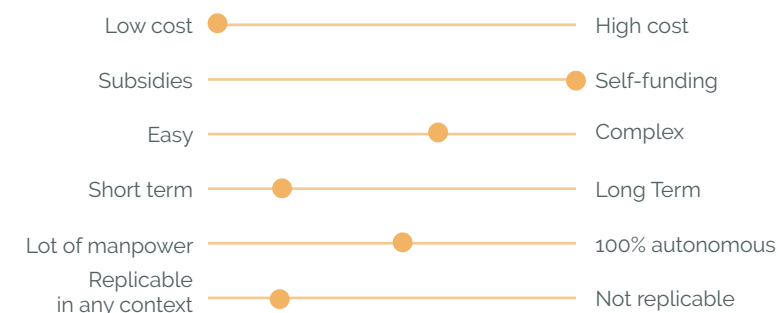
Business Model & Governance

The privately-run farm supplies chefs with unique vegetables, flowers, and foraged wild plants. Though not designed for profit and prioritizing creativity, ecology, and personal fulfillment over growth or scale, it remains financially balanced through a multi-activity lifestyle. Recently, the manager started taking on part-time agricultural work to diversify her activities and secure a steadier income.

Outcomes

This new opportunity as Administrative and Events Manager at Potagers Familiaux Bruxellois on a 4/5th-time basis provides a stable income that helps balance farm work with financial security, enabling investments in better equipment and reducing stress related to crop success. Clients are already informed of this new arrangement, which supports a more sustainable and resilient farming practice.

Innovation Details



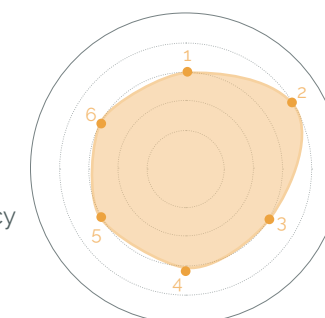
PART-TIME FARMING MODEL

Goals & Implementation

After a difficult season marked by poor weather and financial strain, it became clear the existing model wasn't sustainable. Inspired by the [Slasheur/Cueilleur](#) concept from France, the project shifted toward a part-time farming approach combined with other activities. The focus is on finding a balance that suits personal needs rather than profitability, starting with identifying complementary work. This part-time model required no setup costs, staying true to the spirit of Tiers Paysage, which has been entirely self-funded from the start.

Impact Assessment

1. Stable and autonomous income
2. Income diversification
3. Production quality & value
4. Marketing & sales techniques efficiency
5. Reduced costs
6. Local economic development



© Lucile Dizier

Main Issues & Next steps

The main challenge is balancing time and energy between the part-time job and farming. Going forward, the focus will be on optimizing this dual model to maintain crop quality and client satisfaction while ensuring well-being and financial stability. Streamlining operations and other support may also be explored.

Who can set it up



Farmer



NGO/
Association



Citizen



© Cécile Gilquin



CYCLE FLEURS

GENERAL PRESENTATION

**Linkebeek, Belgium**

**Urban Farm**

**2018**

**800 m²**

**NGO/Association**

**Ornamental flowers**

CONTACT
www.cyclefleurs.com
pascale.malilo@skynet.be



© Pascale Malilo Vanclooster

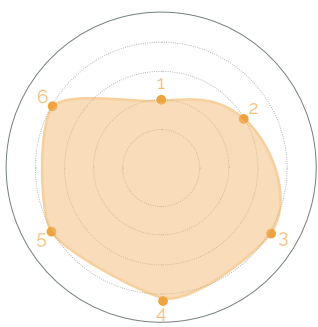
SELF-HARVEST FLORAL FARMING

Goals & Implementation

The self-harvest model at Cycle Fleurs was developed to move away from conventional marketing and reconnect with the essence of growing. It offers a calm, sensory experience and fosters direct relationships with the community. Communication is based on trust and simplicity, making the field accessible to a broad and diverse public.

Impact Assessment

1. Stable and autonomous income
2. Income diversification
3. Production quality & value
4. Marketing & sales techniques efficiency
5. Reduced costs
6. Local economic development



Goals & History

Cycle Fleurs emerged from a professional reconversion, following training in organic farming in 2015. After several years cultivating herbs and edible flowers at Cycle Farm, the founder launched her own flower field for self-picking in 2018. A second site for dried flower production followed, before she fully dedicated herself in 2024 to a single seasonal flower field, rooted in ecological values and a desire to reconnect people with nature.

Main Value Proposition

Cycle Fleurs offers a seasonal flower field in open-air self-picking, grown on living soil without greenhouses or mechanisation. The diversity of flowers follows the rhythm of the seasons and explores an evolving garden. The project is built on eco-friendly growing methods, trust-based relationships with pickers, and a strong connection between floral production and the surrounding landscape.

Other Activities

Beyond flower production, the site serves as a space for biodiversity awareness, with quiet zones, signage on protected native species and a pedagogical approach rooted in training with the environmental NGO Natagora. The founder is also active in sustainability-focused networks such as Slow Flowers Belgique and Wecandoo, where she offers workshops and shares her expertise.

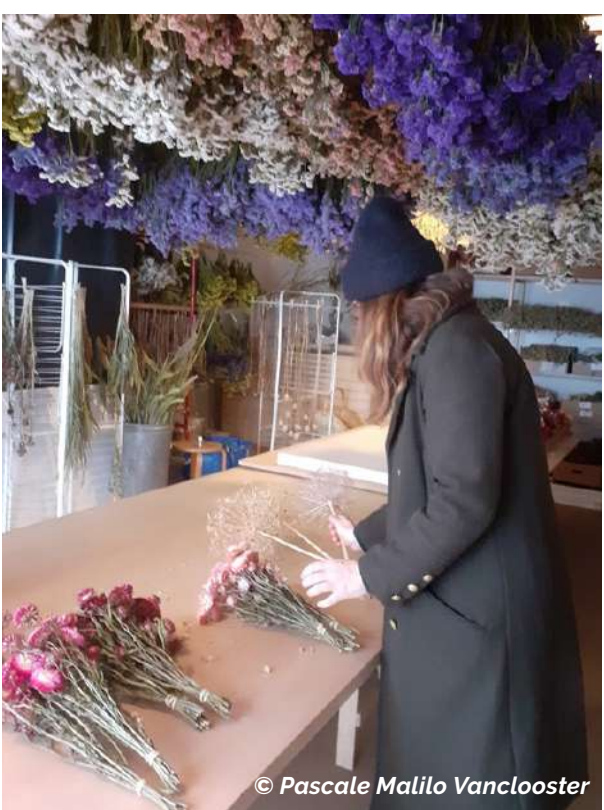
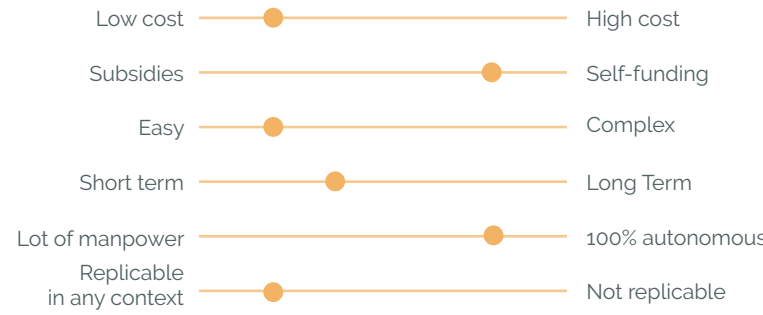
Business Model & Governance

Cycle Fleurs operates autonomously through direct sales via the self-picking model. Visitors pay based on the size of their bouquet (via cash, bank transfer, or QR code). The project also offers gift cards and 5- or 10-visit subscriptions sent by post. It is run by a single person within the Smart cooperative and supported by a network of partners engaged in ecological transition.

Outcomes

The model has built a loyal, diverse audience and offers an experience rooted in nature, slowness, and reconnection. While economically modest, it is stable and sustainable, with all work done manually and paid through a trust-based self-picking system.

Innovation Details



© Pascale Malilo Vanclooster



© Pascale Malilo Vanclooster

Main Issues & Next steps

Balancing openness to the public with personal limits remains a key challenge. Future efforts will aim to maintain this balance while diversifying income, especially through dried flower production in the off-season.

Who can set it up

**Farmer**

**NGO/ Association**

**Citizen**

**Public official/ Administration**



LES POUSSES POUSSENT

GENERAL PRESENTATION



Liège, Belgium



Urban Farm



2018



6 000 m²



Cooperative



Vegetables

CONTACT

[Les-pousses-poussent](https://les-pousses-poussent.be)
poussespoussent@gmail.com



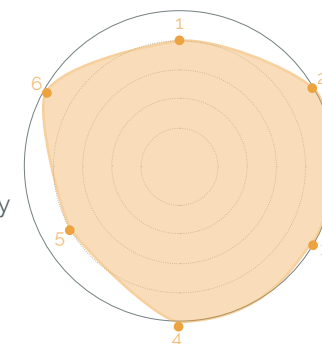
URBAN GROWER HYBRID

Goals & Implementation

The 'hybrid status' concept emerged when the city of Liège provided a 1.2-ha plot to redevelop Urban Agriculture. The cooperative Petits Producteurs decided to combine self-employed farming with part-time store employment to help new farmers secure steady income. David and Félicie, the current growers, were recruited under this model. It was implemented by aligning farm tasks with peak seasons and providing off-season employment in the cooperative's shops.

Impact Assessment

1. Stable and autonomous income
2. Income diversification
3. Production quality & value
4. Marketing & sales techniques efficiency
5. Reduced costs
6. Local economic development



Goals & History

Les Pousses Poussent was created in 2018 as part of Liège's CreaFarm program, which provides municipal land to new urban farming projects. The farm, run by the cooperative Les Petits Producteurs, was launched to help independent growers settle sustainably despite the high cost and scarcity of farmland in Belgium. Its main goal is to produce fresh local vegetables while strengthening food sovereignty and offering fair working conditions.

Main Value Proposition

The farm cultivates around 6,000 m² out of a 2-ha municipal site. It grows over 50 different vegetables throughout the season, supplying harvests mainly through a self-picking subscription model. About two-thirds of the land is dedicated to pick-your-own harvesting, while the remaining is used for planned sales to the cooperative's local shop. The farm is easily accessible for local residents, encouraging direct engagement with food production.

Other Activities

In addition to growing vegetables, Les Pousses Poussent offers a pick-your-own system where local residents harvest their weekly share themselves. This model fosters community connection and education around seasonal eating and farming practices. The farm also opens its site for direct sales two hours per week to reach more neighbourhood customers.

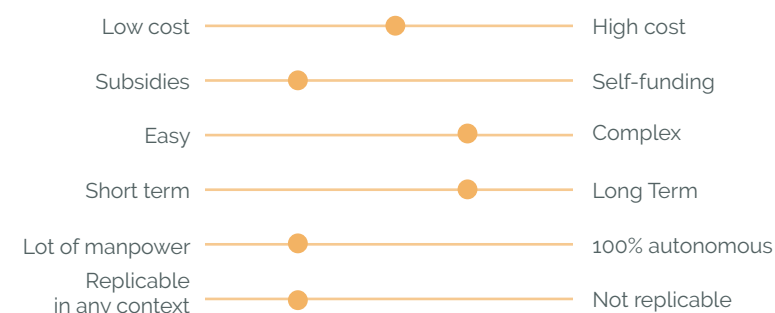
Business Model & Governance

Les Pousses Poussent relies mainly on annual subscriptions for self-harvest, providing stable income in advance. About 80% of revenue comes from members' fees (€420–€500/year and around 180 members), while the rest comes from planned sales to the cooperative's local stores. The city provides land and basic infrastructure free of charge. Fair wages, zero-interest loans, and small grants help ensure economic sustainability and good working conditions for the farmers.

Outcomes

This hybrid approach gives growers financial stability and flexibility. In peak season, they focus fully on production and local sales, while in winter or low-demand months they work in the cooperative's stores. This balance ensures year-round income and better working conditions, while also strengthening ties between the farm and the cooperative's urban shops.

Innovation Details



Main Issues & Next steps

A key challenge remains improving the farm's infrastructures, which still depends on additional support. Moving forward, the priority is to strengthen this balance by securing local support for vital improvements and refining the hybrid model to provide long-term support for new growers.

Who can set it up



NGO/
Association company



Private
company



Farmer



Public official/
Administration



LA MILPA

GENERAL PRESENTATION

Toulouse, France

Urban Farm

2019

5 ha

Private company

Vegetables, fruits, flowers

CONTACT
<https://lamilpa.fr/>
contact@lamilpa.fr



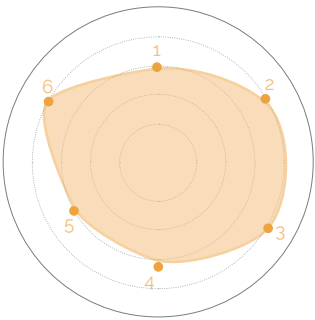
AGRI-DESIGN DUAL MODEL

Goals & Implementation

La Milpa aims to strengthen local food production by combining two complementary activities: market gardening and Urban Agriculture or landscaping services. Its innovative business model relies on a balanced structure-two team members focus on crop production while two others lead service-oriented projects such as garden design and maintenance. The rest of the staff remains versatile, contributing across both areas.

Impact Assessment

1. Stable and autonomous income
2. Income diversification
3. Production quality & value
4. Marketing & sales techniques efficiency
5. Reduced costs
6. Local economic development



Goals & History

La Milpa is a professional organization dedicated to designing, building, and maintaining vibrant and productive urban agricultural spaces. Based in France, it develops market gardens, edible landscapes, orchards, and eco-grazing areas. Combining horticultural expertise with ecological principles, it offers tailored services for individuals, communities, and cities seeking to integrate food production and biodiversity into urban settings.

Main Value Proposition

La Milpa manages over 5 ha of farmland in the Toulouse area, including a 3-ha site in Blagnac and 20 smaller gardens across the city. Using traditional, low-tech methods, it produces vegetables, fruits, and flowers. These open-access sites welcome the public three days a week, fostering local food production and community connection.

Other Activities

La Milpa offers urban farming services, including the design, installation, and maintenance of edible gardens for cities, companies, and communities. It also manages diversified market gardening sites but does not work with eco-grazing.

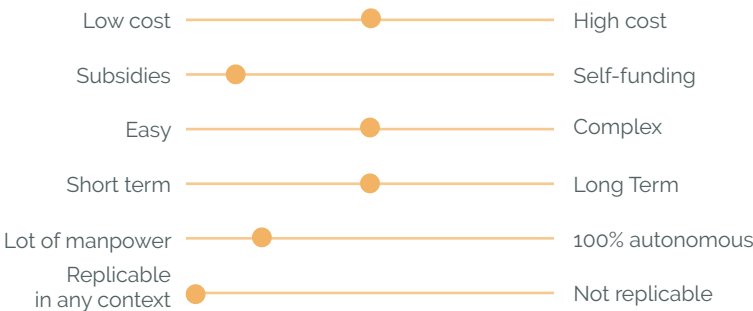
Business Model & Governance

La Milpa employs 15 staff and operates as a private cooperative enterprise. Its business model combines landscaping services with the sale of fresh produce and plants from their managed plots. This hybrid model supports both professional partnerships and community engagement. The landscaping activity is more profitable and ensures overall economic balance, while the market gardening side remains financially stable. The project setup cost is estimated at €100,000, partly supported by local and national authorities through funding calls.

Outcomes

Local residents can freely access garden produce through a self-harvesting system. Market gardening and horticultural products are sold to generate income. The landscaping and service activities are more profitable and help maintain the cooperative's overall financial stability, while the farming operations achieve a balanced break-even.

