

The Agroecological Park

A Building Block for an
Agroecological Urbanism



AESOP4FOOD

Title

The Agroecological Park. A Building Block for an Agroecological Urbanism

Editor

LE:NOTRE Institute, Jeroen de Vries

Authors

Roxana Maria Triboi- LE:NOTRE Institute, the Netherlands

Jeroen de Vries, LE:NOTRE Institute, the Netherlands

With contributions by

The partners of the AESOP4Food Erasmus + Collaborative project.

Suzie Bernard, Paris Uni 8, France

Damien Conaré – Institut National d'enseignement Supérieur pour l'agriculture, l'alimentation et l'environnement, Montpellier, France

Coline Perrin, INRAE, Montpellier, France

Pierre Janin, Fabriques, Architectures Paysages, France

Clara Zamour - Terres en Villes, Paris, France

The participants of the Learning Teaching and Training Event in Montpellier, July 2024.



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Jeroen de Vries and Roxana Maria Triboi

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Acronyms and the term Agroecological Park

<i>AEP</i>	Agroecological Park
<i>AESOP</i>	Association of European Schools of Planning
<i>AESOP4Food</i>	Erasmus plus Collaboration Project Action for Education, Spatial Organisation and Planning for Sustainable Food
<i>AP</i>	Agricultural Park
<i>CIRAD</i>	The French agricultural research and international cooperation organization working for the sustainable development of tropical and Mediterranean regions.
<i>CRFS</i>	City-Region Food System
<i>ES</i>	Ecosystem Services
<i>GHG</i>	Green House Gas
<i>ILVO</i>	Flanders Research Institute for Agriculture, Fisheries and Food
<i>INRAE</i>	Institute National de Recherche Agriculture et Environnement
<i>IPES-Food</i>	International Panel of Experts on Sustainable Food Systems
<i>SCOT</i>	Strategic Land Development Plan (French spatial planning instrument)
<i>Supagro</i>	Institut National d'enseignement Supérieur pour l'agriculture, l'alimentation et l'environnement

Agricultural Park and Agroecological Park

There is a lack of consistency in how agricultural parks are labelled, the names vary from Agripark, Agropark, Agrifood-Park, and Agricultural Park. Also, the name varies in different languages, e.g. Landbouwpark in Dutch.

This report uses in general the term Agricultural Park for existing parks and Agroecological Park for the new model that incorporates aims for agroecology. In cases where there is a reference to a specific park, the local name is used, for instance Agriparc Les Bouisses.

Summary

The concept of Agroecological Parks introduces an innovative approach to sustainable planning by integrating agroecological principles into land use and food system development. These parks not only reduce greenhouse gas emissions but also provide a wide range of benefits, including enhanced biodiversity, ecosystem services, and improved social, health, and economic outcomes.

Agroecological Parks respond to the growing need to transform food systems, ensuring food security, social and environmental justice, food democracy, and equitable income for producers. They promote sustainable resource management and empower local communities to actively participate in shaping resilient and inclusive food systems.

The concept is particularly relevant because it can be implemented through collaboration between public authorities and local actors, offering a new pathway for achieving sustainability goals. Beyond mitigating climate change, these parks create sustainable environments that strengthen local economies, reduce food waste, and support healthier, community-oriented practices.

However, the transition to such innovative models remains slow. International politics and institutional approaches are fragmented, often influenced by corporate lobbying, while local initiatives lack sufficient support. IPES-Food's proposal for a Long Food Movement highlights the importance of empowering niche initiatives, enabling them to lead systemic change and contribute to the broader transformation of the food system.

The concept of an Agroecological Urbanism comprises a series of 'building blocks' for sustainable food planning and the Agroecological Park is one of these. This could be part of a city-region strategy for supporting agriculture and farmers. It does this by supporting transition toward more equitable and regenerative farming models by creating new distribution methods and developing local food hubs. It can also raise the profile of the farming profession and its connection to the city, as well as diversifying livelihoods and recovering urban/rural relationships by transferring towards agroecology. AEPs achieve this by acting as incubators for new ways of food cultivation, processing, and distribution. The approach allows integration of large areas, often with diverse ownership and legal status, into a single organisational entity.

Although there is a longstanding interest in agricultural parks in some parts of Europe, the planning approach is not yet properly developed. By connecting analysis of existing parks with concepts for climate action, well-being and sustainable food systems, this report drafts a model for the new agricultural park as an integral strategy and deepens the understanding of the benefits to people.

This report concludes with a set of guidelines for planners on how to create, plan and further develop agroecological parks.

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1. Introduction: the role of Agroecological Parks in Sustainable Food Planning

This report is meant for learners and professionals in the field of spatial planning who are or aim to be active in sustainable food planning.

The AESOP4Food project fosters the development of sustainable food systems. It applies the concept of an Agroecological Urbanism, which provides an approach for planners to organise a positive change. The approach was developed during the project 'Urbanising in place' which was one of the funded projects of the Sustainable Urbanisation Global Initiative (SUGI) Food-Water-Energy Nexus call. Agroecological Urbanism requires new transformative projects that redefine social, spatial and political relations. For this a series of building blocks were developed and the Agroecological Park is one of these.

The AESOP4Food project discussed a new model for the parks which resulted in a paper for the AESOP Sustainable Food Planning Conference 2024 in Brussels-Ghent.

In July 2024 partners and students further explored this building block during an International Workshop in Montpellier by developing a participatory approach for L'Agriparc Les Bouisses, which is the fifth Agricultural Park in the city region of Montpellier. The city of Montpellier, researchers of INRAE and Supagro provided valuable insights in how an agricultural park can be developed.

This report integrates the knowledge and experience of this process.

We hope that this report helps sustainable food planners to support the spatial planning of city-regions.

The editors and partners of the AESOP4Food project

2.A new model for Agroecological Parks

A new concept for Agroecological Parks (AEPs) can provide a powerful planning strategy to cut greenhouse emissions in addition to providing a wide range of social, health, economic, and environmental benefits. It is evident from current public debate that there is a need to transform the food system to enhance food security, food justice, food democracy and fair income for producers. At the same time there is a need to reduce food waste and negative environmental impact while also adapting to climate changes. However, the transition is slow. International and national politics are still sectoral, influenced by corporate lobbyists and local initiatives are scattered. IPES-Food proposed a Long Food Movement where niche initiatives are empowered to contribute to transformation (IPES-Food, 2021). For this the key field of play for transformation can be the local level and particularly, as a system of -sometimes long lasting - embedded socio-ecological proximity relationships- the city-region. Cities have independent strategies, often determine the use of public land and can link local producers and consumers while possibly setting and implementing intertwined social, environmental and economic policies. Indeed, sectoral silos within city government can also be more easily overcome, especially if food policies are connected to climate actions. In 'From Plate to Planet IPES-Food' (2023) states: Local governments are spearheading action to cut greenhouse gas emissions. It presents seven ways local governments are harnessing food system transformation to combat climate change. These include supporting sustainable farming and short-supply chains, ensuring that healthy, sustainable diets are available, accessible, and desirable.

This report explores creating a framework for community life in cities through new AEPs, envisioned as communal assets. The concept draws on the heritage of cooperatives and garden cities, emphasising decommodification in agroecological practices as acts of care and resistance (Popławska, 2020). These practices occur amid common enclosures and rural de-agrarianisation (Sadura et al, 2017, Popławska, 2020). In this context they could strengthen communities within the food sovereignty movement. Revitalising the city to foster communal interaction is central to the idea of common goods. We must redefine the social nature of cities as their core foundation and a critical condition for communal life (Marzec, 2010). Our proposal, grounded in an Agroecological Urbanism, promotes interactions among urban residents and food producers, creating spaces for exchange and collective education. Understanding agricultural practices and coexisting with the natural environment fosters appreciation for farmers' work. This shared experience and respect for food production and the reproduction of life establish the foundation for communal life among diverse social groups and the living environment.

AEPs can provide powerful mechanisms for supporting agri-food system transformation, and for this it is necessary that additional aims, functions, and regulations are added to the concept. This would be the New Agroecological Park Model. It represents a multifaceted strategy for sustainable agriculture that integrates key components: food production, environmental regeneration, a learning environment, research, and social integration. This holistic model aims to create a complementary relationship between agriculture and the broader community, fostering a sustainable and inclusive food system.

To develop a base for a new concept a reference study on various forms of parks was conducted. We included comparable concepts such as the Cultural Landscape Parks, the concept of Agroecological Parks which is part of the project Urbanising in Place and the Metropolitan Agro-Net proposed by Hoyos Rojas (2022). It was also inspired by the workshop on the Agricultural Parc Les Bouisses in Montpellier.

3. Typologies of Agricultural Parks

3.1 Existing Agricultural Parks

There is a lack of consistency in how agricultural parks are labelled, the names vary from Agripark, Agropark, Agrifood-Park, and Agricultural Park. This report uses the term Agricultural Park for existing parks and Agroecological Park for the new model that incorporates aims for agroecology. If there is a reference to a specific park, the local name is used, for example Agriparc Les Bouisses.

