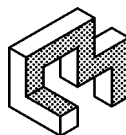


AGROPOLIS



**FROM PILOT PROJECT
TO METROPOLITAN
FOOD NETWORK**

JOINT PUBLICATION UNDER THE SUPERVISION
OF ROSELYNE DE LESTRANGE (METROLAB BRUSSELS)
AND CATHERINE FIERENS (BOERENBRUXSELPAYSANS)



This publication is the concrete outcome of intense dialogue and debate that took place in 2020, focusing on the key questions emerging from the experience in the field of Boeren-BruxselPaysans and the research conducted by Metrolab Brussels, two projects supported by the ERDF (European Regional Development Fund). This document, the result of a collective forward-looking campaign, is intended for all those who manage the territories on a daily basis, and for steering public policy in the Brussels metropolitan area in particular. It summarises discussions throughout the cycle, identifies concrete action plans and makes recommendations for the structural deployment of agroecology across regions referred to as the metropolitan food basin.



BOERENBRUXSELPAYSANS AND AGROPOLIS



01 AGRICULTURE, A METROPOLITAN PROJECT



02 URBAN FARMER, A PROFESSION WITH A FUTURE



03 AGROECOLOGY WITHOUT LAND?



04 AGRICULTURE AND BIODIVERSITY



05 TOWARDS A METROPOLITAN FOOD NETWORK



SUMMARIES CONCLUSION



BOERENBRUXSELPAYSANS

On 04 February 2016, the government of the Brussels-Capital Region decided to grant a subsidy not exceeding 5,857,986.49 euros to launch BoerenBruxselPaysans (BBP). This project is part of the 2014-2020 European structural funding programme and the Operational Programme entitled "Investment for growth and employment" in the Brussels-Capital Region (ERDF). The subsidy is split more or less equally between infrastructure funding and operating and staffing costs. BoerenBruxselPaysans has not granted any subsidies to third parties.

This pilot project has been implemented successfully by several partners: Brussels Environment, Le Début des Haricots ASBL, Terre-en-vue ASBL, Maison verte et bleue ASBL, Crédal ASBL and the municipality of Anderlecht.

TRANSFORMING OUR FOOD SYSTEMS

The vision of BoerenBruxselPaysans revolves around securing the transition of our food systems to ensure the respect of all living beings and the possibilities of future generations.

BoerenBruxselPaysans's main mission is to facilitate and boost local ecological food production and processing¹, mainly by addressing farmers. The pilot project also aims to promote access to high-quality food for Brussels' consumers via short food chains, to raise their awareness of all aspects of sustainable food and to involve them in local food dynamics.

The aim is to create a limited, reproducible project, integrating the entire sustainable food chain, from production to consumption. Once this pilot project is completed, the relevant methods and processes can be reproduced and any weaknesses or shortcomings identified.

¹ "Local" means in the Brussels-Capital Region and in connection with the Region's food sector.

BoerenBruxselPaysans is guided by the following principles:

- Preserving and improving the soil, air, water and biodiversity capital of eco-systems;
- Enhancing/creating the link between the city and its rural peri-urban environment, not only in terms of food and human, social and economic relations but also in terms of the landscape;
- Ensuring the economic viability of the operators, in an ecosystem where margins are shared fairly between farmers, processors and distributors and where products are widely accessible to Brussels' consumers via short food chains.

The six project partners are involved in numerous strategies: methodological and technical support for project holders and entrepreneurs, training, provision of infrastructure and land, development of short processing and sales circuits, raising awareness and networking, etc.

This pilot project is located on the edge of the peri-urban area, mainly in Anderlecht (with a greater potential for agricultural land) but also in other municipalities where professional outdoor cultivation is possible.

INITIAL RESULTS

Access to land

Access to land is the lifeblood of in-field agroecological production. This is already difficult to access in general, but even more so in an urban context. Moreover, conditioning access to land by a sustainable production for the city dwellers is complex from a legal perspective. Following a stock-take of potential land and initial negotiations, Terre-en-vue soon realised that it would take time to make any really significant progress.

Thanks to the partnership with the municipality of Anderlecht, BoerenBruxselPaysans was able to start the Graines de paysans agricultural test area in 2016 and secure its long-term access to land spanning 3.3 ha in the Vogelzang valley (rue Chant d'oiseaux in Anderlecht). It also succeeded in acquiring 2.7 ha of public land at the end of 2018 via a long-term lease signed between the

municipality of Anderlecht and Terre-en-vue to install, under long-term contracts, the RadisKale and Smala Farming market garden projects as well as the Hierba Buena herbal tea project.

The Region has also developed and made available one hectare of agricultural land in Neerpede (Champ du Chaudron, 2019) and 0.7 ha for sheep farming (Les moutons bruxellois, 2018). Other public stakeholders then followed suit. The municipality of Jette entrusted the management of a 1.2 ha plot to Terre-en-vue, where the Les garçons maraîchers project was able to start up in 2020, joined a year later by CourJette and Les simples Jettoises. Further negotiations are in the process of being concluded.

Agricultural test area

The acquisition of skills is another key component for a successful food project. BoerenBruxselPaysans did not want to create new training courses, but to provide young entrepreneurs with an agricultural test area (ETA or *espace-test agricole*) that would enable them to test their professional activity in real-life conditions and in a safe environment. This area consists of agricultural land, technical buildings and a building housing the administrative offices. The municipality of Anderlecht (with the collaboration of Terre-en-Vue) made the land available along with Kattekasteel Villa, which was renovated for the occasion. The non-profit organisation, Le Début des Haricots, was responsible for creating the area, including the construction of the technical buildings. A landscape plan was drawn up to ensure the landscape quality of the test area, which is located near a listed site and a nature reserve.

Five calls for applications were organised between 2016 and 2020. Projects were selected according to ecological, agronomic, economic and legal indicators as well as the profile of the applicant.

The infrastructure can accommodate up to nine activities at the same time. At the end of a training course or internships, and before starting their own business, the people test project owners implement their business model in the field with very limited financial investment. They have access to up to 30 ares of land (including tunnel greenhouses), shared infrastructure and tools, targeted

training and support, and to a collective dynamic. At the beginning of 2021, 31 candidates applied. Sixteen of them started testing their project (8 are still in the test phase and 5 have already set up their business). So far, only one person has dropped out of the project testing phase.

Support (including short supply chain)

BBP project partners have worked very closely together to provide economic support for the projects. The group comprising Crédal, Maison verte et bleue and Le Début des Haricots facilitated the implementation of short supply chains and lent their support from the development of business models to assistance with governance or the administrative formalities required to obtain authorisations. This group also ensured that the knowledge acquired was fully exploited by providing technical data sheets.

In addition, BBP has been able to support logistics projects (Terroirist cooperative) and projects involving the collective installation of producers.

Product processing

Maison verte et bleue was keen to support product processing via a test kitchen and technical coaching. Indeed, not all products are consumed fresh due to seasonal overproduction or for reasons of added value. However, this avenue was not pursued because we realised that the greatest challenges lay in primary production. We therefore channelled the resources in other directions.

Ferme du Chaudron

Thanks to BoerenBruxselPaysans, new farmers have access to land, but these are often small areas without buildings. The Ferme du Chaudron, located on the edge of Pede pond and owned by the Region, has been transformed by Brussels Environment into an infrastructure supporting the activity of producers (packaging, processing of fresh products). This site - which is currently being developed - should also be able to welcome citizens and provide them with a gateway to these agroecological producers, or accommodate other professional stakeholders. Together with Crédal, Brussels Environment rolled out a process to appoint a distributor tasked with managing the site (opening

planned for the end of 2022). The consortium "Commune Racine - Douche-Flux - Happy Farm - Les gastrosophes" was awarded the concession.

Raising awareness

More than 3000 Brussels consumers had the opportunity to participate in visits and workshops organised by Maison verte et bleue. Citizens wishing to volunteer in the fields were given information and guidance. Indeed, volunteering is crucial as a key means of support for most newly established producers.

Communication/events

In order to support and raise the profile of all the actions, Maison verte et bleue and Brussels Environment set up dynamic communication tools (website, brand identity, brochures, social networks, etc.). Events were organised: a market garden festival in 2018, the Agropolis seminar, workshops, national and international media events, etc.

Sustainability

Most of the funds from the European Regional Development Fund (ERDF) will be exhausted by 2021 (except for infrastructure, which has a longer time frame).

Thanks to the development of the region's Good Food strategy and the enthusiasm of new producers and consumers, resources are secured to continue the main focus of BoerenBruxselPaysans in future years. The processes we have initiated are fully integrated into the regional strategy. The purpose of testing and then retaining what is relevant has therefore been achieved. The future will show us how the Region's food strategy will evolve in the long term and what resources will be available to implement it.



AGROPOLIS

THINKING ABOUT THE URBAN CHALLENGES OF THE METROPOLIS

Metrolab Brussels is a laboratory for applied and critical urban research funded under the 2014-2020 ERDF programme for the Brussels Capital Region. It is inter-university (UCLouvain and ULB) and above all interdisciplinary, bringing together geographers, sociologists, urban architects and landscape designers from four research centres (LOCI & Cridiss UCLouvain, IGEAT & LoUIsE ULB).

All of its activities are geared towards the urban issues of the Brussels metropolis, considering this region in the broadest sense of the term. Entrusted with the scientific coordination of ERDF programme stakeholders in Brussels, the Metrolab works on three major themes, linked to the EU's 2020 regional agenda: inclusion, ecology and production. Different types of activities have been developed simultaneously: individual research (doctorates or post-doctorates), collective research, international master classes or seminars.

Agriculture is a cross-cutting theme and activity. Metrolab's productions in this field include: individual research ("Landscapes and regions of metropolitan agroecology", "Sustainable food projects and citizen participation", "Urban metabolism and organic waste management"), interdisciplinary collective research ("Food practices and policies"), a master class (Designing Brussels' Ecosystems/Agricultures), and seminar cycles combining research and action (Ecological Urbanism, Designing the Transition). All of these activities have led to publications available on the Metrolab website².

² www.metrolab.brussels

A SEMINAR HINGED AROUND URBAN AGROECOLOGY

Among these approaches, the Agropolis seminar cycle follows on from five years of respective, cross-over investigation by BBP and Metrolab in an attempt to pave the way for the future of agroecology in and for the Brussels metropolis. There is nothing random about the use of this combination: agroecological agriculture is now scientifically and politically recognised as a fundamental element of urban and territorial resilience.

Agropolis is based on a radical premise: agriculture is a political issue in the true sense of the term, which is that of managing the city, understood as a human and social structure. The term 'agropolis' itself is reminiscent of a city anchored in a landscape where the urban, rural, human and non-human elements are inextricably linked without hierarchy. Its political and spatial organisation is based - among other things - on a food network.

This publication is the concrete outcome of intense dialogue and debate focused on key questions emerging from BBP's experience in the field and the research conducted by Metrolab.

From March to September 2020, meetings with reference projects and a retrospective analysis allowed the elements of a prospective reflection to be identified.

From October to December 2020, five discussion mornings brought together online just over 200 people from administration, government, research and the food sector from Brussels and beyond. The sessions successively addressed agriculture as a territorial project, the future of the urban farmer profession, access to land, the conditions of symbiosis between agriculture and biodiversity and finally the governance of a metropolitan food network. Discussions were further fuelled by the presence of scientific experts and speakers from the cities of Geneva, Rennes, Nantes, Île de France (Paris) and the Flemish and Walloon Regions.

This document, which should not be considered as an expert report but as the result of a collective forward-looking process, is intended for all those who manage the region on a daily basis, and for steering public policy in the Brussels metropolitan area in particular. It summarises discussions throughout the cycle, identifies concrete action plans and makes recommendations for the structural deployment of agroecology across regions referred to as the metropolitan food basin.





AGRICULTURE, A METROPOLITAN PROJECT

INTRODUCTION

TOWARDS A CHANGE OF CIVILISATION

BY ROSELYNE DE LESTRANGE

"Agriculture is undergoing an unprecedented urban revolution, reflecting a profound change in civilisation that is probably as significant as that which occurred in the Neolithic period."

Rémi Janin, "The Agricultural City"³



³ Rémi Janin, "La ville agricole. L'agriculture vit une révolution urbaine sans précédent traduisant un changement de civilisation profond", Openfield Publishing, 2018

This work opens with a conviction: agriculture must be integrated into every metropolitan project. Metropolises are at the heart of climate change and their decarbonisation is a matter of urgency – the Green Pact for Europe⁴ requires carbon neutrality by 2050.

This decarbonisation can only be achieved, among other measures, through changes in food production practices and the relocation of this production as close as possible to the consumers, and therefore to the cities. This leads to the transformation of our diets and the management of our territories and food system. This prompts some authors, such as Rémi Janin (farmer and landscape architect), to refer to a "change of civilisation".

It goes without saying that neither Brussels nor any other large agglomeration will be able to significantly improve its food sovereignty and sustainability within its own borders. It is a question of mobilising its entire 'hinterland' or functional territory, which we refer to here as 'metropolitan territory'. It covers 4,499 km² in and around the capital⁵.

Many urban agriculture projects are already being carried out there, on the initiative of producers, citizens and public authorities. But there is an urgent need to step up and structure this movement. The spatial potential is encouraging, as 47% of the functional metropolis' surface area is deemed useful agricultural area (UAA)⁶.

The hypothesis of a metropolitan agricultural project raises many questions, starting with the territory to be mobilised⁷. Is it a matter of geographically pre-defining a project area or, conversely, of starting from existing dynamics and emerging opportunities in order to progressively draw its contours?

At present, the territory of the Brussels–Capital Region, consisting of the 19 Brussels municipalities, covers 162 km². The other two regions in Belgium are the Flemish Region (incorporating the Brussels Capital Region) and the Walloon Region.

⁴ https://ec.europa.eu/info/strategy/priorities-2019-2024/european-green-deal_fr

⁵ "Elaboration of an inventory of the Brussels metropolitan area", ICEDD, KULeuven, 2010

⁶ 2,136.15 km of 4,499 km², according to the above-mentioned study, KULeuven-ICEDD.

⁷ This is not insignificant, as 65% of the inhabitants of the functional metropolis live outside the Brussels Region.

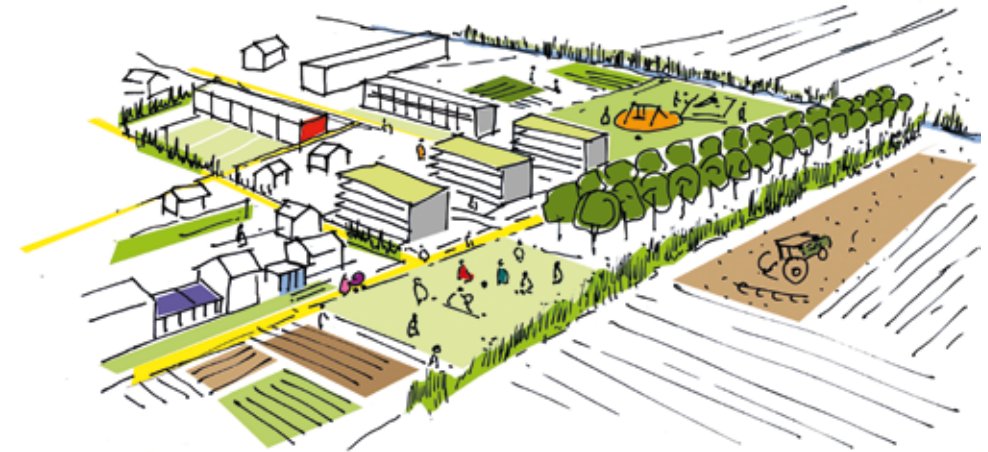
We can then ask ourselves about the shared vision, which is essential to any project: radical transition driven by a proactive policy or consolidation of emerging dynamics? The option chosen will have socio-political, economic and ecological implications. It will require connections to be nurtured between powers and territories.

In Brussels, the avenues currently under discussion (taking into account the ecological and agronomic value of land use, revision of the conditions of access to funding under the Common Agricultural Policy, etc.) all face paradoxes inherent in the complexity of the urban resilience equation. This must combine urbanisation (due to structural population growth), protection of fertile land ("No net land take"⁸) and opening up and greening the city to combat heat islands and flooding.

Within the Metrolab research context⁹, the creation of a metropolitan yellow network has been proposed. As an agroecological complement to the blue and green network, it would encourage the deployment of agroecology in the region, with both strong structural interventions (work on land, regulations, technical conditions) and the consolidation of existing dynamics, along the lines of the pilot project of BoerenBrusselPaysans (BBP), whose experience opens this chapter.

A similar proposal to that of the yellow network has been developed in Geneva, whose Agglomeration Landscape Project is described in the second part of this chapter. Like Brussels, Geneva is a cross-border metropolis straddling three territories. Its agricultural project, linked to its landscape project, serves, beyond food production, as a means of preserving the territory.

The third part of this chapter takes up the discussion led by Pr. Michiel Dehaene (University of Ghent), who is working on the concept of 'agroecological urbanism'.



Geneva model

⁸ The "No net land take" policy consists of not urbanising new natural or agricultural territories or, if this is unavoidable, of renaturalising other areas by way of compensation.

⁹ Roselyne de Lestrangne, "Transition Agricultures in Brussels Bioregion: The Yellow Network, a Landscape Urbanism Perspective", in *New Metropolitan Agricultures*, Metrolab, 2021

THE EXPERIENCE OF BBP

AGROECOLOGY, A BREATH OF FRESH AIR FOR BRUSSELS

SPEAKERS: GABRIELE ANNICCHIARICO, ALICE GILLEROT AND CATHERINE FIERENS
SUMMARY AUTHOR: GABRIELE ANNICCHIARICO



Agroecological agriculture plays a fundamental role in the urban and territorial planning of a city. This is certainly the case in Brussels, a metropolis with a high agricultural potential and one of the most ambitious food resilience policies in Europe. The aim is to lay the foundations for the city of tomorrow, which faces major environmental and societal challenges.

One question repeatedly asked when discussing this subject is whether agriculture has a place in a metropolitan context. Our answer is prompted by one observation: urban areas are at the heart of climate change. They must urgently decarbonise, thanks to, among other things, the renewal of agricultural models, the relocation of food production as close as possible to cities, and, consequently, profound transformations in the entire food system.

AGROECOLOGY, A MODEL FOR CITIES AND THE COUNTRYSIDE

Agroecology is a philosophical and scientific approach, but also a socio-political movement, which reconciles human activity with the preservation of natural ecosystems. It develops a multidimensional approach to natural and human resource management. It is an alternative to the dominant economic model, based on the exploitation of natural elements and human beings. Within an urban context, agroecology invites us to rethink the relationship between city dwellers and their own environmental and social context. It brings communities and neighbourhoods together around local projects, designed as spaces that foster mingling and learning.

Economically, agroecology promotes diversification of production and short supply chains. The aim is to favour the direct distribution and sale of foodstuffs, from producer to consumer (or via a single intermediary). A model on a human scale, linked to notions of resilience, proximity, solidarity and circularity.

At the political level, the emphasis is on participatory governance, with an active role for citizens and local communities in the management and planning of the city. Public institutions are committed to striking a balance between the needs of a community (places to meet and mingle, solidarity between citizens and between generations, exchange of know-how, upgrading of essential professions such as farming, access to healthy food) and the exploitation of resources, while respecting the environment (preservation of biodiversity and soil fertility, reduction of greenhouse gas emissions, elimination of chemical inputs, etc.).

BRUSSELS, AGRICULTURAL CITY

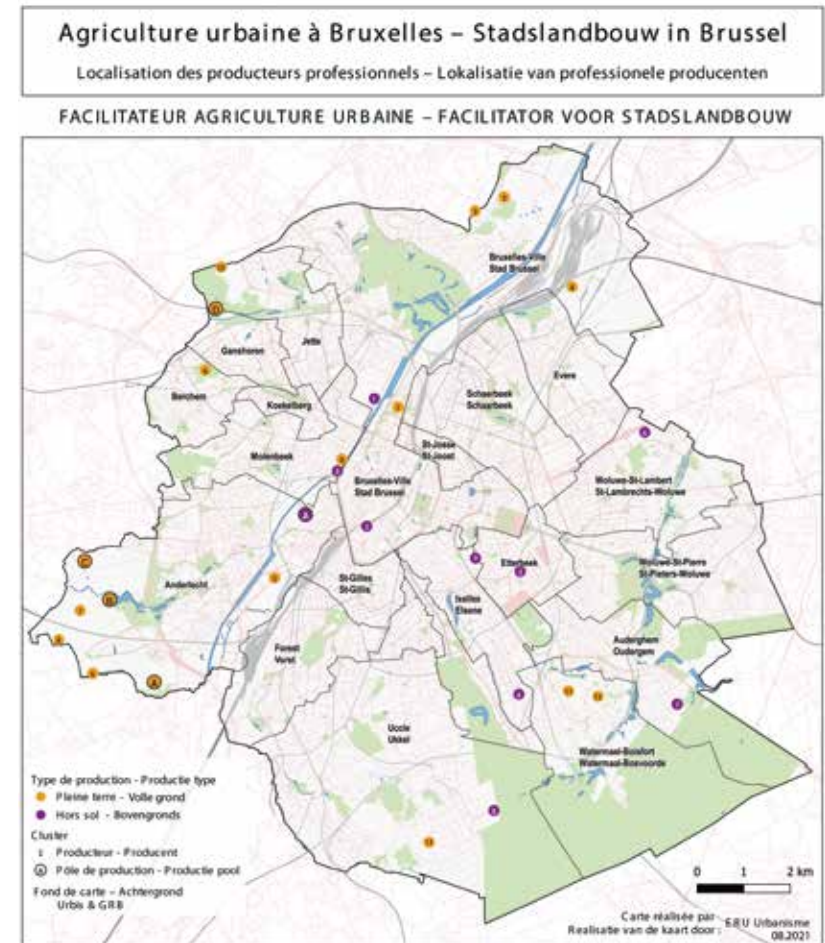
The evolution of agricultural practices and initiatives in the urban context of Brussels has been clearly inspired by an agroecological approach, in particular through:

- the emergence of a very active associative sector over the last fifteen years;
- the involvement of citizens;
- public policies that invest in and support urban agriculture.