Innovation Details



Main Issues & Next steps

The main challenges lie in securing sufficient urban land for agricultural production and accessing investment support. Moving forward, priorities include expanding land availability and enhancing financial resources to ensure sustainable growth.

Who can set it up

NGO/ Association

Private company

Farmer

Public official/ Administration



GENERAL PRESENTATION



Almere & Utrecht,
Netherlands



DIY Garden



2012



5 ha



Private company



Gardening

CONTACT

www.onzevolkstuinten.nl
info@onzevolkstuinten.nl



© ONZE

Goals & History

Since 2012, ONZE has offered citizens in Almere the chance to grow their own vegetables and fruits year-round in a shared greenhouse. By renting small plots under glass, people can cultivate tropical crops that are hard to grow outdoors in the Netherlands. With around 1,200 gardens now in use and a second site launched in Utrecht in 2023, ONZE promotes sustainable urban farming and encourages healthy, organic local food production.

Main Value Proposition

ONZE provides 5 ha of allotment gardens and 0.6 ha dedicated to tropical vegetable production in simple, low-tech greenhouses. Gardeners enjoy year-round access from sunrise to sunset, while other visitors can benefit from fresh produce and services six days a week. By combining accessibility with sustainable methods, it makes urban food growing easy, affordable, and community-focused.

Other Activities

In addition to renting plots, ONZE supports gardeners with essential services like water supply, compost, tools, and practical workshops. A small shop on-site offers plants and sells produce grown by ONZE and local gardeners. The company also sells seedlings to both its members and external gardeners. From April to October, ONZE produces and sells fresh tropical vegetables from its greenhouse, adding value for the wider community.

Business Model & Governance

ONZE's model combines land rental with shared services. Gardeners pay a monthly fee (€30-€90) that covers water, compost, and tools, while ONZE offers workshops and sells plants, seedlings, and greenhouse-grown tropical vegetables. The low-tech setup keeps costs low and operations simple, with daily member access and basic company management to support and maintain the site.

Outcomes

The business operates fully self-sustained, without relying on government grants or subsidies. Gardeners rent greenhouse plots and receive everything they need to grow their own fresh produce year-round. They learn by doing, with support available through practical help, workshops, and advice whenever needed. The role of the owner is more about building a supportive community than producing food themselves, creating a social space where people connect, share knowledge, and enjoy gardening together.

Innovation Details



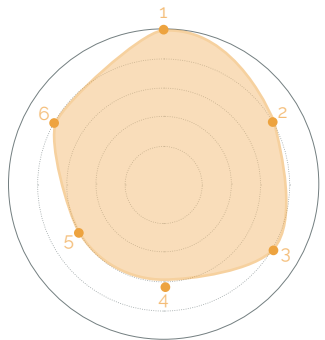
UNDER-GLASS GARDENS

Goals & Implementation

This project began in 2009 when Ron van Zwet, after losing his rose greenhouse business, looked for a new way to use greenhouses sustainably. Seeing the huge lack of allotments gardens, he decided to turn empty greenhouses into places where people could grow their own food. The first site started in a small 0.8 ha greenhouse and has since grown to 5 ha and a second location opening in Utrecht in 2023, with over 1,200 local gardeners. The aim is to reconnect people with their food-where it comes from, how much effort it takes, and enjoying fresh, healthy produce. The gardens also bring people from different cultures and backgrounds together, creating positive social connections.

Impact Assessment

1. Stable and autonomous income
2. Income diversification
3. Production quality & value
4. Marketing & sales techniques efficiency
5. Reduced costs
6. Local economic development



© ONZE

Main Issues & Next steps

The concept runs smoothly but could reach more people. Many potential gardeners are still unaware of this opportunity. Strengthening communication will help connect with new members and expand the community's positive impact.

Who can set it up



Farmer



NGO/
Association



Public official/
Administration



© ONZE



REFRESH BRUSSELS

GENERAL PRESENTATION

Brussels, Belgium

Zero Acreage Farm

2016

2 000 m²

Private company

Gardening

CONTACT
<https://refreshbxl.com/>
toiture@refresh.brussels



© Marie Gorza

Goals & History

This farm project was initiated through a co-creation process between the Commune of Ixelles, the Université Libre de Bruxelles, and the non-profit organisation Refresh, with financial support from the European ERDF fund. Designed as an educational and experimental market garden, its goal is to foster collaboration between public institutions, academia, and civil society while promoting sustainable food practices at the local level.

Main Value Proposition

This low-tech, open-ground farm cultivates vegetables, aromatic plants, fruits, and flowers across 1,200 m² of a 2,000 m² rooftop. The remaining space is used for educational activities and group visits. Designed for openness and community involvement, the farm is accessible to all during the market gardener's working hours, while pick-your-own customers benefit from 7-day access.

Other Activities

The farm grows over 50 types of vegetables, 25 aromatic plant varieties, along with small fruits and edible flowers, all in cultivation tanks. It also offers a self-picking program, an educational GoodFood restaurant, and an urban agroecology training. Around 3 tonnes of vegetables are harvested annually for the restaurant, supporting short supply chains and self-sufficiency.

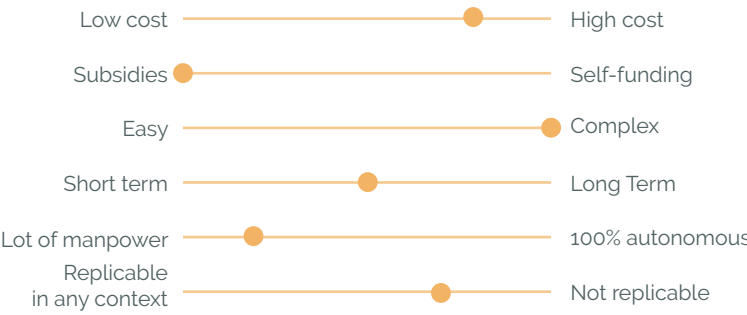
Business Model & Governance

The farm is run by a private company, with revenue from restaurant sales, pick-your-own subscriptions, and paid tours and workshops. The rooftop generates around €1,900 annually from vegetable sales and visits. Part of the market gardener's salary is covered by public subsidies for supervising trainees and income from other Refresh activities. The €1 million setup was supported by European FEDER funds.

Outcomes

This multiactivity rooftop site combines production, processing, consumption (through a restaurant), and a pick-your-own farm. The three main activities are vegetable production and sales, trainee supervision, and organizing visits and workshops, all managed by the same person. While the market garden contributes to Refresh's economic activities, it is not the most profitable; the catering business generates higher returns.

Innovation Details



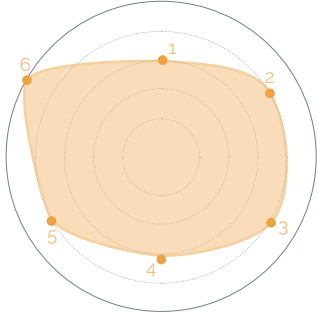
CIRCULAR ROOFTOP AGRI-BUSINESS

Goals & Implementation

The LlaglUM project emerged from the Maelbeek Sustainable Neighbourhood Contract (2014–2017), led by the Regional Urban Renewal Department. It turned the roof of a Colruyt supermarket into a 2,000 m² accessible green roof farm. Rooftop cultivation brought specific challenges compared to in-soil farming. After five years of production, the project has generated valuable knowledge to guide ongoing improvements and inspire similar initiatives.

Impact Assessment

1. Stable and autonomous income
2. Income diversification
3. Production quality & value
4. Marketing & sales techniques efficiency
5. Reduced costs
6. Local economic development



© Marie Gorza



© Marie Gorza

Main Issues & Next steps

Continuous improvement is key, especially in market gardening practices, to maintain and enhance vegetable quality. Future efforts will focus on refining cultivation, pest control, and resource use to boost productivity and sustainability.

Who can set it up

**NGO/
Association**

**Private
company**

Farmer

**Public official/
Administration**



ATYPICAL EXAMPLES



OESTERZWAMMERIJ

	Bloemendaal, The Netherlands		Zero Acreage Farm
	2019		250 m²
	Private company		Oyster mushrooms

Mushroom Transformation Model

Oesterzwammerij is a circular urban farm in Bloemendaal, Netherlands, that transforms used coffee grounds from local restaurants into substrates for growing oyster mushrooms. The mushrooms are used in regional food products, and the leftover coffee grounds are composted, creating a sustainable local cycle connecting producers, consumers, and restaurants.

CONTACT
<https://oesterzwammerij.nl/>

FUTURA GAIA

	Tarascon, France		Zero Acreage Farm
	2021		144 m²
	Private company		Vegetables

Rotative Geoponics System

Futura Gaia develops scalable vertical farming biofactories using a patented 'rotative geoponics' system with living soil. Their pesticide-free method produces high-value plants year-round with optimized active compounds and lower water use, targeting cosmetics, pharmaceutical, and nutraceutical industries while offering a sustainable alternative to traditional agriculture.

CONTACT
futuraGaia.com/



INTERNATIONAL EXAMPLES

LA CENTRALE AGRICOLE

	Montreal, Canada		Cooperative
	2019		Diversity of farm sizes
	NGO/Association		Diversity of crops

Urban Cooperative Network

La Centrale agricole is the world's largest Urban Agriculture cooperative, based in Montreal. It brings together over 20 urban farms under a collaborative governance model focused on member participation. The cooperative supports members with training, networking, and shared resources, promoting a circular economy and strengthening sustainable local food systems.

CONTACT
centrale.coop/



IGA - FRAIS DU TOIT

	Montreal, Canada		Zero Acreage Farm
	2017		2 700 m²
	Private company		Vegetables

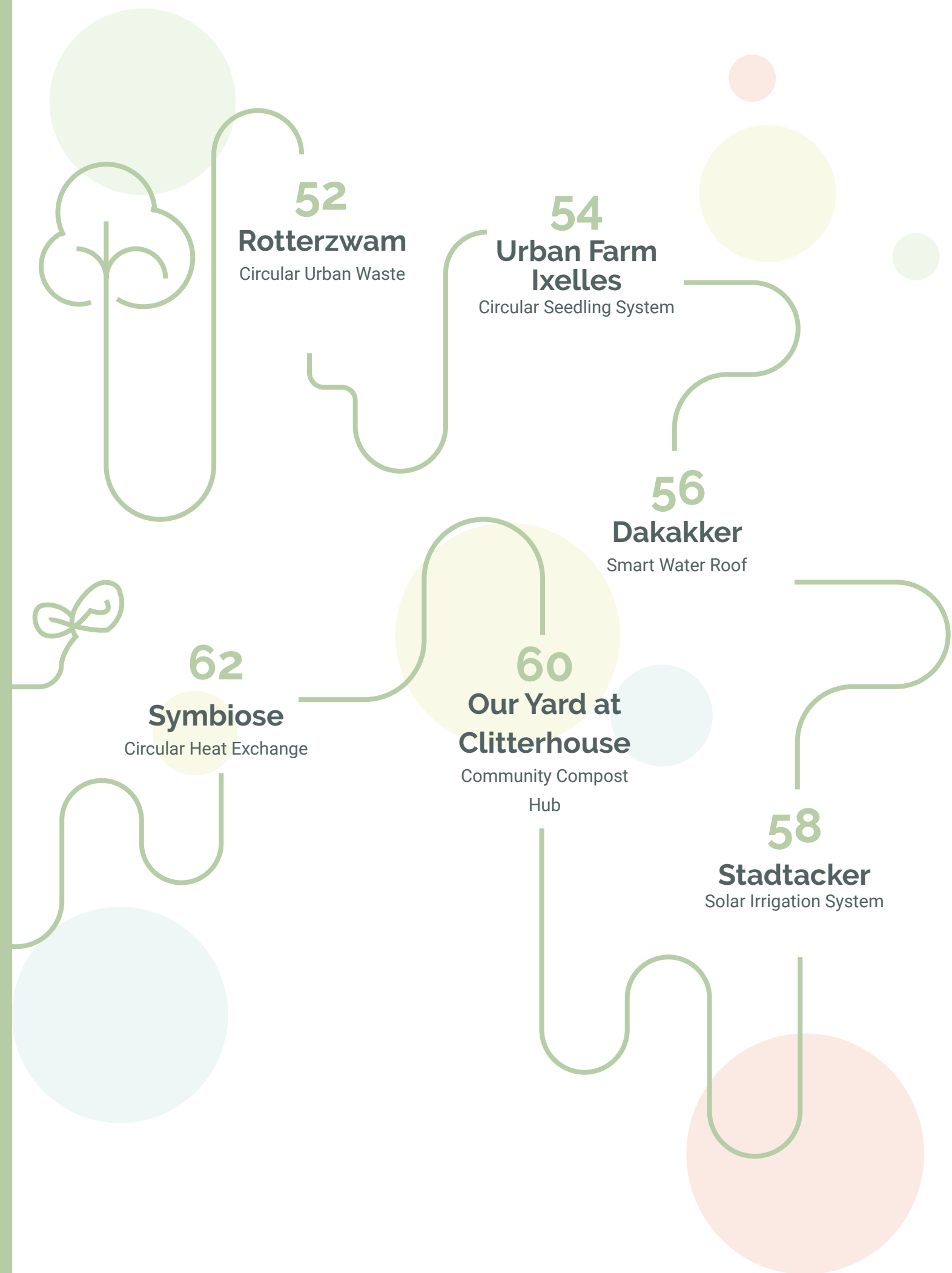
Rooftop Farm Market

The IGA Famille Duchemin in Montreal runs Canada's largest organic rooftop farm, producing over 7 tonnes of fresh vegetables and honey each year right above the grocery store. This award-winning project cuts food miles, boosts local organic sales by 50%, and keeps prices affordable. Its innovative model combines urban farming with retail, creating green infrastructure that supports local food security, community jobs, and sustainability.

CONTACT
www.igaduchemin.com/frais-du-toit



ENVIRONMENTAL INNOVATIONS —





ROTTERZWAM

GENERAL PRESENTATION

Rotterdam, Netherlands

Zero Acreage Farm

2013

600 m²

Private company

Oyster mushrooms

CONTACT
www.rotterzwam.nl/
info@rotterzwam.nl



© Rotterzwam

Goals & History

Rotterzwam was founded in 2013 in a former public swimming pool in Rotterdam with the goal of creating a circular food system by growing mushrooms on spent coffee grounds. The project demonstrates how urban waste can be transformed into valuable food, and create jobs and public awareness. Over time, Rotterzwam has grown into a leading educational and entrepreneurial hub for urban circular agriculture, influencing initiatives both nationally and internationally.

Main Value Proposition

Rotterzwam transforms urban waste, especially spent coffee grounds, into valuable food by growing oyster mushrooms in a high-tech facility of about 600 m². The project showcases how cities can become centers for circular food production, turning waste into mushrooms and further into food, products, and education.

Other Activities

Rotterzwam sells grow kits and substrate to help people grow mushrooms at home and offers workshops to promote urban circular agriculture. They provide consulting and training on circular economy practices for businesses. Currently, they are developing mushroom extracts and powders to expand their product range.

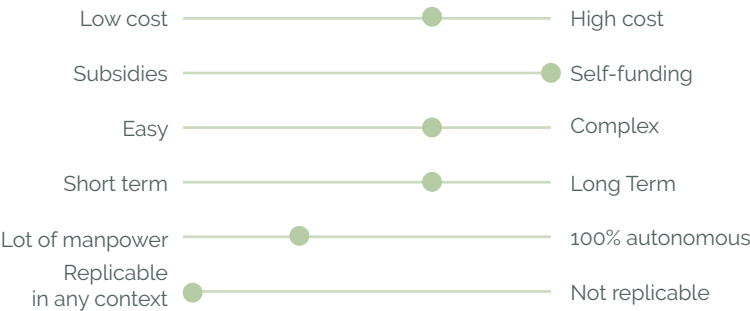
Business Model & Governance

Rotterzwam started with self-funding and public grants, and now generates income through direct sales, consulting, and training. Their production scale-up is supported by crowdfunding and social investments. Privately owned, the company operates with a mission-first approach and transparent communication, collaborating closely with municipalities, educational institutions, and circular economy networks.