Agricultural Parks (APs) are mostly near the urban fabric and, accordingly, they are conceived and designed in terms of multifunctionality, that accommodate and aim to integrate medium sized and small farms, public areas and natural habitats and other public interest services mainly relating to farming activity. They could allow small farmers access to secure land and local markets; they provide fresh food, and are an educational, environmental, and aesthetic amenity for nearby communities. Whereas the European Socio-Economic Committee (EESC, 2004) states the key importance to protect and enhance a multipurpose peri urban agriculture, the COST action Urban Agriculture Europe presents a stronger link to the needs of the city and states that agricultural parks represent a specific component of Urban Agriculture (UA) that plays a key role in two global challenges: urbanisation and food security. UA can provide an important contribution to sustainable, resilient urban development and the creation and maintenance of multifunctional urban landscapes (Lohrberg et al., 2016). Fanfani (2019) describes the genesis, evolution and basic features of the Peri-urban Agricultural Park Model presenting an analysis of APs in Spain, Italy, and France. He concludes that APs can represent an integrative and suitable planning and design tool that deals with the growing complexity of peri-urban open space governance issues and help to overcome the distinctive separation between urban and rural domains.

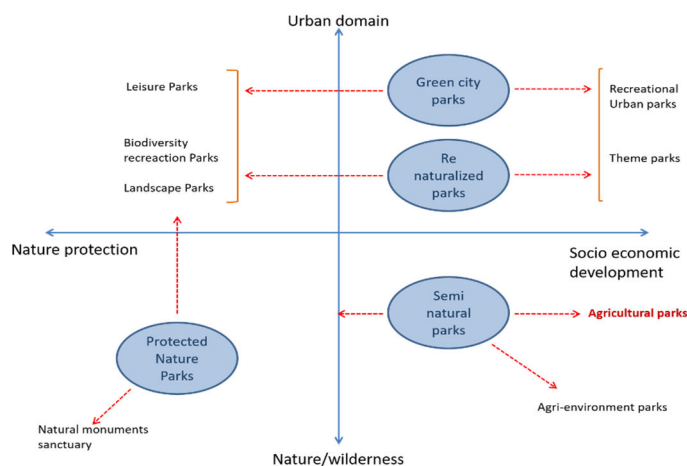


Figure 1. The position of Agricultural parks within other types of parks (source Fanfani, 2019)

The strength lies in the definition of a specific territory that is governed by a set of rules and regulations while at the same time it is guided by a locally shared vision and a strategy. A key to success is a creation process that combines a bottom-up approach that is embedded in a public authority framework and stable, pro-active partnerships of producers, citizens, civil society, and public authorities (Fanfani 2019). Drawing on evidence from Spanish cases, this is a relevant factor for the establishment and implementation of APs and refers to its multipurpose nature that increasingly combines goals for farmland protection along with creation of Agro-Food-Networks and environmental enhancement (Paül and Zazo Moratalla, 2022).

The Flanders Research Institute for Agriculture, Fisheries and Food carried out research for future development of Agricultural Parks (Vanempten et al, 2018). The quick scan in the report also includes areas that are not specifically framed as agricultural parks but have comparable objectives and organisation. A selection of nine cases is presented in Table 1.

Table 1. Summary of the quick scan made by the Flemish Research Institute for Agriculture				
Name, location, size, original cause, initiators	Collaboration	Framework	Aim	Interventions
Belvédère Landschaftspark Cologne, Germany 330 hectares Urbanisation pressure Group of citizens	Citizens' movement, farmers and the Cologne government.	Landscape protection strategy.	Multifunctional land use preservation existing agriculture. Recreational & educational functions. Ecological upgrade of edges.	Four observation towers, a path network, a wooded belt and flower borders. Minimal intervention, that effectively safeguard the openness of the area.
Pferdelandpark Aachen, Germany 534 ha with agriculture Protection open space Municipalities of Aachen, Herzogenrath, and Kerkrade	Region in dialogue with local farmers for all interventions and changes.	Regional Programme, regional area development with structural financing.	Strengthen the landscape and cultural identity. Protection of open space. Direct marketing of farms.	Coherent agricultural landscape, divided into three types, connected by a white path with twelve stops. Local/ linear interventions for access and identity.
Triangle vert du Hurepoix Paris, France 4300 hectares 20 km southwest of Paris Safeguarding agricultural activities Initiative by five municipalities	Non-profit organisation, with full-time employee, steering group of experts, boards of stakeholder groups.	Landscape studies by local/nearby knowledge institutions. a local charter for sustainable agriculture.	Safeguard local agricultural activities (40% of the territory) for the future of 'le potager' of Paris.	Cultural historical landscape with local market gardeners (les maraîchers). Activities to protect 'conventional' agriculture. Projects for short chains, green and blue services, education, awareness and experience.
Parc des Lilas Paris, Vitry-sur-Seine, France 100 hectares Protecting nature quality Department Vitry-sur-Seine.	Departmental and municipal authority. Allotments, operated by associations of citizens.	In 1990, protected as a 'espace naturelle sensible'; Approach of gradual filling, by progressive purchase of land	Preserving traditional agriculture. Branding as 'Les Lilas'.	Multifunctional: recreational, sporting and cultural activities, allotment gardens. Agricultural/ horticultural exploitation with new forms of management and marketing. Laboratory for future urban agriculture: farm incubator.
Parc Agrari dell Baix Llobregat Barcelona, Spain 3300 hectares in river delta / valley. Urbanisation pressure, safeguarding agricultural land local farmers initiative	Consortium of local farmers, agricultural organisation and the 14 municipalities .	Included in the green belt of the Regional Council of the district management plan and development plan	Protecting, managing and developing agriculture near the city.	Own Brand Stamp and web portal for direct sales. Agriculture with extensive horticulture: vegetables and fruit. Production by some 500 family businesses with medium-sized farms.
Tuinen van Stene Ostend, Belgium 35 hectares Developing the Green Belt. city of Ostend	City of Ostend.	Part of 'Green Belt' with cycling and walking strip of 37 km New design of the area	Adding a new public space in the Green Belt. More attractive for leisure and recreation. Connecting consumers and producers.	Classic park functions, such as nature, landscape experience, recreation, heritage and water storage. New forms of agriculture close to the city'.
BoerenBruxselPaysansBrussel , Belgium in Anderlecht (Neerpede and Vogelzang). 1 hectare core area Fostering local and ecologically produced food. BoerenBruxselPaysans (initially 'Agrobiopool') is an experiment	Project of four associations and two authorities (Brussels Capital Region & Anderlecht) financed by EU regional development fund.	Every partner develops projects contributing to common objectives of developing sustainable, local food chains	Providing local and ecologically produced food for Brussels 'eaters'.	Land for start-up CSA farmers. Training courses on food production and processing, educational activities and awareness-raising campaigns. Former farm functions as a multifunctional hub for activities.
Parco Agricolo perfluviale Arno. Firenze, Italy Ecological river restoration.	Participation process organized by the region.	Contracts for collaboration activities by various local actors framed by local competences and planning tools	Ecological river restoration; limiting flood risk; active monitoring and management of river quality by farmers.	Development of agro-tourism. Support for short chains and renovations into food hubs. Transition to a different form of agriculture (e.g. more wet crops).
Plaines des Versailles Paris, France 18.000 hectares, 27 municipalities protect agriculture in the region from urban pressure agricultural organisation and politicians from various municipalities)	Permanent office with two paid employees for operation and coordination.	Charter for the region; and an associated action plan.	Support local agriculture, develop short-food-chains. Promote landscape integration. Experience the countryside. Revalue and protect rural heritage. Green and blue ecosystem services.	Develop an action plan for multiple purposes.

Source: Adapted from Vanempen et al, 2018

Recent developments are brought forward by Hoyos Rojas (2022), such as the development of the Portuguese Espaço Rústico by Afife Carreço e Areosa with collaboration between actors, providing infrastructure and innovation for agriculture, protecting and enhancing landscape values, and diversifying the use of amenities. Agricultural Parks accommodate various needs and functions by an integrated landscape approach. Current goals of various parks are presented in Scheme 1.

Scheme 1: overview of current aims of Agricultural Parks		
Aspect		Aims
governance	land use	Regain control of land use.
		Counter urban sprawl, protect open space.
		Develop multifunctional areas.
	organisation of governance	Including stakeholders at multi levels. Co-production by actors (producers, consumers, planners, civil servants), co-creation of strategies.
economy	income	Liveable / fair income for farmers. Workplaces for production, processing, environmental protection, education, etcetera.
	land use	Access to land for (new) farmers.
	stability	Promoting innovation / diversification for a sustainable production model.
	infrastructure	Common infrastructure for machinery and facilities for sales, storage, composting.
	sales	Connection to urban markets / short chains.
social	well-being	Providing opportunities for leisure, recreation, nature experience, mainly in the form of routes for walking, cycling.
	food security	Providing fresh, healthy food.
		Safeguarding local agriculture near the city.
environment	territorial assets	Stewardship of natural resources: farmland, cultural heritage, nature areas.
	ecosystem	Climate mitigation, city cooling, water retention, clean water, healthy soils, clean air,
	services	improving biodiversity, landscape improvement.