Despite this dynamic and innovative reality, which makes it an inspiring example at international level, Brussels communicates little about its agriculture, unlike other European cities and capitals.

Today, three types of production coexist in Brussels, with very different characteristics and historical processes:

1. Citizen self-production: this is the most significant production focus in terms of the number of people reached, with 392 sites (+33% in the last 5 years) and an area of about 80 ha. About a quarter of the inhabitants of Brussels have access to a private garden. Self-production can become a fairly significant food source, which is already the case, for example, in a city like Montreal (Canada). During the summer period, it is able to supply 100,000 to 250,000 people (i.e. 5% to 12% of the population) with fresh vegetables through its collective, community, educational, institutional or company gardens as well as home gardens.



Overview end of August 2021. The dynamics of urban agriculture are constantly changing

2. Conventional production: this is the largest component in terms of surface area, with 239 ha, consisting mainly of grassland (60%) and cereal and potato crops. In Brussels, the dominant post-war agricultural model, based on export or non-local consumption, has been maintained, despite exponential population growth since the late 1990s.

3. Emerging agriculture: at the heart of the BBP project, agroecology is already being deployed in some 40 activities (including soil-less), for a total area of 11 ha and about 80 full-time equivalents. They are mainly new farmers, also called NIMAculteurs (farmers from a non-farming background), often looking to retrain to change career tack.

BOERENBRUXSELPAYSANS

These reflections inspired a pilot project in Brussels, which got off the ground in May 2015: BoerenBruxselPaysans. The objective of BBP, financed with European funds (ERDF) and supported by six partners, is to promote agroecology, by supporting initiatives related to local and sustainable food production, processing or consumption.

Various actions have been undertaken: provision of a "test area" for agricultural production, renovation of rural buildings, support for "sustainable" entrepreneurship (based on production trades), raising awareness among the general public and facilitating access to land in an urban context.

A support programme has been set up to cover technical aspects (agricultural production and processing), legal and financial aspects, short supply chain marketing and the search for land opportunities. It targets not only economic viability⁸ but also personal well-being, employment and time management, choice of distribution channels, management of logistical aspects and the balance between deep-rooted aspirations and technical choices.

⁸ See chapter 2.

This programme that provides support to new farming projects focuses on two aspects:

- **The practise test.** One of the first objectives of BoerenBruxselPaysans was access to land and production resources in urban areas. There is a strong demand for retraining in agricultural professions in the Brussels Region and the test area was able to accommodate half of the applications (16 out of about 30 received). Inspiring examples include: Jean-Martin Fortier (Quebec), Ferme du Bec Héllouin (Normandy), Elliot Coleman (USA) and SPIN Farming (Canada). These projects are characterised by (very) small areas and short supply chain marketing. In contrast to the dominant agricultural models, bio-intensive micro-farms make the most of all the cultivation areas, paying particular attention to soil fertility (high levels of organic matter, surface mulching with plant cover or geotextiles, etc.) and maximising productivity through massive recourse to human labour, mainly manual labour, supported by a large network of volunteers and the pooling of material resources among market gardeners. These micro-farms are therefore not highly mechanised and require little initial investment.
- **Support for new farming projects:** the aim was to ensure a smooth and viable transition between the project test and independent product launch, in order to maintain production activities at a viable pace.

THE ROLE OF CONSUMERS (EATERS)

The pilot projects set up by BoerenBruxselPaysans generally rely on a high level of consumer involvement.

Solidarity between consumers and producers, especially through volunteering in agricultural production tasks, is one of the conditions underpinning their sustainability.

Raising awareness of the agricultural or gardening practices promoted by agroecology is an obvious step when farms are located in an urban context. Citizens can see for themselves the results of their own food choices. They can initiate change and promote the relocation of their own food.

RETHINKING OUR FOOD SYSTEM

The population's food supply has always been one of the primary concerns of the political authorities. But in recent decades, food security and local supply have no longer been part of the remit, and cities have become dependent on the international market.

During the Covid-19 health crisis, the general public largely turned to short supply chains not only for their transparency and health quality, but also for the strong relationships nurtured between local producers and consumers. Smaller producers (such as Smala Farming, RadisKale or Le Champs Du Chaudron) have shown resilience, robustness and flexibility, adapting their logistics model very quickly.

It must be stressed that the responsibility for feeding a whole city cannot be taken on by producers alone, as they are only one link in a chain, alongside nurseries, suppliers of plants or other inputs, restaurant owners, etc. Resilience needs to be thought through across food systems.

A GLOBAL PROJECT

'Urban agriculture' could be considered an oxymoron in that the urban and the rural belong to two totally opposing categories. This is not the case. Modern cities have developed in a subtle relationship with nature, without completely ousting agricultural activities. The presence of agriculture and green spaces (recreational or dedicated to the protection of biodiversity) is an indicator of the health of a city.

Urban agroecology projects, open to citizens, are not only places where healthy and local food is produced. They are also living environments, places to meet, where know-how is exchanged, where nature and good food practices are discovered. It is a tool used to weave the social fabric in an urban context.

This is reflected in the image of the city. From now on, a green city, in which agricultural activities are rooted in the social fabric, will be considered as "exemplary". The interest shown in the BoerenBruxselPaysans project during its implementation – by the press, politicians, academic researchers, but above all by citizens – bears testimony to this.

The presence of urban agroecological micro-farms could also play an important role in the protection and preservation of soil and biodiversity, and in water management. The BoerenBruxselPaysans charter proposed a model of diversified agroecological agriculture, in harmony with the environment.

Finally, the agroecological projects supported have demonstrated creativity and entrepreneurial dynamism. Despite the sector's economic weaknesses (this is an agricultural model totally exempt from European aid under the Common Agricultural Policy, the CAP), these young farmers have generated diversified, local jobs that, in addition to primary production, also have repercussions for the processing, sales, tourism and education sectors. The sector is thus able to generate 80 full-time equivalents for a production area of 10 ha. Traditional agriculture generates 32 full-time equivalents on the 239 ha currently earmarked to it.

REFERENCES AND BIBLIOGRAPHY

[Boutsen Raphaël, Maughan Noémie and Visser Marjolein.](#)

["Assessment of professional primary agricultural production in the Brussels-Capital Region", ULB Agroecology Laboratory, June 2018.](#)

<https://www.cidse.org/fr/2018/04/03/the-principles-of-agroecology/>

<https://www.actualites.uqam.ca/2020/securite-alimentaire-en-temps-de-pandemie>

<https://goodfood.brussels/fr>

<https://www.cocreate.brussels/projet/ultratree/>

CASE STUDIES

THE GENEVA EXPERIENCE

SUMMARY AUTHOR: ROSELYNE DE LESTRANGE

SPEAKER: MARCELLIN BARTHASSAT

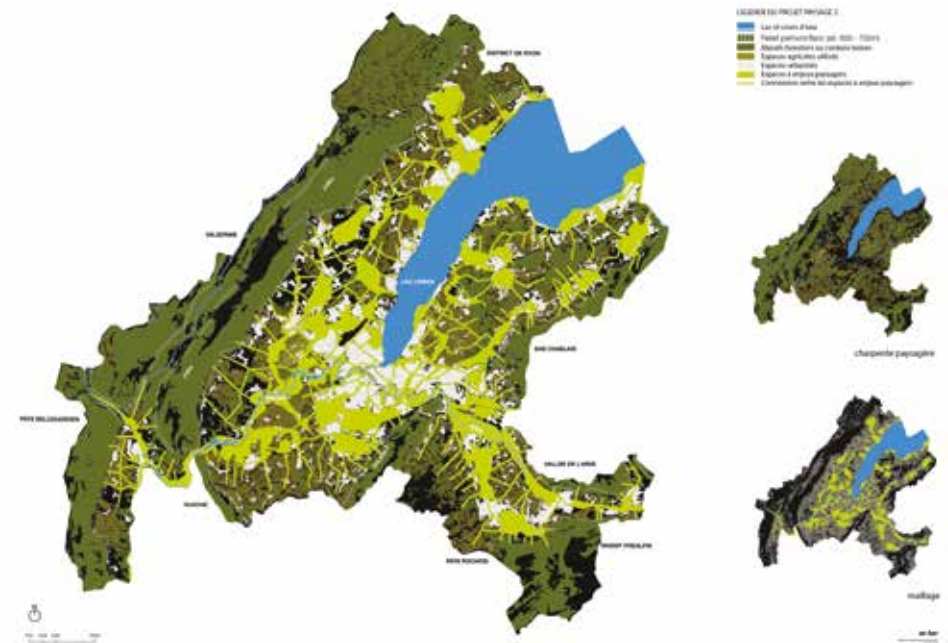


Urban agroecology projects are taking the first step in the transition towards resilient urbanism, as illustrated by the experience of Geneva.

The cross-border agglomeration of Greater Geneva is a vast territory of 2000 km, straddling the Swiss cantons of Geneva and Vaud, and the French departments of Ain and Haute-Savoie. Geneva, like Brussels, is therefore a metropolis on the borders of several administrative entities. Like Brussels, it is also a minority in its territorial surface, the organisation of which is determined by the geomorphology: Lake Geneva, the River Arve and the River Rhône, the Alps and the Jura mountains which surround it.

The strong demographic growth of this "world city", linked to its economic and international role, and its situation as an enclave between France and the Canton of Vaud, generate an urban sprawl on neighbouring territories. This "overflow" is also due to a particular feature: its agricultural area is untouchable. All this creates a tension between agricultural, natural and urbanised areas.

Following the Kyoto agreements (2007), the Swiss Confederation invited its agglomerations to develop mobility projects to limit carbon emissions into the atmosphere. The 212 territorial authorities of the 2,000 km of the Geneva agglomeration had to agree on two aspects: a spatial vision integrating urbanisation, mobility and the environment, and policies to implement this vision, taking into account an anticipated growth of 400,000 inhabitants and 250,000 jobs by 2040. These considerations formed the basis of the Franco-Vaud-Geneva agglomeration project. It was built around the idea of a compact, multi-polar and green city. These foundations are based on a strong Geneva tradition, that of a highly protected green and agricultural belt. The process led to the development of eight intermediate-scale projects in parallel.



Landscape plan, framework and territorial network (M. Barthassat/ar-ter 2011)

Commissioned in 2012 to incorporate all these studies, we proposed a landscape approach based on an integrative 'green infrastructure'. The agglomeration landscape project was therefore developed after the other projects, for sake of consistency. The green infrastructure, a multi-functional open network, takes the lead from the relief and hydrography, the wooded areas and, above all, the useful agricultural areas. Alongside the landscape, agriculture has thus become one of the pillars of the agglomeration project.

Landscape and agriculture as pillars of a new urbanism

our intention was to change the traditional approach of urban planners - since this has led us to the current situation. For us, the only way to integrate the territories of the agglomeration project, and to meet the Kyoto objectives, was to focus on the question of land, extended to that of agriculture, as a source of life. Geneva has a tradition of cereal and wine production and has grassland areas beyond the borders of the Canton. This mosaic, less immediately visible than the wider landscape, was the basis of our vision. We wanted to deepen the territory, rather than extend the city, by returning to the city-country-side relationship.



Landscape plan, framework and territorial network (M. Barthassat/ar-ter 2011)

In doing so, we revisited a very important reference in the history of urban planning in Geneva: the Canton's first zone plan drawn up by Maurice Brillard in 1936. It is a territorial network that invents the concept of "rural public space", green corridors 50 to 300 metres wide that structure the whole territory, and link the city to the wider landscapes and agricultural reserves. In response to this proposal, his friend Hans Bernoulli, a town planner, said to him: "Your plan is magnificent, it's extraordinary. There's just one problem: for this to work, the land would have to be placed under municipal control!"⁹. This question of shared ownership of land - not forgetting the lessons learned from history on the complexity of common land - could be one of the avenues of urban resilience that we all seek.

Ecological corridors

To move up to the operational level, we established 10 local priority landscape projects and drafted a series of measures, integrated into the local strategies and using the operational tools of the different territories.



⁹ The Brillard Plan was partially and progressively implemented over the course of the 20th century, and served as a reference for the 2008 agglomeration plan

The Geneva agricultural project has developed in parallel with the agglomeration dynamic. It encourages all types of agriculture, so as to increase production capacity for local distribution. Through the landscape plan, the Geneva project has become a cross-border project based on 5 principles:

1. Proximity: an export system set up to avoid administrative headaches at the borders has led to the emergence of Franco-Geneva cooperatives;
2. The agricultural area as a structuring element of the territory and a component of the landscape;
3. The organised opening up of agricultural areas;
4. Functional and sustainable operations;
5. An agricultural area protected and preserved from construction.

The first of these, the concept of which predates the agglomeration project, is that of new territorial contracts called "ecological corridors". The aim is to (re)create agri-environmental networks, based in particular on the principle of ecological compensation. In Switzerland, each farmer who turns over 7% of their land for biodiversity enhancement receives a financial compensation from the Confederation and the Canton. These measures did not exist on French territory but have been extended under these new Territory Contracts. This has made it possible to enhance biotopes and, more generally, agriculture, whilst creating a multifunctional network at the same time.

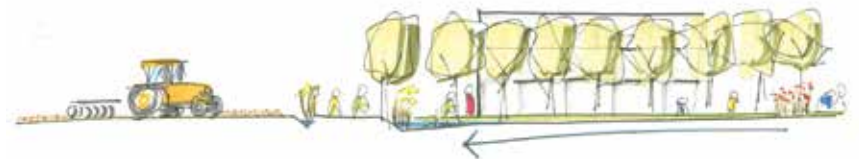
Another interesting step is the creation of the urban agroecological park in Bernex, which has become a showcase for local production in Geneva.

We have also worked on the borders that ensure the transition between the city and the agricultural areas, by encouraging the development of gardens, plantations or vegetable gardens. Their implementation requires profound changes, starting with a more mutualized land policy or the creation of public agricultural facilities. There is indeed talk of feeding the city locally, but there is never any mention of public facilities as is the case in the education or health sectors. This is a major political issue.

A new monumentality

After almost ten years, the agglomeration project is in its fourth generation. Its approach, which was very promising in 2012, has slowed down over time, notably due to complex cross-border institutional adjustments. In spite of this, the administration of the Territory Department launched a call for tenders a few months ago to take over the Landscape Plan and step up its measures.

In conclusion, we would like to insist on the idea of inversion, advocated by many urban and landscape planners. It advocates the following principles: the land, the foundation on which the city rests, is a common resource and the productive countryside must be considered as the 'new monumentality of the city' (M. Corajoud). This inversion undermines the usual concepts of conventional urban planning: the structured programme is no longer all-powerful. Constraints are given by the landscape (soil, water, biotopes) and agriculture. They must now define the potential for urban growth and not the other way round.



DISCUSSIONS

AGRICULTURAL URBANISM

SUMMARY AUTHOR: GABRIELE ANNICCHIARICO



Devising agricultural urbanism

How and where do you start to include agriculture in urban policies in a structural and systematic way? With BBP, the idea was to focus on concrete issues, without waiting for a major interregional agreement. The BBP approach is also original in that it did not limit itself to commercial issues but integrated training, coaching, access to land, provision of infrastructure, and sharing of know-how and knowledge. What remains to be exploited is the role of urban agriculture, and in particular agroecology, in land-use management and planning.

The role of the public authorities

The BBP pilot project was launched alongside the Brussels-Capital Region's Good Food strategy, which now involves two administrations, Environment and Employment. The next step would be to involve other sectors of the administration, such as the Town and Country Planning Department, in matters such as the qualification and planning of urban spaces.

In Geneva, the municipalities located between the city and the countryside play an essential role in the promotion and preservation of agriculture. Their action is a source of hope, especially given the marginal role reserved for initiatives to green urban areas and the increase in land pressure, which is often exerted on the weakest link: agriculture. However, in Geneva there would have been no Landscape Plan without agriculture and natural areas.

The involvement of municipal institutions and the role of the municipality of anderlecht

The decision to develop infrastructures, such as the agricultural test area in the Vogelzang valley (western periphery of the Brussels Region), was motivated by a historical element, namely the involvement of the municipality of Anderlecht in safeguarding this large rural area, threatened by urbanisation. The original idea was to revitalise an area straddling Brussels and Flanders. It was an opportunity to support an action designed to preserve the neighbouring area of Neerpede.

Today, the municipality owns a large amount of land (about 100 ha), most of which is leased to conventional farmers. How can we encourage them to adopt other, more sustainable agricultural models? Thanks to BBP, 4 ha in the Vogelzang valley and 3 ha in Neerpede have now switched to agroecology. The social and environmental added value of this approach is undeniable.

Working with Flemish municipalities and CPAS (public social welfare centres)

Cooperation between the Flemish municipalities and the Brussels-Capital Region on local agriculture is complex. First of all, there are linguistic problems. Then, unlike in Geneva, the agroecological approach is not unanimously supported by the leaders of local institutions. The political culture does not favour collaboration between different institutions, despite latent opportunities. However, current reflections on a common vision in the Pajottenland offer positive prospects.

Creating an observatory of open spaces

Geneva based its project on thorough and continuous knowledge and analysis of the cross-border territory. Is it possible to set up this kind of observation dynamic in Brussels? The production of information and knowledge could play a decisive role in decision-making and support urban and agroecological agriculture as a political project. On this last point, BBP has taken a very strong stance: "We assume that a dense city is not desirable; the city must be ventilated, there must be interaction, there must be room for nature in the city and for productive nature."

The place of agriculture in the metropolitan project

There is growing recognition of the need to integrate agriculture into the urban project. But the translation of this vision into practice - the inclusion of productive landscapes into the metropolitan context - comes up against the difficulties of a pre-existing city. BBP has found a way forward in the environmental administration policies (Brussels-Environment) and the local administration (Commune Anderlecht) as well as in a dynamic associative community. The next step

is to introduce this culture into other areas of city management. It is not only urban planning that has become detached from the agricultural world. Urban society as a whole has neglected this fundamental sector. However, the current climate issues and the Covid-19 crisis remind us of the importance of food security and of opening up cities to open spaces. The experiences of BBP in Brussels or the Landscape Plan in the Geneva agglomeration are encouraging. Such initiatives, although in the minority, point the way to what should become the norm.



PROJECT SHEET

FRANCE-VAUD-GENEVA AGGLOMERATION

KEY OBJECTIVE

"a balanced cross-border living area, a compact, multi-polar and green urbanization; agriculture and landscape to feed the city"

STAKEHOLDERS

Republic and Canton of Geneva, District of Nyon (Canton of Vaud),
Department of Ain, Department of Haute Savoie, Swiss Confederation, Rhône
Alpes Region, French Genevois, City of Geneva, French Republic, Interreg
France - Switzerland

KEY DATES

- 1973: creation of the Comité régional franco-genevois (CRFG) (Regional France-Geneva Committee)
- 2004: launch of the Agglomeration Project
- 2007: the 1st generation Agglomeration Project (December 2007)
- 2010: awarded the European Prize for Town Planning
- 2012: the Agglomeration Project extends to Greater Geneva
- 2012: the 2nd generation Agglomeration Project (June 2012)
- 2013: creation of the Agglomeration Forum representing civil society
- 2016: the Greater Geneva Territory Project 2016-2030 (December 2016)

KEY FIGURES

212 municipalities, 2,000 km²

946,000 inhabitants (growth scenario looking ahead to 2035-2040: 1.25 million).

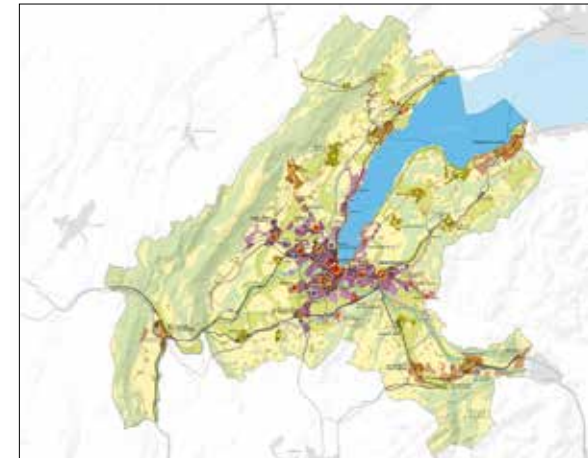
451,000 jobs of which 66.1% in Geneva, 8.6% in Vaud, 25.3% in France (or 65% of housing in France, 24% in Geneva, 11% in Vaud, etc.)

41% forests, 33% agricultural areas, 13% hydrography,

13% of the built-up area of the urbanised territory is occupied by the villa zone (area of 4-fronted houses which accommodates 10-11% of the population)

Agriculture:

- ca. **31,000 ha of agricultural land**
- **1,300 agricultural businesses** spread over 167 municipalities, i.e. an average of 7.5 per municipality)
- **6,000 direct jobs, 30,000 indirect jobs**
- Livestock: 57% of farms
- Specialised crops: 18% of farms
- diversified crops: 1/3 of farms
- 60% of farms have a future project (40% have no potential buyers)



Projet de territoire Grand Genève 2016-2030



**URBAN FARMER,
A PROFESSION
WITH A FUTURE**

INTRODUCTION

A PROFESSION IN ITS RIGHTFUL PLACE

BY ROSELYNE DE LESTRANGE

Our reflections on agriculture as a pillar of city life - to be taken in its original sense of "community" - are broached in this chapter from the perspective of the farming profession. This is the key to the urban ecosystem and the heart of any agroecology project.



