PARIS

The 18th Arrondissement of Paris represents a diverse neighborhood that integrates cultural and industrial spaces. Despite being an active area with a population density of 32,024 people per square kilometer, it faces distinct challenges, including limited green space (4.6%), soil and air pollution, soil sealing, gentrification risk, and elevated unemployment rates. Operating within the framework of a circular city, the 18th Arrondissement serves various roles, such as a production center, loop closer, and an innovation and learning hub.

In the area, a renovated industrial and commercial building stands as an exemplar of 20th-century brutalist architecture, designated with the "Architecture Contemporaine Remarquable" status by the City of Paris. Owned by the City Council (RIVP), the structure encountered abandonment in the 2010s but has been revitalized, now housing co-working spaces in the basement and presenting intriguing possibilities for urban gardening and a revival of historical city gardening techniques.

City Population size	L	**Productive focus**	Urban food system
Population density	Paris 18th Arrondissement: 32,024 people/km2	**Partners**	Fab City Grand Paris, (WOMA, ARS Longa, Vergers Urbains), Volumes, Sony CSL
Pilot scale	Neighborhood	**Website**	Cartography web

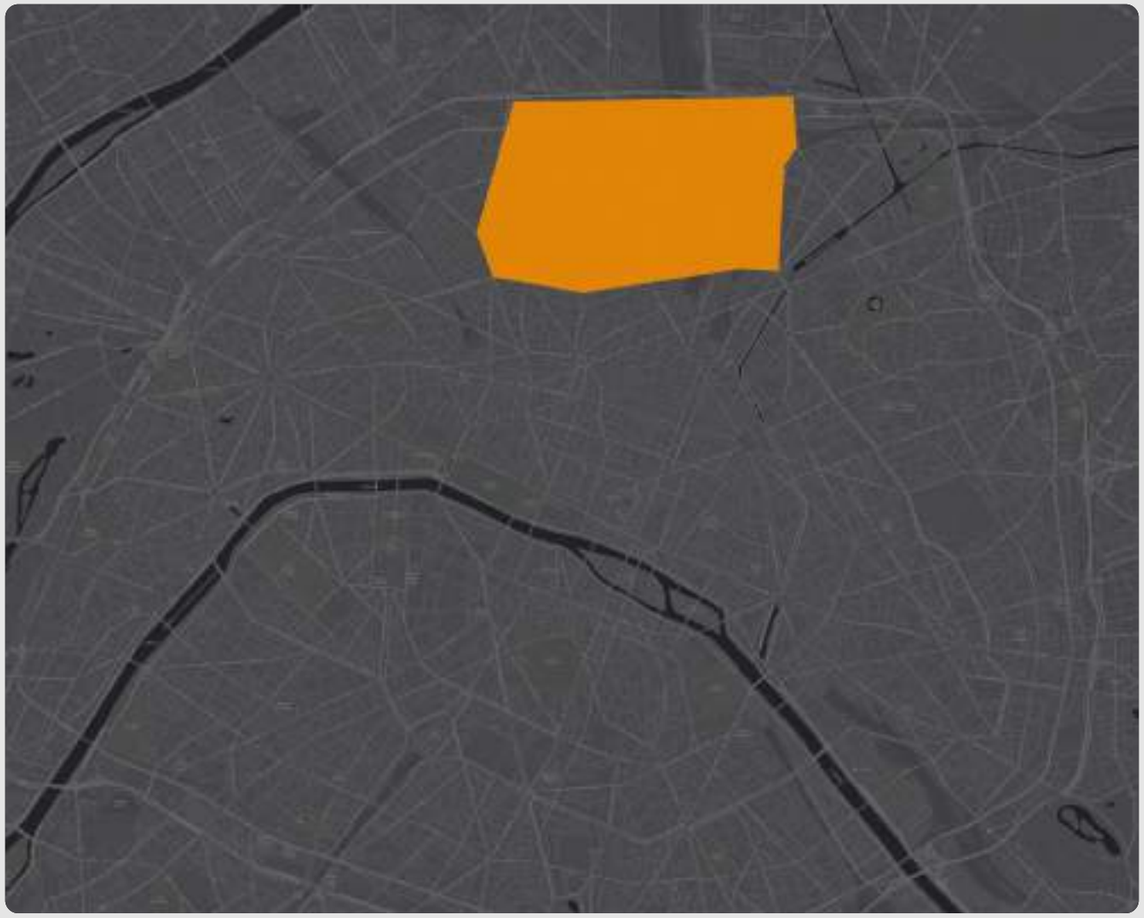

Figure 24. *Map of the Paris pilot area by Metabolic Institute*

Vision

To gather and to develop an alternative urban food system thanks to a rich historical and sociological heritage showing that it is both economically viable and environmentally friendly to grow food in the city and to hybridize past practical knowledge with cutting edge technologies.

+80	+160	30	+940	+170
Cartography resources	Participants in CENTRINNO Schools	Living archive stories	Participants in public events	Active stakeholders in the community

Figure 25. *Paris Pilot Key Performance Indicators*

Map | Engage | Prototype | Develop | Map | Engage | Prototype | Develop | Map | Engage | Prototype | Develop | Replicate

Circular Economy

- Mapping of skills and needs of stakeholders
- ✱ **Mapping experimentation to enhance synergies amongst 18th district food system actors on Kumu**
- Engagement with the Paris City Council Webinar through a webinar on urban agriculture
- Public presentation of Jardin des traverses, new approach to reinvent urban place
- Prototype of an urban farming rover by Sony Lab, FCGP and WOMA
- Launch and onboarding of initiatives to Make Works Paris
- Co-development of a workshop with Ouishare on Collective intelligence
- Mapping productive spaces in the city through a bike tour
- Engagement with food system actors to show and enhance the synergy between them
- Organization of a roundtable on urban agriculture: a tool for cooperation and consultation
- Development of 2 Round Tables on urban agriculture, and tech & citizens