3.2 Recent developments

Hoyos Rojas (2022) explores and deepens the concept on a metropolitan scale adding a network approach to it. The concept of a Metropolitan AgroNet integrates the objectives of the agricultural parks and a network that allows flows between multiple areas and actors in the food system. It facilitates the exchange of information, experiences, tools, techniques, and material that improve the metropolitan food system. The networks take a model for organising the relation between the different types of actors. It can gather public and private actors, such as local authorities, regional institutions, universities, research centres, NGOs, civil society organisations, farmers, landowners, etcetera. The network highlighted the role of agreements and a shared responsibilities model. At a metropolitan level it might foster a governance system based on partnerships that enforce the administrative support, and the active collaboration of public officials and other informal participation related to specific projects (Hoyos Rojas, 2022, p 30-31).

In the project “Urbanising in Place” the concept was further developed as an Agroecological park (Dehaene & Renting, 2024). The building block of the Agroecological Park articulates the relation between objectives for environmental goals, development of green infrastructure and agroecological farming. It embraces the use of territorial instruments in bringing about transition in agricultural models. It creates a dedicated area with special rules and regulations (i.e. the ban of pesticides), specific forms of management (i.e. installation and maintenance of shared infrastructure), and the visible implementation of distinctive farming practices (no tilling, no bare soils, elaborate crop rotation systems, companion planting and aspects of agroforestry, etcetera). It aims to regain control of land-use; preserve and protect territorial assets; provide infrastructure for farmers and producers; and function as an incubator for specific farming models. It fosters co-production of actors, both producers, consumers, and planners.

3.3 Related land-use planning concepts

There are many projects and models that have aims which are comparable to those of agricultural parks but are not labelled as such. Two examples are the Biovallée, the Drôme valley in France and the Markemodel in the Netherlands.

3.3.1 Biovallée Drôme Valley

The initiative (<https://biovallee.net/>) aims to establish the Drôme valley as a regional leader in the management and valuation of natural resources (Bui, 2015). Its objectives in 2009 included: (1) Develop high-level training opportunities in the field of sustainable development, (2) Reduce the territory's energy consumption and fully supply it by locally generated renewable energy by 2040, (3) Convert 50% of farmers and agricultural surface area to organic agriculture by 2020, (4) Supply 80% of the procurement of institutional

catering using organic or regional products, (5) Change urban planning guidelines such that after 2020 no more agricultural land will be diverted to urbanisation, (6) Halve the amount of waste brought to waste treatment plans by 2020.

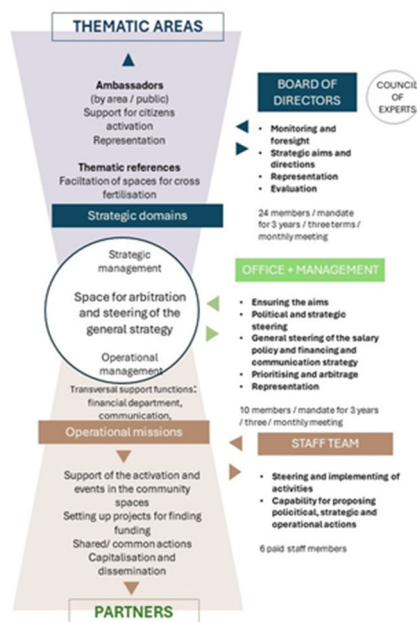


Figure 2 Governance model of the Biovallée (translated from French)

The Drôme Valley's transition provides insights into how norms can be shifted over time. Ongoing interaction between mainstream and alternative actors has allowed for rapid upscaling, access to resources, and legitimisation of the transition process. The transition has also been advanced through various forms of institutionalisation and a well-planned governance process. The main bodies are the general assembly of members of the association, which validates the strategic goals and starting renewals, the advisory board for the strategy and outlook and a staff office with paid employees.

3.3.2 Markemodel, the East Netherlands

The Markemodel is a pilot in the framework of the Common Agricultural Policy (CAP), and it not only focuses on the quality of agricultural nature and landscapes, but also on soil, water and air. It intends to be an answer to the shortcomings of the current economic and social model. A group of 35 farmers in Winterswijk and 't Klooster near Zelhem are collaborating within the framework of the model. The Markemodel is an approach in which farmers and steering parties jointly arrive at a regional, integral set of quality goals and the associated rewards for future-proof agriculture. The pilot project investigated how the rules of the European goals (Nitrates Directive, Water Framework Directive, Climate Agreement) and goals in the field of nature, landscape and biodiversity fit into a bottom-up governance model. It focuses on quality objectives and the development of an effective remuneration model for farmers. It aims to reduce implementation costs and increase the effectiveness of achieving goals for integrated environmental quality. It should help to build motivation, a sense of responsibility for sustainable development and to further the business interests of the farmers for achieving the quality objectives.

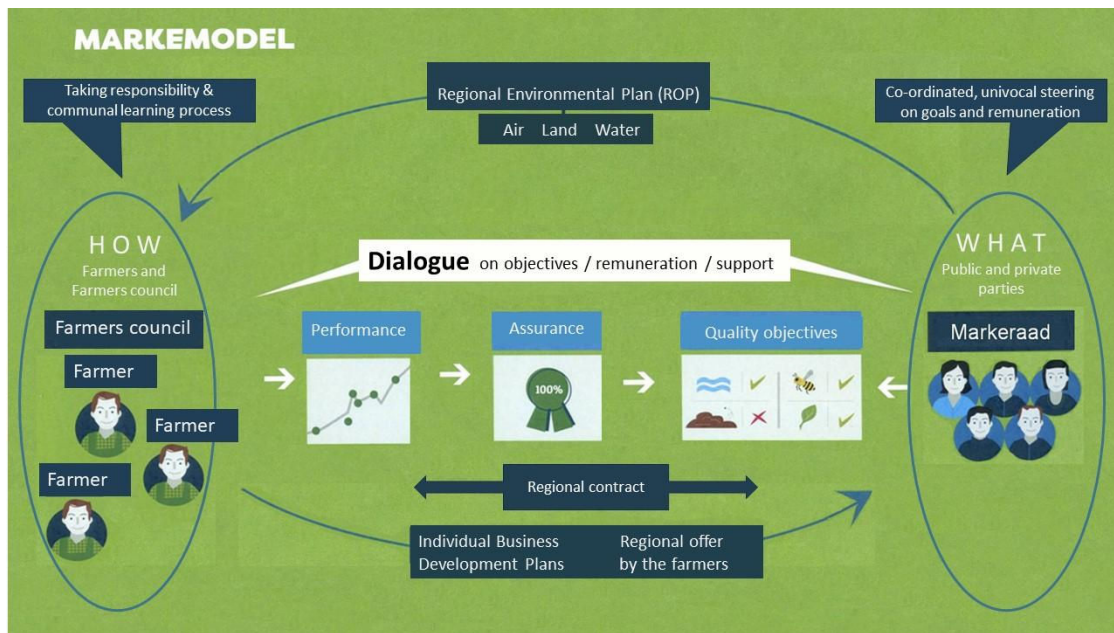


Figure 3. Organisation model and approach of the Markemodel (adapted from <https://vruchtbarekringloopoost.nl/glb-pilot-het-markemodel>)

The strength of the Markemodel approach is its inclusiveness of diverse types of farms and farmers. Moreover, it develops common aims and values in dialogue. This empowers the farmers, builds capacity, and fosters collaboration. Working with Key Performance Indicators simplifies their administration and helps them to track environmental targets. A weakness is the small amount of financial remuneration. In the approach consumers, local retail and food processing industries are not included. Integrating these could help to build a sustainable local food system. Because the partnership consists of individual farms, the area is not sufficiently covered, which is important for an integral environment in the region.

4. The case of Montpellier

4.1 The food policy of Montpellier

Montpellier is a city in the South of France, near the coast of the Mediterranean Sea with some 500.000 inhabitants in the metropolitan area. The city has a long agricultural tradition, and the region is an important wine growing area. The region developed into a tourist destination with new modernist settlements which were established in the 1960's along the coast. In recent decades the city attracted a lot of new inhabitants, and the dramatic urban sprawl resulted in loss of natural spaces and the excessive mineralisation of public and residential space. The city acknowledged the value of green, natural land and changed its perspective through the years 2000. No longer seeing agricultural land as empty space which can be developed but defining it as an essential part of the city-region that needs protection and conservation.

The local authority acted on agriculture and food, not only for the city but for the metropolitan area, which includes 31 municipalities. For this a land development plan (SCOT) is set in place that aims to set a balance between agricultural and natural areas and urbanised areas. The SCOT is translated into local urban planning documents.

Because the agricultural activity is under pressure, with massive retirement of farms and fragmented land holdings with a lot of fallow land, a strategy is developed. The ambition is to strengthen the ecological intensification of primary production and the associated development of agricultural employment, while guaranteeing sufficient income for farmers.

The city of Montpellier is one of the signatories of the [Milan Urban Food Policy Pact](#). In 2014, the city has launched an agroecological and food policy with the following objectives:

- offering healthy, local food to as many people as possible.
- supporting the agricultural and agri-food economy and employment.
- preserving the landscape and natural resources.
- mitigating greenhouse gas emissions and adapting to climate change.
- promoting social cohesion, by fostering links with nature and between urban and rural areas.

Activities consist of coordinating partnerships for access to land and starting farmers, developing public land for agriculture, setting up public private partnerships, and helping farmers to cope with climate change and preserve natural resources. A network of supporting farms is set up with test areas. Other activities are short supply chains for school catering and developing community gardens. This makes Montpellier one of France's pioneers in this field.