What are the values behind this term 'urban farmer'?

- A diversity of spatial situations, from dense urban to rural;
- A service and care dimension (social and environmental benefits for the territory);
- A territorial anchorage. For example, a farmer who cultivates its land in Brussels and exports its produce is not considered an 'urban farmer', unlike a farmer in the Flemish or Walloon countryside who produces for a GASAP¹² in Brussels.
- An ethic, underpinned by agroecology. The farmer works in understanding with the land.

This chapter initially looks at the future prospects of this profession, which is often idealised in urban perceptions but is jeopardized/vulnerable in the field.

Purely agricultural models are not yet able to compete with the omnipotence of globalised industries. Successful farmers use paradoxical strategies such as purchase and resale or switch from a production logic to a service logic: their solvency depends on a purpose other than food production. But is it legitimate to expect the farmer - urban or not - to also be a gardener of the territory, an environmental educator or a social worker?

The cooperative model is the subject of numerous experiments, the most promising of which extend to land and create entrepreneurial statuses adapted to changes in the profession. The Champs des Possibles in Île de France, presented in the second part of this chapter, offers some very inspiring ideas. The lessons BBP has learned from its experience shows that the reality remains more difficult in Belgium despite a political consensus on the importance of maintaining this profession.

In the third part, François Lohest (researcher in the sustainability of alternative food systems) sheds light on the potential of metropolitan agroecology, the political and economic obstacles that prevent its structural integration into the food system and, finally, the conditions that must be met if farmers are to enjoy their rightful place at the heart of the Brussels metropolitan economy.

¹² Groupe d'achat solidaire de l'agriculture paysanne (www.gasap.be), a citizens' initiative that supports small-scale farming.

THE EXPERIENCE OF BBP

VIABILITY AND BUSINESS MODELS

SPEAKERS: ALICE GILLEROT, GABRIELE ANNICCHIARICO, THIAGO NYSENS
SUMMARY AUTHOR: THIAGO NYSENS



XIX General view of porte de Nivove, Brussels

URBAN MARKET GARDENERS, THE REBIRTH OF THE BOERKOZEN OF YESTERYEAR?

Since the end of the 20th century, a new generation of farmers has emerged, who do not have an agricultural background, but who live in cities and are setting out on a new career path. Not having inherited any infrastructure or land titles, they set up their operations near their community, convinced of the relevance of local supply chains. These new urban market gardeners are reminiscent of the boerkozen of the industrial revolution.

In the 19th century, Brussels underwent a period of expansion, to the detriment of arable land. The transport revolution also allowed for the gradual outsourcing of cereal crops, which were not only too space-intensive but also subject to national and international competition: cereal imports increased to the detriment of local crops. The lack of available space also impacted on grazing. Livestock was no longer bred in the immediate vicinity of the town.

At the same time, urban densification led to an increase in the city's demand for food. Specialised horticultural farms, the so-called boerkozen (literally 'marsh market gardeners'), developed. These farms were worked by the poorest sections of the population, artisans and working-class families, who left the Brussels pentagon for more affordable land and vegetable plots to cultivate on modest farms.

Market gardening and horticulture developed in the Brussels suburbs (cabbages in Saint-Gilles, cherries in Schaerbeek, endives in Evere or Haren, lilacs in the north-east of the city). The North-West of Brussels became the city's 'vegetable garden'.



Boerkozen, market gardeners in the direct vicinity of Brussels

As a result, two agricultural systems coexisted: historical mixed farming and livestock farms, which still exploited large plots of land, and new establishments geared towards market gardening and horticulture.

This model of agricultural specialisation spread to all European cities from the 18th century, as described by German economist Johann Heinrich von Thünen in his theory of the isolated state.



SUPPLY AND DEMAND OF AGRICULTURAL PRODUCTS IN THE BRUSSELS REGION

A growing sector, which remains marginal

According to data provided by the Brussels administration in October 2020, urban agriculture is a growing but marginal sector. There are 40 full-time equivalents (FTEs), occupied mainly in outdoor production (market gardening, small fruits, aromatic and medicinal plants) and in a few sheep breeding projects. If we add the soil-less projects (not studied or accompanied by BoerenBruxselPaysans), the number increases to 80 FTE.

The first professional productions started in 2015-2016 with 15 of the 33 projects currently in existence having passed through the BBP test area. Given the short time frame, there is still a lack of insight into the viability of these business models. A 2018 estimate by the Université Libre de Bruxelles (ULB), based on cumulative turnover, put annual production at around 100 tonnes of vegetables for 5.2 ha. In 2020, 12 ha of land were cultivated for market gardening within the Brussels Region, representing a production of about 200 tonnes per year. This corresponds to 0.05% of the fresh fruit and vegetable needs of the entire Brussels population. These figures demonstrate the need to extend the territory of the Brussels Region to the entire metropolis in order to develop a consistent food project.

Market gardeners who produce on small surface areas favour direct sales, subscriptions and B2B sales in semi-wholesale (grocery shops, hotels and restaurants).

The thorny issue of land

Opportunities to increase production are often linked to access to land. This topic is dealt with specifically in chapter 3 of this publication.

Growing but highly segmented demand

Interest in local, sustainable food has been growing over the past fifteen years or so. One way of quantifying this evolution is to observe the constant increase in the consumption of organic products (15% per year, according to Biowallonie). Biowallonie has also noted a supermarket drive in this development since the 2010s. The organic product niche is a very profitable market for this sector.

These products are sold in highly segmented and diversified markets comprising numerous distribution channels (supermarkets, open-air markets, hard discounters, grocery shops, etc.), vying to outdo each other. This competition is not only about price, of course, but also about accessibility, range, etc.

For these reasons, there is a clear disengagement of the consumer from the "vegetable baskets" that kept the sector buoyant in the 2010s. The demand for 'committed' short supply chains is not growing as rapidly as before, but inno-

vative forms of distribution are emerging: Community-Supported Agriculture (CSA), consumer cooperatives, pick-your-own, incubators, web platforms, etc.

In the field, we note that producers who set up shop generally succeed in developing a community of consumers. Some supply chains such as CSAs even generate very long queues but with greater customer turnover. Most segments saw their demand triple during the first wave of the pandemic in 2020, before settling down to a higher level than before.

Who are the farmers of Brussels?

The new producers are mainly people with no agricultural background (so-called NIMAculteurs¹³). The average age is 35. A common motivation links those interested in such a career path: the search for a job that is "meaningful", "in contact with nature" or "in the open air" and the desire to contribute to "the establishment of sustainable, responsible food supply that is in harmony with our environment".

BUSINESS MODEL AND KEY FIGURES

Production models

The market gardening models observed in Brussels are "bio-intensive on a small area". They are characterised as follows: about 30 species cultivated, three to five rotations per year, about 80 ares per agricultural work unit. For aromatic and medicinal plants, the cultivated areas are of the order of 20 ares per work unit. Crop rotation is composed of annual plants and perennial species.

The two systems have in common the protection of a part of the tunnel crop production areas (> 15%), frequent recourse to voluntary labour, the lack of mechanisation for the sowing, harvesting and weeding phases (only occasionally for preparatory soil work). Both systems use purchase and resale to expand or supplement their range at the beginning of the season. Purchases can be made peer-to-peer or via wholesalers.

CAPO and CSA: two major avenues

7 Brussels projects took the form of Collective Agricultural Production Organisations (CAPOs). Even without a significant increase in turnover per unit of work, the advantages of pooling are numerous: less loneliness, freedom from on-call duty, technical specialisation, dissemination of knowledge, greater investment capacity and economies of scale. However, the human factor makes it difficult to set up and sustain these collective projects.

CSAs with (or without) pick-your-own are developing in Brussels as in other regions (there are currently four projects). These models reflect a significant increase in turnover per unit of work. Post-harvest work (order management, preparation and packaging), which can represent up to 1/3 of working time, is reduced. Moreover, the customer no longer pays for a basic product but for a production system. The question of the reproducibility of these models to all socio-economic environments in Brussels remains open.

Elements of profitability

Few market gardeners and herb growers have developed cost accounting tools.

From our field observations and support work, it appears that the average turnover per work unit is between 25,000 and 40,000 euros per year. As a general rule, under 25,000/year, production costs are not considered to be covered. Above 40,000 euros/year, farmers can pay themselves a wage and develop an investment capacity.

These figures result in net salaries of 700 to 1200 euros/month, which is below the national averages for hourly workloads of 2,500 to 2,800 hours per year compared to 1,800 for a full-time employee.

¹³ "Ultra Tree" study, see sources below.

However, in the projects supported, the improvement in profitability is very real in the first four to six years of activity, thanks to strategic and organisational choices: crops in line with marketing, simplification of sales channels, extension of growing seasons (production of early or late varieties), logistical optimisation, etc.

URBAN STRATEGIES

The urban agriculture business model can count on several advantages, the most important of which is the proximity of the farm to the consumer. It can shape the urban landscape, characterise the environment, and help build a community's identity, as is often the case with CSAs or pick-your-own.

Moreover, urban agriculture can provide other services to the city besides supplying food. It can offer training, create social links and reconnect city dwellers with nature, for example. The inventiveness of urban business models is apparent from the way in which one service rendered remunerates the others, and strikes a balance: examples include Atelier Groot Eiland, which draws an income from the socio-professional integration sector, or the CSA model with the over-seeing of the Ferme du Champ des Cailles district in Watermael-Boitsfort.

- "Urbanising in Place", Workshop "Towards a Brussels Center for Agroecology" (September 2019) inspired by Kerckhove, Greet "Sterk Gemengd (...) Hageland & Pajottenland" (1993);
- "Co-developing a cereal network in Pajottenland, Belgium" Van den Abeele, Lucas (2018).
- "Etude Historique du Zavelenberg", ERU (2019).
- Hermesse J., Maughan N., Pipart N., Anciaux G., Heymans E., Wiaux F., Darteville G. and Dayez C., 2020 "Ultra Tree: Supporting the installation and viability of market gardens in the Brussels (peri-)urban area", in Vankeerberghen A. and J. Hermesse (Eds.), "Transitions pour une alimentation juste et durable à Bruxelles : contributions de recherches en co-création", Academia-L'Harmattan, Louvain-la-Neuve, pp. 223-262. "Evaluation de la production agricole primaire professionnelle en Région de Bruxelles-Capitale", ULB Agroecology Laboratory: Boutsen Raphaël, Maughan Noémie & Visser Marjolein (2018)



CASE STUDY

LES CHAMPS DES POSSIBLES



SPEAKER: MAËLA NAËL

SUMMARY AUTHOR: ROSELYNE DE LESTRANGE



Parisians generally consider that the Ile-de-France region is limited to Paris and its suburbs. In actual fact, it is much larger, with a substantial and highly productive agricultural area.

The average size of farms in Ile-de-France is 130 ha, which is about twice the French average. 82% of the agricultural area is devoted to cereal crops. This large UAA covers just under 10% of the vegetable needs of the Ile-de-France population. On the other hand, it produces more than 200% of the wheat needs (even though half of these are covered by imported wheat). The wheat produced in Ile-de-France is mainly intended for export. The region has approximately 24,000 hectares of organic land (less than 10% of all the food consumed by the people of Ile-de-France). This is still far from sufficient to meet needs, especially since, from 2022 onwards, collective catering will have to use 20% organic products. The challenge is huge. But the situation regarding short supply chains does not exactly match that of organic farming. Out of about 5000 farms, 800 operate in short supply chains. These are mainly located in

the inner suburbs, in Seine et Marne, in the east of the Île-de-France. Of the 350 associations for the preservation of smallholdings, the Associations pour le maintien de l'agriculture paysanne (AMAPs), which reach about 50,000 consumers, about 50 are located in Paris.

Parisian agriculture has particular characteristics, compared to those of the Ile de France region: according to the Association of Professional Urban Agriculture (AFAUP), the majority of farms are on rooftops. To strengthen this movement, the Parisculteurs project, overseen by the City of Paris, aims to devote 18 hectares to organic farming on 79 sites.

The role of this intra-urban agriculture is generally considered marginal in terms of food production, but it is an irreplaceable laboratory for agricultural experimentation. The viability of agriculture in the dense city is also improved thanks to the presence of plants. It also offers venues for food education, the creation of social links and integration jobs, etc.

The new farm dynamic

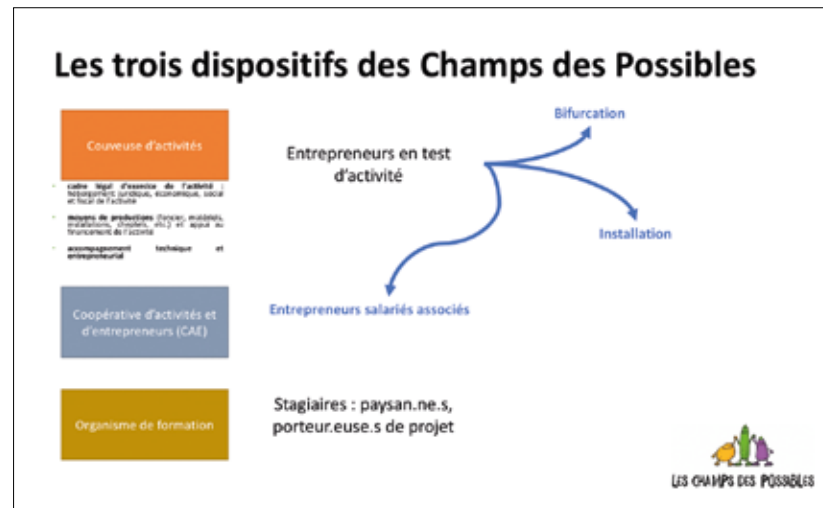
It is difficult to provide figures on new farming businesses because the Chamber of Agriculture only counts those that it supports: 40 new farming businesses per year including 100 organic facilities in the last ten years. This figure is increasing, with 20 to 30 new organic farming businesses per year, but not all of them benefit from a support system. And unfortunately, the transfer of arable and mixed farming businesses is difficult: in 2010, about 60% of farmers were over 50 years old and half of them had not identified a successor. 150 farms are lost per year in the region. However, it would take about 250 new farms to set up in business every year to off-set the departures.

In view of the urgency, different business structures have emerged. In the 2000s, the first agricultural test area was created. In 2003, a law for economic initiative prompted the creation of the CAPE contract (contract to support the business project), which is based on support for initial project tests. The first AMAPs (associations for the preservation of smallholdings) were created at the same time. In 2005, they formed a network. Consumer demand very quickly exceeded supply. This situation led to the creation of the Champs des

possibles in 2009. The creation of the National Network of Agricultural Test Areas (RENETA) in 2012 should also be noted. This currently unites over 300 areas.

The project

Les Champs des Possibles is part of Abiosol, which offers support to various stakeholders: to project leads during the set-up process (dialogue with farmers, search for financing, management, project testing, etc.), to sellers (land diagnosis, economic study, support for processing, training, etc.) and to local authorities (support for the protection of agricultural land, land diagnosis, implementation of the AB (organic agriculture) directive and collective catering, studies and management of new farm set-up projects). Approximately 200 projects contact Abiosol each year, and this number is increasing. There are also more and more requests from local authorities, but it is difficult to mobilise the sellers.



Within Abiosol, Les Champs des Possibles is an incubator and cooperative for agricultural food activities and local development, covering three sectors: organic and smallholder agricultural production, food processing and crafts, and support, advice and training. The cooperative economic model is based on the turnover it generates, of which a 10% levy on the profits of the cooperative entrepreneurs (see below) supports the operating costs, and on subsidies from the Region, the Water Agency and the Departments.

The incubator allows farmers to test their project for one to three years, with technical and entrepreneurial support. It provides them with the means of production (equipment, infrastructure, animals, etc.) and the land (generally leased by the Champs to other structures such as Terre de liens). There are three pathways:

1. immersion, organised in collaboration with the Réseau fermes d'accueil d'Île-de-France, which allows entrepreneurs to sample the profession alongside a farmer;
2. the on-site project test provided by the cooperative;
3. the transmission association that connects potential farmers with sellers.

The activities tested within the incubator are mainly market gardening, aromatic and medicinal plants, small fruits, and watercress (a historical crop in the Ile-de-France region). There is also poultry farming, mixed farming and bakers. A processing laboratory is being opened: it is therefore an experimental farm, a third place for food.

A key element to attract new farmers used by the Champs is the business project support contract, a private law contract that does not create a relationship of subordination between the host structure and the project lead. The contract is valid for one year with the option to extend twice. It is compatible with another part-time activity or with unemployment benefits whilst the new activity is not lucrative. Between 2009 and 2019, contracts were signed with 72 entrepreneurs (40% women and 60% men), from all professional backgrounds. Of the 35 people who went through the "project testing" phase, only

4% did not stay in the sector and 100% of the companies created were sustainable after five years.

After the incubator, it is possible to remain in the entrepreneurs' cooperative as an associate employee entrepreneur (ESA). This status, which stems from the Labour Code, allows for the sustainable development of the activity within the cooperative after the test phase. Entrepreneurs can enter into a partnership as individuals or collectively, by taking over an existing farm or establishing a new facility. The cooperative finances production tools, offers complementarity between professionals and shared services.

The average annual turnover on the project test is 33,000 euros. In market gardening, where the main marketing method is via the associations for the preservation of smallholdings (AMAPs), turnover is rarely less than 20,000 euros. The average annual turnover for the associated salaried entrepreneurs is 70,000 euros, with a gross annual remuneration of 20,000 euros. This activity also pays for seasonal or permanent jobs.

In line with the major challenges of agricultural transition, Les Champs supports three types of production:

4. Arboriculture. It is a sector in crisis; 80% of orchards have disappeared in 40 years, while the demand for local fruit has never been greater. Few businesses are being set up, notably because of inclement weather. Les Champs offers specific support for the transfer of tree farms and the takeover of abandoned orchards.

5. Sheep farming. This activity, which is virtually absent from the region, is encouraged by managers of natural areas and by cereal farmers. The cooperative is therefore involved in research and awareness-raising projects in this field.

6. Market gardening. This is a very dynamic sector. A study conducted by us shows that vegetable farms are generally viable, with monthly earnings higher than the minimum income, independence from European aid under the Common Agricultural Policy (CAP) and lower investments than in the

rest of the agricultural world (on average, 60,000 euros per ha). Up to 6% of new investments are subsidised by EU funds for organic farming. Thanks to this low level of debt, the twenty or so farms monitored in our study are sustainable. Their turnover is increasing and most have created jobs. The results are therefore encouraging. But this study is less positive about the viability of the profession (working hours, physical strain, high psychological burden).

In Île-de-France, the demand for local and organic products is spiralling, with a networking dynamic between farmers and with citizens; similarly, the support actors are well coordinated and their partnership with the local authorities is valuable. The importance of subsidies for structures providing support to new agricultural businesses, for new farms and for professional transition periods should also be emphasised. But many challenges remain: raising awareness of the agricultural professions, mobilising professionals without a farming background (NIMAs) beyond market gardening, linking inspiring models and collective catering, structuring the sectors, overcoming the widespread denial concerning the thousands of transfers that will not find buyers, and unlocking access to land! Our wish for the next decade would be to see the development of the concept of collective and cooperative farms, with salaried entrepreneurs who have a long-term business project and are capable, in turn, of taking on people who are testing their own project.



DISCUSSIONS

ECONOMIC FRAGILITY OF THE SECTOR INDIVIDUAL CHOICES VERSUS COLLECTIVE RESPONSIBILITY

SUMMARY AUTHOR: THIAGO NYSENS



The various field reports from the BoerenBruxselPaysans experience paint a picture of fragile economic models and low-paying jobs. Financial needs are individual: someone with dreams of becoming a market gardener could be satisfied with a fairly low income for various reasons.

However, what is the societal responsibility when such models are supported by the community? According to researcher François Lohest, when public authorities support these urban agriculture models, there is a risk of appropriating the image and positive consequences of the activity, without questioning the societal context responsible for the precariousness of the sector. The community's intention, while laudable, can be insidious.

There is some evidence to support this. The main effects of the Common Agricultural Policy (CAP), for example, penalise the smallholders and local food production (farm concentration, support for export markets, free trade). How could this budget of 60 billion euros a year be directed towards supporting agriculture that feeds communities?

On an individual scale, production is linked to the acceptance of a very low income, which is demotivating for managers of a market gardening project. This is now the main gateway to the agricultural professions, which have been experiencing a serious succession crisis for the past thirty years.



IS THE MARKET GARDENER PROFESSION (ON A SMALL SURFACE AREA) AT A DEAD END?

Over the last 15 years, the profession has developed and technical, logistical and organisational solutions have been put in place to improve the profitability of the farms. Everything that falls under the responsibility of the market gardener seems to have been explored.

Is this profession doomed to stagnate in a state of economic fragility? There may be other avenues to explore:

- **More varied production models.** Encourage people to enter the agricultural profession by means other than market gardening on a small surface area (small livestock, fruit growing, field crops, etc.). To do this, it is necessary to work on reducing the barriers to entry (investments, training, etc.). This is a central issue when we know that one of the roles of urban agriculture is to be a springboard for the rural agricultural workforce of tomorrow.
- **Statutes adapted to newcomers.** The testimony of Champs des Possibles shows that adapted statutes can promote the gradual and secure establishment of new agricultural businesses. The results in terms of job creation and profitability are convincing.
- **Short and fair channels.** Pooling sales plays a major role, provided that it supports a fair price, through the short supply chain and fair trade practices, such as the many farmers' cooperatives that are emerging. For small-scale urban market gardening, the direct link with consumers (via forms of subscription, GASAP, AMAP, CSA, etc.) is essential to secure economic viability.
- **The Collective Agricultural Production Organisations (CAPOs)** help to make the profession of producer more attractive to young people (less isolation, collective structure other than family, etc.)
- **The role of the public authorities.** Our actions have little or no influence on the overall socio-economic context and European policies (CAP). It is therefore essential that local and regional government bodies can test, support and strengthen food agriculture.