- Engagement with actors connected to robotics in food production
- Organization of a Conference on the topic 'Reinventing the future of our waste'
- Circular loop was installed in the Fab City Hub with a farmbot
- Implementation of the project ARTAGON with urban agriculture in residence in an abandoned college
- Workshops on material reuse in collaboration with external projects

→ Opening of an experimental farm on the roof of a building to test how robotics can contribute to the regeneration of the French method

→ Opening of le Ferme di Midory for testing innovations of farm bots and a monitoring cable bot

Heritage

- Historical desk researches to build a narrative to reboot local food production
- Stories collection through Emotion Networking sessions on food topic
- Test of a hackathon on transforming Villa Buonaccorsi into a shared creative and productive hub
- ✱ **Launch of Food Track: a pedagogical booklet and a platform on urban food ecosystem**
- Stories collection through Emotion Networking Session
- Beta version of a local living archive platform called "Foodtrack"
- Workshop and webinar on the activation process of Villa Buonaccorsi
- Organized the workshop: Market gardening practices and modeling of micro-farms
- Stories collection through Emotion Networking on the relation between the city and its river
- Engagement with actors interested in heritage and food
- Public seminar organised by the French method research group
- Creation of a bilateral Food Heritage working group (in Paris and Cannes)

→ Guidebook on how to run Emotion networking workshops dedicated to food

→ Establishment of a Food Heritage working group

→ Development of the Food Track digital platform for sharing tools or urban farming

Innovation space & social inclusion

- Engagement with policy makers, makers and designers, researchers
- Participation on Maker Faire Rome: showcasing alternatives for urban food tech system
- ✱ **Fab City Hub Paris reflections on the space to open and welcome collective innovation**
- Fab City Camp Paris event with workshops and discussions on energy matter and food
- Engagement with social organizations
- ✱ **Fab City Hub Paris Grand Opening event**
- Food Track exhibition
- Collective work with CRISALIM NGO on the developement of a food culture for young and vulnerable people
- Study on the effects of the empowerment of local actors to manage their own shared edible gardens
- Documentation of results of the social and care activities made by the Foodlab team
- Convention of partnership signed between Fab City Grand Paris and Oasis 21 to organise public events on CENTRINNO pillars

→ Guidance on how to create a FoodLab in a Fab City Hub

→ Workshops on how to reinstall a food culture in popular districts to raise people's awareness about their nutrition