Being the poorest of the 10th biggest French cities, food justice is also a main issue to be tackled. Therefore, since 2023, a current project managed by the civil society is experiencing a local food social welfare ([la Caisse Alimentaire Commune](#)), which funds and promotes a sustainable food system, with good quality fresh food for all.

In this context, the [UNESCO Chair in World Food Systems](#), hosted by [L'Institut Agro Montpellier](#), has been working on city region food systems since 2011, and as such, has been accompanying the city of Montpellier, through a series of publications, policy briefs, research projects together with different research institutes, especially [INRAE](#) and [CIRAD](#), and conferences. Two important projects are [Foodscapes](#) and [Urbal](#). [Foodscapes](#) is based on the hypothesis that "food supply" is not just a response to "food demand" which is determined essentially by consumers' individual characteristics: income level, education, age, family size, etc. The hypothesis is that the supply, environment and food landscape shape behaviour, or the demand: the location of stores, availability of gardens, advertising, etc., have an influence on food consumption, practices and representations. This research combines sociological, geographical and nutritional approaches, comprehensive in-depth interviews, sample surveys and cartographic analyses to test this hypothesis. The [Urbal](#) project

develops and tests a participatory method to identify the possible impacts of urban innovations on the sustainability of food systems.

4.2 Agriparcs in and around Montpellier

Although much of the land is cultivated as vineyards, the wine crisis in the beginning of the 21st century left land available for other types of farming. Cereal crops, market gardeners and small recreational farms with olive trees were part of this diversification. The city changed its perspective on the wine sector and developed a territorial marking strategy, with improving the quality and linking it to tourism with wine routes and wine festivals.

In 2010 a Guide des Agriparcs was published, in which two former wine estates were defined as agriparcs and the concept of agriparcs was developed with urban agriculture as part of the urban green infrastructure and multifunctional farming on public land.

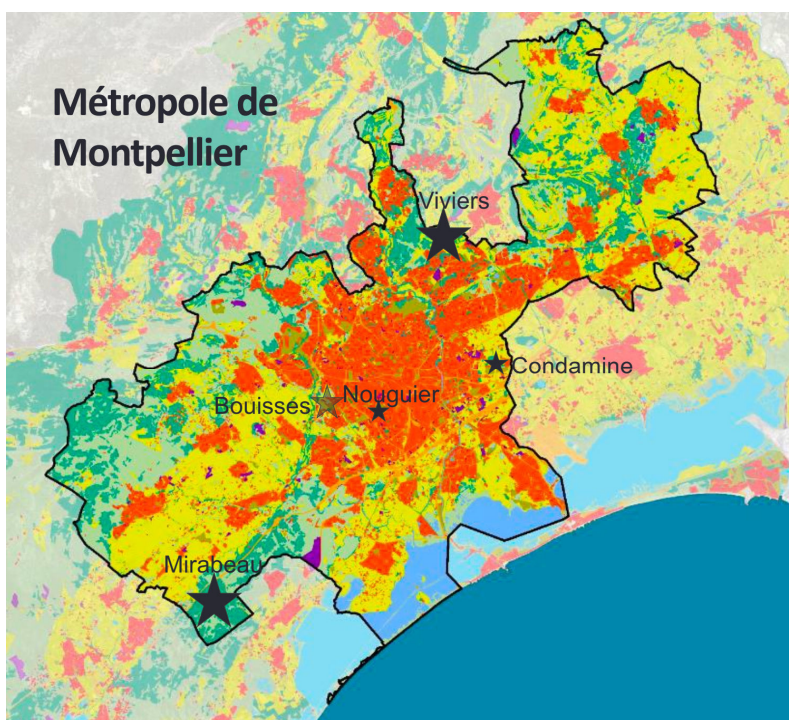


Figure 4. Agriparcs in and around Montpellier (source: Perrin, 2024)

Viviers

In 2012 the city developed this park by means of the SAFER, a public body that improves and maintains land structures by agricultural or forestry activities and rearranges plots. The park is mainly destined for agriculture with 30 hectares of vineyards, 60 hectares of crops and one farm incubator of 10 hectares for market gardeners and one market gardener on 10 hectares. The process was criticised because the land allocation was not published widely and mainly achieved by the SAFER with the main local the farmers' association. The farm incubator (Terracoopa) produces organic vegetables and has also a social, educational and recreational function.

La Condamine

This is a small park which has been developed on public land during an open process which took two years. There was a call for applications, with scoring criteria for the proposals. It includes an area for a market gardener and a collective multifunctional farm where several persons are operating.

Mas Nougulier

This park of 17 hectares has been developed on public land and is part of the green infrastructure of an urban development. The former wine estate now has multiple functions for leisure, recreation and education. It provides ecosystem services for flood control and fostering biodiversity. Since 2010 an organisation providing work for people with disabilities supports inclusion. People are working in an organic vineyard and a restaurant. In 2015 it was defined as an agro-ecological food park.

AgroEcoPôle de Mirabeau

This park on a former wine estate of 220 hectares is the outcome of a struggle of residents against a new waste disposal site. The municipality bought the land through biodiversity compensation for new infrastructure in the area. Buildings were renovated. The agriparc aims to foster biodiversity and carries out research experiments and organises cultural and pedagogic activities. Social inclusion and reintegration take place by working in the vineyards and market gardens. The park has diversified agriculture with arboriculture (pistachios, pomegranates), beekeeping, poly-breeding with goats, sheep and chicken, and open-air pork breeding in the oak forest.

Development of a network of agriparcs

The new masterplan of Montpellier of 2019 (SCOT) proposes a network of multifunctional resource farms. A series of large estates which are designed to host different types of food-related activities such as agronomic research, agro-ecological production, educational and reception functional, shared logistics and composting services. The plan authorises to change existing spaces and buildings to allow for this multi-functionality. The masterplan is however not legally binding, but functions as a strategy.

The development of agriparcs in Montpellier took place by public acquisition of abandoned former wine estates, in some cases supported by active struggle of residents. It results in a diversification of farming systems beyond wine, with various types of crops and business models. It helps to reconnect consumers in the city with producers also by combining production with recreation, leisure and education. The current system consists of small and larger areas, inside the city to the peri-urban areas. The strategic plan proposes the development of a network of multifunctional farms.

Between 2010 and 2019 the organisation of the agriparc developed together with the urban food policies. Starting from a top-down approach, the public policy instruments developed into organising more partnerships and an open process. With opportunities for new, tenant farmers, education and support in the form of farm incubators and social enterprises which offer places for disabled and marginalised groups of people.

4.3 The plan for Les Bouisses

The planned Agriparc “Les Bouisses” is located at the western border of the city of Montpellier. The project, to be started by 2025, was born of a political desire to rebalance the share of natural areas within the Metropole. A major challenge in the context of the necessary ecological transition, marked by the commitment to preserve over 100 hectares at Les Bouisses (out of the 140 hectares of the project area). A competition was launched in which a co-constructed approach was one of the requirements. The competitive dialogue included citizen consultation and an interactive participatory process.



Figure 5. An overview of the area of the planned agriparc Les Bouisses, west of Montpellier (source: Fabriques)

4.3.1 The competition and the participatory process

The competition started in July 2021 by a competitive dialogue with visits to the site. The city launched in November 2021 a website for consultation and organised a guided tour and workshop in the area. A draw, based on criteria of representativeness, was organised among the benevolent participants in the first workshop, which then led to the creation of a panel of citizens from the neighbourhood and the Montpellier metropolitan area, known as the Metropolitan Citizen Group (MCG). Building on the results of this process two thematic workshops were organised by the city and the outcome of the workshops were handed over to the participants in the competition. In September 2022 a jury decided on the winning team and published the results of the participation process. The laureate of the competition is a team of an office specialising in the fields of landscape and territorial strategies together with specialists in the field of architecture, urban planning, civil engineering, environment, soil and water. Together with the city the winning team followed up in 2023 on the process with workshops on agriculture and living in the agriparc. The plan and the future process was made public to start with a broader implementation.