- **The Brussels municipalities** have a direct role to play, particularly in the establishment of 'régies agricoles' (municipal structures whose role is the primary production of food for the communities, with a generally salaried agricultural workforce). It is also worth noting the interest in linking socio-professional integration paths (in collaboration, for example, with Actiris, CPAS (public welfare centre), social housing cooperatives, etc.). In addition, the involvement of municipalities and CPAS in the provision of land can be managed by land registries.
- **The Brussels Region** is considering a more structured financial framework through an agricultural order. It wishes to co-construct this order with the stakeholders, but the health context is throwing a spanner in the works. The Region has also launched a public tender to study how Brussels can appropriate the CAP to support its own agricultural policy.



PROSPECTS FOR BOERENBRUXSELPAYSANS

How could BBP or other Brussels stakeholders make a project such as Abio-sol, which includes Les Champs des Possibles, a reality? This kind of platform would strengthen cooperation between the many public and private structures involved in the deployment of agroecology. A few avenues emerged from the discussions:

- 1. improving the social status of the farming profession** (by the public authorities, consumers and the professional world, including agriculture). The search for meaning has become more important in the motivation of new entrepreneurs. The notion of 'endeavour' replaces that of 'work' in their approach. It is about building something more collective, achieving a new balance between work and the contribution to a social project, a new urban ecosystem that reconciles the city and the countryside.
- 2. the decompartmentalisation of town and country**, the concept of 'local' is being transformed by the new smallholders. The concept of a 'metropolitan community' refers to the idea of a city bringing together town and country.
- 3. the construction of 'third places for food'**, collective spaces that create a network of practices and regions. It is essential to consider the link between urban agriculture and infrastructure, particularly active mobility networks designed for local logistics. The region offers many possibilities for such an urban planning project, which could also trigger the emergence of new professions.

The farming profession has always been hard and demanding, but the meaning it gives to uprooted urban lives, the upgrading of its social and economic status supported by initiatives such as BBP and Les Champs des Possibles, make it possible to consider it as a profession of the future.



PROJECT SHEET

LES CHAMPS DES POSSIBLES

STAKEHOLDERS

Les Champs des Possibles, National network of agricultural test areas, AMAP network in the Île de France region, Terre de liens, Organic farmers of Île de France

KEY DATES

- 2000: first "project tests" in France (non-agricultural)
- 2003: Economic Initiative Act - CAPE contract
- 2005: Ile de France AMAP network
- 2008: first agricultural test areas in France
- 2009: setting up of a regional agricultural test area at the instigation of farmers and citizens from the AMAP Île-de-France network. Creation of the association Les Champs des Possibles within ABIOSOL
- 2012: Creation of the National Network of Agricultural Test Areas RENETA
- 2016: Les Champs des Possibles becomes a Société Coopérative d'Intérêt Collectif (SCIC - Cooperative Society of Collective Interest). Since then, this Cooperative of Activities and Entrepreneurs (CAE) has been welcoming associate salaried entrepreneurs who, after a project test phase, wish to develop their activity on a long-term basis in this shared enterprise.
- 2020: more than 60 Agricultural Test Areas

<https://www.leschampsdespossibles.fr>

KEY FIGURES

12 million inhabitants in the Île de France region including 2.2 inhabitants in Paris

Agriculture in Île de France:

UAA 47% of regional territory, **569,000 ha**

82% of the agricultural area in **cereals**

4.2% of UAA = 24,000 ha in **organic** farming (compared to 6% in France)

Average farm: 130 ha (double the national average)

1 farm for every 2400 consumers (compared to 1 for 148 in France)

5000 farms of which **447** are **organic** (about 10%) of which 169 in field crops and 157 in market gardening with an average area of 37 ha

353 AMAPs reaching **50,000 consumers** (0.5% of the Ile-de-France population), including 50 in Paris

Half of the 157 organic vegetable farms are in AMAP.

Food coverage rate:

10% of the vegetables and 200% of the wheat required to meet the food demands of Ile-de-France

New needs of the catering industry:

20% organic for 30 million meals by 2022 (Egalim law)

KEY OBJECTIVE

Les Champs des Possibles is a **cooperative of agricultural and food activities** uniting farmers, food artisans, consultants, project managers, consumers, local authorities and other associates around an economic and social cooperation project.

Through the step-by-step construction of a **shared enterprise** activating social and professional solidarity, its cooperators intend to encourage and facilitate access to jobs directly or indirectly linked to agricultural production and to develop economic relations around food - the shared commodity of humanity - based on trust and fair exchange rather than on mistrust and predation.



AGROECOLOGY WITHOUT LAND?

INTRODUCTION

LAND AS A SHARED COMMODITY

BY ROSELYNE DE LESTRANGE

In the two previous chapters, we presented the objective of the Agropolis project: to structure, on a supra-regional scale, the archipelago of land and small-holder dynamics into a territorial agriculture project.

The issue of land access not only raises regulatory and strategic questions. It also focuses on landscape or environmental justice - an issue that has never been more topical in these times of a pandemic. The importance of cultivated soil for the decarbonisation and resilience of our territories has now been recognised by Europe. However, concrete initiatives for transition in land management are still mostly part of the so-called "alternative" sphere.



These pages address technical as well as ethical and political issues. These include the stability of the City, the survival of those who farm the land and the livelihood of the population as a whole. What would be the consequences of recognising the principle, advocated by Thomas More in "Utopia", that land is a shared commodity and not an economic resource? What rights and duties do those who cultivate have? What are the conditions governing the use of the land and its resources? Is local governance becoming crucial for the implementation of a metropolitan agroecological policy? Aren't flexible, agile and varied strategies the best guarantee for the sustainability of any dynamic? What mechanisms can be invented to regulate and guarantee this flexibility?

To explore these issues, we will compare the situations in Brussels and Nantes. The functional metropolis of Brussels is a living area without administrative status, where it has become essential to develop a land and agricultural policy based on consultation with the local authorities. As a City-Region, the capital itself is under great pressure in terms of undeveloped land, including the scarce cultivated land, whether or not in an agricultural zone. As part of its Good Food strategy, the Brussels Region government is working to change the conditions of land access and to set up collaboration with the conventional agricultural sector and neighbouring Regions to create a food basin.

The Nantes metropolis, on the other hand, is an administrative entity. It has set up a Territory Food Project and benefits from flexible and creative tools to increase access to food land. But unlike Brussels, agriculture is not part of its political remit.

The two situations have three elements in common: a historic green belt, mobilised public institutions and a culture of territorial experimentation.

FEEDBACK FROM THE BBP EXPERIENCE

BRUSSELS AND ITS LAND

SPEAKER: MAARTEN ROELS

SUMMARY AUTHOR: ANTOINE GÉRARD



Map of Belgium, after Ferraris, drawn up in 1831 by Ph. Vandermaelen

The ebb and flow of urban agriculture between the 19th and 21st centuries

Ferraris' map (1777) shows the presence of numerous market gardens interspersed with cereal fields on the outskirts of the city of Brussels. Agricultural production in the Brussels hinterland at the time was almost exclusively intended to feed the Brussels population.

From the industrial revolution onwards, new residential and industrial areas were gradually built on this agricultural land. The textile industry, which required large areas of land, contributed significantly to the spatial change of the countryside.

The 19th and 20th centuries saw agricultural production move further and further away from cities, until the transport boom made it accessible on a global scale. Globalised trade, as it developed in the 20th century, slowly sealed the fate of economic links between Brussels' peripheral farmland and the city. The Common Agricultural Policy (CAP), Europe's strategic axis for the development of a competitive internal market, has also pushed farms to expand and to be oriented towards international markets, leading to a conversion of market garden land into land for livestock and field crops.

In 1970, the Brussels area still had 2,000 *boerkozen*¹⁴, the name given to fruit and vegetable growers in the suburbs who brought their produce to the Brussels markets. This figure had dropped to a few dozen by the turn of the 21st century. One of the last Brussels cattle farmers, who died in 2018, described how the city had swallowed up his plots of land, so that he had become trapped within the urban fabric, unable to even enter his own farm with his tractor.

THE RETURN OF THE BOERKOZEN

Since the beginning of the 21st century, we have seen a return to the production of food crops for local populations. In the Brussels–Capital Region, there were no fewer than 40 new urban agriculture projects (in-field and soil-less) in 2018¹⁵.

At least two factors illustrate the precarious situation of these new agricultural activities.

Setting up of operations outside agricultural areas

The Brussels–Capital Region has 227 hectares of agricultural land in the Regional Land Use Plan (PRAS), 94% of which is located in Anderlecht, in the Neerpede district in the south west of Brussels. However, according to the CAP declarations, 255 ha are actually used by farmers (98% for livestock and 2% for market gardening and others).

¹⁴ See chapter 2

¹⁵ R. Boutsen, N. Maughan and M. Visser, 2018. "Evaluation of professional primary agricultural production in the Brussels–Capital Region", study carried out for the Brussels Regional Public Service (SPRB) Economy and Employment, Economy Department, Agriculture Unit, 2018

How can these figures be explained? On the one hand, not all land in agricultural areas is cultivated. Many dwellings with gardens have been constructed here, mostly before their allocation to the PRAS. This means that only 118 ha are both in agricultural zones and declared to the CAP. On the other hand, 133 ha are declared to the CAP but are not located in an agricultural zone. Most of this land is located in green zones and is sometimes subject to various classifications (e.g. Natura 2000). These are therefore agricultural activities mainly aimed at maintaining a landscape and/or a state of biodiversity (forage crops and pastures). Of the 227 ha of agricultural land in Brussels, only half is actually used for agriculture.

Most of the new urban agriculture projects mentioned above are located outside agricultural areas, usually in protected areas (green zones, park areas, cultural heritage, Natura 2000, etc.). PRAS directions are not clear with regard to the possibility of holding agricultural activities in these areas, which weakens the legitimacy of the projects (difficulties in obtaining environmental and town planning permits, risk of formal notice by a public authority, etc.).



Precarious contracts

We note that the vast majority of NIMAculteurs (farmers without a farming background) have no security in terms of land access. They have only tenancy at will contracts (which can be terminated at any time) or temporary occupation agreements, as public or private owners prefer to keep control of the long-term use of the land. As they are not historical stakeholders, they do not have access to the agricultural land in Neerpede, where the descendants of the *boerkozen*, who have mostly converted to cattle farming, have farm leases.

During the five years of the BBP project, we identified different types of land tenure contracts:

- **Leasehold:** dominant method of land provision, freedom of cultivation for the farmer over a period of 4 tranches of 9 years which can only be interrupted by the owner on the grounds of personal land exploitation.
- **Long lease:** transfer of real rights for a minimum of 27 years.
- **Occupancy agreement:** regularly used by administrations, making land available for a short and fixed period with a series of clauses to be respected.
- **Commodate:** a free loan, registered in the Civil Code, for a fixed or open-ended period. Considerable freedom in the establishment of clauses to be respected by the lender and the lessee.

INVOLVEMENT OF EXISTING FARMERS

On the one hand, at least 118 ha of agricultural land in the BCR are farmed via farm leases outside of agroecology and the short supply chains. On the other hand, there are a large number of farmers from a non-farming background looking for land to cultivate or seeking greater security on the land they already cultivate.

It is therefore essential to work with conventional farmers in the BCR and the periphery to make them aware of their role in moving towards food resilience. The vast majority of them are reaching the end of their careers. These issues will therefore need to be addressed with their successors. The transfer of activities, whether intra-family or not, is indeed a major opportunity to support the installation of new agricultural models.

It also seems appropriate to create common tools for the various public authorities involved in Brussels and the surrounding area, for better management of the land in the Brussels Metropolitan Area.

FARMERS LOOKING FOR LAND

The BoerenBruxselPaysans (BBP) project worked with Terre-en-vue to find land for new projects.

To do this, Terre-en-vue has implemented methodology based on:

- the mapping of land potentially suitable for an agricultural project, together with a database to record land information;
- a thorough knowledge of the legislation on land release.

From 2017 onwards, Terre-en-vue inspected land, met with private and public landowners and presented them with agroecological models and legal land release solutions. This has led to projects and important partnerships with certain public authorities.

In concrete terms, a first call for projects was launched in 2018 for a little more than 2 ha of land in Neerpede, leased to Terre-en-vue by the Municipality of Anderlecht through a long-term lease. This allowed three projects to be set up: RadisKale, Smala Farming and Hierba Buena. This used to be a horse meadow occupied through tenancy at will, and one of the very few plots of land in this area where the occupant did not have a lease.

A second plot of land of 1.2 ha in Jette, rented for 10 years by tenancy at will to Terre-en-vue via the ASBL la Ferme pour enfants de Jette, has witnessed the setting up of three projects: Les Garçons maraîchers in 2020, Cour'jette and Les simples Jettoises in 2021. A long lease from the municipality of Ganshoren is also being finalised. These plots were both made available following the death of the previous occupant. This illustrates the importance of establishing contacts with farmers to know when land becomes available and to react quickly to obtain that land.

In Uccle and Neder-Over-Heembeek, Terre-en-vue obtained the consent of farmers to give up their occupancy title so that a market gardening activity could be launched. This type of agreement requires gaining the trust of farmers and convincing them of the role they can play.

The five years of the BBP project have also shown the importance of meeting with local residents and working with landscape architects to integrate agricultural infrastructure into the landscape.

A NEED FOR A LAND POLICY

As a result of the BBP project and Terre-en-vue's research, the Brussels regional authorities realised that long-term land policies were needed to develop urban agriculture. Indeed, the regional and municipal authorities in Brussels are major landowners and most of the land is occupied through long-term contracts.

To date, there has been no way of regulating the land market in Belgium, which leads to a surge in the price of agricultural land. In particular, it is necessary, beyond the PRAS, to develop land regulation tools with different objectives:

- **Monitoring:** an agricultural land observatory that would make it possible to list all sales and to collate useful information for each plot (owner, occupant, contract, duration, presence of a successor, etc.).
- **Management:** in France, structural control allows all agricultural land rentals to be monitored. This tool can refuse certain rentals when they are not in line with the agricultural policy of the region (in the case of excess production, for example). SAFER, another French mechanism, has impacted the land market through application of the pre-emption right. Such mechanisms do not exist in the Brussels-Capital Region.
- **Legal aspects:** the environmental rural lease, adapted from the farm lease, would make it possible to include requirements in terms of the environment and social impact.

CONCLUSIONS

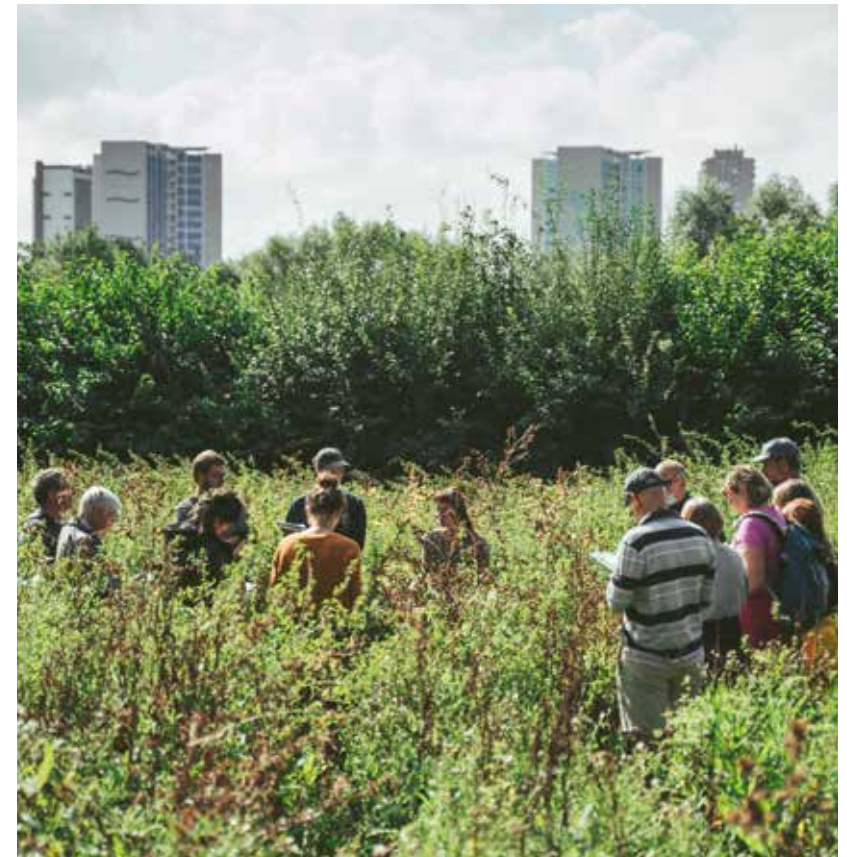
Together with BoerenBruxselPaysans, we have observed a growing demand for agricultural land in the Brussels-Capital Region between 2017 and 2021. We looked for land opportunities and the quickest results were achieved by working with public authorities who are themselves landowners. The importance of working with farmers (awareness of short supply chains, transfer plans for those who do not have a buyer, etc.) was also highlighted.

The first steps towards a regional land policy have been taken. This should lead to improved regulation of the land market for acquisitions and rentals so that land can be used as a lever for regional agricultural and food policies.

The development of urban agriculture in interstitial spaces is also worth supporting. This should include innovative agricultural models (SPIN Farming¹⁶, soil-less, etc.) and probably adaptations of urban planning regulations, in order to take into account the new infrastructures required for these activities.

¹⁶ Small Plots Intensive Farming

Finally, we would like to emphasise the importance of maintaining the rural quality of Neerpede and the landscape quality of other open spaces in Brussels (Zavelenberg, Kauwberg, Engeland Plateau, etc.). Agriculture has kept these areas free of woodland and buildings for centuries. The development of agricultural projects must respect the living environment of all inhabitants, including the fauna and flora.



CASE STUDY

NANTES: DEVELOPING LAND FOR FOOD

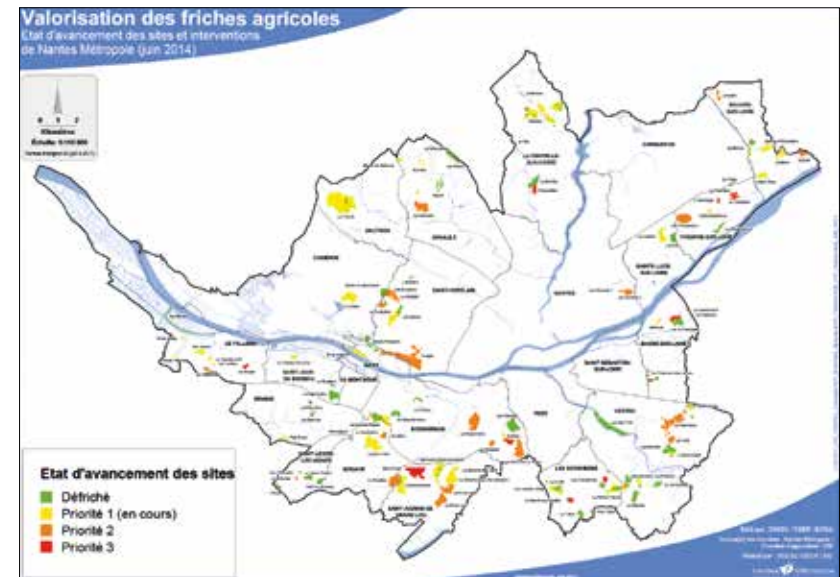
SPEAKER: CHRISTINE MARGETIC
SUMMARY AUTHOR: ROSELYNE DE LESTRANGE



Nantes is considered an "agricultural metropolis" in the geographical sense (13,500 ha of UAA) but also in terms of governance. The issue of urban and peri-urban agriculture is quite old and takes original forms, which have led to a change in the understanding of its land, now considered as land for food. This expression of "land for food" contains the idea of a collective cultural heritage, heading in the direction of a common agricultural social commodity. Seen from this angle, agricultural land is systematically integrated into territorial development policies, including urban planning documents, and adopted by various stakeholders in multifunctional food policies. The territorial authorities are extremely willing to connect with the agricultural world. Several tools have been introduced in a bid to offset the Metropolitan Community's lack of agricultural competence: the appointment of a vice-president in charge of urban agriculture in 2000, a partnership with the Loire-Atlantique Chamber of Agri-

culture since 2007 and a food transition jurisdiction within the City of Nantes. This shift from urban agriculture to food transition clearly marks the evolution of Nantes' thought processes in terms of agricultural issues.

The territory has 240 farms. This is a significant and dynamic fabric but insufficient given the size of the population. Livestock (cattle, sheep and poultry) predominate. Despite this, market gardening has earned a reputation for itself within the field of agriculture in Nantes. There is talk of a Nantes market gardening basin, the emblematic product of which is lamb's lettuce. Another key activity is viticulture with the Muscadet grape variety. Finally, there is a nursery and horticulture activity. There is a real network between these crops, not only in terms of sectors but also geographically.



Valorisation des friches agricoles ; source Barreau, D. (2014).
Agir pour l'agriculture : Nantes Métropole. *Pour*, 4(4), 351-360. <https://doi.org/10.3917/pour.224.0351>

EARLY POLITICAL SUPPORT

There is no agriculture without production support. In Nantes, urban planning policies preserve agricultural areas, for economic reasons (intensive market gardening and viticulture represent many seasonal jobs) and ecological reasons (the metropolis has set a target of 50% of UAA for organic production). All organic farming projects are systematically supported. The number of new agricultural businesses is dynamic (5 to 10 per year), which unfortunately is not enough to counteract the non-renewal: nearly half of the 240 farms have no known successor, despite the support offered by the Chamber of Agriculture. Urbanisation is the other major cause of UAA loss.