Outcomes

Rotterzwam has diverted over 100,000 kg of coffee grounds from incineration and produced more than 10 tonnes of fresh oyster mushrooms per year. They have trained hundreds of mushroom entrepreneurs worldwide and inspired multiple international circular mushroom projects. Today, Rotterzwam stands as a leading example in circular food production.

Innovation Details



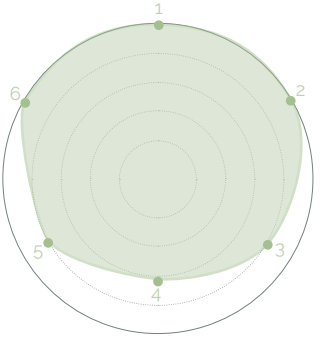
CIRCULAR URBAN WASTE

Goals & Implementation

Based on the principles of the circular economy, Rotterzwam's process aims to minimise external inputs and emissions by reusing spent mushroom substrate as compost and using minimal, recyclable packaging. By innovating in waste sourcing, modular urban production, and entrepreneurship education, Rotterzwam combines circular logistics, local food production, and community engagement to transform cities into hubs of sustainable, closed-loop food systems.

Impact Assessment

1. System circularity & sustainability
2. Use of local resources
3. Biodiversity, crops and ecosystem diversity
4. Energy consumption
5. Water management
6. Waste management



© Rotterzwam



© Rotterzwam

Main Issues & Next steps

Rotterzwam faces challenges in scaling within cities, managing waste collection, and competing in the market. Next, they plan to expand production to new locations, boost substrate supply through [SPORO](#), develop mushroom-based products, and enhance training for growers.

Who can set it up



Farmer



Private company

company



URBAN FARM IXELLES

GENERAL PRESENTATION

**Ixelles, Belgium**

**Urban Farm**

**2017**

**250 m²**

**Private company**

**Vegetable & fruits**

CONTACT
www.vestaculture.com
info@vestaculture.com
SustainabilityDelhaize@delhaize.be



Goals & History

Launched in 2017, this project transformed the rooftop of the Delhaize Boondael supermarket into a productive urban garden, through a partnership with Vestaculture, a company specialized in edible rooftop and ground-level gardens. The project aims to reconnect food production with urban life by turning underused roof space into an edible landscape while selling the produce directly in the supermarket below, closing the loop between production and local distribution.

Main Value Proposition

On 250 m² of compost-enriched rooftop soil, this farm grows over 50 varieties of vegetables, herbs, and berries using low-tech, permaculture-inspired methods. Combining outdoor beds and a greenhouse, it produces around 2 tonnes of food annually, showing how rooftops can become highly productive urban growing spaces.

Other Activities

In addition to food production and sales, the farm hosts visits and events for the public and professionals. It opens for tours on Wednesday afternoons and holds open days in spring and summer. Plant sales are organized yearly in front of the supermarket, and special events target real estate developers, architects and public sector stakeholders to showcase the potential of rooftop farming.

Business Model & Governance

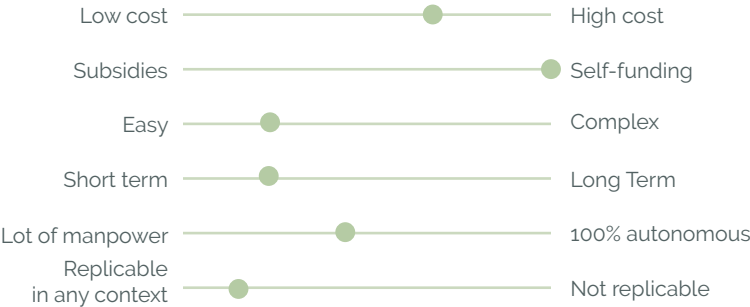
The site is owned by Delhaize supermarket and managed by Vestaculture. The produce is sold directly to the organic section of the Delhaize Boondael store. Main costs-labor and materials-are covered by Delhaize's sustainability department, while store utilities are funded by the supermarket. The setup cost was over €300,000, fully financed by Delhaize Belgium via its sustainability service.



Outcomes

The project proves that rooftop urban farming is both technically feasible and a strong tool for promoting healthy, local food. It raises awareness among all ages-especially schoolchildren-about farming, food systems, and ecological challenges. Produce is harvested three times a week and sold on-site. Despite natural constraints like weather and pests, high crop diversity ensures resilience. The rooftop also enhances the urban landscape and is well received by local residents.

Innovation Details



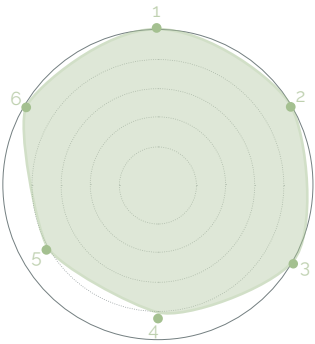
CIRCULAR SEEDLING SYSTEM

Goals & Implementation

The rooftop nursery was initiated by Delhaize Belgium's sustainability team to demonstrate their commitment to healthier, more local food systems. Implemented by Vestaculture, the project aims to grow vegetable seedlings from organic, reproducible seeds. It promotes intensive small-scale farming, showcases the feasibility of rooftop agriculture in dense urban settings, and encourages plant-based diets for all ages. The farm also serves as a community space for learning and exchange, inspiring similar projects elsewhere.

Impact Assessment

1. System circularity & sustainability
2. Use of local resources
3. Biodiversity, crops and ecosystem diversity
4. Energy consumption
5. Water management
6. Waste management



Main Issues & Next steps

Economic performance remains a key area for improvement. In 2025-2026, efforts will focus on developing trainings, workshops, plant sales, children's camps, and space rental to boost revenue. Additionally, the project aims to enhance its cultural and social role within the community.

Who can set it up



Farmer



Private company



Public official/
Administration



DAKAKKER

GENERAL PRESENTATION



Rotterdam, Netherlands



Zero Acreage Farm



2012



1 000 m²



NGO/Association



Vegetables, flowers, fruits, honey

CONTACT

<https://dakakker.nl/site/>
info@dakakker.nl



© Karin Oppeland

Goals & History

The DakAkker rooftop farm was created by ZUS architects and the Rotterdam Environmental Center. It serves as a model for urban farming, featuring the innovative Smart Roof technology and hosting educational programs. Maintained by volunteers, it demonstrates how green roofs improve biodiversity, water management, and urban cooling.

Main Value Proposition

DakAkker produces a variety of open-ground crops, including vegetables, flowers, fruits, honey, and vermicompost, blending low-tech methods with high-tech innovations. The site features a restaurant open seven days a week for breakfast and lunch, with a terrace offering views of the large agricultural roof and the Smart Roof. Roof fields are accessible for guided group visits by appointment.

Other Activities

Each year, about 350 excursion groups and thousands of visitors come to the DakAkker. Hundreds of schoolchildren learn about urban farming, biodiversity, bees, water management and healthy food. The farm also serves a social role, with dozens of local volunteers helping maintain the 1 000m² rooftop garden which includes vegetables, edible flowers, fruits and beekeeping. The DakAkker team and the Rotterdam Environmental Center also provide advice to other rooftop farming projects.

Business Model & Governance

The DakAkker foundation operates as a business without subsidies. Income from excursion groups and educational activities exceeds that from agricultural production. Educational programs for children receive partial funding from the Rotterdam Environmental Center foundation.

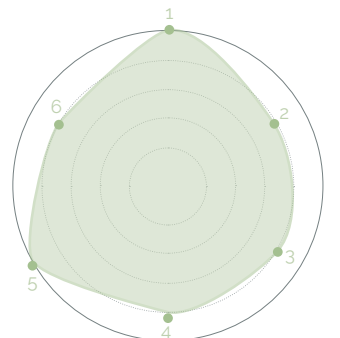
SMART WATER ROOF

Goals & Implementation

The Smart Roof technology is an innovative water storage system installed on the Rooftop Pavilion, featuring a flow control regulated by weather forecasts. When heavy rain is predicted, the system creates extra water storage capacity 24 hours in advance. Developed by the German company Optigrün and the Rotterdam Environmental Centre as part of climate adaptation efforts, the project was launched in 2018 with support from the city's innovation fund and business sponsors. The Smart Roof serves as a test site and demonstration model for developers, architects, policymakers and rooftop farming initiatives.

Impact Assessment

1. System circularity & sustainability
2. Use of local resources
3. Biodiversity, crops and ecosystem diversity
4. Energy consumption
5. Water management
6. Waste management



Outcomes

The Smart Roof has become a model for climate-adaptive design, inspiring over 50 similar smart roofs across the Netherlands and abroad. Though compact (120 m²), it stores up to 14,000 liters of rainwater, with 9,000 liters available for irrigating the DakAkker farm. The system, fully automated via smart flow control, can retain around 60 liters of water per square meter and operates continuously. It serves as a functional test site and an example for green roof innovation.

Innovation Details



© Annette Behrends

Main Issues & Next steps

Scaling remains a challenge due to costs and limited awareness. Next steps focus on promoting the system to architects and policymakers, expanding its use in new developments, and continuing on-site testing to adapt it to diverse urban settings.

Who can set it up



Private company



Researcher



Public official/
Administration



© Annette Behrends



STADTACKER

GENERAL PRESENTATION



Stuttgart, Germany



Community garden



2012



4 000 m²



NGO/Association



Vegetables

CONTACT

www.stadtacker.de

info@stadtacker.de



© Rafael Glatzel

Goals & History

Originally launched during the '72 Hour Urban Action Festival', the Stadtacker project started as a collaboration between local universities and an art association. Though it didn't meet its initial goal of producing food for the event, it evolved into a community garden on a former railway site, now run by students, families, immigrants and workers from diverse backgrounds.

Main Value Proposition

Stadtacker blends private and community garden plots with shared spaces for growing food, cooking, and cultural events. Most materials are reused, and the low-tech site includes open-ground and raised beds. The area has no fence, so it is always open and accessible, with dedicated community hours on Tuesday and Thursday afternoons and evenings for everyone to join in.

Other Activities

Beyond food production, Stadtacker fosters community through cooking, events, and environmental education. Local schools and a kindergarten visit regularly, with five children's groups attending weekly over extended periods. A solar-powered irrigation system supports sustainable water use across the garden.

Business Model & Governance

Stadtacker is run by an association. Vegetables are shared freely among participants, and occasional products like food or soaps are offered for donations during community events. The project operates on a non-commercial, solidarity-based model.

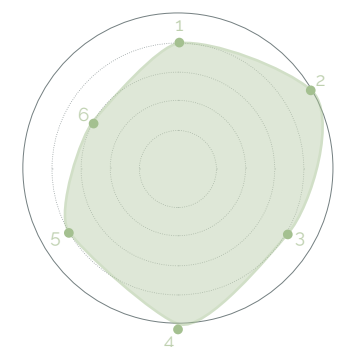
SOLAR IRRIGATION SYSTEM

Goals & Implementation

The solar irrigation system was created to save water and reduce manual work, especially for raised beds that require frequent watering. The first system was funded through a public vote and installed by a garden member with technical knowledge. A second system was added later, also serving as a workshop topic to attract new visitors. While setting it up requires technical understanding (e.g. water pressure, line resistance), it ensures more regular watering, improving plant growth compared to manual irrigation. Funding came from a mix of public and self-financing, with additional support from the city administration.

Impact Assessment

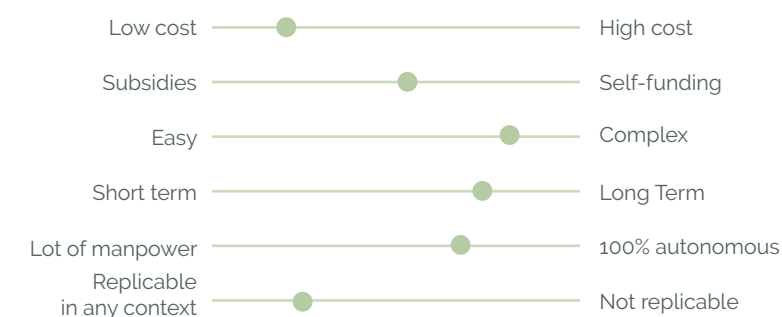
1. System circularity & sustainability
2. Use of local resources
3. Biodiversity, crops and ecosystem diversity
4. Energy consumption
5. Water management
6. Waste management



Outcomes

The solar irrigation systems use Arduino boards connected to solar panels. When the sun sets and voltage drops, irrigation is triggered automatically for one hour. This ensures consistent watering, improving plant growth and saving time for garden participants. As the garden lacks easy access to electricity, the solar setup enables irrigation where it would otherwise not be possible. Each system cost around €100 to set up, with some materials-like the solar panels and hoses-re-used from existing resources.

Innovation Details



© Martin Abelman



© Stadtacker

Main Issues & Next steps

The main challenge is the technical knowledge required to set up and maintain the system, such as managing water pressure and line resistance. While effective, the system still uses a significant amount of water. Next steps include optimizing efficiency and expanding coverage by adding more pipes.

Who can set it up



Researcher



NGO/
Association



Citizen
Public official/
Administration



OUR YARD CLITTERHOUSE

GENERAL PRESENTATION



London, England



Community garden



2014



300 m²



NGO/Association



Vegetable & ornamental

CONTACT

www.ouryard.org

garden@clitterhouse.com



© Isher Dhiman

Goals & History

The Clitterhouse Farm has a rich history dating back to the 1300s. Once a working farm supplying hay to London, it gradually declined through the 20th century and was abandoned for over a decade. In 2013, four local residents founded the Clitterhouse Farm Project to save the site from demolition. A community garden was launched in 2016, growing into a vibrant hub for horticulture, culture, food, and community activities in North West London.

Main Value Proposition

Our Yard's community garden combines open-ground plots, raised beds, and containers to grow vegetables, herbs, fruits, flowers and grasses. It also includes a tiny forest and wildflower beds in the park. Low-tech and community-driven, the garden opens three days a week.

Other Activities

In addition to food growing, Our Yard runs a community composting scheme and maintains wildflower beds and herb gardens. The food waste collection box used for composting is available for public use 24/7. The site supports both food production and biodiversity through low-impact, open-ground gardening.

Business Model & Governance

Our Yard operates as a social enterprise. Income is generated through the community café, space hire, pop-up events, workshops, and school visits. However, the project still relies partly on external funding to sustain its activities.

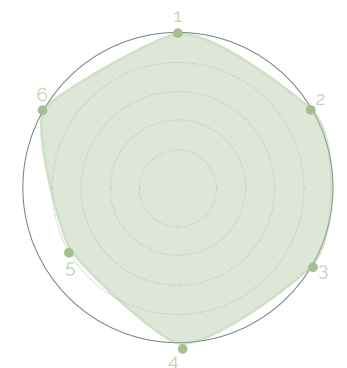
COMMUNITY COMPOST HUB

Goals & Implementation

Rooted in circular economy principles, the Community Composting Scheme turns food scraps into compost for the same garden that produced them. Vegetables are harvested, cooked, served in the café, and leftovers return to the soil. As there is no household food waste collection in the area, it offers a local way to cut waste and enrich soil. Managed by the Garden Manager and volunteers, the project cost £15,000 for equipment, outreach, and materials. Funded for a year by The North West Waste Authority in 2023, it now continues thanks to weekly gardening groups keen to keep composting.