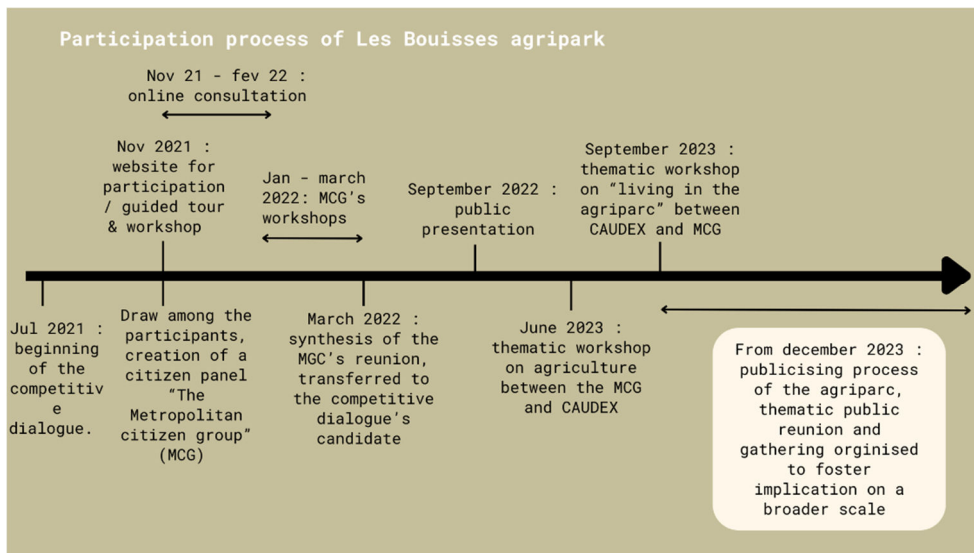


Figure 6. Main steps in the participatory process (Source S. Bernard)

The main principles of the plan are an agroecological approach, restoration of landscape structures and ecosystems. Originally there was a plan to build up an additional 40 hectares for urban development, and this was reduced to around 10 hectares according to the strategy of the city to have less development of urban space. The planned landscape consists of Mediterranean dry areas with scrubland (garrigues), forests, meadows and pastures and an improved hydrological system. There are several focus areas for urban development, agriculture with incubators and educational spaces. A space for exhibitions, workshops, and meetings supports communication on the park. The various types of food production include agroforestry, viticulture, allotment and community gardens. A network for soft mobility and connection to a new city tramline supports recreation, leisure and an attractive environment. The built facilities for food production and recreation consist of light and flexible structures.

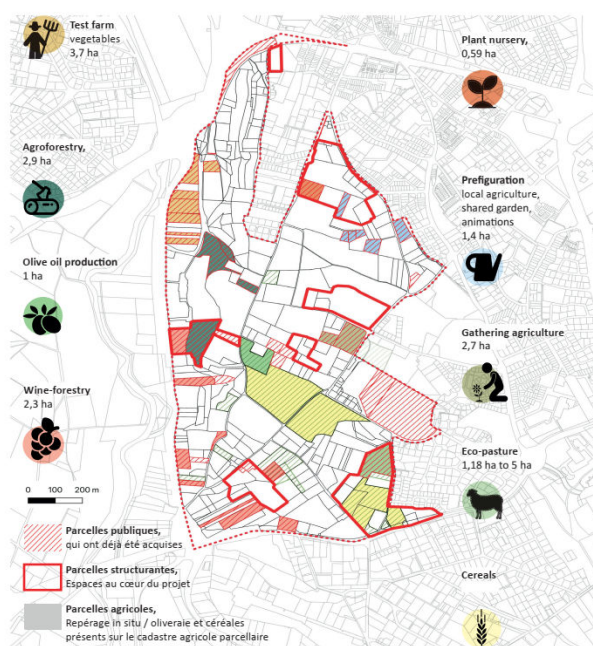


Figure 7. Functional plan of Les Bouisses with test farm, agroforestry, olive orchards, viti-arboricultura, plant nursery, local agriculture, community gardens, pick your own, eco-pastoralism and cereals. (source: Fabriques)

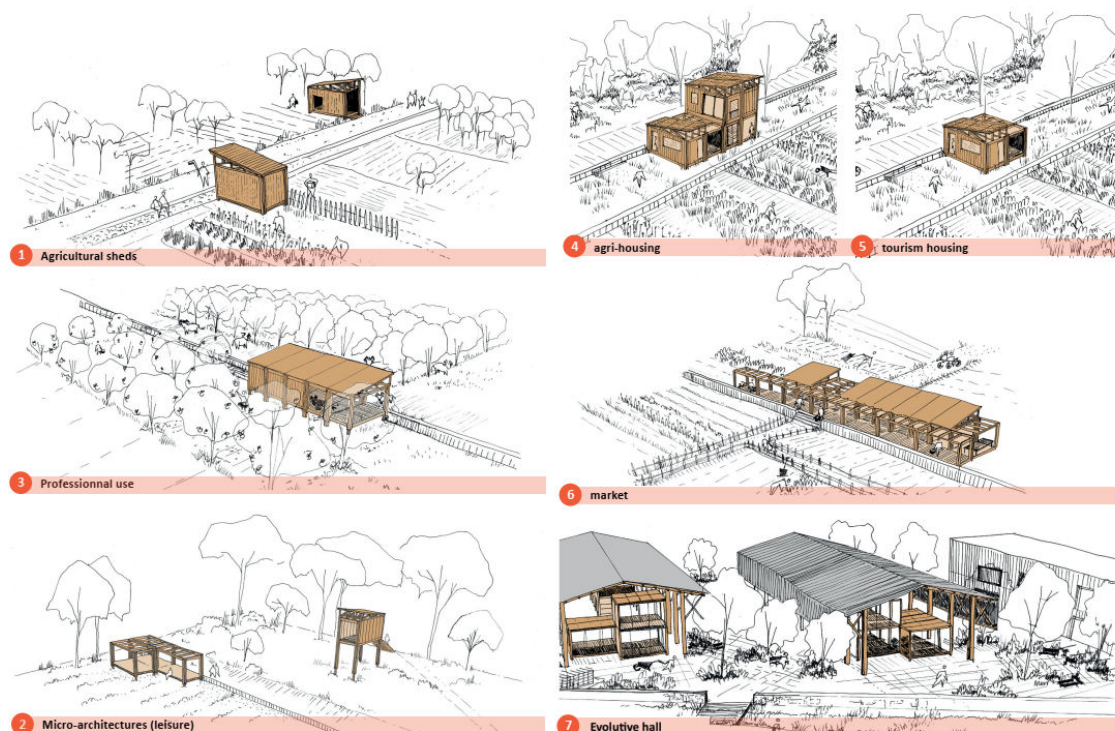


Figure 8. Light built structures in the park (source Fabriques)

4.3.2 Reflections on Les Bouisses

During the AESOP4Food international workshop in Montpellier the participants explored various aspects of Les Bouisses: (1) governance, (2) land justice, (3) management and functions, and (4) connections and (5) city links.

The groups really appreciated the strategy of the city and the plan of Fabriques. As a result of their analysis, they proposed the following issues for further consideration.

Governance

Create a park through community building instead of creating an agro-community through the top-down implementation. This approach shifts the perspective from an outside-in to an inside-out viewpoint, emphasising the importance of local involvement and ownership. It also shifts the timeline for the creation of the park, as our proposed starting point is community building, followed by the creation of the park. Our proposal for inclusive development focuses on providing light social infrastructure to empower the invisible residents of Agriparc des Bouisses. By establishing facilities such as a football field and organising regular community events and social care support, we aim to foster a sense of belonging and co-responsibility among the residents. The Lighthouse Model serves as the core concept, offering a community hub as a central point for services, activities, and rights for invisible groups. Initial activities include organising weekly football matches, conducting garbage removal and site cleaning, hosting food-sharing events and picnics, and starting a community garden. The community hub, supported and monitored by the municipality and NGOs, will leverage community activities to build responsibility and engagement among participants. This inclusive and community-driven approach seeks to activate stakeholders, including invisible residents such as gypsies, migrants, squatters, and young people, as well as residents, farmers, landowners, community members, and volunteers not included in the participatory process. By addressing their needs and providing necessary resources, we aim

to create a collaborative and trusted governance structure for Agriparc des Bouisses, ultimately empowering the invisible residents and transforming the governance process into a more inclusive and horizontal model. These could include activities such as: weekly football matches, collective garbage removal and site cleaning before the match, sharing food/picnic after the match, starting a community garden with educational classes and workshops, mobile medical services in the park, movie nights, and arts and crafts workshops.

Land justice movement

The spirit behind this is that transformative movements should not just strive for change. They should be the change. How can we make sure that the way the park is realised and socially constructed reflects the core values it should embody. For this various seeds can be planted to give a new status to the land questions in the park:

- Exploring the opportunity to settle a perimeter with the institutional stakeholders : Organise a session in the park
- Reconnect residents with the surrounding nature : we propose that one of the first actions should be a cleanup of the immediate environment. On this occasion, we hope that they will rediscover the beauty of the nature around them. Perhaps we can convince them to support nature and biodiversity in their gardens and even agricultural fields. On a larger scale, we propose planting small trees and native shrubs on the borders of plots. Leaving semi natural places on settlements, near various institutions.
- Develop agricultural opportunities : Promising examples already exist within the park, such as small-scale fruit farming initiatives on private property. These projects, including a private fruit plant testing site and a vineyard, demonstrate the potential for valuable neighbourhood-scale agriculture. Building on these existing initiatives, our vision is to cultivate land with perennial plants. We propose a fruit farming model inspired by the grassroots initiative "Urban Harvest" from Leeds, UK. This model emphasises a community-oriented approach, featuring a farmer (or a collective of farmers) responsible for overall management alongside a volunteer network mobilised during harvest season. This neighbourhood engagement fosters social connection and a learning process, enabling a reconnection with nature and local food production. Finally, the harvested fruit could be sold or processed into juices for local consumption, further strengthening the community aspect.
- Finally, building a land justice movement : We feel that one seed is already present, namely the fact that the house acquired by the municipality today is used to host refugees. We feel this house could become the meeting place for a land justice movement in the making it could be connected to nature (Friends of the Earth), Biodiversity (LPO, FNE), Refugees (Cimade), housing (Collectif Quatorze), food sovereignty (Fian International), farmers (Via Campesina, Terres de Liens, SAFER).