Learning ecosystems

- Development of the training program 'Resiliences productives'
- Development of the training program 'Agriculture XYZ'
- Discussion on the viability of reactivation of the "French Method" for bio-intensive micro-agriculture
- Conference on how to train people an alternative skills in a tense job market
- 1st session of the Agriculture XYZ training program
- 2nd Edition Agriculture XYZ programem - 4 months training on urban agriculture
- Global strategy of vocational training structured for Fab City Grand Paris and its partners
- Development of the Common Gardens training programme

→ Replication of the training program 'Resiliences productives'

SPRINT 1: M8-M14

Heritage and hubs, main keystones to ignite a resilient urban food system

SPRINT 2: M19-M25

Heritage and community building in the Parisian food ecosystem

SPRINT 3: M30-M36

The Fabcity market garden: a matter of neighbours and friendly robots

✱ Trigger moment for policy recommendation

✱ Tool development and application

KUMU FOR LEARNING ECOSYSTEMS

An open source mapping to turn your Hub into a Learning Ecosystem: a case study from Paris FCHs Team

Photo by Paris pilot

Online
Setting

Urban food actors, agricultural stakeholders
Target

Digital platform
Format

What is it about?

KUMU is an open source mapping tool that was used as a basis for collecting data about urban ecosystems by the 9 Fab City Hubs within the CENTRINNO Cartography activities. For Paris, the purpose was to map the actors of alternative food systems and their potential to support the creation of a learning ecosystem.

The Paris pilot required a comprehensive understanding of the skill sets of Fab City Grand Paris network and extended community. This insight was crucial, for example, for formulating a vocational training program, providing expertise or spaces for specific needs, and collaborating on calls for proposals.

Story behind

The Paris pilot encountered challenges in assessing the diverse skills and knowledge within its extensive and dispersed membership. To bolster its role as an active learning ecosystem, the Paris pilot decided to develop this tool to identify, quantify, and localise the skills, resources, and actors within its network's members.

Key steps

- Understanding the purpose and how KUMU works
- Testing and trying the tool and its customization
- Choosing a specific purpose for the ecosystem mapping
- Customising and developing the local tool pilot through a series of training sessions
- Organising promotional events in order to present the work done with Kumu

Recommendations for future applications

- Defining the purpose of the ecosystem mapping is crucial as it helps to gain a clear overview of the available skills and resources within a specific territory
- A digital tool that allow not only the identification of stakeholders but the connections among them is a good asset to support the implementation of physical FCHs as a distributed learning ecosystem
- Use the analysis to identify potential business opportunities, training programmes or distributed production places
- Publicly sharing the results can cultivate crucial partnerships for multidisciplinary collaborations and bolster local production efforts

FOOD TRACK

Uniting history, community, and innovation in urban agriculture

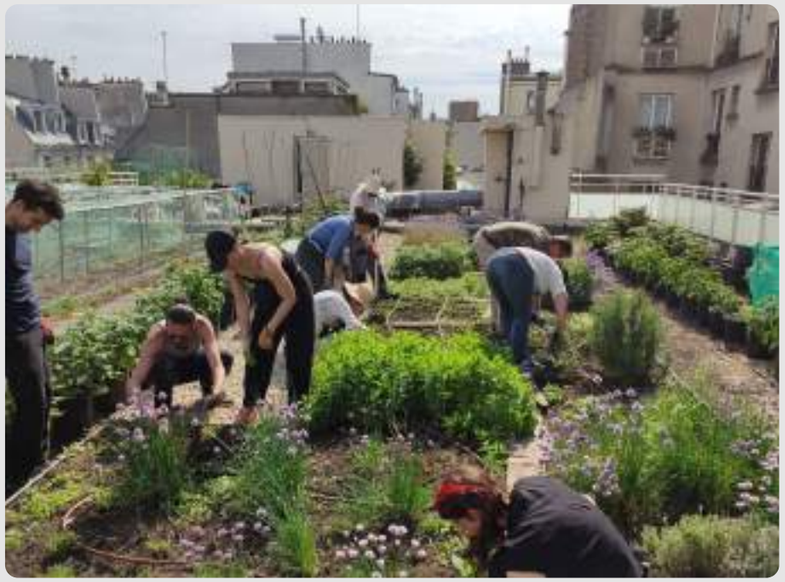

Photo by Paris pilot

Hybrid
Setting

Urban food actors, agricultural stakeholders
Target

Digital Platform
Format

What is it about?