Impact Assessment

1. System circularity & sustainability
2. Use of local resources
3. Biodiversity, crops and ecosystem diversity
4. Energy consumption
5. Water management
6. Waste management



Outcomes

All food waste produced and collected on site is diverted from landfill, offering a sustainable alternative to traditional waste management. This supports a local circular economy by turning waste into a resource and creating a long-term, community-owned asset for environmental action. About 60kg of food waste is saved each week, totalling several tonnes over 2.5 years. By working with local residents, the project raises awareness, empowers action, and builds a strong network committed to sustainability and mutual support.

Innovation Details



© Anika Bakirtzidis

Main Issues & Next steps

To increase impact, the project could scale up by involving more participants, collecting more food waste, and expanding on-site composting infrastructure. Offering additional workshops and sharing knowledge with other community groups are key steps toward broader adoption and long-term sustainability.

Who can set it up



Farmer



NGO/
Association



Citizen



Public official/
Administration



© Thomas Ball



SYMBIOSE



GENERAL PRESENTATION



Nantes, France



Zero Acreage Farm



2022



400 m²



Private company



Vegetables

CONTACT

www.we-agri.fr/portfolio_page/symbiose/
luc.stephan@nmh.fr



Goals & History

Symbiose began as a rooftop renovation project aimed at revitalizing 1970s social housing by enhancing aesthetics and creating functional spaces. The idea of integrating agriculture came later, transforming the rooftop into a productive greenhouse. Today, it combines food production with a system that captures and redistributes heat to help warm the building's flats, demonstrating a synergy between urban farming and energy efficiency.

Main Value Proposition

Symbiose is a rooftop greenhouse with 80 containers, where crops are grown by hand and adapted to the greenhouse's climate conditions. A smart system balances energy needs between plant growth and building heating. The space also hosts workshops and school harvests, linking food production with community learning.

Other Activities

In addition to food production, the 400 m² rooftop greenhouse contributes to heating water for the building's flats by recovering energy. The system is monitored to assess its impact on both crop yields and energy efficiency.

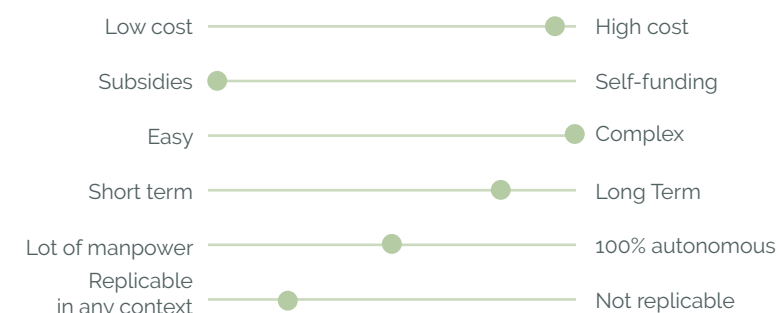
Business Model & Governance

Symbiose is led by the social housing company Nantes Métropole Habitat (NMH) that manages the building. Rather than aiming for profitability, it serves as a experimentation exploring how rooftop farming can integrate with energy production in urban housing. The €1 million project covered renovating 24 flats, installing a new lift and energy system, and building the rooftop greenhouse, which cost €300,000 alone. Funding came from the social housing company self-financing and loans (60%), and other municipal and national loans (40%).

Outcomes

Four partners collaborate at Symbiose: energy manager, farmer, ECOS association, and NMH. They coordinate climate control, vegetable production, workshops, and resident support. A smart system optimizes greenhouse conditions and heat recovery. While designed to provide 70% of the building's hot water, it currently delivers about 50%, saving roughly €100 per tenant annually.

Innovation Details



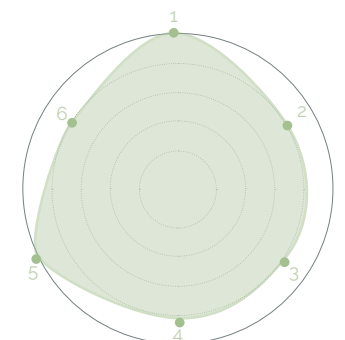
CIRCULAR HEAT EXCHANGE

Goals & Implementation

Symbiose was born from the collaboration between an architect, an energy manager, and NMH with the support of GROOF, an North West Europe Interreg project funded by EU. Located in a socially disadvantaged neighborhood, it aimed to test the rooftop greenhouse as both an energy producer and a new shared space for residents. Its goals included restoring value to the real estate asset, creating a visible urban landmark, improving the building's insulation, and generating renewable energy. It also served as a test for rooftop agriculture and structural elevation, while offering an educational tool for schools.

Impact Assessment

1. System circularity & sustainability
2. Use of local resources
3. Biodiversity, crops and ecosystem diversity
4. Energy consumption
5. Water management
6. Waste management



Main Issues & Next steps

Challenges include limited lift access, water damage to the wooden floor, and pollination management. Residents value free vegetables, though few join the harvests, and children engage in weekly workshops. Production will shift to a plant nursery to support 35 shared gardens.

Who can set it up



Private company



Researcher



Public official/
Administration



ATYPICAL EXAMPLES



© Trichon farm

TRICHON FARM

	Roubaix, France		Community Garden
	2015		9 000 m ²
	NGO/Association		Vegetables

Urban Soil Recovery

Trichon Farm in Roubaix, France, is an urban farming project transforming polluted industrial land into fertile ground for vegetables. Run by a local non-profit organisation, it combines composting, rainwater harvesting and greenhouse growing while experimenting with soil restoration and biodiversity recovery.

CONTACT
fermeurbainedutrichon.fr

FOODE HYDROPONIC GREENHOUSE

	Berlin, Germany		Zero Acreage Farm
	2006		1 200 m ²
	Private company		Vegetables

Greywater Pilot Plant

FOODE's Berlin pilot integrates a hydroponic greenhouse with a greywater treatment system led by Nolde & Partner. This compact setup treats up to 10,000 L/day of household greywater, redirecting recycled water into the greenhouse where crops are irrigated sustainably. The project combines food production with educational tours, demonstrating circular use of water, energy, and nutrients in an urban setting. Its goal is to scale greywater recycling as a cost-effective solution for resilient Urban Agriculture.

CONTACT
innovative-wasserkonzepte.de/



© Nolde – innovative Wasserkonzepte GmbH

INTERNATIONAL EXAMPLES

AQUAVERTI

	Montreal, Canada		Zero Acreage Farm
	2018		3 000m ²
	Private company		Vegetables

Sustainable Vertical Farm

The AquaVerti Farm is a vertical hydroponic farm in Montreal, using 100 % renewable hydroelectric energy to power its controlled-environment agriculture. By growing locally in stacked water beds with filtered air, AquaVerti ensures year-round freshness, reduces food miles by 99%, and supports Quebec's food security-all while minimizing land use and environmental impact

CONTACT
www.aquavertifarms.com/



© Aquaverti

BEACON FOOD FOREST

	Seattle, USA		Community Garden
	2009		7 ha
	Association		Vegetables

Forest Urban Integration

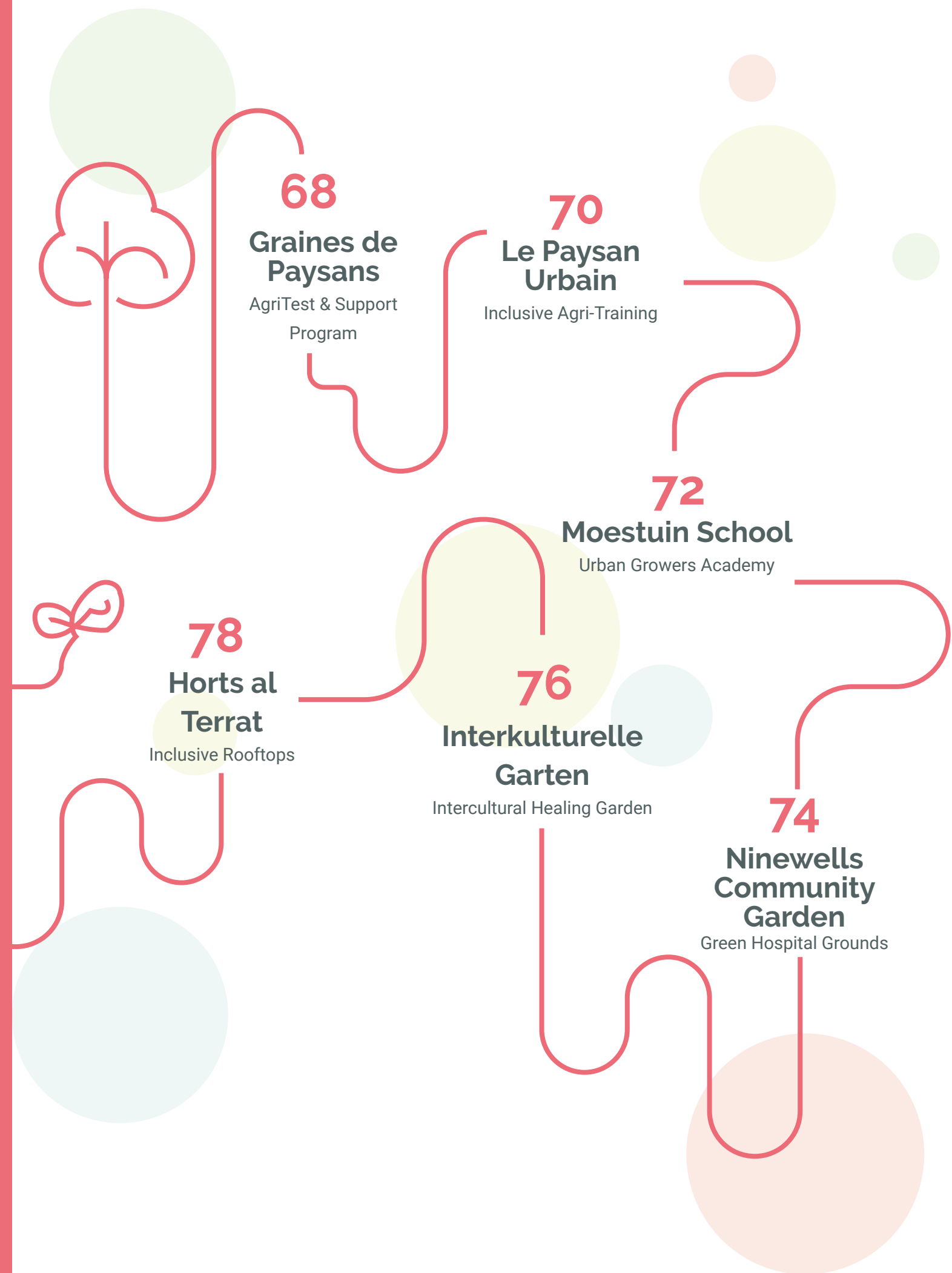
Beacon Food Forest in Seattle is a community-led urban garden launched in 2009 that combines native habitat restoration with edible forest gardening. Designed like a woodland ecosystem, it layers fruit and nut trees above berry bushes and edible perennials. Born from a permaculture course and built on public land through Seattle's P-Patch program, the project brings together hundreds of volunteers who co-design, build, and care for this shared food forest.

CONTACT
www.beaconfoodforest.org/



© Beacon Food Forest

SOCIAL INNOVATIONS —





GRAINES DE PAYSANS

GENERAL PRESENTATION



Brussels, Belgium



Urban Farm



2016



40 000 m²



NGO/Association



Vegetable, aromatic, medicinal herbs, flowers

CONTACT

www.haricots.org/
ledebut@haricots.org



© Le Début Des Haricots

Goals & History

Graines de Paysans was launched in 2016 by Le Début des Haricots as part of the EU-fund BoerenBruxselPaysans program. In order to support the emergence of new ecological farmers in Brussels, the project created an urban agricultural test area and support pathway to help aspiring growers access land, tools, and training. The goal is to boost local, sustainable food production and ease the transition to independent farming.

Main Value Proposition

Graines de Paysans supports small-scale, agroecological farming using a bio-intensive model. Each farmer in training has access to plots, a personal greenhouse, shared facilities, tools, and cold storage. The low-tech site fosters hands-on learning and experimentation. Open to the public, it hosts weekly on-site markets and events to connect local food production with the community.

Other Activities

The project contributes to research on Urban Agriculture, hosts professional events, and engages with policymakers to support sustainable farming. It also raises public awareness on local food systems and serves as a welcoming space for citizens, professionals, and visitors alike.

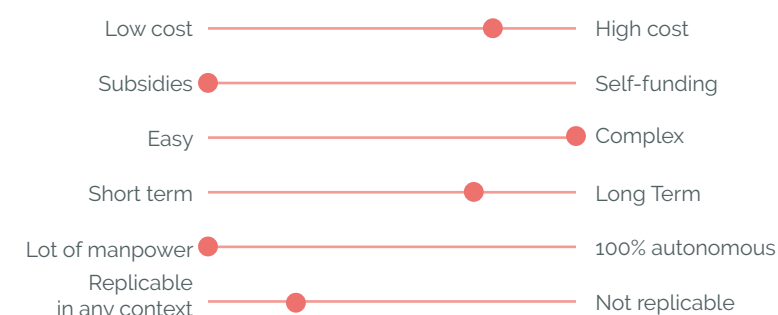
Business Model & Governance

Led by Le Début des Haricots, the project is funded by public subsidies and foundations support. Farmers in training sell their produce via local cooperative shops, a weekly on-site market, GASAPs (solidarity-based purchasing groups), and sometimes self-picking subscriptions. The initiative involves around fifty partners and targets a local consumer base. Set up from scratch on a simple grass field, the project received €1 million in FEDER funding and is now supported by Brussels funding.

Outcomes

The project operates within a strong and diverse local ecosystem, including partner farms, associations, cooperatives, researchers, local authorities and volunteers. Two coordinators from Le Début des Haricots provide daily support to farmers. The test farm welcomes innovative agricultural projects-economically, socially, and environmentally-offering new farmers a safe space to experiment and to co-create solutions aligned with today's societal and environmental challenges.

Innovation Details



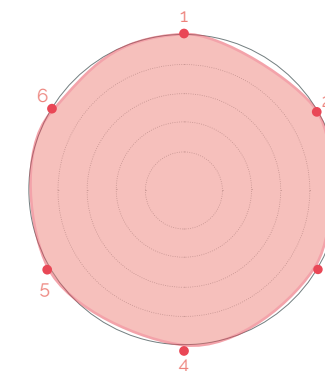
AGRITEST & SUPPORT PROGRAM

Goals & Implementation

The project addresses two key issues: the outsourcing of food production from Brussels and the lack of support for aspiring farmers without an agricultural background. It aims to foster new, small-scale farming models that balance ecological values, economic viability, and farmer well-being. Through the test farm and personalized support, Graines de Paysans helps new growers transition into professional, resilient, and sustainable farming careers.

Impact Assessment

1. Education & training
2. Inclusivity
3. Social cohesion
4. Fair organisation & governance
5. Access to quality local food
6. Improved quality of life



© Le Début des Haricots



© Le Début des Haricots

Main Issues & Next steps

A new model, the 'lot test', is being piloted. Under this model, farmers can remain on their parcel beyond the initial 3-4 years test period by reimbursing the infrastructure investment. This model facilitates smoother transitions to autonomy.