Management of les Bouisses

For agro-living we added functions that help to strengthen the sense of community such as a swapping and sharing market (both for food, clothing, seeds and other items), a common kitchen and a collective processing and storage unit for food, cosmetics and other products that can be made from local crops, vegetation and animal produce. The activities need to be based on the soil quality (organic matter, hydrology, without residues of pesticides and waste materials) and the incubator test plots need to be based on the principles of agroecology for which a learning environment about circularity, ecological approaches such as permaculture or organic farming, fair business models.

Several activities can be integrated into the Agriparc House, which was acquired by the City of Montpellier. This house could be a focal point for the park where visitors, inhabitants, producers, sellers interact. The farmers' community can have its seat there, where new and current farmers exchange ideas, learn from each other and organise collaboration. The garden can contain a community garden and educational plots. It can offer workshops for all target groups and provide materials and infrastructure for processing, storage and a selling point for farmers in and around the park. It could also host the community kitchen where visitors and residents can prepare meals but also buy a meal at a solidarity price.

To enhance productivity and adapt to climate conditions crops, hedges and groves need to be based on the local situation (soil, hydrology, traditional cultures) and climate change with hotter summers, less rainfall and some heavy showers. Introduction of more hedges and groves, combination of crops with agroforestry and vitiforestry. Instead of installing a diversity of fences, we propose to apply hedges and groves with indigenous and productive species (berries, nuts, hazelnuts) to enhance biodiversity and production. These hedges can have different heights and sizes, depending on the spatial layout of each site in the park.

Main points of advice are to:

- a. install a NGO for developing and managing the park and propose a governance structure
- b. raise more general awareness on the aim and vision for the park, for instance by further developing and publishing a game: Jeu de Bouisses.
- c. include the public at large into the participation process.
- d. develop activities in an integrated way, combining functions for production, leisure, processing and connecting various actors creating a sense of community.
- e. Use soil quality as a starting point and organise a collaboration between the city and Supagro for taking soil samples and define soil quality (organic matter, type of substrate, grade of pollution).
- f. build upon the existing proposal of Fabriques and:
 - develop educational routes with various subjects (orchard species, biodiversity),
 - base the zoning on activities and not on functions,
 - apply types of growing that are related to the original crop production in the area, such as orchards of quince, olives, as well as vineyards,
 - do not install a diversity of fences but apply hedges and groves with indigenous and productive species (berries, nuts, hazelnuts) to enhance biodiversity and production.

Connections

One of the most important goals regarding nature connections is to create or develop green corridors towards the city. As the park in the west is connected to green areas, it may become an important element of urban ecological corridors in Montpellier.

The park can have some zoning in accessibility. One zone is more open and welcoming everyone with rich social program such as: community kitchen, community garden, food market with food gate to the neighbourhood, space for different kind of workshops and food festival which can cooperate with other existing festivals in Montpellier : Soirée Refunge Food Festival, O'Millésimes, The Saporta Summer Festival, Cook Your Dinner organised by Les Ateliers D'Arthur and 4 SFEST (Four Seasons Festival). It is a good opportunity to create cooperation between those events and invite them to the Agriparc Les Bouisses. It takes from 25 to 40 minutes by bike to go from the park to the place where those festivals take place. There were defined two core areas: one inside the park and it is the place where the main actions take place connecting to the whole organism of the Agripark and the second is just inside the neighbourhood that is the centre connecting the park with the neighbourhood community. Additionally, we propose a waste management spot located in the south area of the Agriparc Les Bouisses that can help with recycling materials and reuse them. It was suggested to implement a bike station where it would be possible to rent a bike or park it to encourage people to use a greener type of transportation. It is wanted to limit the flow of the cars inside the Agriparc Les Bouisses by creating no car zone so people who want to go to the park by car can get there from the south or north entrance but without the possibility of crossing the park.

City links

We aim for a multi-diverse park where everyone feels welcome. With free Wi-Fi, picnic tables, and a small petting zoo, people can enjoy their time for hours. It's also a place where visitors can buy local foods, ensuring that farmers are paid fairly. The creation of a network of agriparcs in and around Montpellier is desired to strengthen their role in the local food system.

By creating a physical infrastructure for bicycles, using the existing and future bike lanes in Montpellier, we aim to aid the building of a network of agriparks by building a better connection to city inhabitants. The digital support for this bike infrastructure also encourages people to explore the natural areas in Montpellier and visit all parks in the region.

We propose a festival that builds on existing food festivals taking place in Montpellier, like Terrafiesta, and adds the idea of a touring festival, moving each weekend to different agriparks. This festival strengthens the connection between the agriparks, by encouraging the collaboration for organising and sharing of infrastructure, and by attracting people to visit.

The “power-up” spots proposed for the Agripark de Bouisses are useful both for pedestrian visitors, and for people starting a bike trip. They are planned around key entry points to the park and close to the proposed ball courts. These spots can be replicated in other areas and used by people on bicycles, visitors or locals.

In conclusion, while the vision of a connected network of agriparks holds great promise for enhancing community engagement and promoting sustainable food practices, significant challenges remain. Addressing the concerns of private landowners and finding mutually beneficial solutions will be crucial for the success of this initiative. Moving forward, it will be essential to engage in open dialogue with all stakeholders, including farmers, local authorities, and residents, to find collaborative and innovative approaches to land use and bike route development. With continued effort and cooperation, the dream of a greener, more connected Montpellier can become a reality.

5. Discussing the scope of the New Agroecological Park

Although the French and Dutch cases are not defined as APs, they show that it is essential that an AP is managed by a specific governance body, which sets strategies, triggers actions and monitors results through a collaboration of stakeholders, inhabitants, and involved associations. A set of sustainability goals (e.g. for agroecological production, renewable energy, social inclusion) needs to be defined, while participating actors are not fully bound by regulations but motivated by supportive infrastructure, benefits and self-government. Related to this double strategic and governance dimension, drawing on experiences and practices assessment (Zazo Moratalla, Yacaman Ochoa, 2015; Zazo Moratalla 2018; Yacaman Ochoa, 2018), while, still according to Paül, Zazo Moratalla (2022) mandatory planning rules and tools for farmland protection have shown as not being key in achieving expected results.

The New Agroecological Park model can build on the features of existing APs and comparable projects for sustainable development of rural areas with agricultural production. It can be extended by the concept of a federative network model, which connects different areas with hubs in the city. It also aims to recover and deepen the mutual regenerative and metabolic relationship between urban and agro-urban/rural domains through the integration of an agroecological approach on a socio-ecological basis.

The governance model can help to protect farmland and agroecosystems from urban encroachment. The policy should however contain more than protection and include a strategy for rural development that integrates multiple functions. The land use needs to be well integrated into the regular spatial planning instruments.

Defining the park area can have effects on the surrounding land, such as increase of land price in the proximity of the park and increasing urbanisation pressure in the borders of the park. For this the impact of alternative contours of the park needs to be analysed.

It shows that a governance model that links bottom-up processes to the local / regional authorities is the most sustainable. This may be a challenge for public authorities to change rules and regulations to achieve the necessary innovations, such as regulations for handling compost / soil which might be a hindrance for cooperative infrastructure. The multi-purpose nature of the agricultural park calls for an integrated system to cope with the considerable complexity of the governance process. If the realisation of goals that are valued by local actors and stakeholders takes a long time, there is a serious risk of limited or interrupted participation. For this a combination of short term, mid-term and long-term goals is essential and regular events and activities can support commitment.

The establishment of an agricultural park can foster local economy by farmers' increased income and reducing external leaking of the economic value produced at local level. There might be a revenue multiplier due to the local market increase combined with economic enhancement of other sectors who can benefit from the place-based economy, such as processors, logistics, restaurants and shops. The backlash can be that farmers who are not part of the park might feel to be "left out" from public policies and support. For consumers it is essential that they are informed of the added value because of the higher price of food compared to the regular (super)market. The discourse should not be that it is developed for an elite of stakeholder parties. The strategy should include generating a mutual support and positive economic loop between various economic activities (e.g. tourism, farming, food processing, living, etc) or services (e.g. slow mobility, ecosystem. services). The governance systems in place need to ensure equitable distribution of benefits, such as social inclusion, places where less advantaged people can grow their own food, fostering social enterprises.

An Agroecological Park can reduce exposure to the conventional market price fluctuations. On the other hand, a focus on only local production can neglect the wider networks needed in times of adverse weather conditions. So the strategy needs to consist of a combination of the enhancement of a self-reliant local agrifood system, which seems to be key in coping with recurrent shocks related to global trends.

The park organisation can support innovation in logistic service provision, network and sustainable transportation (e.g. food hub, cargo bike, etc) and proximity of production of fresh food does not need long distance transportation. The organisation of the logistics is important because the smaller scale can induce an increased demand and logistic flows due to the reduced quantity of goods and reduced scale of retail units (e.g. large retailers versus farmers' markets). This may lead to increased GHGs' emission per production unit. This calls for the reframing of the conventional logistic/functional production/transformation/distribution/consumption system with integrating flows and providing sustainable ways of transport.

A local food system will increase the relevance of small/medium sized retail points and direct selling on behalf of farmers or with the relevant reduction of middlemen value capture. These need to be integrated and in proximity to residential neighbourhoods. An uneven distribution over the urban system more favourable for areas with medium/high income inhabitants may lead to unaffordable food provision for those on low incomes. This calls for coordination of the planning of the sales systems which is strongly related to the overall revision of the production/retail network.