As far back as 50 years ago, a major mapping exercise, crossed with population data, was used to identify the land that definitely had to be maintained. This was a pioneering step at a time when agricultural land was being consumed without a care in the world. This philosophy continues through several dynamics, such as that of the peri-urban laboratory areas (example: as far back as 1994, Bouguenais, an agricultural town, created the Pollen programme and the fertile town network of the municipality). Nantes Métropole and the Chamber of Agriculture have identified sustainable agricultural areas (transposed into urban planning documents in 2002) and created urban forests. Although it is very "green", the territory is indeed suffering from a loss of biodiversity.

The metropolis has developed specific projects: sustainable management plans, planting of hedgerows and agroforestry projects, as well as systematic environmental leases in agricultural areas.

In the 2000s, the Metropolitan Local Urban Plan (PLUm), which implements the recommendations of the Schéma de cohérence Territoriale (SCoT - Territorial Coherence Plan), identified 16,464 ha of land for sustainable agriculture to increase the land available for food, alongside the 13,912 ha of natural and forest areas, most of which are managed by farmers. The PLUm classifies agricultural areas into three categories:

- Ad sectors: sustainable agricultural areas, the most restrictive and best protected. The aim is to make agriculture multi-functional;
- Ao sectors: ordinary agricultural areas;
- Acl sectors: agricultural areas with limited constructibility. They can eventually accommodate other operations but must remain agricultural and sustainable.

The metropolis has also created an original tool for maintaining agricultural land: the perimeters for the protection and enhancement of agricultural and natural peri-urban areas (PEAN). Agricultural activity must predominate and stakeholders and farmers are obliged to draw up action plans to manage this land for the benefit of the local region. The PEAN is a strong legal initiative: it is binding on the PLUm and on the owners. Once a perimeter has been validated, only the Council of State can revoke it. This logic of land sustainability in peri-urban areas is essential.

RECONVERSION OF WASTELAND

Nantes is also renowned for its programme to rehabilitate wasteland. At a time when there was no talk of agricultural wasteland, in the 2000s, a diagnosis was carried out with the municipalities and professional networks. This highlighted 3,700 ha of wasteland that could be reconverted because it was fairly recent (less than 6 years old, after which the cost of reclamation becomes too high). Among these 3,700 ha, 1,500 ha of land were used for horses. These areas were designated potential agricultural areas. 155 sites (2,000 ha) were identified, including 43 priority sites, intentionally spread across all the municipalities of the metropolis in order to involve all levels of governance. These 43 sites increased to 88 in 2014.

This dynamic was managed by steering committees comprising a representative of the metropolis, an elected official of the municipality, a representative of the chamber of agriculture, inhabitants and members of agricultural land associations. A long owner-identification process was carried out – sometimes a 300 m² plot had 20 different owners, who did not even know they were owners! This was followed by campaigns to raise awareness and identify viable and original projects, followed by technical support with environmental expertise. The SCIC Nord-Nantes (a cooperative uniting a number of stakeholders) was created to take charge of clearing the land, financed by the metropolis to the tune of 80%, and to manage the land pending the appointment of a project manager. This led to real local mobilisation. Significant financial resources were made available. In addition to clearing land, there is aid for farmers to set up in business and for technical support, with environmental expertise.

Despite this support, after a few years the proportion of wasteland did not decrease because of the creation of new wasteland. The momentum is therefore built around three basic ideas:

- 1. Patience and openness,** respect for professional contacts willing to take on a site. Recently, the term "wasteland" has been replaced by "abandoned farmland". The term suggests an easier return to agriculture. Between 2009 and 2017, 51 sites covering 450 ha were cleared, benefiting 30 farms. This is not insignificant.
- 2. Understanding the territory.** It requires detailed knowledge of the contexts. In partnership with the university, a permanent observation of abandoned farmland has been set up.
- 3. A Call for Expression of Interest (CEI)** for the setting up of new farms was launched in 2018, as part of the Community Food Strategy. This first call for projects has become permanent. The last campaign attracted 70 project managers.

URBAN FARMS

At the same time, there was a desire to recreate food farms in Nantes, the only municipality in the metropolis that no longer had any farms. To do this, the framework of ZACs (Joint Development Zones) has been used: agriculture has become a fully-fledged element of the urban project. One example is the Douhon-Gohards ZAC (180 ha, of which 100 ha are in natural areas, 2,700 dwellings). Nantes Métropole Aménagement has created a specific agri-urbanism zoning to create four organic farms. It is now a productive agri-neighbourhood, developed with the local residents.

CONCLUSION

The agro-industrial and urban sprawl era in the 1970s generated a logic of spatial closure and an idea of limited – albeit existing – land. Today, we are following the logic of socio-spatial openness with less agricultural land, the future of which is controlled by the inhabitants. There has been a shift from the idea of land insecurity to food insecurity; hence the term 'land for food'. But transition requires time, which is probably what is mostly lacking. It also requires resources, which Nantes Métropole has always had. Finally, and this is crucial, there must be real political support, at both intra and supra-territorial levels. The recent signing of a reciprocity contract between Nantes Métropole and a neighbouring community includes the issue of agriculture and food. Things have got off to a very good start.



DISCUSSIONS

BRUSSELS AND NANTES, TWO LABORATORY CITIES FOR URBAN AGRICULTURE

SUMMARY AUTHOR: ANTOINE GÉRARD



This section reports on some of the topics discussed following the presentations of the BoerenBruxselPaysans and the City of Nantes projects, on the themes of land access and the development of urban agriculture.

Housing, public infrastructure and agriculture: an end to rivalries.

Moving towards an Agropolis requires reconciliation between the dominant functions of land such as housing, recreation and agriculture. The rivalries between these different functions must be overcome. This approach is already under way in various multidisciplinary working groups within the Brussels administrations, notably around the revision of PRAS. The Urban Agriculture Facilitator, created by the Environment, Economy and Employment administrations, allows the different stakeholders to come together to have this dialogue.

An inspiring partnership between Nantes Métropole and 26 property companies was set up two years ago. Together, they explore how to integrate urban agriculture into project designs and also consider what support can be given to tenants to manage the structures themselves.

The Brussels administrations of Spatial Planning, Agriculture and the Environment have expressed their interest in projects combining housing and urban agriculture. The main barriers are, on the one hand, the need to involve many stakeholders with sometimes diverging interests, and, on the other hand, their difficulty in understanding political priorities: the implementation of an Agropolis requires a major political commitment to revolutionise the approach taken to the city's developments.

The same administrations also recall the need to pursue these ambitions at different scales. The Brussels Region has thus started mapping small plots of land, particularly around social housing, where an urban agriculture project with a strong social purpose could be developed. Furthermore, it is important to consider urban agriculture on the scale of a territory and therefore also to promote food production for local populations, including the Brussels periphery.

The urban farm, a new public facility?

The example of the Douhon-Gohards ZAC in Nantes aroused considerable interest. The desire to develop a new district based on "agri-urbanism" or a "productive agri-neighbourhood" is highly innovative.

Could the urban farm, which provides food but also a place for meetings, learning and contact with living organisms, become a public facility? Shouldn't access to this type of infrastructure be available to all Brussels residents?

Agricultural and land policy: cities take action

There is unanimous agreement that many towns and cities, whether large or small, are dissatisfied with European and national policies on the development of sustainable agriculture and are moving towards improved management of their land. There is a growing awareness that land for agriculture (which produces) should in fact be considered as land for food (which feeds).

At the same time, local authorities also have a role to play in reviewing the various regulatory frameworks. In Brussels, for example, the development of urban agriculture for food would be greatly helped by targeted revisions of the PRAS, the legislation on farm leases or the urban planning regulations (CoBAT) so that the latter can include agricultural infrastructures. Any project must also take into consideration how greenhouse gardening, for example on roof-tops, can benefit local residents, who can also take ownership of the initiative.

Working with the farming community

In addition to the public authorities, farmers themselves must be involved at all levels in the development of an Agropolis.

The policies in Nantes, for example, were formulated in consultation with the local Chamber of Agriculture. Following the creation of perimeters for the protection and enhancement of peri-urban agricultural and natural areas, all

farmers active in these areas have set up an enhancement scheme. They then undertake to comply with this scheme, which they have been instrumental in outlining. Finally, when a new agricultural project is set up, a tutoring system is organised.

Feminism and agriculture

The seminar ended by exploring the role of women in today's agricultural world. Numerous engravings from the 18th century denote a strong female presence in the agricultural landscape, especially in the market gardens. However, the trend has changed considerably and the profession of market gardener became almost exclusively male in the 20th century.

The new boom in peri-urban market gardening activities is accompanied by a better balance between male and female employment in this sector. Furthermore, the vast majority of volunteers who participate in urban agriculture projects (self-harvesting, weeding sites, etc.) are women. Urban agriculture therefore contributes to the democratic empowerment of women in the management of public spaces and for the common good.

PROJECT SHEET

NANTES

KEY OBJECTIVE

An agricultural metropolis.

No agriculture without production facilities, no agricultural spaces without a land preservation policy!

Participatory democracy to strengthen agricultural projects in the city.
Shaping a fertile city: the urban farm, a new facility.

STAKEHOLDERS

Nantes Métropole, Chamber of Agriculture, Terres de Liens, SAFER, Réseau Villes Fertiles, University of Nantes, etc.

KEY DATES

- 2001: programme for the recultivation of wasteland and support for agricultural facilities in the area
- 2016: productive agro-district in Douhon Gohards
- 2017: the Nantes-Saint-Nazaire SCOT (territorial coherence plan) sets the area of agricultural land to be considered as permanent at 15,000 ha
- 2018: Nantes métropole territorial food project
- 2019: PLUm (local metropolitan urban plan): 16,464 ha dedicated to agricultural activity, + 13,912 ha of natural areas and forests which are (or can be) used mainly for agricultural activity

KEY FIGURES

Nantes métropole :

24 municipalities

646,542 inhabitants (2017), including 309,346 inhabitants for Nantes;
Horizon 2030: + 75,000 inhabitants

535 km²

600 km of waterways Density: 1,235 inhabitants/km²

40% of the urbanised surface area,

60% of the **natural or agricultural** surface area, i.e.

32,380 ha classified as A (agricultural in the urban planning documents) or as N-natural,

of which 15,447 ha are used by professional agriculture in sustainable agricultural zones,

of which 32% are agricultural zones = 16,750ha

240 farms

of which 50 are organic.

of which 120 are involved in short supply chains.

51 sites covering **450 ha have been cleared**, benefiting 30 farms

<https://metropole.nantes.fr/alimentation>
<https://metropole.nantes.fr/plum>



AGRICULTURE AND BIODIVERSITY

INTRODUCTION

A QUESTION OF BALANCE

BY ROSELYNE DE LESTRANGE

This fourth chapter deals with the balance between the different 'states of nature': wild, cultivated or garden. The European strategies for agroecology (Farm to Fork) and Green Infrastructure confirm, if confirmation were needed, that agriculture and biodiversity are necessary for each other and must be considered from the micro to the bio- or even eco-region scale. This is a key issue for society. The habitability of our territories will depend on our ability to create symbioses between different life forms.



It seems increasingly necessary to discuss the landscape in line with the work of Françoise Burel and Jacques Baudry. Its mediating nature promotes integration between agricultural activity and other land uses: aesthetic integration that facilitates cohabitation, integration in the area to promote multifunctionality or in the ecosystem to benefit biodiversity. This link between biodiversity and agriculture¹⁷, impoverished by decades of industrial farming, is now being revived in agroecological practices.

However, not everything can be done in the same place, as Hubert Bedoret (Natagriwal) reminds us, and the agriculture-biodiversity relationship calls for choices to be made. In addition to technical and legal constraints, trade-offs are necessary: what priority of use should be given to an open space in the dense city or on the periphery? What protection should be afforded a remarkable rural landscape? What are the criteria when attempting to strike the balance between agriculture and biodiversity in our metropolitan context? What strategy should be adopted for cohabitation or even integration in terms of issues?

These questions generate two categories for reflection. Some relate to space: at what level should balance be considered? In which cases should specific habitats or, conversely, a heterogeneous mosaic be promoted? Other questions relate to governance: what criteria and methods should be used in the decision-making process? In what framework and with what tools should this balance be structured?

In the Brussels Region, half of the territory comprises open spaces. But these spaces are poorly distributed. The development of nature therefore remains an important issue. As for the paucity of agricultural land (2.12 m. of UAA per inhabitant), it is under considerable pressure for land and food. In this 'competitive' context, the Region is trying to strike/restore a balance between natural states.

The proactive strategy adopted by Rennes gives us many leads, over and above the difference in context.

This chapter closes with a summary of the discussions introduced by Hubert Bedoret (Natagriwal), giving the debates the metropolitan dimension they require.

¹⁷ The mosaic of practices and crops generates genetic, species and ecosystem heterogeneity, i.e. biodiversity, which is essential for agriculture. https://ec.europa.eu/commission/presscorner/detail/en/ip_20_1920

FEEDBACK FROM THE BBP EXPERIENCE

THE BRUSSELS CONTEXT AND BBP EXPERIMENTS

SPEAKERS: MATHIAS ENGELBEEN, CATHERINE FIERENS, CHRISTOPHE BOURGOIS
SUMMARY AUTHOR: CHRISTOPHE BOURGOIS



Beetle larvae in compost

The European Commission's latest State of Nature report¹⁸ highlights the negative impact of intensive and conventional agriculture. Consequently, although BBP's main objective was to redevelop agriculture for food in Brussels, attention was also paid, from the outset, to the challenges of preserving and strengthening biodiversity.

However, the lack of available land within the Brussels region has sometimes created tension between advocates of agricultural transition and defenders of natural heritage. Here we will attempt to clarify the Brussels context (part 1) and how these tensions have been managed in the implementation of Boeren-BrukselPaysans (part 2).

¹⁸ https://ec.europa.eu/commission/presscorner/detail/en/ip_20_1920

PART 1 :

THE SPECIFIC FEATURES OF THE BRUSSELS SITE

Nature protection perimeters in Brussels.

Three types of perimeters help to protect nature in addition to the regulatory contribution defined by the Regional Land Use Plan (PRAS):

- 1. Natura 2000 sites**, the legal framework of which is defined by the two European "Nature" directives namely the Birds Directive and the Habitat Directive. 26,000 sites cover 18% of the European territory. These perimeters are very large and include inhabited areas and agricultural areas in particular. Human activities can continue in these areas, but must take into account the objectives of protecting biotopes and target species. The Brussels Region has three such areas located in its outer ring including the Forêt de Soignes (14% of the regional area).
- 2. Nature reserves and forest reserves**, the legal framework of which is defined in the Order of the Brussels Region relating to nature conservation (2012). Objectives for the active protection and development of nature are defined for each site. 18 reserves are located on the periphery of the Region (1.8% of the regional surface area).
- 3. Classified heritage sites**, the legal framework of which is defined by the Brussels Code of Town and Country Planning (COBAT). In addition to historical monuments, heritage protection also extends to larger undeveloped sites that are preserved for their landscape interest and rare species. This extremely important protection status covers about 18% of the Region.

There are partial overlaps of these various perimeters in many areas. Some areas may therefore have two or even all three statuses at the same time.

The perimeters relating to agricultural activity in Brussels.

PRAS specifies the use of each regional plot of land. 227 ha are located in the 'agricultural zone', mainly in the Neerpede valley in Anderlecht.

Nevertheless, there is a clear distinction between the spatial distribution of land allocated as agricultural land and the land actually used for agriculture in Brussels¹⁹.

Overlaps between agricultural perimeters and nature protection areas.

The overlap between the PRAS agricultural areas and the nature protection areas is anecdotal (1 ha). On the other hand, a comparison between the actual agricultural uses and the nature protection perimeters shows that 30 ha of land included in the nature perimeters are used for agricultural activity, mainly in the north-west (Zavelenberg and King Baudouin Park) and in the south of Brussels (Kauwberg and Engeland plateaux). These are often permanent meadows.

A comparison between agricultural uses and classified sites reveals an even greater overlap: more than 90 ha of the land used by Brussels agriculture are included under classified sites (Zavelenberg, Scheutbos, Koevijver, etc.).

It is therefore important to define the conditions under which new food farming projects, meeting regional Good Food objectives, can be integrated into protected sites (nature or heritage). BBP's experience argues for a case-by-case approach to integrating 'more agriculture into nature'. But it is also essential to develop a complementary approach to integrate "more nature into agriculture".

Agriculture has long since supported the development of a fauna and flora specific to certain activities: poppies and other messicolous flowers in field crops, swallows nesting in stables, hedgerows bordering grazed meadows, etc. With the advent of intensified farming practices from the 1950s onwards, these synergies have been disrupted through the introduction and extensive

use of biocides or the disappearance of hedges. Some actions to reverse this trend have been implemented in other regions of the country, notably through agri-environmental measures (AEM) attached to the third pillar of the CAP, but nothing has been done so far in Brussels.

To make up for this shortcoming, Brussels Environment will develop a programme of incentives, equivalent to the AEM, to promote nature in the Neerpede Valley, given its status as the largest agricultural area in Brussels. These measures will take the form of support and financial incentives for the creation, restoration or maintenance of biotopes. They are based on the Nature Order of 2012, in particular Article 66 on the protection of urban biotopes.

An analysis carried out in Neerpede identified biotopes of interest to be preserved and (re)developed:

1. meadow-orchards
2. hedges and shelterbelts
3. rows of pollarded trees
4. headlands (uncultivated edges of cultivated plots)
5. megaphorb plantations (wet herbaceous vegetation)
6. ecological water points

Several of these biotopes are directly linked to agricultural activities and settlements are also scattered throughout the area of interest. The incentive programme should therefore target not only farmers active in the area but also the inhabitants.

¹⁹ See chapter 3.

PART 2 : THE EXPERIENCE OF BOERENBRUXSELPAYSANS

Regeneration project for the Zavelenberg site.

The Zavelenberg site is a regional property located in Berchem-Sainte-Agathe, covering approximately 25 ha, of which nearly 15 ha is a High Biological Value Area classified as a heritage and nature reserve. Brussels Environment wishes to steer agricultural practices more towards nature, with several specific objectives:

- Combining nature conservation and food production through an agroecological approach;
- Developing a professional, diversified and viable agricultural production cluster;
- Encouraging Brussels' consumers to reconnect with producers, while maintaining the historical landscape qualities of the site.

The site should also be better integrated into the life of the neighbourhood, in order to counteract recurrent acts of vandalism.

At this stage, Brussels Environment has decided to apply for planning permission before handing over the land to producers. Potential stakeholders have been invited to express their interest. The process is complicated. Finding a viable economic model while respecting the site's protection constraints appears to pose a challenge, despite the consultations and discussions carried out as part of a feasibility study.

Establishment of the Garçons maraîchers market gardeners on the Natura 2000 site.

This vegetable farm was to leave the Vogelzang test area (see below) and develop independently. It was looking for a plot of land of at least 20 ares net for ecological cultivation, with the possibility of installing about 400 m of tunnel greenhouses and water access.

Terre-en-vue then identified a 1.5 ha parcel of grassland belonging to the municipality of Jette, including a meadow orchard of about 40 ares, with only being used as a meadow. However, it turned out that the plot was included in the Natura 2000 site of the Molenbeek valley and that the meadow was a natural habitat of regional interest for a rare small grass. Developing a market garden on this plot was clearly incompatible with habitat protection objectives.

This was extremely disappointing given the potential of the land to be used as a nursery. Another possibility was then identified, namely a plot of about 1 ha, quite similar in appearance and also included in the Natura 2000 site. However, this does not incorporate an area of habitat of regional interest. Discussions with Brussels Environment led to the conclusion that the agroecological activity was compatible with the general and specific objectives of this Natura 2000 site.

The agricultural activity carried out by the Garçons maraîchers market gardeners could therefore be developed on approximately 25 ares of the plot. A call for applications was launched in October 2020 for a second vegetable farm on about 50 ares, as well as a herb farm on about 20 ares.



Clearing of the Champ du Chaudron

This 80-acre site belongs to the Brussels Region and the municipality of Anderlecht. The area was identified as a potential site for market gardening activities at the outset of the BBP project in 2015. However, the area was entirely wooded at that time and therefore had a natural as opposed to a food-producing vocation. So what were the reasons for wanting to make it an agricultural site?

Firstly, most of the afforestation was relatively young. Old aerial photographs show that this site was occupied by market gardens in the 1950s. In the late 1970s, softwoods were planted in close rows as part of a nursery project. Field visits confirmed the artificial nature of the woodland and the low biological interest, with the exception of large deciduous trees on the site periphery. All of these plots were then classified as agricultural zones by PRAS.

Some local residents and stakeholders were concerned about the natural damage caused by the felling of most of the trees. Cutting down a tree is often seen as harmful to nature. However, biodiversity in open areas is generally higher than in forested areas. The reasons behind this clearing had to be explained. This prompted the redevelopment of an agricultural activity to feed the citizens and foster social cohesion at the same time.

Wildlife in the agricultural test area

As part of the BBP project, the 'Graines de Paysans' agricultural test area was developed on communal land within the Vogelzang site. It is home to several market gardeners and herb growers in the test project phase, covering almost 3 ha of land eligible for inclusion in PRAS. However, the municipality wishes to maintain the open and natural character of the landscape.

Most of the site was previously occupied by horse pastures and shelters, as part of a long-standing tenancy at will. The development of the test area's crops has given the site a new purpose as a food source and has secured its interest to the community. Tunnel greenhouses were installed on the site, according to a landscape plan that aimed to avoid fragmentation of the landscape. The greenhouses were therefore added to existing infrastructures or barriers.