Who can set it up



NGO/
Association



Public official/
Administration



LE PAYSAN URBAIN

GENERAL PRESENTATION

**Marseille, France**

**Social Farm**

**2017**

**2 500 m²**

**NGO/Association**

**Microgreens**

CONTACT
lepaysanurbain.fr/marseille/
clairemoreau@lepaysanurbain.fr



© Guillaume Morel-Chevillet

Goals & History

Founded in 2017, Le Paysan Urbain Marseille Métropole is a solidarity-based agroecological project promoting nature in the city and social inclusion. It combines urban farming, educational activities, school gardens, a native plant nursery (Nèrta), and green job training for youth. The farm engages citizens, institutions and businesses to build a greener, more resilient Marseille.

Main Value Proposition

A pioneer of microgreens in Marseille since 2019, Le Paysan Urbain is the region's sole agroecological producer. The socially inclusive farm grows 21+ varieties-from mustard and kale to edible flowers-without artificial light or heating. In 2024, it harvested 2.9 tonnes in four bioclimatic greenhouses (600 m²) using low-tech, sustainable methods. That year, it also launched a native plant nursery, producing over 2,000 endemic plants to boost urban biodiversity.

Other Activities

In 2024, the NÈRTA nursery team grew, adding new tools like ethnobotanical walks and nature zones. The ETRE Marseille school reached its second year. The farm earned a 5-year environmental protection certification (AAPE), strengthening public partnerships. Educational activities on urban gardens, ecological awareness, and renaturation expanded, becoming the project's third economic pillar, benefiting over 3 455 mainly young participants.

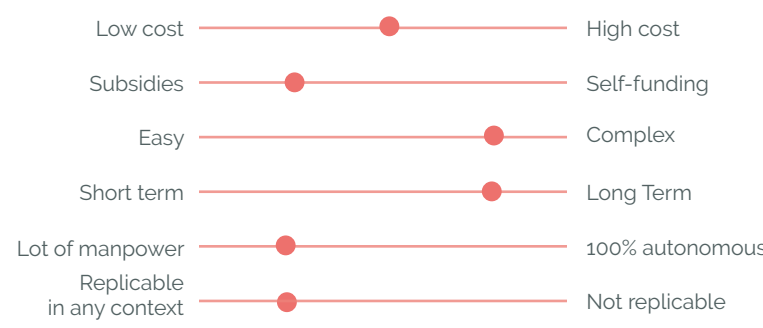
Business Model & Governance

In 2024, the project involved 104 volunteers, 15 staff, and 2 civic service members, supporting 92 beneficiaries through a work-integration model (chantier d'insertion). This socially driven model relies on dedicated public funding schemes, with specific financial arrangements tied to the supervision and support of employees in transition. The organisation operates across three main areas.

Outcomes

Despite growing social and mental health challenges, Le Paysan Urbain achieves a strong 70% positive exit rate, reflecting its effective support rooted in a connection with nature. In 2024, 50 participants completed integration pathways averaging 13 months, overcoming barriers like health issues, lack of experience, and housing difficulties. Training expanded with hands-on learning in plant production and education, benefiting 9 people. The ETRE program guided 42 young people aged 16–25 toward employment.

Innovation Details



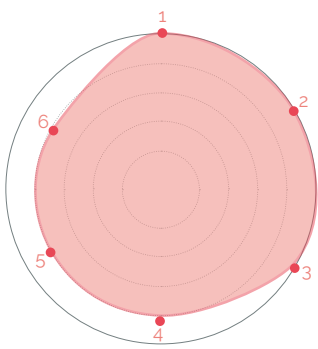
INCLUSIVE AGRI-TRAINING

Goals & Implementation

Le Paysan Urbain supports vulnerable people by removing barriers to employment and offering personalised pathways based on individual needs and aspirations. It ensures sustainable transitions through social and professional support. Integration roles include microgreens and nursery workers, garden educators, and administrative assistants. Beneficiaries learn about soil, seeds, planting, community gardens, eco-friendly practices, and receive follow-up support.

Impact Assessment

1. Education & training
2. Inclusivity
3. Social cohesion
4. Fair organisation & governance
5. Access to quality local food
6. Improved quality of life



© Guillaume Morel-Chevillet

Main Issues & Next steps

In 2025, Le Paysan Urbain will focus on empowering youth for ecological transition and reengaging young people in priority neighborhoods in northern Marseille. It will also strengthen its network by sharing resources to boost impact and resilience.

Who can set it up



NGO/
Association



Public official/
Administration



© Guillaume Morel-Chevillet



MOESTUIN SCHOOL

GENERAL PRESENTATION



Amsterdam, Netherlands



Community Garden



2021



1 000 m²



NGO/Association



Vegetables

CONTACT

moestuijschoolamsterdam.nl/
info@moestuijschoolamsterdam.nl



© Moestuinschool

Goals & History

Moestuinschool was founded by two gardeners who started a small urban garden on 1,000 m² to show the real value of seasonal, local food. They saw that many city dwellers wanted to grow vegetables but lacked skills and guidance. To share their experience and expand urban food knowledge, they created Moestuinschool: a place to learn, grow, and bring more edible spaces to the city.

Main Value Proposition

Moestuinschool Amsterdam is an urban farm and garden school that grows a wide range of organic vegetables and herbs on 1 000 m² using low-tech, sustainable methods. The site is accessible to course participants, who learn gardening one day a week from March to November. By combining small-scale food production with practical education, the farm helps city residents grow healthy food and build a local community of gardeners.

Other Activities

One of the gardeners regularly gives workshops to share practical growing skills with the community. In 2025, a new partnership with a CSA project in a neighboring town will allow four participants to join the farm one day a week for hands-on experience, with their course fees covered by the CSA project. This creates a learning-by-doing environment and strengthens ties with local food networks.

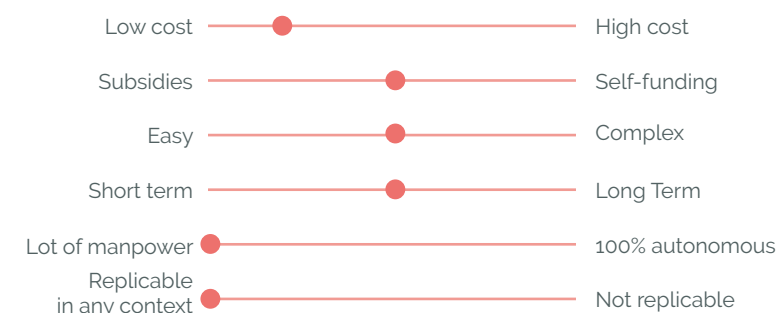
Business Model & Governance

The garden is managed by the foundation De Eetbare Stad, led by three professional urban farmers with support from an expert board and guest lecturers. Initially funded by a €45,000 grant for setup and equipment, the school now runs independently on course fees and workshops, breaking even with 42 students per year. Governance combines practical farming leadership with formal oversight to ensure hands-on learning and financial balance.

Outcomes

Each year, about 40 people finish the Moestuinschool program ready to start their own gardens or apply their skills as gardeners or chefs. Graduates grow fresh food, cook with seasonal produce, and value parts of plants often wasted. The school creates a network of urban growers who add more edible green spaces and food awareness to the city.

Innovation Details



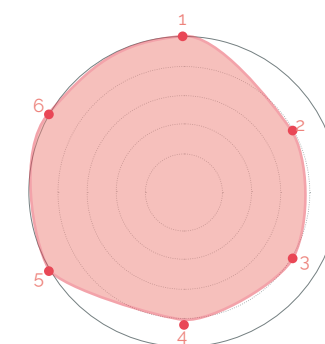
URBAN GROWERS ACADEMY

Goals & Implementation

The Moestuinschool Amsterdam aims to empower city dwellers to grow their own organic vegetables and herbs through hands-on learning. By offering a year-long practical training, the school guides adults step by step through the full cycle of organic gardening - from seed to harvest. Participants work together on a shared urban garden, learning directly on-site under the guidance of experienced growers. The approach combines practice with seasonal lessons and community building, helping people reconnect with food production and contribute to a more sustainable urban food system.

Impact Assessment

1. Education & training
2. Inclusivity
3. Social cohesion
4. Fair organisation & governance
5. Access to quality local food
6. Improved quality of life



© Moestuinschool



© Moestuinschool

Main Issues & Next steps

Moestuinschool faces ongoing land use uncertainty, limiting future planning. Attempts to find new sites have failed, and founders prioritize teaching over expansion. In 2026, one instructor will run a shortened

Who can set it up



Farmer



NGO/
Association

NINEWELLS COMMUNITY GARDEN

GENERAL PRESENTATION



Dundee, Scotland



Community Garden



2009



4 000 m²



NGO/Association
Scottish Charity SC044580



Vegetables

CONTACT

ninewellsgarden.org.uk/
outreach@ninewellsgarden.org.uk



© Ninewells

Goals & History

Started in 2009 by volunteers and staff from National Health Service (NHS), the Ninewells Community Garden aimed to create a therapeutic green space within the hospital to support health and wellbeing. Backed by research on the benefits of nature for recovery and staff morale, the project grew with local support, gaining essential infrastructure and becoming a charity in 2013. It now hosts a wide range of therapeutic and community gardening activities.

Main Value Proposition

The garden is a low-tech vegetable garden designed as an open, inclusive space for all. Accessible at any time of day and night, it offers a welcoming environment for relaxation, reflection, and community engagement. Weekday activities are supported by staff and volunteers, and the space is fully accessible for people with reduced mobility.

Other Activities

The garden hosts daily horticultural activities supported by staff and over 40 volunteers, alongside community events, education, and honey production from its apiary. It promotes wellbeing through nature, working with local groups and initiatives like the Flourish program—a six-week horticultural therapy project in partnership with universities and mental health organisations.

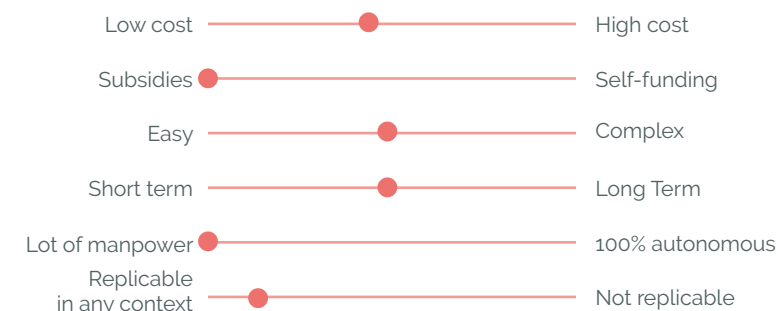
Business Model & Governance

The garden is run by two part-time staff, over 40 volunteers, and a board of seven trustees. It partners with community groups, NHS Tayside, the local authority, and local businesses for in-kind support. Produce is shared through local sales and donations. The annual cost of £150,000 is covered by NHS Tayside, trusts, the National Lottery, and small grants or in-kind help from local businesses.

Outcomes

The garden is widely used by NHS staff, patients, and the public, fostering wellbeing, inclusion, and connection with nature. Run by volunteers and supported by expert staff, it aligns with Scotland's health and sustainability goals. As part of the city's green network, it hosts regular events and was awarded the RHS Community Award for Health & Wellbeing in 2024.

Innovation Details



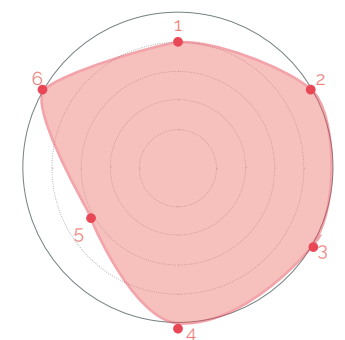
GREEN HOSPITAL GROUNDS

Goals & Implementation

The project brings the benefits of green spaces into the hospital environment, connecting NHS staff, patients, volunteers and the wider community. It promotes health and wellbeing by turning underused hospital grounds into inclusive therapeutic gardens, supporting by the Scottish Government's 'Our Natural Health Service' strategy and working with public health departments to embed nature-based care.

Impact Assessment

1. Education & training
2. Inclusivity
3. Social cohesion
4. Fair organisation & governance
5. Access to quality local food
6. Improved quality of life



© Ninewells



© Ninewells

Main Issues & Next steps

With over 40 volunteers from diverse backgrounds, the garden has expanded. One challenge is accessibility for some patients, which is being addressed by creating ward-based gardens. Supported by NatureScot, a new wild garden area will enhance biodiversity and provide space for bees and alternative crops.

Who can set it up



NGO/
Association



Public official/
Administration



INTERCULTURAL GARDEN

GENERAL PRESENTATION



Berlin, Germany



Social Farm



2006



2 200 m²



Public official/
Administration



Gardening

CONTACT

www.parkamgleisdreieck.de
info@suedost-ev.de



© Intercultural Garden

Goals & History

Founded in 2006 by the association südost Europa Kultur e.V., the Intercultural Garden Rosenduft began as a small garden created by refugees from Bosnia and Herzegovina. Its main goal is to support the social participation of traumatised refugees and to offer a therapeutic space that helps them cope with everyday life. The garden also aims to bring together other refugees and local residents, fostering community ties and intercultural exchange.

Main Value Proposition

At Rosenduft, the focus lies not on crops but on creating a safe, supportive space with a strong social and therapeutic purpose. The garden combines individual plots with shared areas and simple, low-tech facilities like two construction trailers. Open daily from April to October, it welcomes everyone to enjoy the space freely, while guided tours and public celebrations foster connection.

Other Activities

Beyond gardening, Rosenduft serves as a meeting place for self-help groups and community exchange. Volunteers share the harvest among themselves and for garden parties. The project hosts workshops for adults and children on topics like beekeeping, pottery, heritage plants, and healthy eating. It also offers guided tours, welcoming groups to learn and connect through the garden.

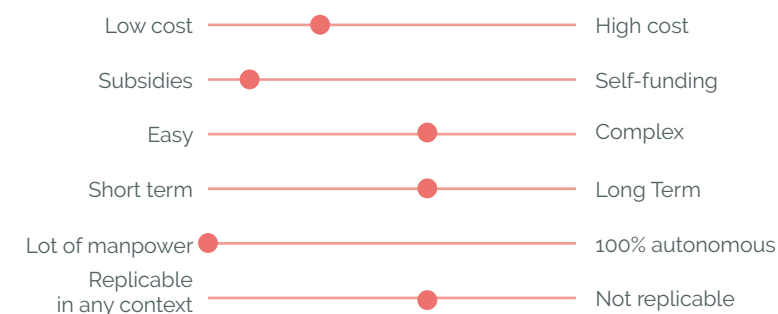
Business Model & Governance

The Intercultural Garden Rosenduft is a non-profit project in a public park, managed by a state-owned company. A former refugee coordinates the garden and provides counselling and language help. The garden generates no income, but the counselling and the language help done by the coordinator are supported by a project of the Berlin Senate for Integration.

Outcomes

The garden is managed with strong commitment and expertise, supported by volunteers and staff. Its key strengths include empathy, horticultural knowledge, and cultural understanding. The project is highly regarded and well integrated into the Kreuzberg community, with active involvement from local residents and stakeholders, some of whom had similar experiences. It has become a recognized part of the urban landscape and attracts international students interested in its unique therapeutic model.

Innovation Details



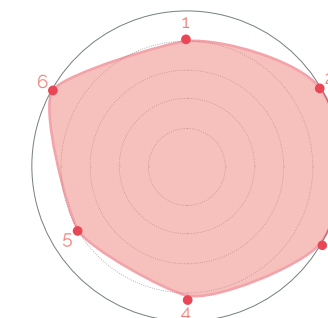
INTERCULTURAL HEALING GARDEN

Goals & Implementation

The project started to offer traumatised refugees a safe space to grow plants and build roots in a new community. A community garden was chosen to support this goal. Securing a long-term site with Berlin's administrative support was the main challenge, but the idea was quickly embraced. Through shared gardening and therapeutic activities, participants reduce stress, share experiences, and gain confidence, improving mental health and community ties to better cope with daily life.