Developing an agricultural park supports the general improvement of the urban and rural ecosystems along with the factors impacting human health and well-being. It also fosters the improvement of the social relationship, due either to the more direct producer/consumer contact and to the related increased awareness on behalf of inhabitants of a common belonging to a place. If the park does not have a solid strategy for ecological transition the increased production can increase the use of harmful products for farming. High prices of the products can create a polarisation between the various consumer categories according to wage levels, thus feeding social unfairness and discomfort. For this a park should be considered a key tool to pursue an overall strategy of the food system of a city, both focusing on economic/ productive processes and local metabolism. By this it can increase the awareness of the importance of place stewardship to feed life processes and healthy socio-ecological relationships (between humans and with the living environment).

The parks are usually and strongly related and aimed at the reconstruction of a resilient food system enabling food security in terms of provision and quality. This might lead to an unrealistic vision of food provision self-sufficiency and dangerous exchange/trade closure, especially to some exotic produce key for livelihoods in many regions of the global south. However, considering the recurring global shocks AP can be considered an important tool in the portfolio of policy tools to achieve food provision during shortages.

Establishing a park can increase the trust between producers and consumers by providing a supportive network and dialogue. It might overcome farmers' distrust of authorities and regulating bodies. The organisational framework of an Agroecological Park can feel as a restriction to their farming practices and criticising their current methods. For this it should be seen as a place of dialogue and meeting have a role to play in reducing the mistrust between sectors. The organisation of the Markemodell is a good example for this (section 3.3.2). The park can be a support on behalf of farmers as a tool not only to protect farmland but also to explore new possibilities offered by the proximity of the urban market and by the quality brand related to the AP. However, the idea of the park as an entity that can engender bans and restrictions can generate mistrust in farmers. For this the involvement of farmers, not only in their associate forms or trade union, but in the process of the AP creation is essential.

There is an increased opportunity for ecosystem services (ES) provision relating to regenerative farming (e.g. agroecology, organic, etcetera). For this the demand of space wilderness and ecological cycle regeneration need to be reconciled with a viable production system. Considering the ecosystem as "natural capital" can entail the idea of ES as a commodity and not for their community and life supporting role. Agroecological Parks at the urban/rural interface appear an effective and viable solution for the recovery and management of the urban/rural metabolism. They can promote an active protection of the agroecosystem going beyond a conceptual and functional separation between human activities and nature, particularly addressing resilience and social fairness issues in a proactive way.

5.1 Conclusions for the New Agroecological Park Concept

A new model should include active land-use protection strategies; enabling logistics within the network; integration of key functions in Food Hubs; facilitating farmer cooperation and learning potential; the promotion of place tailored farming; and innovative technologies.

Active land use protection strategies	economic and profitability enhancement of urban and peri-urban agriculture drawing on locally driven markets form set up and co-production with the regeneration of circular flows of matter and energy as economic resources
Enabling and building logistic and processing capabilities	connecting production areas with community shared infrastructure, with mutual benefits and equipment which are distributed according to the related benefits and needs.
Integrating the key function, services and structures in Local Food Hubs	Develop the emerging civic, fair, interactive, sustainable, and innovative dimension of the local agrifood system. Locating one or more hubs in the urban environment as a public space for selling, marketing, education, as a link to the peri-urban area.
Facilitation and support farmers cooperation	Adopting nature based and agroecological farming systems solutions and procedures to access in the framework of CAP supporting policies and funding (e.g. eco scheme funds) according to the overall and joint goals of peri urban landscape aesthetic improvement and sustainability;
Creation of a “common and mutual learning space”	Developing solutions reframing complex problems via collective intelligence and synergistic and cross-disciplinary approach. Involving producers, urban consumers, and policy environment. Fostering production pacts (e.g. community supported agriculture) and short food supply chains schemes (e.g. innovative farmers markets); involve inhabitants in farming practices, develop food prosumerism and pursuing social inclusion;
Place tailored farming, food management and technology	Fostering innovative technologies and organisation suitable for small/medium scaled farming needs to meet the quality oriented and “scattered” food local demand. This includes diversification of farming, also to meet the local food demands, instead of focusing on export.

6. An Agroecological Park model

The model consists of a network of agricultural parks and a concept for the organisation and structure of the separate parks.

6.1 A city-region network of parks

To deepen the concept of the City-Region Food Systems (CRFS) (Blay-Palmer et Al. 2016) in our vision the city region develops and organises a network of agricultural parks. Each park involves some specialisation of crops and produce depending on the existing farming tradition, landscape character, soil and water conditions. The size of the parks varies with some being directly connected to the city, while others are further on the periphery. A city region food strategy is conceived as relying on this network and sets aims for developing the whole system for improving social, environmental and economic sustainability. It does this according to the ten principles of agroecology: which are: diversity; co-creation of knowledge; synergies; efficiency; recycling; resilience; human and social values; culture and food traditions; responsible governance; and circular and solidarity economy (Barrios et al, 2020). A city-region food council coordinates the implementation of the food strategy in such a way that the separate councils of each park and the farmers and producers can contribute, at their own pace and manner, to the overall sustainability and provision of food. Representatives of each park have a seat in the city region food council.

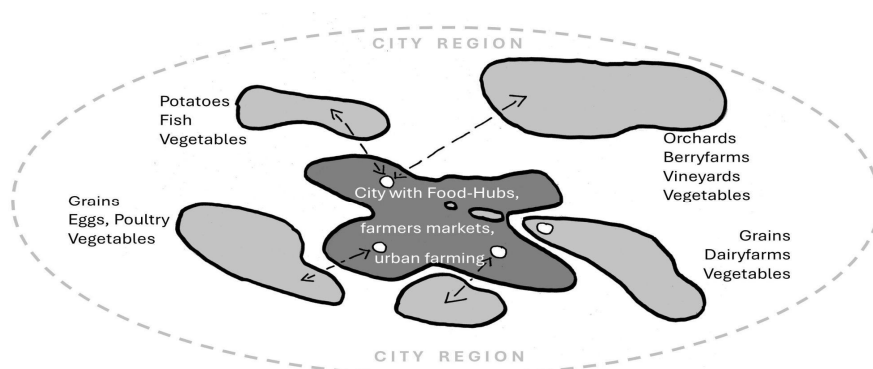


Fig 9. City region with a network of agricultural parks which provide various types of crops and products depending on the landscape type, soil and farm structure. (elaborated by the authors)

6.2 Model of the Agroecological Park

The Agroecological Park is not only a defined geographic area. It includes a democratic governance organisation that connects the producers and consumers to civic society and local authorities. The organisation includes a steering committee, the park council and a staff office. The steering committee has representatives from the park council, local authorities and relevant NGOs. It develops the strategy and guides the office staff. The park council consists of representatives of the farmers, producers, processors, NGOs related to nature protection, recreational representatives, consumers, and public bodies. The council makes the main decisions, in its general assembly, on the vision, aims and strategy and mid-term working plans. The staff office organises activities and prepares the strategic, tactical, and operational activities and policies.

The vision and aims of the park centre on agroecological production and nature-inclusive farming. Individual farmers are not forced into regulations for this but can adapt their methods and set their farm business plans to improve their sustainable production, for soil health, water management, green-blue veining, composting, etcetera.

The New Agroecological Park model aims to improve soil health and water management, foster biodiversity, and cultural identity, and provide infrastructure for leisure and recreation. Farmers and producers are

supported by infrastructure such as a composting plant, storage capacity for crops and processed food, and machinery that can be used by the members of the park organisation. New farmers can make use of a farmers' incubator space that provides vocational training in agroecological methods, organises traineeships at local farms and makes experimental plots available.

The model supports the links between the urban population by developing a food hub in the urban area as a public space for selling, marketing, and education. It's organisation also provides links to existing or newly installed farmers' markets. Consumers can support farmers by the creation of community supported agriculture and co-operations through common land ownership for food production. Urban dwellers can regain their connection with food production in allotment gardens, community orchards, community food forests, community gardens and "pick your own" farms.