In addition to the agroecological nature of the crops (organic certification since 2016), several elements have been developed to enhance wildlife occupying the site: planting of hedges, creation of a pond and ancillary areas with spontaneous grassing and late mowing management.

The impact on wildlife is very positive. The following have been seen there:

Grey partridges, rarely observed in the perimeter but no doubt attracted by the food available in the market garden areas and adjacent crops; Rhinoceros beetle larvae, also an uncommon species in Brussels, found when a pile of shredded material was moved; Kestrels, for which a perch was installed in the middle of the market garden areas. A hawk used to land there regularly, apparently interested in the many small rodents that have multiplied under the weed-proof tarpaulins used by the market gardeners. There is obvious symbiosis between this species and agricultural activities, as the reduction of rodents by the falcon reduces the damage to root vegetable crops; Barn Owls (feathers and pellets found in September 2020 in a building that has been unoccupied for quite some time). This rare species had not been observed for several years in the area.



CASE STUDY

RENNES: STRONG LINKS BETWEEN AGRICULTURE AND BIODIVERSITY

SPEAKERS: FRANÇOISE BUREL AND JACQUES BAUDRY
SUMMARY AUTHOR: ROSELYNE DE LESTRANGE



Rennes is located in the Armorican massif, an ancient bedrock structure with a very dense hydrographic network. It has inherited an agricultural landscape characterised by the *bocage*, wooded countryside, typical of mixed farming. This agricultural activity, historically very intense, has decreased significantly but is more common in Rennes Métropole than in

the department as a whole. The bocage benefits from a maintenance policy (planting of hedges), given its cultural functions, water and soil protection and biodiversity. Despite this, there is a loss of biodiversity – a third of insect species and 4/5ths of bird species are in decline as elsewhere in Europe, including in agricultural landscapes. Domestic biodiversity has been greatly reduced by industrial agriculture, which is why agriculture and biodiversity often oppose each other.

Yet they are inseparable. Biodiversity contributes to the success of crops: pest control, presence of pollinators and other ecosystem services such as soil protection, carbon storage, etc.

In the course of our research, we have demonstrated the role of landscape heterogeneity on biodiversity and in particular that of semi-natural elements of the agricultural landscape, which are not directly involved in production: hedges, copses, permanent grasslands. A positive relationship exists between the amount of semi-natural elements and the number of species. Connectivity has a central role in this biodiversity. For instance, it allows dispersing individuals to recolonise habitats left vacant by local extinction. Such movements

depend not only on the type of species (some move more than others) but also on the structure of the landscape. In Rennes, there are major breakdowns in connectivity linked to transport infrastructures, but there is also strong connectivity between the rural and urban areas thanks to the *bocage* network.

Moreover, agriculture per se promotes biodiversity. Entomophilous crops, such as sunflower or oilseed rape attract bees. Crop rotation in the plots also plays a role. For example, rather short rotation increases the presence of carabid/ground beetles, which protect crops. Finally, the organisation of the mosaic, the interaction between adjacent crops plays a crucial role. The more interfaces there are, e.g. between spring and winter crops, the more resources are available to carabid beetles all year round. All these are agroecology principles, optimising the use of ecological processes to ensure agricultural production and preserve natural resources (soil, water, biodiversity). This requires a multi-scale management approach (plot, farm and landscape).



AN AMBITIOUS POLICY

Rennes Métropole has put in place strategies to promote agroecologies and to reconnect rural and urban areas, based on three approaches:

- Promoting sustainable agriculture.
- Ensuring a link between farmers and urban development, so that they do not feel like a non-urban category.
- Reconnecting urban people with food production.

The Terres de sources action is a policy whereby contracts are signed with farmers who manage the drinking water catchment areas that supply Rennes. This action is based on the rural lease with environmental clauses: the local authority rents its land in exchange for environmental clauses such as a ban on the use of certain pesticides, antibiotics as a preventive measure for animals, GMOs and palm oil in animal feed, etc. This type of lease was widely used in the past to manage hedges and various aspects of the landscape. In return, the metropolis promotes farmers' products via collective catering (school canteens in Rennes and 15 Municipalities) and direct incentives for consumers.

Rennes Métropole is known for its green belt, which was included in the master plans for urban development in the 1970s. This is the choice of the Archipelago City, which organises the territory into urban islands anchored in the productive countryside. The 'Rennes, ville nourricière' (Rennes, food city) policy is part of the Ville Archipelago strategy. It reinforces the dynamics that link the city to the countryside, such as eco-grazing in public spaces, shared gardens, neighbourhood orchards, and activities that allow residents to "farm" in their own right, etc.

The Green and Blue Network, a national policy that extends to local level, is also an important lever in developing agroecology. Ecological continuity is mainly found in rural areas. This policy is based on the agricultural plots in MNIE (Natural Environments of Ecological Interest/Milieux Naturels d'Intérêt Ecologique), which are managed for biodiversity, according to precise specifi-

cations (use of less fertiliser, less grazing, etc.). MNIEs include wet meadows, mesophilic meadows, ponds, streams, grass strips, copses and hedges, etc.

In a similar vein, the concept of the "urban field" has been developed in Rennes Métropole. These are areas, at the interface of several municipalities, which have specific landscape and environmental qualities. These features must be maintained as they develop, thus creating a productive ecological landscape.

We will round off by mentioning two particular sites generating activities focusing on agriculture and biodiversity in Rennes. The La Prévalaye site covers 450 hectares, 80% of which belong to the city of Rennes. It unites several projects, including the Jardin des Mille Pas (1.2 ha), a garden cultivated with 4 employees and 20 volunteers. Part of the garden is reserved for the National Research Institute for Agriculture, Food and the Environment (INRAE) which is involved in producing seeds for farmers. Plots are also allocated to organic farmers via a call for expressions of interest. This area is served by public transport. It is now very popular with city dwellers thanks to a network of paths.

The Bintinais ecomuseum is the second site. In an old farmhouse on the outskirts of Rennes, the eco-museum hosts a permanent exhibition and temporary exhibitions on the history of the relationship between agriculture, biodiversity and urbanisation.

In order to implement the entire Archipelago City project, the local authority acquires "sustainable productive" plots of land, which it rents to farmers. Indeed, after urbanisation, the protection of biodiversity will inevitably be responsible for reducing the surface area of agricultural land, which itself supports biodiversity.

DISCUSSIONS

AGRICULTURE AND BIODIVERSITY

SPEAKER: HUBERT BEDORET

SUMMARY AUTHOR: CATHERINE FIERENS

Based on his experience with Natagriwal, Hubert Bedoret notes that the need for local agriculture in an urban environment can conflict with the need for 'wild' nature. It is often hoped that this conflict can be avoided and that both objectives can be fully met in the same area. In reality, there is always a choice to be made when prioritising sites.

The landscape seems to be the best medium to ensure this mediation. It translates the land use of the urban plans and nuances thereof into concrete terms, integrating our cultural, personal and historical perception. It also includes functional elements relating to the use of the site in question (roads, paths, storage, etc.). Finally, the landscape both supports and reflects an ecosystem. It gives us a better insight into striking balances at different scales - a crucial approach for improved distribution of the various functions of nature in urban and peri-urban areas²⁰.



However, when we think of agricultural use in relation to 'nature for its own sake', it does not always lead to rivalry. It is important to remember that historically, agriculture has always been conditioned by the existence of a healthy, dynamic ecosystem. It is only since the generalisation of practices based on petrochemistry and mechanisation that this link has been broken. With the benefit of hindsight, we understand that the primary production of human food depends on nature that is both diverse and robust. It cannot be a one-way relationship, i.e. exploitation of nature. It must also be able to exist independently. It is not possible to oversimplify. Not every healthy ecosystem is beneficial to agriculture, and studies are ongoing to identify which elements actually support production.

The agroecology model is based on the construction of mutual relationships between human activities and the ecosystems of which they are part. These links can be rebuilt by continuing age-old practices and integrating new practices based on the latest information. But we would be naive to believe that this will avoid any conflict of use. All human activity has an impact on nature. There will always be a caveat. Sometimes it can be at one end, as long as we focus on the entire area, combining integration and segregation.

Trade-offs will be made taking into account the different regulations governing land use and the protection of nature but also depending on the type of biodiversity (domestic, ordinary or extraordinary with rare or threatened species). When, on a national scale, the only reservoir of a threatened species is in Brussels, the Region has a conservation responsibility. Conversely, a species that is rare in Brussels may in fact be quite common in more distant territories. The notion of the scale of territories must therefore always be included when making a preservation decision.

Finally, echoing the current assumption that cities need to build a food belt, we must avoid idealising citizens' demands or needs to have nature or agriculture in close proximity. There is nothing universal about these.

²⁰ We recall here that, whether in the case of agriculture or nature, the territories under consideration are not administrative management regions. In the case of Brussels, it is obviously crucial to go beyond the administrative boundaries of the Brussels-Capital Region.

Bridges built by agroecology.

The agro-ecological transition can (re)create this link between agriculture and nature. How can we put this transition into action? Public action has a role to play:

- revising public subsidies to take into account the natural fluctuations of the ecosystem and not only the area or yield;
- decompartamentalising services in charge of the various areas;
- considering the agroecological network as part of the ecological network.

The integration of green and blue networks is already effective in the Brussels-Capital Region. A "yellow network" for agricultural plots could be added to these two networks to showcase their importance for regional mapping. Our French guests report that farmers who have been managing biodiversity in their fields for years would like to be recognised for this effort and would like to see their plots integrated into the green and blue network.



Fears about the yield capacity of agroecological production are one of the obstacles to this transition. However, Hubert Bedoret states: "Today, we have the capacity to feed ourselves without any difficulty on a European scale with what we have in Europe. If we want to respect the balance of the agricultural market, this means that we must also let the rest of the world produce for itself, as it wishes."

It would therefore be much more relevant to change the system to reduce globalisation (subject to major geopolitical risks), rather than to maintain it for fear of shortages.

"We don't have much choice," insists Mathias Engelbeen (Brussels Environment). Conventional farming tends to destruct natural environments (soil, landscape, species, etc.). We need to move towards striking an ecological-agricultural balance as much as possible. This is driven home even more considering the catastrophic impact of conventional agriculture on biodiversity in South America.

In conclusion, if we look at these issues as a whole, we realise that the link between yields and income is not always directly proportional. When producers switch to agroecology in industrialised countries, yields decrease but profitability can increase because there are far fewer inputs and therefore costs. Moreover, the precariousness of the profession is not linked to the agroecological transition. Just think of the many crises surrounding dairy produce and pigs or mad cow disease, which have made conventional agriculture extremely vulnerable. This leads us to the proposal of Panos Mantziaras, architect and urban planner, to grant a universal income as a priority to agroecological farmers, given that agriculture is a shared commodity and that agroecology is strategic for society, which it feeds and whose ecosystem it (partly) manages. It would also give farmers a great deal of pride, as they, like all of us, need to see their work valued – and not just financially.

PROJECT SHEET

RENNES METROPOLE

KEY OBJECTIVE

Agriculture, landscape and biodiversity: agriculture is an essential component of the environment. Agriculture shapes landscapes and has an impact on biodiversity. It is also in a permanent relationship with natural resources.

The Archipelago City: rural and urban, multipolar.
There is a strong presence of natural and agricultural areas in the region. These create a landscape and environmental continuum linking all the municipalities. Promote agroecologies and their links to local food.

STAKEHOLDERS

Rennes Métropole, Pays de Rennes, Safer, Chamber of agriculture of Ille et Vilaine, Ville de Rennes, AUDIAR, Rennes town planning agency, INRAe

KEY DATES

- 1970: Green belt of Rennes Métropole
- 1994: SDAU: multipolar urban structure strategy
- 1999: birth of Rennes Métropole
- 2000: SCoT pays de Rennes, concept of 'ville Archipel' - Archipelago City, "enhancement of agricultural activities and preservation of landscapes, factors which are also deemed extremely important for the inhabitants in order for their dream of a city in the countryside to materialise"
- 2010: Local agriculture programme: farmers at the heart of the Archipelago City
- 2012: SCoT revision, Urban Fields concept

KEY FIGURES

Pays de Rennes:

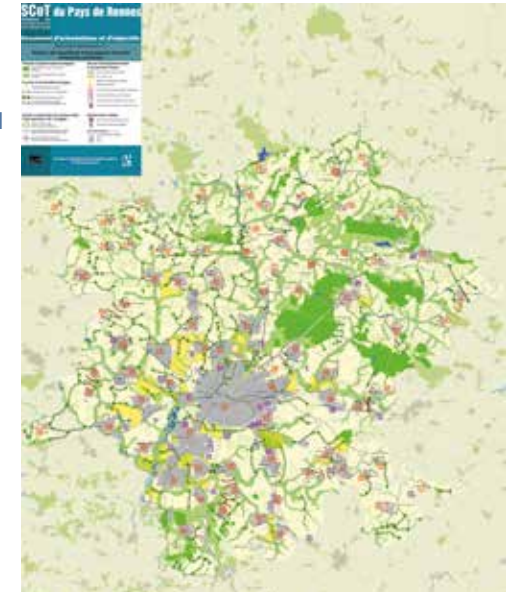
76 municipalities, 1,390km², and 508,761 inhabitants.
Density 367 inhabitants/km.
UAA of 56.5%, 585 MNIE listed, for 14,230 hectares, i.e. 10.2% of the Pays de Rennes.

Rennes metropole:

43 municipalities, 704.94 km², and 447,339 inhabitants
18% of the territory in urban areas
78% of the territory in natural or agricultural zones
Less than 3% in urbanised areas
56% of the territory occupied by agriculture (39,200 ha)
1,900 working on farms,
966 farms
9,000 jobs in 800 agricultural and agri-food businesses,
92 organic farms (i.e. 9.5% of farms in metropolitan France)
over 3,529 ha

Rennes Ville:

27 farms, 6 semi-professional farms
225 ha of farmland used, i.e. 44% of the UAA 15 ha/
1,009 market gardens,
70 shared gardens



<https://metropole.rennes.fr/lagriculture>

<https://metropole.rennes.fr/un-plan-local-durbanisme-intercommunal-plui-pour-43-communes>



TOWARDS A METROPOLITAN FOOD NETWORK

INTRODUCTION

A REFLECTION ON GOVERNANCE

BY ROSELYNE DE LESTRANGE

This last section is devoted to what originally defines the city, with Agropolis proposing an agricultural approach: the triptych "organisation, stakeholders, territory". In other words, governance.

The need to cross scales and borders is a common thread running through the previous sections. It becomes a focal point here for several reasons. First of all, the governance of a metropolitan food network cannot be considered in a vacuum. This metropolis covers an interregional territory and food resilience must necessarily be considered on the scale of the territories it involves. Secondly, the avenues explored by the seminar show us that the realisation of a metropolitan agricultural project will require a dynamic network, which necessarily poses questions of governance. The term 'governance', from the Greek 'kubernao', which led to "cybernetics", refers to a dynamic process of coordination between stakeholders. This process can take place within a domain of activities or a spatial domain – or both. However, our network calls for connections between stakeholders, fields of competence, areas and territories. Governance is therefore the natural outcome of the 'prémices' or advent²¹ of Agropolis.

The choice of this theme, looking ahead, is also justified by experience in the field and the pattern of emerging dynamics, including that of BBP. We have indeed reached the stage where their deployment is beginning to profoundly transform the landscape, and the very appearance of our territories.

As a matter of urgency, we need to decide both collectively and politically, on the approach to adopt: to see how things progress or to support or structure the approach. This means we need to work towards a common vision for territories and stakeholders alike. We are not starting from a blank canvass in this respect. We can draw on historical references (such as the Geneva Braillard Plan), local references (such as the Interregional Master Plan for Neerpede-Vlezenbeek-Sint Anna-Pede), scientific and operational knowledge, and a regional shared desire. We have analysed a series of avenues, the links in a chain that could potentially be activated: spontaneous cooperation on the ground, support from public action, charters and contracts, strategic measures, regulatory documents, etc. The conditions seem to be in place to experiment with a pilot food territory, both here and in the metropolises that have shared their latest innovations with us. The following contributions fuel reflection on the terms and conditions of its governance: which stakeholders, missions, perimeters or networks, in what guise? It is important that we express this appropriately, as illustrated in the two following accounts.

These obviously come from the Walloon and Flemish Regions, with whom Brussels metropolitan food resilience must be built. The Regionaal Landschap Pajottenland en Zennevallei (RLPZ) is a key partner in the pilot area between Neerpede and the Pajottenland. It has experience of multifunctional landscape governance, bringing together public and associative action, and showcases the experimental public scheme of the Voedsellandschapparken. The Réseau Aliment-Terre de l'arrondissement de Verviers (RATAV), for its part, has set up a networked system of governance, driven by citizens. This also mobilises food in order to achieve a broader ecological transition.

This ambitious fifth section is enriched by the enthusiastic participation and expertise of Julien Noël, scientific coordinator of the Chaire Crélan "Structuring short food supply chains" hosted by Gembloux AgroBio-Tech - Liège University.

²¹ An unavoidable digression here – it is worth noting that the French term 'prémices' initially referred to the first fruits of the earth or breeding offered in sacrifice to the gods. Then, by extension, this term also took on the meaning of 'prelude and warning sign'. (<https://www.academie-francaise.fr/>)

FEEDBACK FROM THE BBP EXPERIENCE

WHAT GOVERNANCE IS NEEDED FOR AN AGROECOLOGICAL REGION IN NEERPEDE?

SUMMARY AUTHOR AND SPEAKER: CATHERINE FIERENS



The BoerenBruxselPaysans (BBP) pilot project was very much designed to work at field level, and at different stages in the Brussels food chains: access to production resources, knowledge and markets for outdoor production. The aim was not to work on a new model of city governance.

However, the two are inextricably linked. Such an ambitious project must rally a large number of stakeholders and subject matter (agriculture, urban planning, nature, research, etc.). Working on food production implies thinking about the impact on ecosystems, mobility, heritage or tourism. These themes had already been discussed in significant work conducted at regional or municipal level, which BBP has built on²².

The transition of agricultural practices also means anticipating the transition of the landscape. Even during the development of the BBP project, the municipality of Anderlecht anticipated a landscape integration plan to steer

development of the test area in the Vogelzang valley. This concern for the landscape was then shared within the team and a landscape architect from Brussels-Environment worked on operational and pragmatic proposals to set up producers on their land in Neerpede or in Jette. These recommendations were easier to implement than those of the larger scale landscape plans. For instance, the interregional master plan for Neerpede recommends that the historical dynamics of creating small market gardens in the valleys and large farms on the ridges be followed. In practice, land access is so difficult that if new farms are to be created, the availability of land must also be considered.

In addition to these challenges, the peri-urban areas, which are reservoirs of agricultural land, are mainly located on the border between the Brussels and Flemish regions and fulfil many functions at the same time. This is particularly the case in Neerpede.

A specific governance tool was therefore necessary for this strategic area. BBP project partners have conducted prospective reflection on this subject, which is ongoing with this Agropolis seminar. It puts forward a proposal, which is still to be developed with other partners.

Let's look once again at the reasons why this tool is deemed indispensable:

- Small-scale market gardening, which is based on citizen participation and (partly) on direct sales, leads to an influx of visitors which can put pressure on the natural environment and on the lives of the inhabitants of the areas concerned. These transitional agriculture models, which are new to Brussels, are not stable as yet. The purpose of public investment is for these agroecological practices to spread and create added value. It is therefore crucial for these producers to have continued access to the support they need to refine their models. Furthermore, these models must be assessed to ensure their viability.
- The land surrounding a city is subject to land speculation. Landowners often count on urban sprawl and hope for a change in the use of agricultural land to achieve a more financially viable status. There is a need

²² Interregional Master Plan Neerpede - Sint-Anna-Pede - Vlezenbeek, Operational Plan Neerpede, Municipal Nature Development Plan, Maison Verte et Bleue missions

to assert their agricultural identity, both on the ground and in official communications. Neerpede in particular lacks a spatial planning policy and finely tuned planning tools (e.g. a landscape charter, a network of stakeholders, support for practices, etc.).

The image of a Swiss Army knife has been used to illustrate this diversity of issues and responses, without increasing the number of stakeholders and tools.

What proposals have already emerged from BBP's forward-thinking approach?

The following proposals have been put forward: on the one hand, all stakeholders in the region need to be addressed, not only the agroecology stakeholders and their consumers. On the other hand, the region of Neerpede has its own identity, which makes it the link par excellence between city and hinterland.

One of the proposals was the creation of a 'steward' function²³, focusing on the environment, agriculture, culture, recreation and housing in the whole of Neerpede, and in connection with the neighbouring Pajottenland.

This function would seek to:

1. Identify the land resources and their potential evolution

- Carry out a diagnosis, based on available resources, and build on this with missing data (factual and usage data, identification of stakeholders and their activities, qualities and risks, etc.).
- This diagnosis must be made in a shared manner and should be transparent.
- Monitor available land and ongoing dynamics.
- Create links with academic activities in the subject areas concerned.

2. Guide decisions that strengthen our vision for the future (long term)

- Clarify the future vision for Neerpede. This systemic approach must be translated into clear objectives, linked to the challenges of the Region,

and public authorities should be mobilised. The values linked to uses must be included in this approach.

- Conduct a shared and evolving strategic plan.

3. Generate actions that reinforce the vision (short and medium term)

- Encourage stakeholders to identify actions to be integrated into a shared action plan.
- Visualise this action plan in a lively, interactive and evolving way.

4. Link

- Coordinate, create partnerships, relay cooperation opportunities, encourage participation. Promote a participatory, inclusive approach, resulting in the formation of a collective identity. Link up a variety of local stakeholders: the municipality, Maison verte et bleue, economic stakeholders, agricultural test areas, heritage and nature conservation, citizens (including users outside Neerpede), etc.
- Involve other stakeholders, within a wider radius, extending beyond the Brussels-Capital Region (schools and associations in the densely populated districts of Anderlecht, Regionaal Landschap Pajottenland & Zennevallei, etc.). Take into account the cultural aspect of the process.