Impact Assessment

1. Education & training
2. Inclusivity
3. Social cohesion
4. Fair organisation & governance
5. Access to quality local food
6. Improved quality of life



© Intercultural Garden



© Intercultural Garden

Main Issues & Next steps

Securing stable funding and ensuring long-term sustainability remain key challenges. Thanks to strong volunteer support, the project continues to thrive, with future efforts focused on enhancing financing and deepening community engagement.

Who can set it up



NGO/
Association



Public official/
Administration



HORTS AL TERRAT

GENERAL PRESENTATION



Barcelona, Spain



Social Farm



2016



210 m²



Public official/
Administration



Vegetables & flowers

CONTACT

[Horts al terrat](#)
furgell@bcn.cat



© Horts al Terrat

Goals & History

Launched in 2016 by the Barcelona City Council, Horts al Terrat repurposes unused municipal rooftops into hydroponic gardens for social inclusion. Initially a pilot, the project now includes 10 rooftop gardens engaging over 250 participants with disabilities from 21 organizations. It improves well-being (+5.5 on the Quality of Life Index) and donates fresh produce to vulnerable communities.

Main Value Proposition

The rooftop gardens use off-ground hydroponic systems with water recirculation and rainwater harvesting to grow vegetables, salads, flowers, and ornamental plants. Designed to be fully accessible, they include ramps, low working tables, adapted tools, and easy-to-read materials for people with physical and communication disabilities.

Other Activities

The project includes 560 m² of off-ground (soilless) cultivation space. Beyond production, it hosts educational visits, community workshops, public tours, and research collaborations, making it a space for learning, inclusion, and innovation.

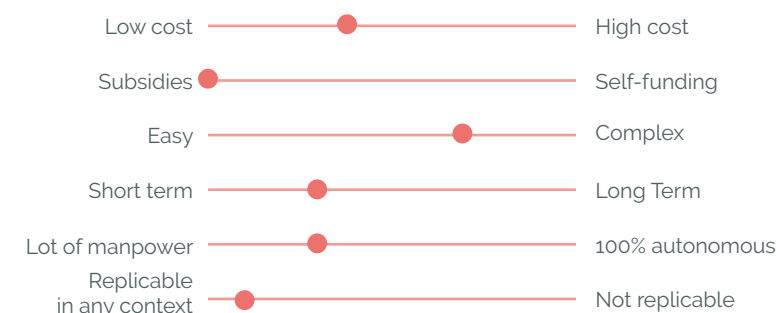
Business Model & Governance

The project is publicly managed and funded by the City of Barcelona through the municipal budget. It operates on a non-commercial basis, with all produce donated to social canteens. Setup costs ranged from €6,000 to €15,000, fully covered by public funding. Governance and coordination are ensured through municipal oversight and partnerships with local social organizations.

Outcomes

Weekly gardening sessions engage participants, with all produce donated locally. Research shows therapeutic gardening improves mental and physical health, autonomy, and social skills for people with disabilities. The project is fully supported by Barcelona City Council through funding, rooftop spaces, and coordination.

Innovation Details



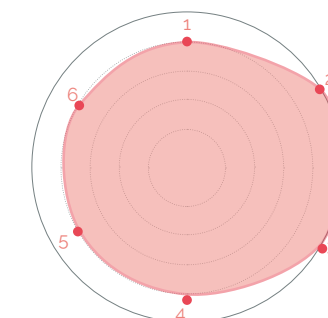
INCLUSIVE ROOFTOPS

Goals & Implementation

Launched in 2016, this initiative combines horticultural therapy and hydroponic rooftop farming to promote social inclusion. Now scaled to 10 gardens, it partners with disability organizations to provide accessible green spaces, tackle social exclusion, and support urban food resilience through efficient, water-saving systems.

Impact Assessment

1. Education & training
2. Inclusivity
3. Social cohesion
4. Fair organisation & governance
5. Access to quality local food
6. Improved quality of life



© Horts al Terrat



© Horts al Terrat

Main Issues & Next steps

Originally designed for agriculture, the rooftop gardens could be adapted to use empty spaces for other purposes such as events, talks, and outdoor activities, broadening their social impact.

Who can set it up



NGO/
Association



Researcher



Public official/
Administration



ATYPICAL EXAMPLES



© OrganicLea

ORGANIC LEA

	London, England		Social Farm
	2001		5 ha
	NGO/Association		Gardening

Cooperative Leadership Model

OrganicLea is a community food-growing cooperative based at Hawkwood Nursery in London. Its innovative governance model gives every core member equal responsibility as a director, ensuring shared leadership and collective decision-making. Combining organic food production with local distribution, training, and community engagement, OrganicLea shows how democratic structures can power a resilient, people-led food system.

CONTACT
www.organiclea.org.uk/

LE SANTROPOL ROULANT

	Montreal, Canada		Social Farm
	1995		8 000 m ²
	NGO/Association		Gardening

Food Solidarity Hub

Based in Montreal, Santropol Roulant combines Urban Agriculture, collective cooking, and meal delivery to strengthen food security and reduce social isolation. With rooftop gardens, a peri-urban farm and community projects like beekeeping and composting, it connects generations and empowers volunteers while building a more caring, resilient community.

CONTACT
santropolroulant.org/



© Le Santropol Roulant

INTERNATIONAL EXAMPLES

LEMON TREE TRUST

	Kurdistan Region Iraq		Community garden
	2015		100 raised beds
	NGO/Association		Gardening

Refugee Garden Network

In Iraq, the Lemon Tree Trust runs urban and peri-Urban Agriculture projects in refugee camps to support displaced communities. By employing refugees, promoting entrepreneurship and offering training, these gardens near local markets help households grow and sell vegetables, generating sustainable income and improving food security. Globally, the Trust empowers marginalized groups through community-led Urban Agriculture and capacity-building initiatives.

CONTACT
www.lemontreetrust.org/



© Britt Willoughby Dyer

NORDIC THERAPY GARDEN

	Kyiv, Ukraine		Social Farm
	2024		4 500 m ²
	NGO/Association		Gardening

Nature Therapy

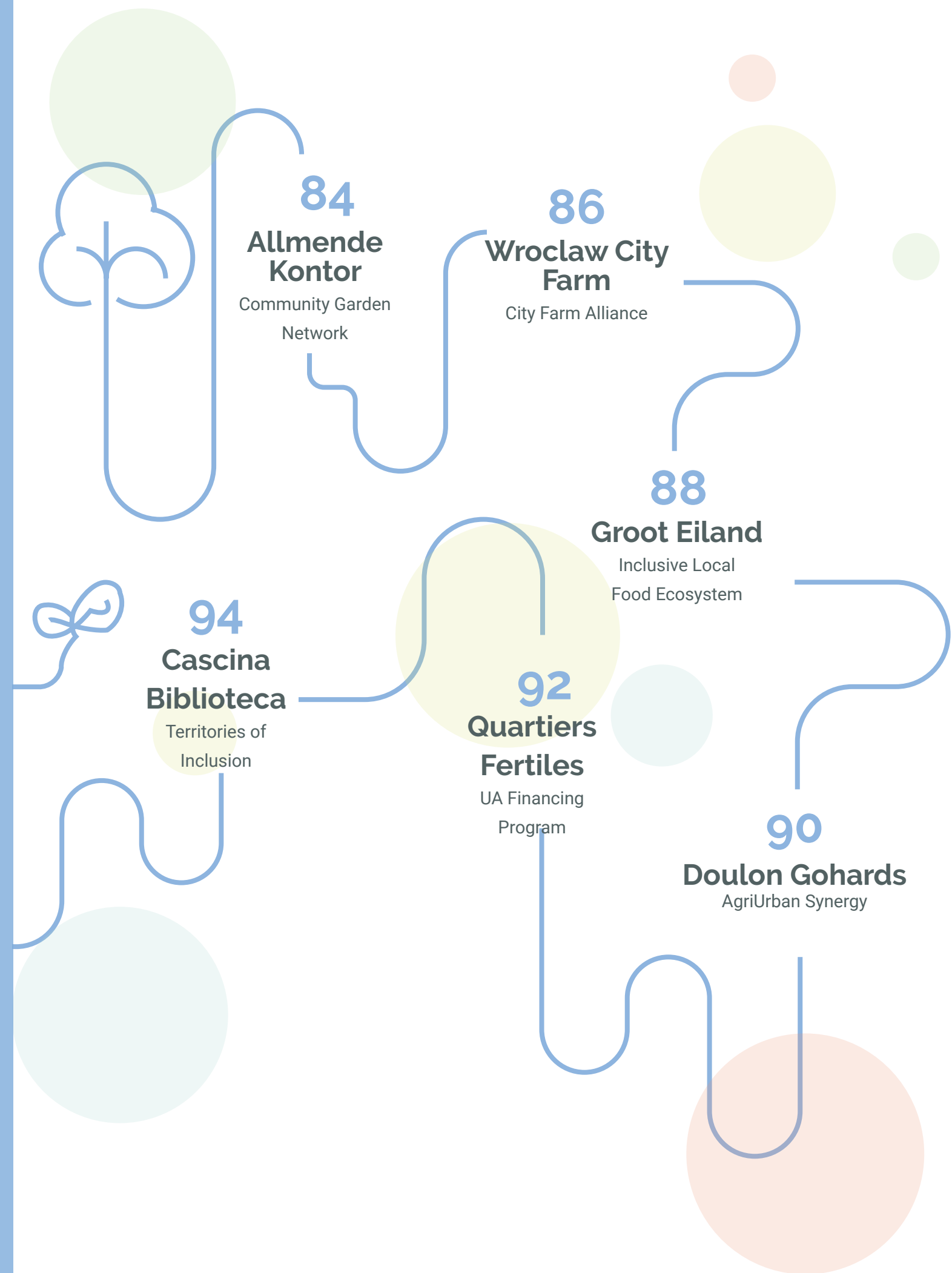
The Nordic Therapy Garden in Kyiv is a 4,500 m² healing space designed to support mental health, especially Post-Traumatic Stress Disorder recovery for civilians and veterans. Created in 11 weeks near Pavlov Psychiatric Hospital, it features calming Nordic design, sensory plants, and zones for reflection, socializing, and physical activity. The garden aims to promote community resilience and inspire similar therapeutic spaces across Ukraine.

CONTACT
www.colville-andersen.com/therapy-gardens



© Nordic Therapy Garden

TERRITORIAL INNOVATIONS





ALLMENDE KONTOR

GENERAL PRESENTATION



Berlin, Germany



Community Garden



2011



5 000 m²



NGO/Association



Gardening

CONTACT

www.allmende-kontor.de/
garten@allmende-kontor.de



© 2023 Volker Gehrmann / KARACHOBERLIN

Goals & History

Founded by 13 community gardening activists and researchers, Allmende-Kontor started as a network to share knowledge and ideas on Urban Agriculture. It has since grown into a key reference point for public institutions, supporting the management and promotion of community gardens in Berlin and beyond. Allmende-Kontor addresses urban challenges like cultural and biological diversity, participatory planning, urban ecology, sustainable food and civic solidarity.

Main Value Proposition

The garden offers a 5,000 m² community area with 250 raised beds individually designed and cultivated by gardeners. Open to the public from sunrise to sunset, it provides an open, low-tech space for people to grow food, connect with nature, and share sustainable practices in the heart of the city.

Other Activities

Allmende-Kontor is also a place for networking and advocacy, supporting movements like the 'Manifesto of Urban Gardening' to promote common goods and influence city debates. The garden runs educational activities, joins research projects on urban ecology, and experiments with dye plants, beekeeping, composting, and water management, making it a practical lab for sustainable city living.

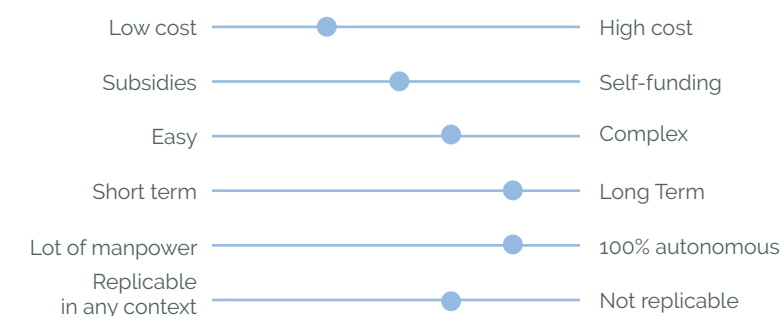
Business Model & Governance

Allmende-Kontor is a non-profit association of around 500 self-organized gardeners, supported by a wider community network. Activities are planned monthly and funded entirely by membership fees and donations. In its first year, total costs were about €226,500, covered mainly by funds from an employment office and business partner, and a social and professional activation program.

Outcomes

The garden is a cool, shady oasis on Tempelhofer Feld, rich in rare plants and insects. While individual gardeners manage their own beds, communal areas and tasks encourage cooperation. The garden has grown organically over time, shaped by the collective efforts of many, which gives it its unique charm. A central meadow and covered stage provide space for community events. Beds are allocated free each spring to association members, fostering ongoing participation and care.

Innovation Details



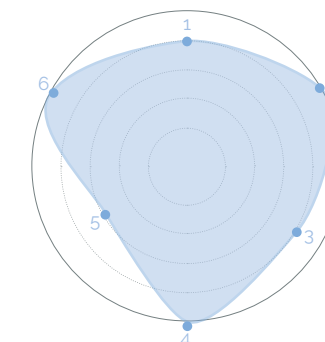
COMMUNITY GARDEN NETWORK

Goals & Implementation

When Tempelhofer Feld opened to the public in 2010, a small group called for community gardens on the site. In 2011, after long discussions, the first pioneer agreement was signed. Allmende-Kontor promotes the idea of the commons through an intercultural garden where resources are used and cared for sustainably under community-defined rules. The goal is to bring together people from different countries to share languages, skills, art, and life experiences through equal cooperation.

Impact Assessment

1. Local development
2. Local acceptability
3. Territorial anchorage & land management
4. Heritage preservation
5. Access to quality local food
6. Multi-stakeholders approaches



© Allmende-Kontor e.V.



© Allmende-Kontor e.V.

Main Issues & Next steps

Challenges include littering, vandalism and sustaining gardener commitment, along with improving water use for greater climate resilience. The next focus is on strengthening community engagement, enhancing infrastructure and adopting more sustainable water management.

Who can set it up



NGO/
Association



Public official/
Administration



WROCLAW CITY FARM

GENERAL PRESENTATION



Wrocław, Poland



Urban Farm



2024



35 000 m²



Public official/
Administration



Vegetables

CONTACT

[https://www.wroclaw.pl/
Katarzyna.Sokolowska@
um.wroc.pl](https://www.wroclaw.pl/Katarzyna.Sokolowska@um.wroc.pl)



© Municipality of Wrocław press materials

Goals & History

The Wrocław City Farm began with EU-funded food projects and the Milan Pact, as Poland's first city farm created with local partners. The farm grows vegetables for nurseries and care homes while supporting social inclusion by training long-term unemployed residents. It combines social, environmental and educational goals: improving nutrition, cutting CO₂ emissions, promoting sustainable farming, and helping people gain skills for jobs.

Main Value Proposition

Wrocław City Farm combines local food production with social inclusion, offering training and jobs for people at risk of exclusion. Guided by university experts, the farm ensures high-quality crops with minimal environmental impact. This partnership between the city, NGOs, universities, and businesses builds a shorter food supply chain, cuts waste and pollution, and supports vulnerable residents.

Other Activities

Wrocław City Farm grows diverse vegetables for local nurseries and care homes, ensuring fresh, same-day deliveries with minimal emissions. Surpluses are turned into meals for seniors and refugees to prevent waste. The farm also runs an educational program with workshops, events and training on sustainable cooking and waste reduction, thanks to strong partnerships with associations and businesses. Local kindergartens will also receive fresh crops and take part in farm visits.