The goal of Foodtrack, is to organise collective thinking about the heritage of the “French method” (urban agriculture techniques developed in the 19th century in Paris) for the development of current urban agriculture.

Foodtrack is both a historical archive, a digital community platform, a toolbox for urban market gardeners, and a reflection on the alternatives to produce food in an urban landscape.

The creation of this tool is based on the skills of the Paris pilot ecosystem and on scientific partnerships to create a French method research group (with historians, data scientists, urban farmers, and more). Check out the platform here.

Story behind

The goal of this tool is to raise awareness about the challenges of urban agriculture by showing the changes in the Paris region in the last 200 years and the disappearance of a rich heritage.
By showing the links between the know-how of the French method and current urban agriculture, the Paris pilot questions the replicability of a model that has proven itself beyond mass agribusiness.

Key steps

- Mapping the existing material and the state-of-the-art of past urban agriculture practices
- Working on how the platform presents this material
- Opening the platform for contributors to give feedback and improve its system

Recommendations for future applications

- Relying on scientific partnerships can be beneficial for creating or validating methods or frameworks
- After having the technology in place, start with a first circle of professionals that could create an interesting first ensemble of entries
- Design the platform in a way that its nature and the structure can be transferred to other topics
- Create an active community on the alternative urban food system by raising awareness and reconnecting the public with food issues

DEVELOPING A DISTRIBUTED CITY-LEVEL ECOSYSTEM OF PLATFORMS: TRAINING AND PUBLIC DEBATES ON SUSTAINABLE URBAN FOOD AND AGRICULTURE

Related key concepts

Circular Economy
Heritage
Vocational Training
Innovation Spaces
Social Inclusion

Areas of influence

Heritage value and innovation
Policy-making mindsets
Contingency and macro trends
Spatial Planning and Urban Development Frameworks
Regulation
Funding
Knowledge and Capacities

Recommendations

- Engaging a large spectrum of actors from the civil society, the third sectors and the involvement of public authorities
- Developing joint projects on distributed production, and vocational training courses on circular design and food production
- Demonstrating the sustainability of alternative economic models such as shared professional kitchen and complementary infrastructures to help companies to design, prototype and test their ideas.
- Getting financial accessibility of real estate market through public or private partnerships considering temporary use convention
- Ensuring support by local authorities in the provision of resources for educational programs, and guidance for the identification of financing schemes.
- Promoting the creation of interconnected sites or hubs that function as part of a larger ecosystem
- Encouraging hubs to develop strong identities centred around social economy and ecological transition

Practical case

The establishment of the Fab City Hub in Paris's North-east district, guided by CENTRINNO principles, presented significant challenges initially. However, the initiative successfully attracted creative and sustainable economy professionals, leveraging extensive networks and support from the City of Paris. Oasis 21, functioning as a cooperative space for ecological and social transition organizations, played a crucial role in community integration, fostering partnerships with local associations and hosting diverse events.

To ensure economic sustainability, the hub prioritized coworking spaces, collaborated with training programs, and introduced a Foodlab and small food-related businesses, enriching its core values. Integrated into a larger ecosystem led by Oasis 21 across three interconnected sites, the hub promoted cooperation and participative governance, strengthening a collective commitment to sustainability. In collaboration with its partners, the local team excelled in forging a robust identity centered on the social economy and ecological transition, uniting like-minded members and residents. This concerted effort has amplified knowledge sharing within the community, fostering a collective commitment to shared values. As a consequence, the Fab City Hub Paris strategically implemented an animation strategy, focusing on key themes such as urban agriculture, circular economy, and DIY (do it yourself) initiatives. Despite challenges, strategic measures and collaborative efforts have transformed the Paris Fab City Hub into a symbol of sustainable growth, uniting diverse stakeholders and nurturing a shared vision of a more sustainable future.