5. Oversee, to include Neerpede's vision in the collective imagination

- Organise events (including artistic and cultural events).
- Organise visits and walks.
- Encourage participation by people who need a break from their daily routines to recharge their batteries.
- Ensure an educational function.

²³ The name of this function is important and should be chosen carefully. The term "steward" is a working term, which was discussed in this seminar but this does not seem to be the final choice

6. Represent: communicate and actively relay the issues

- Communicate within the zone and outside the zone (importance of a visual identity).
- Be a charismatic figure, able to bridge the gap between political, strategic and grass roots stakeholders (including farmers).

A few structures or mechanisms have been identified by BBP as sources of inspiration: on the one hand, rural-type networks (the GAL²⁴ and ADL²⁵ in Wallonia, the Régionale landschappen²⁶ in Flanders), and on the other hand, projects linked to urban centres (Tuinen van Stene in Ostend, the Ceintures alimentaires in Liège or Charleroi, the Réseau Aliment-Terre in the Verviers district, etc.).



²⁴ <https://www.reseau-pwdr.be/sections/gal>

²⁵ <https://emploi.wallonie.be/home/developpement-local/agences-de-developpement-local.html>

²⁶ <https://www.regionalelandschappen.be/>

CASE STUDY

REGIONAAL LANDSCHAP PAJOTTENLAND EN ZENNEVALLEI

SPEAKER: ALWIN LOECKX

SUMMARY AUTHOR: ROSELYNE DE LESTRANGE



The whole of Flanders is covered by 16 associations, the Regionale Landschappen, which develop activities (assessments, events, campaigns) to promote the landscape, nature and heritage. These entities are autonomous NPOs comprising organisations and municipalities. In general, all the municipalities involved in the area of action of a Regionaal Landschap are part of the structure. The other member organisations are related to the areas of nature, tourism, agriculture, hunting, etc. Individuals, who cannot be part of the structure, can be partners in field projects, which are both public and private.

Originally, the Regionale landschappen were created to get former employees of heavy industries back into employment when their work ceased. Nature, landscape and biodiversity were seen as a new source of employment.

The Regionaal landschap Pajottenland in Zennevallei has existed for 30 years. The landscapes it covers are quite diverse, some very rural, some very urban, but mostly with a mixed configuration.

The association's team comprises about ten people with different backgrounds (architects, landscape architects, public involvement specialists, heritage specialists), in order to deal with a wide range of issues and carry out activities in the field: planting trees and hedges, orchards, developing ponds, school activities, visits, etc. In addition to these concrete actions, the association also provides mediation and works on development proposals.

An interesting feature of the association is that it does not belong to the administration per se, so it has no mandatory function. This neutral role allows things to move forward based on dialogue and co-construction dynamics. The association's actions are divided into projects, which may be very specific or involve larger areas.

These projects are financed with provincial, regional and European funds depending on type. In addition to the structural funding from the Province, which is reviewed every five years, the municipalities can initiate projects in cooperation with the Regionaal Landschap and provide their own funding.

The RLPZ has, for example, obtained funding for the strategic project in the Senne valley: Strategisch Project Zennevallei. This valley runs through the whole of South Brabant. On the Brussels border, the Ruisbroeck sector is an interesting tie-in to reflections on Neerpede because the issues are very similar: the question of water, agriculture in short supply chains, and a direct link to the city.

LANDSCAPED PARKS

The landscape quality of the Pajottenland is, of course, at the heart of the association's activities, which is preparing to submit its application as a landscape park. It is a concept devised by the new Flemish government, which aims to provide a framework for initiatives that were already operational or starting up, on very different scales, and to develop a relatively uniform definition and label throughout Flanders. The first call for applications was launched recently.

A landscape park in the Pajottenland could be linked to Brussels via Neerpede, which shares its characteristics. In concrete terms, the implementation of this type of project will benefit from the invaluable assistance of the Flanders Open Space Administration (VLM). Its land bank, which is active throughout the region, allows plot adjustments to be made. Flanders is also developing the national park concept. In the south of the association's area of action, a national park could be created in conjunction with the two regions. European funding, the LEADER fund, is likely to be obtained, but as it is intended exclusively for rural areas identified by Europe (two of which are in Flemish Brabant), the question of funding on the Brussels side would remain unresolved.

As far as agriculture is concerned, there are a number of dynamic interfaces. A local producer cooperative is active throughout the area. A farm that has just changed ownership, Bree-Eik, is setting up an organic field crop project, including cereals. The new owner of this farm also manages a local brewery. He will use some of his grain to make organic geuze.

Bree-Eik is joining the Granennetwerk Pajottenland project, which is the Pajottenland grain network. Trials on local and bread cereals are carried out there in order to develop a fully-fledged industry. This network is open to all cereal producers in the region, preferably organic. However, this is not a requirement, as the idea is to assist producers by offering different channels.

The FeliXart project explores the link between culture, nature and heritage. Finally, the RLPZ participated in the Neerpede-Sint-Anna-Pede-Vlezenbeek Master Plan, which was developed jointly between the two regions. Neerpede is the actual prism that reflects the city to the countryside and the countryside to the city and establishes the link between the two.

FOOD LANDSCAPES

Another concept developed by Flanders, similar to the Landscape Park, is that of the voedsellandschap (Food Landscape), triggered by terminological concerns: on the ground, the term 'Landscape Park' gives rise to fears of landscape constraints impacting on agriculture and is perceived as a threat. However, the concept of landscape park emerged from a series of studies centred on the concept of "urban agricultural park" and then "food park" with a view to revitalising and including agriculture as a driving force for territorial improvement. Ultimately, both concepts co-exist and are applicable in Neerpede, with landscape parks being more oriented towards the issues of landscape, biodiversity and nature, and food landscapes towards local and quality production linked to the territory.

Regardless of the terminology chosen, one way of moving forward positively and linking both worlds, i.e. city and agricultural countryside, would be to take Bokrijk's lead where the Province decided to hire a curator. In collaboration with the existing team, the aim is to use heritage and culture to enhance the value of the agricultural environment. This approach is synonymous with the steward concept in Neerpede.

CASE STUDY

VERVIERS: CREATING A COMMON IDENTITY IN A FRAGMENTED TERRITORY

SPEAKER: VINCENT LAVIOLETTE

SUMMARY AUTHOR: ROSELYNE DE LESTRANGE



The Réseau Aliment-Terre de l'arrondissement de Verviers (RATAV - Food and Land Network of the Verviers district) was the result of a two-fold observation, made in 2015, during workshops on the development of short supply chains: a lack of knowledge, by local stakeholders, of the numerous food transition projects in existence and the link between these initiatives and the slightly outlying Ceinture Aliment-Terre Liégeoise (CATL - Liege Food and Land Belt). The need to develop a common vision for the 20 municipalities of the Verviers district became clear.

In 2017, a call for projects from the Agency for Enterprise and Innovation (AEI) awarded RATAV €150,000 in funding over two years, which helped to get the ball rolling.

The drafting of the Provincial Territorial Development Plan of the Province of Liege gave a second impulse to the project, thanks to its workshops on the ground. The concept of a pilot region in the fields of transition (agriculture, construction) was then proposed to the elected representatives but they were dubious, given the large number of 'plans' already under way. Food appeared to be an ideal entry point for transition issues in the Verviers area, via the RATAV. The concept of 'network' is favoured over that of 'belt' due to its open aspect, which links people and territories.

RATAV was the first supra-municipal project in the Verviers district. It started with a full-time equivalent supported by the Rural Foundation of Wallonia, the GAL (Local Action Group) of the Pays Vert (Green Country) and a consulting agency in France. Today, the RATAV, hosted by GAL, benefits from second funding from the SoWalFin, once again for the full time equivalent of two people. It is currently creating its own legal structure, semi-public, semi-private, in order to be able to receive funding as part of the Walloon Region's call for projects 'Relocalisons notre alimentation' (Relocating our food).

In the context of the Covid crisis, RATAV drafted a white paper, which was widely publicised, to raise awareness among elected representatives and stakeholders (entrepreneurs, etc.) of the concept of resilience, which complements the notion of transition. At present, citizens are the real driving force behind the territory's project, but the aim is to get everyone around the table – especially the elected representatives.

RATAV's mission is to cross institutional layers, scales and dynamics to connect existing initiatives. It draws on the values of the social and solidarity economy. It focuses on ecocentric rather than anthropocentric sustainable development and on restoring the economy to its rightful place. It is radical in its desire for change but realistic in order to bring together as many people as possible. The construction of a narrative is key in this respect.

THE TERRITORY AND ITS STAKEHOLDERS

The district of Verviers is separated by two natural barriers: the Fagnes ridge and the Vesdre valley. There are four types of landscapes:

- the bocages suitable for livestock farming to the north,
- the Vesdre valley (more industrial) with urban vegetable gardens to the east of Verviers,
- the highlands with sheep farms,
- the Ardennes forests in the south.

According to the Province of Liege territorial development plan, this territory has been divided into five sub-territories. How then can Verviers form a 'territory' with so many divisions and actions/logistics, alongside two neighbours with sound food projects (Liège and the German-speaking community) and, above all, with the rather negative image of the de-skilled industrial valley? How can a common identity be created? RATAV draws inspiration from the concept of a bio-region: a living territory, inhabited by people who reflect on their area, their involvement and the impact of their actions. The bio-region must be of a certain size to meet their basic needs. In the area identified for this project, renewable energy and wood can be found in the south, water in Verviers and Spa, and employment in the north. If the basic needs of the 210,000 inhabitants are to be met, the North needs the South and vice versa.

Which stakeholders need to be mobilised? RATAV considers that citizens, entrepreneurs and elected officials are all relevant, without any hierarchical structure. Their different areas of expertise need to be reconnected for this purpose. Hence the central role of territorial leaders, stewards and other facilitators. RATAV makes relations more fluid and improves the efficiency of those stakeholders already in place: the Aliment-Terre network, the non-profit organisation, Signum (social interlocutors), the Bassin authority, active in education and training, the 'J'aime entreprendre' group of entrepreneurs, GAL, the cultural centres, the Verviers creative HUB and the Natural Parks, etc.

The project relies heavily on narrators such as the citizen media *Permavenir* or the web documentary *Les Chemins de la Résilience*. RATAV is an ecosystem where producers, consumers, awareness-raising stakeholders, governance and participation representatives interact.

ACTIONS AND CONCRETE RESULTS

RATAV supports producers: provision of tools, producer networking with grocery shops and Horeca to develop short supply chains, or developing a food policy council to develop the vision of a new food governance in the 20 municipalities. The Network has signed the Milan Charter (on nutrition, environmental sustainability and human rights), which attracted the attention of the scientific community, including Olivier De Schutter, former UN Special Rapporteur on the Right to Food, who sees Verviers as a food transition laboratory.

Gradually, we can see that the stakeholders are changing their stance. Producers are moving away from an individualistic vision, as shown by the creation of the social cooperative *Terre d'Herbage* (online sales and distribution of products), which is gradually being supported by the municipalities. A second project is the incentive grant launched by the town of Malmédy and the *J'aime Entreprendre* group, with a view to creating a citizens' food cooperative. The panel for this grant comprised elected officials, entrepreneurs and citizens. As part of its wider transition project, RATAV is also involved in drafting an energy renovation plan for the 20 municipalities alongside citizens, elected representatives and sector professionals.

The results of these actions include the creation of six cooperative enterprises, with a mobilised capital of around 700,000 euros and more than 100 project managers. These include local grocery shops (*l'Univers paysan*, *l'Épicerie des champs* in Malmédy, *Vervicoop* in Verviers), the *Invent'terre* market gardening organisation, which is also developing test areas around Verviers, a wine company, *Vin du Pays de Herve*, and soon a glass jar shop.

LEVERS AND CONSTRAINTS ASSOCIATED WITH GOVERNANCE

The first of these levers is the regional context, as the government wants Wallonia to lead the way in the ecological, social, economic and democratic transition. The lack of other territory projects in Verviers leaves the field open for this initiative, with a spillover effect offered by very dynamic neighbours such as the *CATL* in Liège, with whom RATAV is collaborating on the creation of a logistics hub. The new generation of politicians and companies is also becoming increasingly aware of their social and environmental responsibilities, supported by the many initiatives of cooperatives and citizen participation. Without being cynical, it is obvious that health crises intensify the need to rethink how a region is structured.

The constraints are just as varied, starting with the global context of anxiety and mistrust of elected representatives. The small size of the RATAV team is a handicap. It needs to assert itself locally but would need support in the political or economic sphere to do so. The relative heterogeneity of the territory is also an obstacle. There are strong local historical identities. However, a common identity must be created based on a future project. Local authorities are also often slow to implement new governance strategies since they have difficulty in accepting that historical power needs to be shared. Another difficulty lies in the opposition between two radical approaches: those who resist change and those who, conversely, wish to accelerate it. The vagueness of the concepts of transition and resilience is also an obstacle in bringing stakeholders on board. Finally, we must point out the resistance of historical producers, notably due to the fragility of the agricultural environment, which is itself linked to CAP inconsistencies, the problem of land access and the economic models in place. Changing eating habits is one of these obstacles, but it is also, without doubt, a very powerful lever.

PROJECT SHEET RATAV



KEY OBJECTIVE

To stimulate, guide and support the relocation of a food system in the 20 French-speaking municipalities of the Verviers district.

To create a territorial community, a regional solidarity, around the local productions of the territory.

To encourage and recreate links between urban agglomerations and rural areas through short supply chains.

STAKEHOLDERS

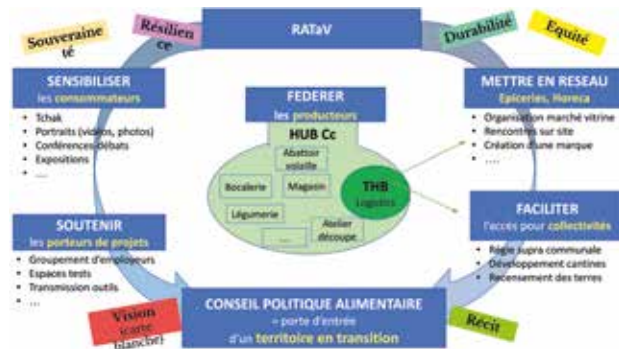
asbl Pays de Herve-Futur, GAL Pays de Herve, Step Entreprendre, FRW, AEI, SOWALFIN, Terre d'herbages, Vervicoop, De Bouche à Oreille asbl, Parc naturel Hautes fagnes, Invent'terre, Parc naturel des Sources Histoire d'un grain, Signum

KEY DATES

- 2015: workshop on the development of short supply chains
- 2016: Short supply chains meeting, AEI (agency for enterprise and innovation)
- 2017: AEI call for projects, funding obtained, inception of RATAV
- 2017: provincial territorial development plan for the Province of Liege
- 28-02-2018: signing of the Milan charter for sustainable food in the district of Verviers (20 municipalities, 5 groups of entrepreneurs and several associations)
- 2019: RATAV 2.0, financement de la SoWalFin RATAV hébergé par le GAL Pays de Herve
- 14-07-2020: carte blanche: Joining forces for a resilient territory under transition
- 2020: Submission of the call for projects "Relocalising our food": action plan until

KEY FIGURES

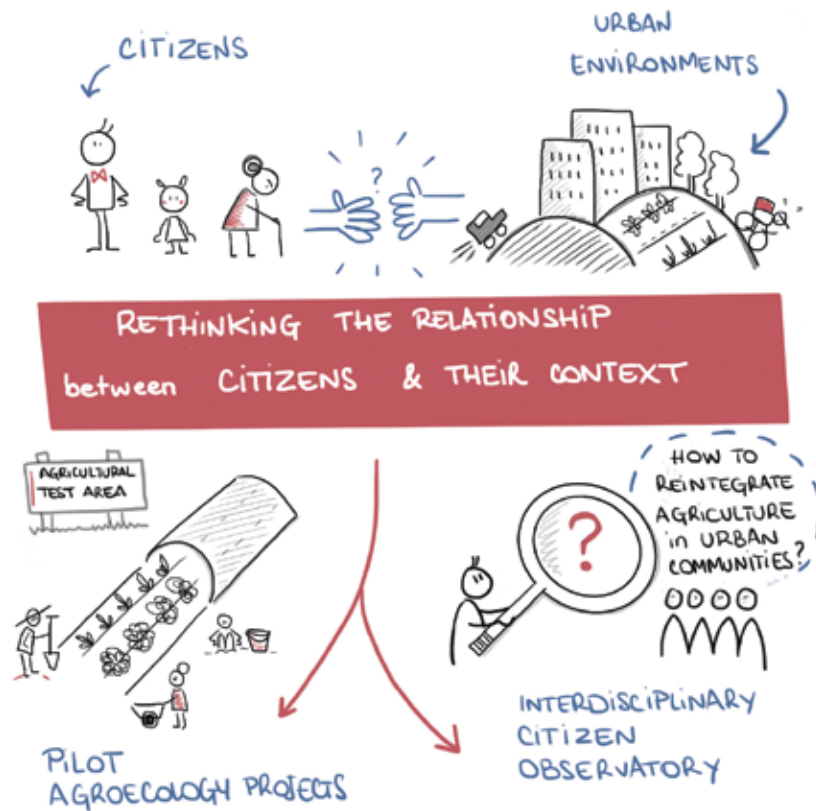
District of Verviers: 20 municipalities **210,000 inhabitants**
 80 kilometres from North to South and 35 kilometres from East to West;
 Funding: €150,000 2017-2019 + €250,000 2019-2021 1 ETP 2 meetings per month;
 Over **100 project leaders**;
 Over **50 short supply chains**;
5 companies created
 €700,000 in capital raised



<http://www.ratav.org>



**SUMMARIES
CONCLUSION**



SUMMARY

CHAPTER 1: AGRICULTURE, A METROPOLITAN PROJECT

Within an urban context, agroecology invites us to rethink the relationship between city dwellers and their own environmental and social context. It brings communities and neighbourhoods together around local food projects, designed as spaces for mingling and learning.

These dynamics create new forms - social, spatial, environmental - in the territory. This calls for the establishment of an interdisciplinary and citizen-based observatory, as a dynamic for exploring and jointly creating favourable conditions on an ongoing basis in the metropolis.

Pilot projects such as BoerenBruxselPaysans or the Geneva Agglomeration Landscape and Agricultural Projects, which are experimental territories, are paving the way for what should become the norm in order to reintegrate agriculture into the heart of the territorial project.

As links in the metropolitan territory, the municipalities straddling town and country have an essential role to play in promoting and preserving agriculture.

IS FARMING A PROFESSION WITH A FUTURE...?



SUMMARY

CHAPTER 2 : URBAN FARMER, A JOB FOR THE FUTURE

Farming gives **meaning** to uprooted urban lives. It is a **profession with a future**, albeit a hard and demanding one, which must be upgraded by the public authorities, consumers and the professional world, including agriculture. Initiatives such as BoerenBrusselPaysans and Les Champs des Possibles (Île de France) play an important role in upgrading social and economic status.

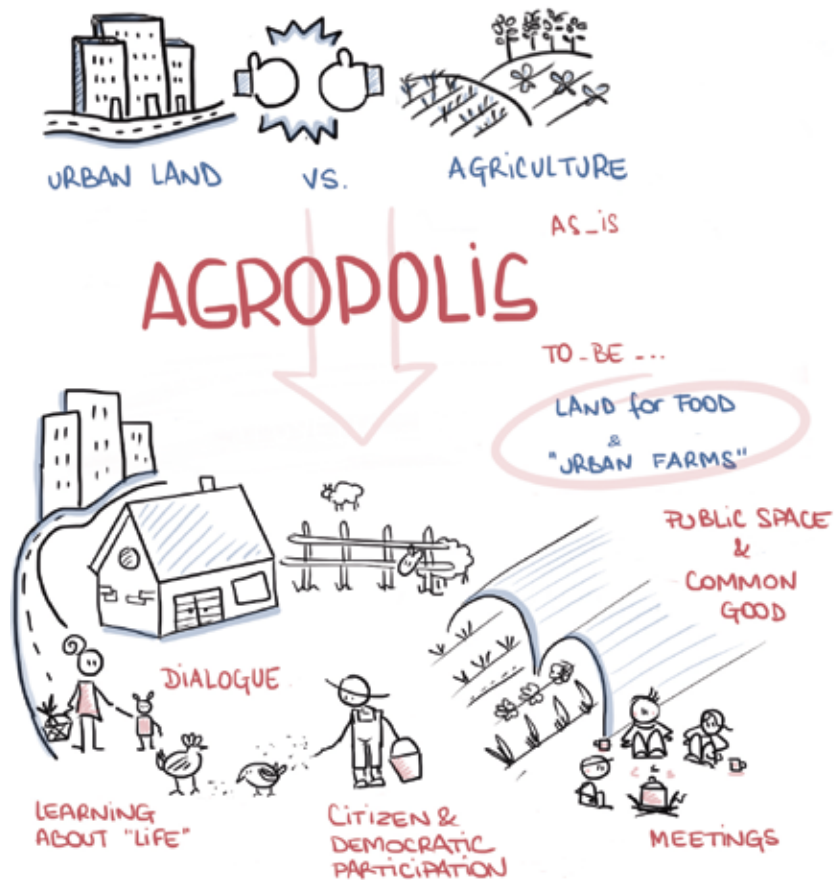
The experience of the Champ des Possibles illustrates the extent to which the **creation of an appropriate professional status**, as part and parcel of a **complete career path**, can help to **set up agricultural businesses gradually and safely**. The results in terms of job creation and profitability are **convincing**.