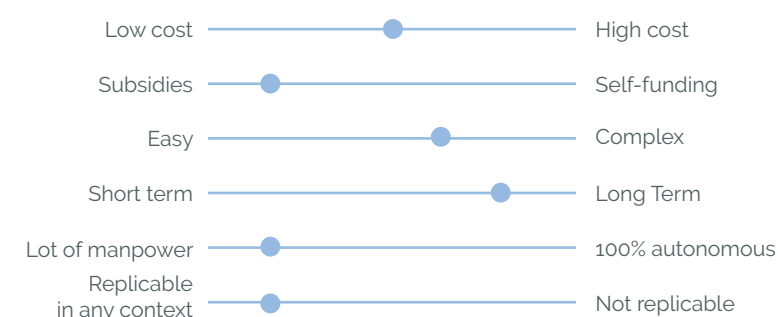
Business Model & Governance

Wrocław City Farm shows a holistic model where City departments, universities, NGOs, and businesses work together. The project is led by the Municipality of Wrocław and runs as a non-profit initiative, combining public services, education, and community support under one shared vision.

Outcomes

Wrocław is the first city in Poland to run a City Farm supplying fresh crops directly to public care and educational units at a city level. Despite the legal and coordination challenges involved, the project demonstrated that it is possible to promote sustainability, social inclusion and education without increasing the city's budget. The farm brings together many partners and supports people at risk of exclusion. Annual reports help improve farming methods and social programs.

Innovation Details



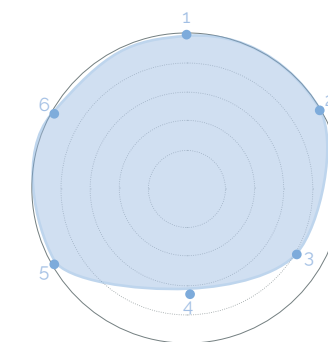
CITY FARM ALLIANCE

Goals & Implementation

The Wrocław City Farm shows how strong cooperation between Municipality, universities, NGOs and businesses can deliver real social and environmental impact. Its main goal is to provide fresh, safe, sustainably grown food to the city's most vulnerable residents - children and the elderly - while offering training and jobs to people at risk of exclusion. The farm operates within city limits to shorten supply chains and boost food security. Crops are delivered by electric car to meet zero-emission goals, and the entire system is designed to be self-sufficient, combining production, education, and social support in one holistic model.

Impact Assessment

1. Local development
2. Local acceptability
3. Territorial anchorage & land management
4. Heritage preservation
5. Access to quality local food
6. Multi-stakeholders approaches



© Municipality of Wrocław press materials



© Municipality of Wrocław press materials

Main Issues & Next steps

The main challenges are legal uncertainties and achieving financial independence. Next steps include expanding storage and processing facilities, enhancing education, and ensuring the farm's long-term self-sufficiency.

Who can set it up



NGO/
Association



Public official/
Administration



GROOT EILAND

GENERAL PRESENTATION



Brussels, Belgium



Urban Farm



2015



5 ha



NGO/Association



Vegetables & flowers

CONTACT

www.grooteiland.brussels

info@grooteiland.brussels



© Marjon Udo

Goals & History

Groot Eiland is a Brussels-based social enterprise using urban farming to support people distanced from the labour market. It began with a 1,000 m² farm supplying its own restaurant, and expanded to several urban plots and CSA farms. It now runs several sites producing food for restaurants and consumers, with all farmers employed on fixed contracts.

Main Value Proposition

Groot Eiland runs several low-tech urban farms in and around Brussels, focusing on open-ground vegetable and flower production through CSA model. The farms use full-soil cultivation and simple machinery, combining food production with ecological design and social impact. Their landscape team, Atelier Permanent, also creates and maintains sustainable green spaces.

Other Activities

CourJette, Theo, and FleurAkker are organic pick-your-own farms on the city outskirts, run via CSA model. CourJette added rainwater harvesting in 2022, Theo built a 560m² tunnel in 2024, and FleurAkker installed an automatic distributor and tourist facilities with Toerism Flanders support. Atelier Permanent manages urban green spaces and private gardens.

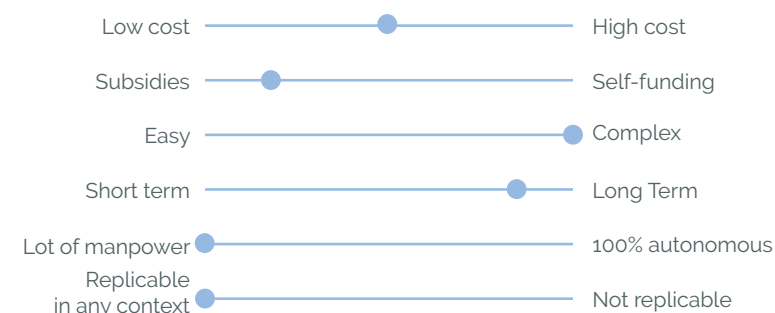
Business Model & Governance

The business model is based on social entrepreneurship, connecting several independently run activities while providing training and adapted work for employees facing labor market barriers. Around 500 Brussels residents are members of CSA farms, generating approximately €200,000 annually. B2B sales supply 10 restaurants and a city centre shop, contributing around €100,000.

Outcomes

Economic activities complement each other throughout the seasons, ensuring overall viability. Approximately 25% of winter crops are sourced from local organic farms, and some non-organic products are still purchased, though the goal is to phase these out completely. A small composting facility at the headquarters processes food waste using locally sourced woodchips.

Innovation Details



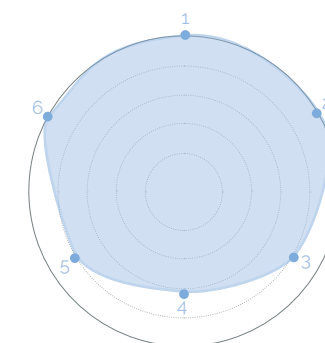
INCLUSIVE LOCAL FOOD ECOSYSTEM

Goals & Implementation

The project aims to create a strongly territorialized network of farms and restaurants that fosters social inclusion and ensures economic viability through an innovative business model. All farms operate under a single non-profit organization, unified by one director and administrative team. Resources such as materials, machinery and staff are shared, boosting collaboration and efficiency. Setting up a 1 ha farm costs about €50,000 and a full-time farmer paid via produce sales. As the farms run work-training programs, about 30% of costs are covered by public funding.

Impact Assessment

1. Local development
2. Local acceptability
3. Territorial anchorage & land management
4. Heritage preservation
5. Access to quality local food
6. Multi-stakeholders approaches



© Marjon Udo



© Lies Engelen

Main Issues & Next steps

Key challenges are high labor needs and a three-year ramp-up to full operation. Some supply is still sourced externally, with room to improve composting and education. The project has grown over more than 10 years, supported by public funds and diverse expertise.

Who can set it up



NGO/
Association



Public official/
Administration



DOULON GOHARDS

GENERAL PRESENTATION



Nantes, France



Urban Farm



2022



12 000 m²



Public official/
Administration



Vegetables & Fruits

CONTACT

metropole.nantes.fr
celine.coutant@nantesmetropole.fr / laurent.comeliau@nantesmetropole.fr



© Valerie Joncheray

Goals & History

The Doulon-Gohards farms are part of a new urban district in eastern Nantes, built on a former market gardening area. From the start of the urban planning development plan in 2012, agriculture was placed at the heart of the project, seen as an economic activity but also as a tool for social inclusion, ecological transition, and food system relocalisation. The farms were the first items to be developed, aiming to reconnect the city with its farming heritage and introduce productive spaces into the urban fabric.

Main Value Proposition

The project brings together four complementary farms producing vegetables, fruits, herbs, and microgreens. Three are open-field, organic, and agro-ecological, focused on short supply chains, while the fourth uses soilless methods to grow microgreens. Together, they showcase diverse and sustainable models of urban food production.

Other Activities

The farms sell their produce directly in the neighborhood and to restaurants across Nantes. The microgreens farm, has a partnership with the municipal central kitchen to supply greens for school meals. The farms are also active in local markets, host public events, and offer open visits. Located at the heart of the Doulon-Gohards district, they are regularly open and accessible to all.

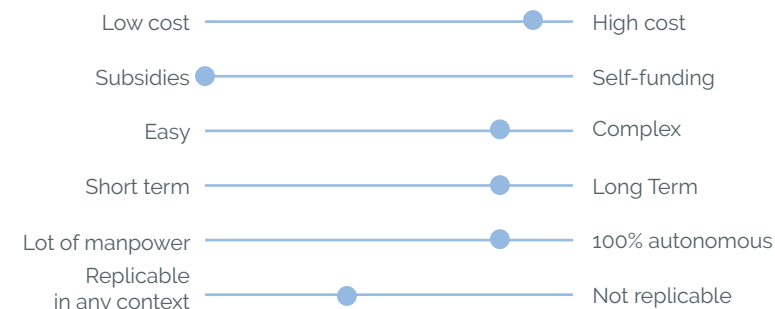
Business Model & Governance

The farms use low-tech methods, with open-field and cold greenhouse cultivation. The microgreens farm developed its own low-tech system with a custom soil mix. Sales are mainly direct: on-site twice a week for residents and local restaurants. Microgreens are also sold via semi-wholesalers and a shared stand. There are no operational subsidies, but educational visits are covered by public support through the Urban Farms Association.

Outcomes

This pilot project resonates strongly with the territory's agricultural heritage and the aspirations of local residents. The first phase has laid the foundations for integrating farming into the urban fabric through the renovation of historic farm buildings and the installation of productive infrastructure. A comprehensive assessment of this initial phase is currently underway to guide future developments within the broader urban planning operation.

Innovation Details



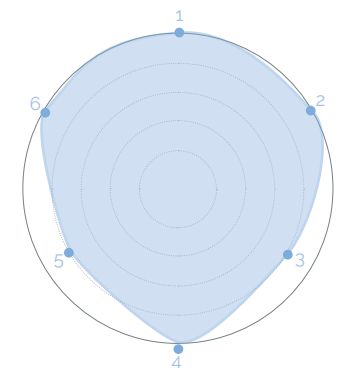
AGRIURBAN SYNERGY

Goals & Implementation

Doulon-Gohards illustrates agri-urbanism—a way to embed farming into urban planning. Anchored in the area's market gardening heritage, the project reconnects food production with daily life. Farms were established before housing, supporting a city model rooted in local identity and ecological transition, with visible elements like hedgerows and above-ground water management. The first phase cost €3.5 million (56 €/m²) for 6.3 ha, covering the renovation of three old farm buildings and the installation of four large cold greenhouses, as well as shared costs for soil studies, fencing, and restoring 27 ha of farmland.

Impact Assessment

1. Local development
2. Local acceptability
3. Territorial anchorage & land management
4. Heritage preservation
5. Access to quality local food
6. Multi-stakeholders approaches



© Roberto Giangrande



© Roberto Giangrande

Main Issues & Next steps

This innovative project demands strong collaboration between agricultural and urban sectors. Its success hinges on the involvement of stakeholders and the adoption of adaptable, primarily low-tech farming practices. The model is replicable but requires local adaptation and sustained support.

Who can set it up



NGO/
Association



Public official/
Administration



QUARTIERS FERTILES

GENERAL PRESENTATION



France



National Program



2020



National level



Public official/
Administration



Diversity of crops

CONTACT

www.anru.fr

ikardava@anru.fr



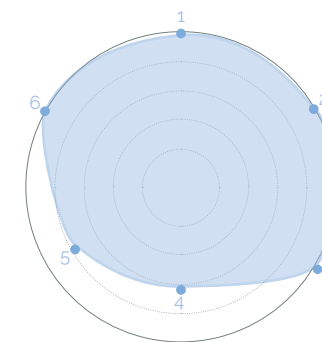
UA FINANCING PROGRAM

Goals & Implementation

The Quartiers Fertiles program supports fully socially inclusive and economically viable Urban Agriculture projects in priority neighborhoods at the national level. It addresses challenges like limited land, soil pollution, and technical constraints by promoting diverse income sources and strong community involvement. The program offers technical and regulatory support, fosters local partnerships, and values social and environmental benefits to build sustainable, context-adapted Urban Agriculture.

Impact Assessment

1. Local development
2. Local acceptability
3. Territorial anchorage & land management
4. Heritage preservation
5. Access to quality local food
6. Multi-stakeholders approaches



Goals & History

Launched by the French Ministry for City and Housing, Quartiers Fertiles is a program of the French National Urban Renewal Agency (ANRU) supporting Urban Agriculture projects with a strong social inclusion focus. Funded publicly, it has granted support to about 100 projects yearly across 140 disadvantaged neighborhoods in France over three years, aiming to boost community development and improve living conditions.

Main Value Proposition

The program is an yearly call for projects involving a diverse range of actors. Candidates include local authorities, associations, education and research institutions or businesses, supported by agricultural experts. Their economic models focus on combining diverse activities to balance social, educational and experimental goals with financial sustainability in priority urban neighborhoods and renewal areas.

Other Activities

In addition to providing funding for projects, the program also offers valuable technical assistance. Urban Agriculture consultancy agencies work closely with project leaders, offering expert guidance and support to help develop, plan, and successfully implement their initiatives. This combination of financial and technical support gives projects the best possible chance of thriving and creating a lasting impact.

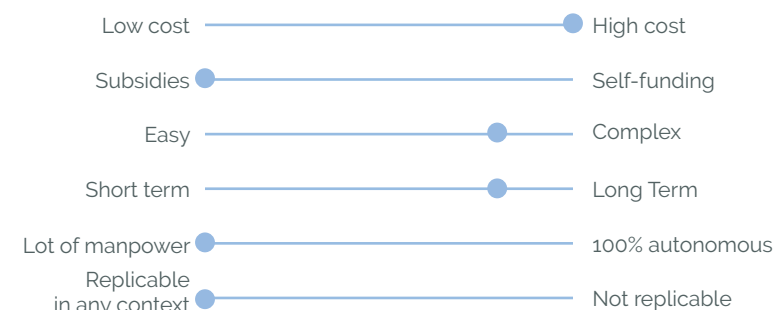
Business Model & Governance

The selected 'Quartiers Fertiles' projects are supported by key public partners including General Secretariat for Investment (SGPI), the Ministry of Agriculture, the financial institution Caisse des Dépôts, the ecological transition agency ADEME, and ANRU. The total setup costs reached €34 million.

Outcomes

Projects receive financial and technical support, including co-financing for investments and staff. They join the Quartiers Fertiles network for training, expert advice, and experience sharing. ANRU and AgroParis-Tech created an evaluation tool to measure progress and social, environmental and territorial impacts through indicators. Updated yearly, this tool helps projects showcase their value to funders and improve over time. While currently for supported projects only, its indicators are available as a resource for others.

Innovation Details



Main Issues & Next steps

Main challenges lie in coordinating diverse stakeholders and fostering strong collaboration. Next steps involve securing funding, deepening partnerships, and expanding projects while upholding social and environmental goals.

Who can set it up



NGO/
Association



Public official/
Administration



CASCINA BIBLIOTECA

GENERAL PRESENTATION



Milan, Italy



Urban Farm



2013



370 000 m²



NGO/Association



Vegetables & flowers

CONTACT

cascinabiblioteca.it
joseph.landolfi@cascinabiblioteca.it



© Cascina Biblioteca

Goals & History

Cascina Biblioteca is a social cooperative in Milan supporting people with disabilities and social vulnerabilities. Recently, it integrated Urban Agriculture through a work-integration farm, reinforcing its role as a community hub and advancing inclusive local development rooted in social, cultural, and economic values.