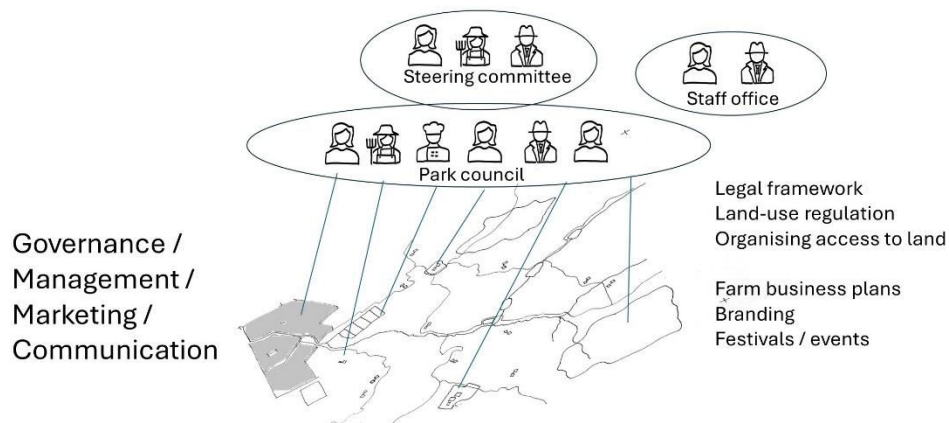


Fig 10. Proposed governance structure for an agroecological park

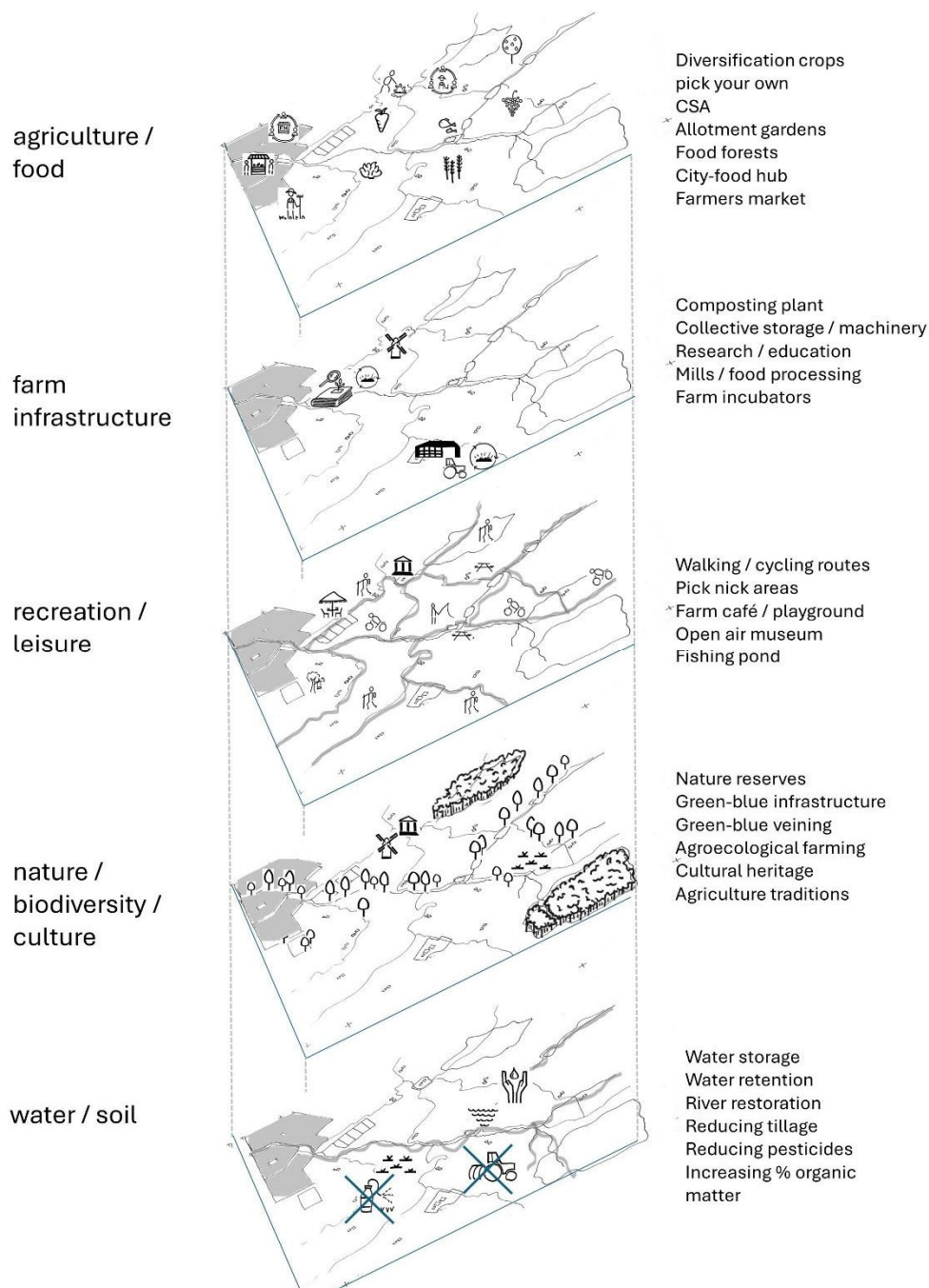


Fig 11. The multiple layers and functions of the model for an agroecological park.

Of course, a newly developed park cannot include all features of the model. It must build upon the existing local situation, the existing civic society and local policies. To be successful in the sustainable development of food systems and foodscapes, a democratic governance, an integration of social, environmental, and economic goals and the production of healthy food for all are essential.

7. Guidance on Agroecological Parks

Based on our analysis and experience with the development of agroecological parks a set of guidelines is presented for sustainable food planners who engage in developing them.

<i>Initial phases</i>	<p>Build upon the energy of the first active groups of people and connect other actors to them.</p> <p>Often the initiative of a park starts with a conflict, a sudden change, a political dilemma. For example, municipalities selling farming land, the impact of a new motorway, the bankruptcy of an agricultural estate. The commitment that arises from that can help to develop the landscape in a more sustainable way, but do not forget to connect it to wider needs of society.</p>
<i>Check the perimeter of the area</i>	<p>The definition of the area of the agricultural park can have an impact on the surrounding landscape. Is that part free for urban development, are the farmers outside the park excluded from any benefits the park brings. For this the most optimal area of the park needs to be explored, even if it includes land that is not owned by any (semi-) public entities.</p>
<i>Governance structure</i>	<p>Regardless of who takes the initiative it is essential that a partnership exists between the local government and local actors (whether or not organised). The role of the local government should play an important supporting role, because setting up partnerships and developing actions on the ground requires time, resources and manpower. Partnership broader than just government and farmers are important because not all actors in an agricultural park are farmers or have food production as their focus. Representatives from recreation, education, heritage, nature development, and the social sector also have a role to play in the governance. The commitment of citizens and local organisations in the area can be decisive.</p>
<i>Multi-disciplinary planning team</i>	<p>Compose a multi-disciplinary planning team for developing the plan for the park in a co-creative way. Include architects, landscape architects, urban planners, social scientists, environmental specialists on soil and hydrology. Let the process be fed by citizens' knowledge of the area and the culture.</p>
<i>Branding and identity</i>	<p>A clearly defined identity for the park is important. Not only for branding local produce but also for attracting visitors and connecting local actors to the park. So, it is important to develop a brand that is recognised by local actors and may also be deposited in a commercial way.</p>
<i>Flexibility in aims and process</i>	<p>Define a clear strategy for agroecology, well-being, recreation and the environment, and at the same time give space to individual producers and actors to define their own objective in their business plans. Not all farmers can transform their business into organic farming or into a social enterprise, but they can contribute in other ways to sustainable development.</p>
<i>Build coalitions</i>	<p>Important actors are the producers and the local authorities, and these need to be included in the development of the park. To make sure the general needs of society are included one needs to connect to existing organisations such as NGOs for social support, nature conservation and schools, elderly people's institutes, research institutes. And do not</p>

forget those who are often not heard like seasonal workers, migrants, vulnerable groups in society.

<i>Addressing all in the collaborative process</i>	Keep in mind that many people do not read journals, official announcements and will not come to meetings organised in the city hall. For this, they organize events, together with people closely linked to the site, in an open and inviting way. These could be food festivals, community barbecues, sports events, landscape walks.
<i>Develop a strategy in a collaborative way</i>	Include various actors in collaborative goal setting for formulating a vision for the area. Define also a set of feasible aims for the short term to make sure that the initiators are committed. Look especially for people who already have double roles, because they can build bridges between groups. For instance, farmers who are already in the city council, researchers who also are residents in the neighbourhood, representatives of cultural groups who also are teachers or work in NGOs, an urban planner who is also a food activist.
<i>Link the strategy to legislation and regulations</i>	The legal aspect that relates to the strategy needs to be integrated into the general planning system of the region or the local authority. The protection of farming land, the regulations concerning common composting and exchange of soil, the water management need to fit into the general planning system. In some countries there are also specific social contracts, which enable effective financing and adaptation of policies, for instance adjusting the permits to the local aims.
<i>The common areas in the park</i>	For the common parts of the park, such as community gardens, semi-public spaces the rights and responsibilities of the commoner need to be clarified. These should explain the benefits, and the contribution they need to make for management, maintenance and social events.
<i>Develop a sustainable business model</i>	While often the park initiatives are funded by project funds, there needs to be a business model for the long term. Funding for a small staff for organisation and communication, and financial support for common facilities such as a composting plant need to be secured by long-term funding by participants and local authorities. Crowd funding by residents can also help to build solidarity for initiatives for community gardens, farming incubators. The model of Community Supported Agriculture in which consumers are in solidarity with the producers can strengthen the link between city and rural areas.
<i>The role of public land</i>	Where cities or semi-public organisations own land or can acquire land, they can help to the sustainable development of the area. Even if only a part of a farm is rented from public authorities, these can influence the business model of the farm, by requiring environmentally friendly farming or setting principles for water management, use of pesticides, etcetera.
<i>Evaluation, monitoring and adaptation</i>	Monitor the development in a collaborative way and adapt to new challenges and needs. For this the strategy and the definition of spatial functions should not be too elaborated and specific to allow for including new initiatives.

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