Agriculture must have **public infrastructure support** in the city in the same way as other urban functions (housing, health care, etc.). It is essential to unite all **micro-entrepreneurs** in creating **third-party food places**: collective places as the **network hub** for practices and regions.

The farming profession will also **evolve**. New forms must be **supported**.

The CAPOs (Collective Agricultural Production Organisations), for example, make the profession of producer more **attractive to the younger generations** of farmers: no longer doing just one job all your life, investing in a framework other than the family, etc.

Agricultural boards, municipal structures whose function is the **primary production** of food for **local authorities** and where the agricultural workforce is generally **salaried**, should be developed. They also have the potential to connect **socio-professional integration** pathways, in conjunction with public **social welfare** stakeholders.



SUMMARY

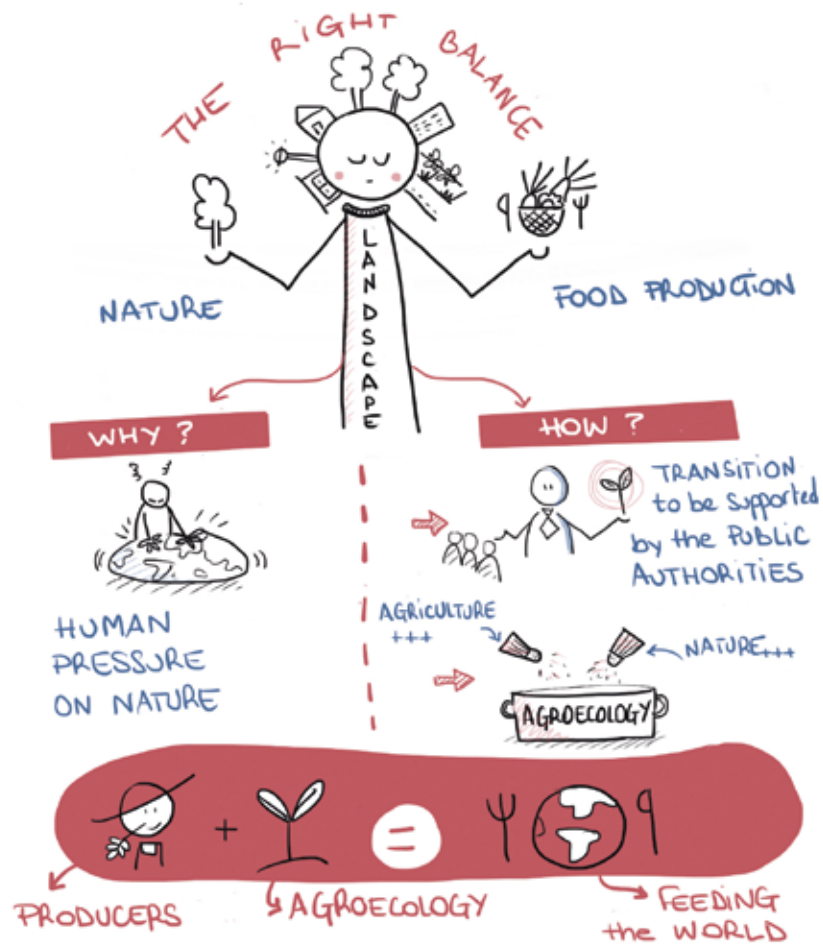
CHAPTER 3 : AGRO-ECOLOGY WITHOUT LAND?

Within the Agropolis, it is necessary to reconcile the currently dominant functions of **land** (housing, leisure, etc.) with agriculture. There is a need to move from a relationship of rivalry to **dialogue** and even **integration**. The **urban farm**, which provides food and a venue for **meetings, learning** and contact with **living organisms**, must be able to become a public facility.

Land evaluation - and hence its priority use - must take into account the **agronomic and ecological value of the soil**. Agricultural land (which produces) must **nurture** at the same time, providing a resource for the body (nutrients, health) as well as being an individual (well-being) and collective resource (culture, values).

Public land is a lever to support these changes.

In addition to public authorities, farmers per se must be involved at all levels in the development of an Agropolis. Agricultural small-holdings are a vehicle for democratic empowerment in the **management of public spaces and shared commodities**, including the involvement of women.



SUMMARY

CHAPTER 4 : AGRICULTURE AND BIODIVERSITY

The **landscape** is a concrete **support** to ensure a **balance of priorities** between nature and human food production.

The balance between nature and agriculture must be struck by working on **numerous scales and situations** ranging from the local to the wider territory, and from the dense city to rural areas.

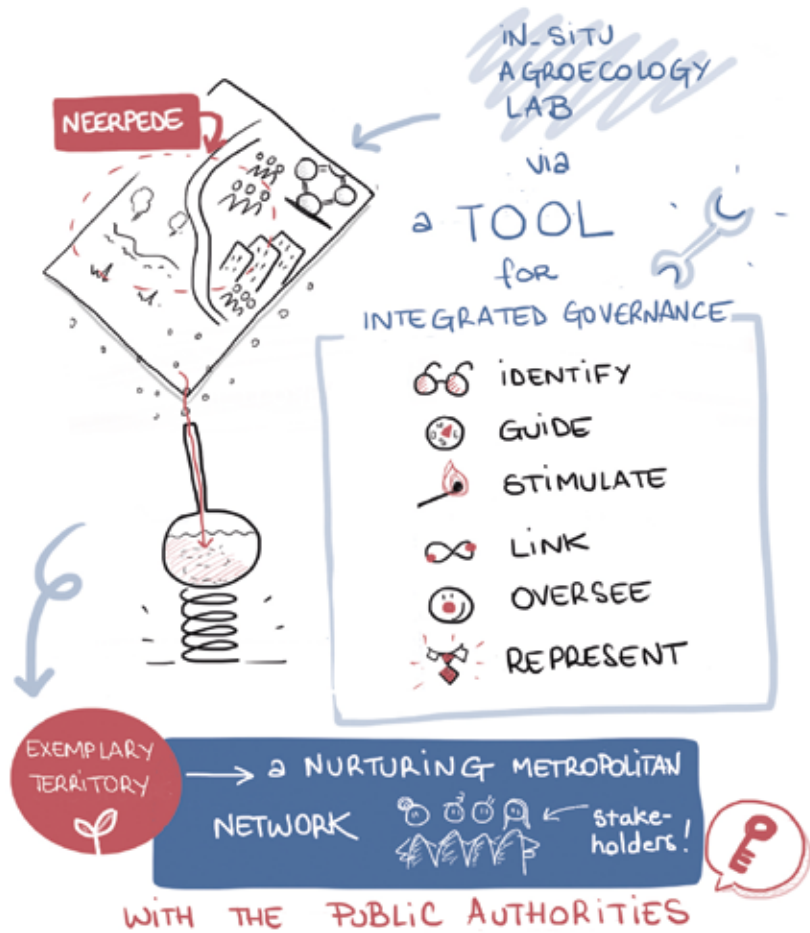
The combination of agricultural activities and the protection and development of nature is a fundamental issue in the current context where **human activities** are exerting an ever stronger **pressure** on the lands.

Agroecological transition offers one solution for promoting the link between agriculture and nature. Among other things, it will be necessary to act upstream on **public action** (subsidies not connected to surface areas or yields, decartmentalisation of actions, agro-ecological networking, etc.).

In addition to "**more agriculture in nature**", it is vital to integrate "**more nature in agriculture**".

The question of yield capacity in terms of agroecological production should be demystified - we now know that it can "**feed the world**".

Could the recognition of **the strategic importance of farmers engaged in agro-ecology** for society be achieved by making them eligible for an initial **universal income**?



SUMMARY

CHAPTER 5 : TOWARDS A METROPOLITAN FOOD NETWORK

There can be no **transition** in agricultural practices without changes in the landscape that supports these practices. This implies integrating **specific tools** into its management arsenal.

The area of **Neerpede in the Pajottenland** has its own **identity**, which among other things makes it the **ultimate link between town and country**. It seems to be the perfect place to experiment.

For this strategic area, a **specific integrated governance tool** is needed to deal with the wide range of issues and to:

- Identify the resources and risks in order to be forward-thinking
- Steer long-term decisions that reinforce the vision
- Encourage short and medium term actions that reinforce the vision
- Link: coordinating in a participatory way, forging partnerships, relaying cooperation opportunities
- Oversee to bring Neerpede, its assets, its challenges and shared vision into the collective imagination
- Represent: actively communicate and relay the issues at the appropriate level.

The establishment of a **metropolitan food network** must mobilise **all stakeholders** right across the board, provided they participate in local agriculture - with a local aim. The role of the **public authorities** is central to this essential project.

CONCLUSION

ROSELYNE DE LESTRANGE



The Agropolis cycle was conceived as a forum to focus on the future of the BoerenBruxselPaysans project. It has allowed us to reflect more globally on changes in the metropolitan territory and the need to (re)integrate agriculture into city management. This is not an exclusive or marginal issue but part of THE big societal question: is tomorrow still possible²⁷? We ensured that debates were conducted without any political or stigmatising language and with a concrete objective: action, whether political, operational or scientific, is no longer an option but an obligation. The food and agricultural transition is an emergency issue. It is all the more vulnerable because it must demonstrate resilience, absorb the risks associated with change and integrate emerging issues, etc. Two fundamental conditions for its implementation have been identified: multifunctionality and networking. The first calls for connecting of sectors and territories, a crossing of scales, collaboration between agriculture, nature, habitat and other uses of the territory. The second concerns spaces as much as people and will only be effective if it is transversal and open.

²⁷ To paraphrase the astrophysicist Aurélien Barrau, who is less optimistic when he asks: "Is tomorrow still possible?"

During the discussions, a number of avenues emerged for the implementation of an Agropolis. Agreement on a common narrative embodied in shared values is an absolute prerequisite and is constantly on the horizon. For example, we have used the notions of 'bioregion' or 'food area', which refer to the idea of a network, rather than the word 'metropolis', which has an ultra-liberal connotation that separates territory from terroir, effectiveness from attractiveness, or resources from work.

We have also noted the importance of test areas and territories for experimentation supported by the public authorities. This leads us to a third aspect: the creation of a permanent observatory of (open) spaces and the uses (technical, political, inhabitants) that generate them. Such an entity inevitably crosses borders and disciplines, scales and fields of governance, and must unite stakeholders across this varied portfolio.

Farmers have emerged as the key to any project. Their infrastructural needs must be reflected in the city's thought processes in the same way as those of other basic sectors, such as health or education. While the City must necessarily have an agroecological vision, implementation of the transition process must mobilise all stakeholders across the board, provided that the focus is territorial agriculture with a local aim. Indeed, the project to create short supply chains can serve as a springboard for a wider ecological transition project.

One lever for the deployment of an Agropolis lies in a twofold change to our understanding of land: the allocations must integrate the agronomic and ecological value of the soil and the 'agricultural' function of land must evolve towards a 'feeding' function. This includes both the idea of a resource for the body (nutrients, health) but also of an individual (well-being) and collective resource (culture, values).

Granting a universal income primarily to farmers who take care of this shared commodity would consolidate the importance of the agroecological model for the sustainability and territorial resilience.

Other avenues were mentioned: designing public subsidies to provide insurance against the natural fluctuations inherent in any system based on living organisms, as opposed to subsidies based on surface area or yield; decompartmentalising competences; changing the fixed definitions of urban or rural, which still determine access to funding and types of activities; instituting a multifunctional agroecological network that links micro-activities with a social or experimental purpose, professional agriculture, active mobility networks, public agricultural facilities, third places for food. Such a network should be based on the landscape. At the same time, support and translation of the functioning of ecosystems and the landscape allows us to understand the balances at different scales, to mediate in the choices to be made, or even to designate, via resources, common values which are the lynch pin of any project.

The work of Agropolis has led to a reflection on the governance of a metropolitan food network focused on three main themes: the missions of this network, its stakeholders, and the territories to be integrated.

The most important task is to connect, delegate and then steer the vision continuously. This is followed by experimentation, with the support of the scientific community, diagnoses, evaluations and assessments. Finally, it is a matter of taking action, which involves technical aspects (creation of agricultural, regulatory and strategic tools, etc.) as well as mediation (prioritisation of actions and assignments, communication, awareness-raising, representation and facilitation).

Stakeholders must be mobilised in the broadest and most inclusive way possible (politicians, administrators, professionals, inhabitants, public and private owners, associations, the world of education and research). Their interrelation requires the establishment of councils, boards, general assemblies, platforms or any other mechanism that allows inter-disciplinary mobilisation whilst being targeted and modulated in time and space.

Finally, the food territory can be identified according to an administrative or topical logic (landscape, economic sector) or by a network of affinities. In the case of Brussels, the complementarity between city and countryside is essential. This territory has no periphery but different types of occupations, more or less urban or rural. In fact, its inhabitants are spread out over an extensive area, both inside and outside the dense city of the Brussels-Capital Region. It is therefore essential to move away from a centralised vision in order to set up a network and cooperation between producers, regions and links in the chain.

The interregional landscape entity of the Pajottenland, which includes BBP, most of the rural area of Brussels-Capital and the agri-landscape dynamics of the Regionaal Landschap and the VLM, would seem to be the ideal place to test these approaches. The mutual knowledge, the history of collaboration, the elements of a shared vision, the eco-landscape logic as well as the complementarity of contexts and arrangements are promising.

Since names are fundamental to existence, the session concluded with a naming exercise. The linking of a name to the territorial context means that the function will not be frozen. Conversely, starting from the mode of operation (steward, mixer, activator, voedselbinder, etc.), an avenue to the various territories remains open. Regardless of choice, it should be sufficiently polyphonic for everyone to grasp.

This led us to the following conclusions: the implementation of a food network can only take place in a mosaic of territories; defining the values of the project in relation to global issues avoids the risk of dissonance or partisan views. Guided by this common approach, network components will gradually move in the same direction through common sense, which places us collectively in a relationship with life on earth.

"Paradoxically, while the transition to industrial agriculture was, in many countries, accompanied by large-scale land development policies geared towards modernisation (replotting, correcting watercourses, drainage, irrigation, etc.), programmes in favour of agroecology seldom address the question of landscape, as if it were possible to modify the direction taken by agriculture while maintaining the spatial framework imagined to establish industrial agriculture".

Régis Ambroise

"Designing agricultural landscapes for the sustainable and harmonious development of territories"

Council of Europe, General Secretariat,
Democratic Governance Directorate,
2017 (CEP-CDCPP (2017))

BIOGRAPHIES

Metrolab Brussels

Roselyne de Lestrangé is an architect, landscape architect and doctor of urban planning, lecturer at UCLouvain and scientific coordinator of Metrolab Brussels. Her research focuses on the dynamics of transition through open spaces, including metropolitan agro-landscape networks.

BoerenBruxselPaysans

Catherine Fierens trained as an architect and practised architecture, landscape architecture, public space and political consultancy before becoming involved with Brussels Environment. For the past 5 years, she has coordinated the ERDF project BoerenBruxselPaysans. She is interested in city construction and its ecological transition, impacted considerably by food systems.

Gabriele Annicchiarico. An anthropologist by training, he has coordinated several urban, social and professional agriculture projects in Italy and Belgium. He is currently responsible for coordinating the agricultural test space "Graines de paysans" (Début des Haricots asbl / BoerenBruxselPaysans) in Brussels. As a journalist for the Italian print media (il Manifesto), he covers Belgian and European politics with particular focus on sustainable agriculture and food.

Christophe Bourgeois, a qualified agronomist, works within the Sustainable Development Department of the Municipality of Anderlecht to strengthen local resilience by supporting concrete projects and actions within the administration and the territory.

Antoine Gérard. Antoine trained as a management consultant before focusing on land access issues after beginning his career with the electricity grid operator, Elia. Involved with Terre-en-vue since January 2019 in order to facilitate land access in the Brussels Capital Region and surrounding area, Antoine is rapidly developing a network and an understanding of local/regional land issues.

Alice Gillerot. After studying economics and agricultural development, Alice joined the team at Début des Haricots to support the establishment of farms and to facilitate networking between producers in Brussels. She is particularly interested in the role of farmers' collectives in the agroecological transition of territories.

Thiago Nyssens. An agronomist/bio-engineer and an advocate of regional projects, Thiago is particularly interested in concrete and innovative projects. Has been working to develop agroecology and the transition of food systems over the past 9 years, initially as a researcher (ULB-Ceese), then in promoting fair trade channels (Collège des Producteurs) and finally in the entrepreneurial support of project managers (Crédal Entreprendre).

Maarten Roels helped found the Chant des Cailles farm in Boitsfort in 2012 and is co-founder of the Terre-en-vue cooperative. With the BoerenBruxselPaysans project, he was able to extend the scope of Terre en vue to the Brussels suburbs. He is as comfortable working with landowners on the ground as he is with strategic land access issues.

Marie-Hélène Steurs has a degree in philosophy and is an eco-consultant. Since 2008, she has been working in the Sustainable Development Department of the Municipality of Anderlecht on projects aimed at preserving the rural character of Neerpede and the surrounding areas.

Brussels Environment

Mathias Engelbeen is a biologist at Brussels Environment. He is responsible for nature conservation and territorial knowledge of biodiversity.

Moderators

Michiel Dehaene is associate professor of urban planning at the Department of Architecture and Urban Planning at Ghent University, where he lectures on urban analysis and design. For the past eight years he has been working with Chiara Tornaghi on a programme for agro-ecological urbanism.

François Lohest is a project manager at the ERU (Urban Studies and Research), a part-time professional market gardener and a scientific collaborator at the Institute for Environmental Management and Land Use Planning (Igeat) of the Université libre de Bruxelles (ULB). His expertise focuses on alternative food systems, the transition of food systems and the role of agriculture in cities.

Hubert Bedoret is a bio-engineer in spatial planning. He is the director of Natagriwal vzw, which manages the agri-environmental and climate programme, and the Natura 2000 network throughout Wallonia.

Julien Noël has a PhD in geography and territorial development. He is currently a post-doctoral researcher and scientific coordinator of the Chaire Crélan "Structuring short food supply chains" hosted by Gembloux AgroBioTech - Liège University. His research examines, in a context of unequal food globalisation, the conditions for sustainability and justice in the re-territorialisation processes of local and alternative food systems, using participatory methodological devices.

External stakeholders

CHAPTER 1

Marcellin Barthassat is an architect and urban planner with Atelier Quatre, a member of the cantonal urban planning commission and co-author of the Greater Geneva cross-border landscape project, linked to the agglomeration's agricultural project.

CHAPTER 2

Maëla Naëli is in charge of coaching and training and is a member of the cooperative Les Champs des Possibles.

CHAPTER 3

Christine Margetic is a professor of geography at the University of Nantes, and co-director of a professional degree course in urban and peri-urban agriculture.

CHAPTER 4

Françoise Burel is a biologist and director of research at the CNRS. Jacques Baudry, agronomist and ecologist, is a researcher and director of research at the Institut National de Recherche Agronomique (INRA). They are co-authors of the reference book "Ecologie du paysage: concepts, méthodes et applications" (Tec&Doc 1999)

CHAPTER 5

Alwin Loeckx, director of the Pajottenland & Zennevallei regional landscape. Municipalities and associations work together to create a more qualitative landscape, inspired by the past and ready for the future.

Vincent Laviolette, RATAV Coordinator, Positive Conspirator, humbly attempts to connect the communities he leads, to inspire and mobilise them around a new narrative and thus intensify the culture of change that is essential to the transition of our society.

The ERDF (European Regional Development Fund) is a tool of the European regional policy which aims to create new opportunities for European citizens and to reduce differences in living standards between regions. Between 2007 and 2013, the Region and Europe invested 116 million euros in 32 projects in the Brussels Region relating to childcare, employment and training, but also to sustainable development, support for economic activities, strengthening the infrastructure of the canal area and social cohesion. The current programme (2014-2020) includes 47 projects that address research and innovation, the development of economic activities and job-creating sectors, the circular economy, and improvements in our living environment. Europe and the Region are investing €200 million in this new programme.

Authors: Roselyne de Lestrangle, Catherine Fierens, Gabriele Annicchiarico, Thiago Nyssens, Antoine Gérard, Christophe Bourgois

Direction: Roselyne de Lestrangle, Catherine Fierens

Editorial committee: Roselyne de Lestrangle, Catherine Fierens, Gabriele Annicchiarico, Thiago Nyssens, Antoine Gérard, Christophe Bourgois, Marie-Hélène Steurs, Robin D'hooge

Popularisation of content and editorial advice: Bee Com - Dies

Design: associatioididees.be

Photo credits:
Service public régional de Bruxelles (Brussels Regional Public Service)/
Yannick Coppens:
p. 4, 10, 14, 34, 37, 40, 58, 63, 66, 92, 144 112, 116
Rocio Paris: p. 13, 20, 42, 68
Terre-en-vue / Martin Chavée: p. 16, 72, 77, 84
Marcelin Barthassat: p. 19, 29, 30, 39
Roselyne Delestrange: p. 30, 31
Collection 't Grom: p. 45
Maison verte et bleue: p. 51, 52, 57, 59, 61, 125
Getty Images: p. 77, 83, 101, 103
Xavier Vermeersch-Neerpede: 90
Christophe Bourgois: p. 94, 99
Regionaal landschap Pajottenland en Zennevallei: 121, 132, 133

Original illustrations of the abstracts: Christine Englebert

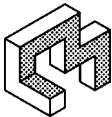
Legal submission: D/2021/5762/13

Managing editors:

F. Fontaine & B. Dewulf · Avenue du Port 86C/3000 · 1000 Brussels

Printed with vegetable-based ink on recycled paper.

We are grateful to Robin D'hooge, Communications Manager of BoerenBruxselPaysans (Maison verte et bleue), for his valuable contribution to the Agropolis seminar and the production of this publication.



La Région et l'Europe investissent dans votre avenir ! • Het Gewest en Europa investeren in uw toekomst!