Main Value Proposition

Cascina Biblioteca's farm combines social inclusion with diversified agricultural production across 37 ha. It produces vegetables (14,000 kg on 3 ha), hay for horses (24 ha), cereals (5 ha), flowers (2 ha), and hosts 2 ha of beekeeping and a 1-ha shared garden. Managed by a multidisciplinary team, the farm engages people with disabilities in farming, animal care and workshops, fostering skill development, autonomy, and social integration.

Other Activities

In addition to farming, Cascina Biblioteca carries out a range of social and educational activities. Its main focus is social agriculture, combining organic vegetable production, beekeeping and animal care with therapeutic and job opportunities for people with disabilities. The cooperative also runs workshops to promote healthy eating, organizes inclusive leisure activities, and supports scientific research in the agri-food sector.

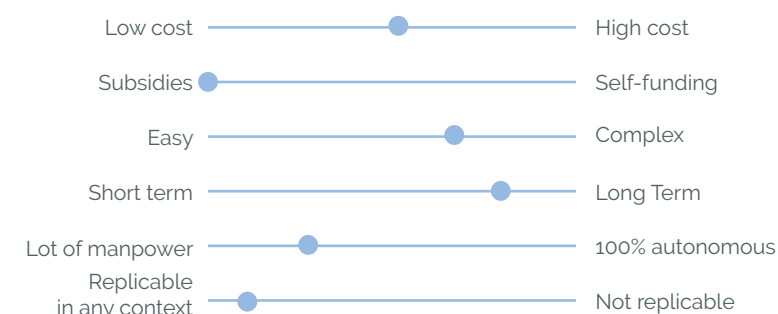
Business Model & Governance

Cascina Biblioteca follows a mixed business model that blends agricultural production with social services. As a social cooperative, it generates income through the sale of organic vegetables, honey, and eggs via its farm shop L'Insalata Matta and local markets. This is complemented by public funding, grants and partnerships, supporting both its financial sustainability and inclusive social mission.

Outcomes

Cascina Biblioteca provides meaningful work, education and community activities for people with disabilities and social vulnerabilities, while producing organic food on over 30 ha. Its inclusive programs-ranging from farming to workshops-promote skill-building, autonomy, and social integration. Widely supported by local residents and stakeholders, the cooperative has become a reference for socially driven Urban Agriculture.

Innovation Details



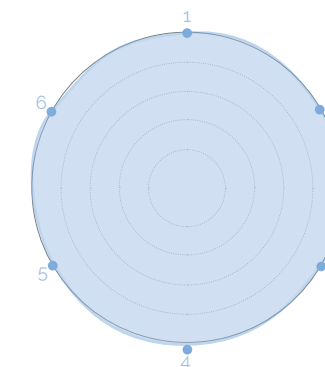
TERRITORIES OF INCLUSION

Goals & Implementation

Cascina Biblioteca combines sustainable agriculture with social services to foster inclusion and empowerment for individuals with disabilities and social vulnerabilities. Established in 2013, it grew from earlier initiatives dating back to 1995, recognizing the therapeutic potential of farming. The cooperative develops programs that integrate work, education and care, supported by a multidisciplinary team and financed through public and private sources. Agricultural production takes place on over 30 ha, with vegetables, hay, flowers, and beekeeping forming the core of its activities.

Impact Assessment

1. Local development
2. Local acceptability
3. Territorial anchorage & land management
4. Heritage preservation
5. Access to quality local food
6. Multi-stakeholders approaches



© Cascina Biblioteca

Main Issues & Next steps

While the model is successful, it faces challenges such as securing long-term funding, coordinating diverse activities, and navigating regulatory frameworks. Next steps include expanding access to programs, adopting more sustainable technologies, and adapting the model to new urban contexts.

Who can set it up



NGO/
Association



Citizen



Public official/
Administration



© Cascina Biblioteca



INTERNATIONAL EXAMPLES



PROGRAMA NACIONAL DE AGRICULTURA URBANA



Brazil



2018

UA National Program

The Brazilian Urban and PeriUrban Agriculture Program is a national initiative that aims to strengthen food and nutritional security, generate income for vulnerable communities, and make cities healthier and more resilient to climate change. By supporting community gardens, agro-ecological production, and local food systems, it helps reduce the distance between producers and consumers while promoting sustainability and social inclusion. The program provides training, digital resources, and legal frameworks to help cities integrate Urban Agriculture into local planning and reach communities most at risk of food insecurity.

CONTACT
www.gov.br

MUNICIPAL LAND BANK ORDINANCE



Rosario, Argentina



2002

Fiscal & Tax Policy

In 2002, the city of Rosario introduced Ordinance No. 4713/02, which exempts landowners from paying taxes on unused land for two years if they allow it to be used for Urban Agriculture. This measure, part of the Urban Agriculture Program (PAU), aims to increase land access for residents of informal settlements to improve food security and income, especially following the 2001 economic crisis that pushed 60% of the population into poverty. Led by the city in partnership with national NGOs, the initiative identified and mobilized 22 ha of public and private land. By 2013, 400 urban gardeners were cultivating 95 tonnes of vegetables and 5 tonnes of aromatic plants on these lands.

CONTACT
ubwp.buffalo.edu



AGTLANTA



Atlanta, USA



2018

City Food Initiative

AgLanta is Atlanta's official Urban Agriculture initiative, working to build a fair, resilient and healthy local food system. By turning vacant city land into productive gardens and farms, supporting local growers through the AgLanta Grows-a-Lot program, and connecting residents to fresh, affordable food, AgLanta helps more people access healthy food close to home. It also promotes education, community events and partnerships to strengthen urban farming and reduce food waste across the city.

CONTACT
www.aglanta.org/



PHILADELPHIA ZONING CODE



Philadelphia, USA

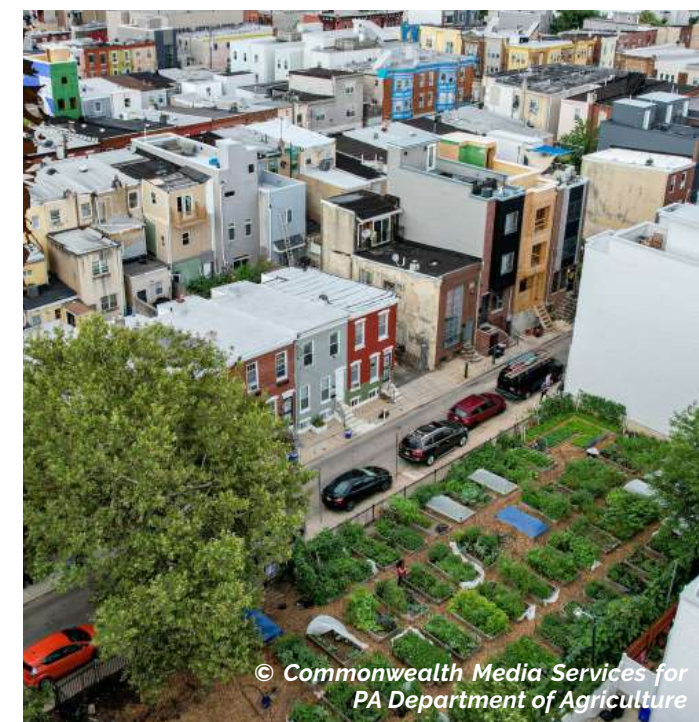


2012

Urban Farming Code

In 2012, Philadelphia's City Council adopted a new zoning code that officially recognized Urban Agriculture as a land use, with four subcategories: animal husbandry, community gardens, market or community-supported farms, and horticulture nurseries or greenhouses. This reform reduces restrictions and clarifies where these uses are allowed, making it easier to start community gardens and urban farms throughout the city. Basic standards were also introduced to ensure safe and sustainable practices, helping Urban Agriculture become an integrated part of Philadelphia's city planning.

CONTACT
codelibrary.amlegal.com



© Commonwealth Media Services for
PA Department of Agriculture

ACKNOWLEDGEMENTS

We would like to express our heartfelt thanks to everyone who made this catalogue of Urban Agriculture projects possible. Together, we show that Urban Agriculture is not a passing trend but an essential, grounded practice that helps cities tackle today's social, environmental and economic challenges and inspires solutions for the cities of tomorrow.

Our deepest gratitude goes to all the Urban Agriculture projects featured here for their trust, openness and generous collaboration. Thank you for sharing your stories, your methods, and your desire to inspire others through your daily commitment. We also warmly thank everyone who contributed their knowledge and expertise to enrich this work - in particular FedeAU, Les Cols Verts, AgriFood and La Centrale Agricole.

A big thank you to all the inspiring initiatives that took the time to respond to our survey on innovative Urban Agriculture practices, even if not all of them could be presented in this catalogue: *Steven's, Jardins Perchés, Coöperatie Stadslandbouw Oosterwold, V'ile Fertile, die LoBauer:innen, Le Bar Radis, Champerché, Kalnciema kvartāls un Āgen-skalna tirgus, NYC Parks GreenThumb, NGO Tartu Organic Allotment Garden, Jardin Jacopin, Orchi Urbani Monte Ciocchi, The Vancouver Compost Demonstration Garden run by City Farmer, Green Food Dhaka, Pilzling, Ludwigsgarten Braunschweig, Wildrijck, Ctgrow, Tiggergarten als Teil der Gemeinschaftsgärten Josefstadt, Buitenplaats Ockenburgh, Tuinen van Mariahoeve, Tuin van Oostduin, De Oesterzwammerij, and A.P.S. Orti Sociali Arvalia.*

We also extend our thanks to the international team of experts whose valuable input and advice greatly supported the selection of innovative practices featured in this catalogue.

Finally, we thank the FoodCityBoost project for its guidance and support throughout this study, and we warmly acknowledge the entire WP6 team for their excellent collaboration, especially the partnership between the Centre de Recherche en Agriculture Urbaine at the University of Liège and ASTREDHOR for shaping this catalogue together.

The authors

Maylis Leblanc, Charlotte Liborio-Cornet, Guillaume Morel-chevillet, M. Haïssam Jijakli

We hope you will take care of this catalogue, share it far and wide, and use it to inspire action. Whether you are a citizen, project leader, farmer, researcher or local authority, we need your help to keep pushing our cities to become greener and more resilient.

REFERENCES

Aguiar Borges, L., et al. (2024). *Urban agriculture for a resilient future*. <http://dx.doi.org/10.6027/R2024.41403-2503>

Balseca Hernandez, V., Ancion, N., & Jijakli, H. (2020). *Business Models in Urban and Peri-Urban Agriculture: Analytical report*.

Doughnut Economics. *About Doughnut Economics*. <https://doughnuteconomics.org/about-doughnut-economics>

EFUA. (2020). *Urban Agriculture Benefits*.

European Commission. (2017). *Good Food Brussels: Pratiquer l'agroforesterie – ferme urbaine*. https://good-food.brussels/sites/default/files/jo16_pratiquer_lagroforesterie_-_ferme_urbaine.pdf

FAO. (2022). *Urban and peri-urban agriculture sourcebook: From production to food systems*. Food and Agriculture Organization of the United Nations.

FOODE Project. (2020a). *Deliverable 6.3: Checklists for replication of best practices*.

FOODE Project. (2020b). *European Guidebook on Sustainable City Region Food Systems*.FOODE. https://hal.inrae.fr/hal-04396621v1/file/FoodE_European-Guidebook.pdf

Grace Ning Yuan, G. N., et al. (2022). *A review on urban agriculture: Technology, socio-economy and policy*.

INA Opitz, Specht, K., Berges, R., Siebert, R., & Piorr, A. (2016). Toward sustainability: Novelties, areas of learning and innovation in urban agriculture. *Sustainability*, 8(4), 356. <https://doi.org/10.3390/su8040356>

Innovation and sustainability in urban agriculture: The path forward. Orsini, F. (2020).

Innovative practices in Urban Agriculture. Leblanc, M., Liborio Cornet, C., Morel-Chevillet, G., & Jijakli, M. H. (2024). *Online survey, FoodCityBoost*.

Levidow, L. (2018). London's urban agriculture: Building community through social innovation.

OECD & Eurostat. (2018). *Oslo Manual 2018: Guidelines for Collecting, Reporting and Using Data on Innovation* (4 éd.). The Measurement of Scientific, Technological and Innovation Activities. OECD Publishing, Paris.

Sanyé-Mengual, E., Specht, K., Grapsa, E., Orsini, F., & Gianquinto, G. (2019). How can innovation in urban agriculture contribute to sustainability? A characterization and evaluation study from five Western European cities. *Sustainability*, 11(15), 4221. <https://doi.org/10.3390/su11154221>

Silva, E., Pfeiffer, A., & Colquhoun, J. (2014). Innovation in urban agricultural practices: Responding to diverse production environments. *Renewable Agriculture and Food Systems*

SUAVE Project. (2021). *D 4.2 Repository of inspiring examples for business process innovations and expert resources for a green and digital transition in urban agriculture*.

Urban Green Train. *Allmende-Kontor*. <https://site.unibo.it/urbangreentrain/en/inventory/allmende-kontor>

Urban Green Train. *Onze Volkstuin*. <https://site.unibo.it/urbangreentrain/en/inventory/onze-volkstuin>

Urban Green Train. *Rotterzwam*. <https://site.unibo.it/urbangreentrain/en/inventory/rotterzwam>

RUAF. (2023). *Urban Agriculture Magazine, no 39: Enabling multiple benefits of urban agriculture*

RUAF. (2024). *Urban Agriculture Magazine, no 40: Pathways towards resilient urban food systems*.

Rikolto. (2024). *Good Food for Cities*.

Van Tuijl, E., Hospers, G.-J., & Van den Berg, L. (2018). Opportunities and challenges of urban agriculture for sustainable city development. *European Spatial Research and Policy*, 25(2), 5–22. DOI: [10.18778/1231-1952.25.2.01](https://doi.org/10.18778/1231-1952.25.2.01)

PUBLISHING NOTES

Project partners



Authors

Maylis Leblanc

University of Liège

maylis.leblanc@uliege.be

Haissam Jijakli

University of Liège

mh.jijakli@uliege.be

Charlotte Liborio-Cornet

ASTREDHOR

charlotte.liborio-cornet@astredhor.fr

Guillaume Morel-Chevillet

ASTREDHOR

guillaume.morel-chevillet@astredhor.fr

External experts

Pierre Chopin

Vrije Universiteit Amsterdam

Agnès Lelièvre

AgroParisTech

Veronica Arcas Pilz

Universitat Autònoma de Barcelona

Leslie Griffiths

Fundación Entretantos

Beatrice Walthall

ZALF

Eric Duchemin

Laboratoire Agriculture Urbaine

Michael Martin

IVL Svenska Miljöinstitutet

Jan Eelco Jansma

Wageningen University & Research

Thomas Chung

Cuhk School of Architecture

Giulia Giache

INRAE

Reviewers

Susana Toboso

Universitat Autònoma de Barcelona

susana.Toboso@uab.cat

Una Meiberga

Kalnciema Quarter

una.meiberga@gmail.com

Communication

Graphic Designer

Adria Fessa

Reframe Food

afessa@reframe.food

Communication Project Manager

Christopher Kennard

Reframe Food

ckennard@reframe.food



FOODCITYBOOST.EU

Innovation in Urban Agriculture

Catalogue of Current Innovative Systems



Authors

Maylis Leblanc

maylis.leblanc@uliege.be

Charlotte Liborio-Cornet

charlotte.liborio-cornet@astredhor.fr

Guillaume Morel-Chevillet

guillaume.morel-chevillet@astredhor.fr

M. Haïssam Jijakli

mh.jijakli@uliege.be



**Funded by
the European Union**



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