

Agricultural Parks in Europe for regenerating city-region landscapes



Based on a paper for the XIth AESOP Sustainable Food Planning Conference



Roxana Triboi & Jeroen de Vries, LE:NOTRE Institute

David Fafani, University of Florence

Aleksandra Nowysz & Anna Podlasek, Warsaw University of Life Sciences

Marian Simón Rojo, Polytechnical University of Madrid

Maciej Lepkowski, Pracownia Dóbr Wspólnych, Warsaw

Joanna Tamar Storie, Estonian University of Life Sciences

Roger Raveel, Voor een blauw gelijnde akker en een grijze lucht, 1975

Definitions

agricultural parks are designed for multiple uses that accommodate small farms, public areas and natural habitats

they 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

Agricultural parks

facilitate the continuity of agriculture as the practice of cultivating the land in urbanised landscapes

the concept as a 'park' is intended to convey its role for open space preservation

suggests the permanent land conservation and recreational use exemplified by the public park

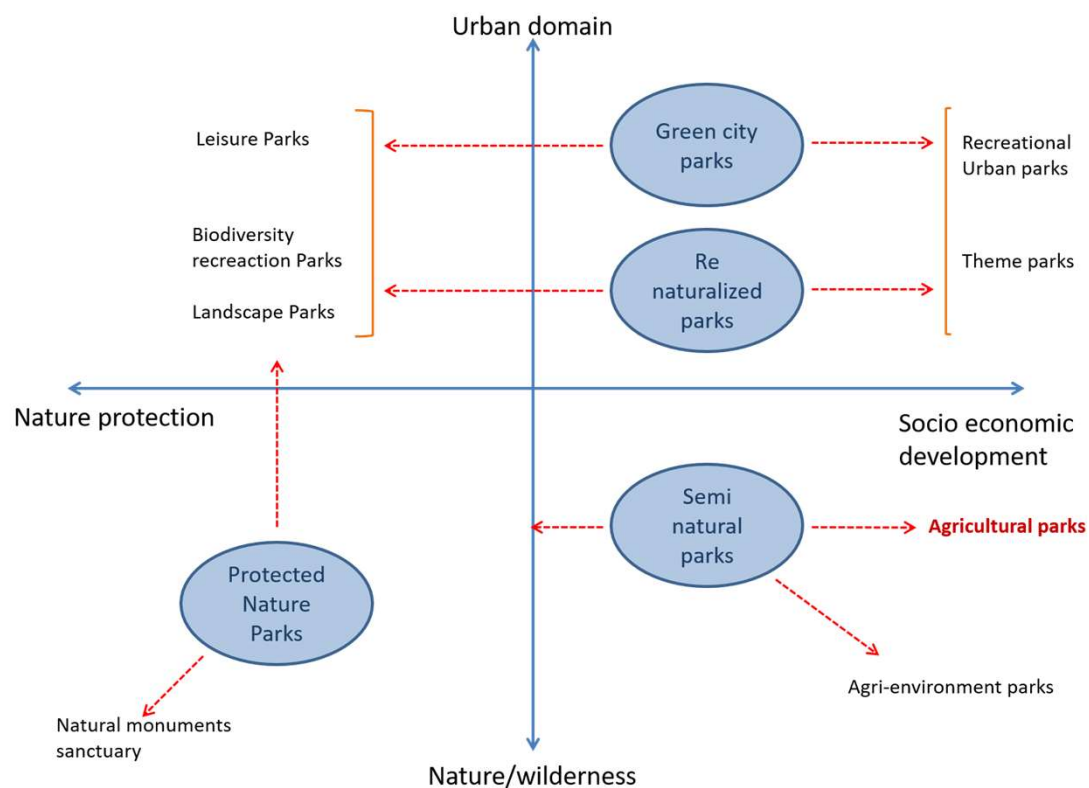
Agroecological parks

regaining control over the use of peri-urban land under urbanisation pressure

rules creating favourable circumstances for agroecological farming & preservation and protection of territorial assets against advance of the urban frontier and development of large scale, export oriented, extractive forms of farming

shared infrastructure, shared management, and technical assistance, for farming, food processing and marketing

Agricultural parks versus other parks



D. Fafani, 2019

Several focuses for Agriparcs

Agrotechnology, not soil related, intensive agroculture. More like a business park and with industrial ecology.

Multiple use, multifunctional and a wide range of agricultural typologies. Ensuring agricultural land use. Not only food but also pedagogic, educational and recreational values and services (cf. ecosystem services).

Less focus on agriculture. Comparable with peri-urban, landscape parks. Areas with an ecological, landscape, societal importance, often interwoven with the urban context. Interpretatie

Focus on sustainable, more small scale agriculture, offering an alternative to the agrobusiness and large scale production of food.

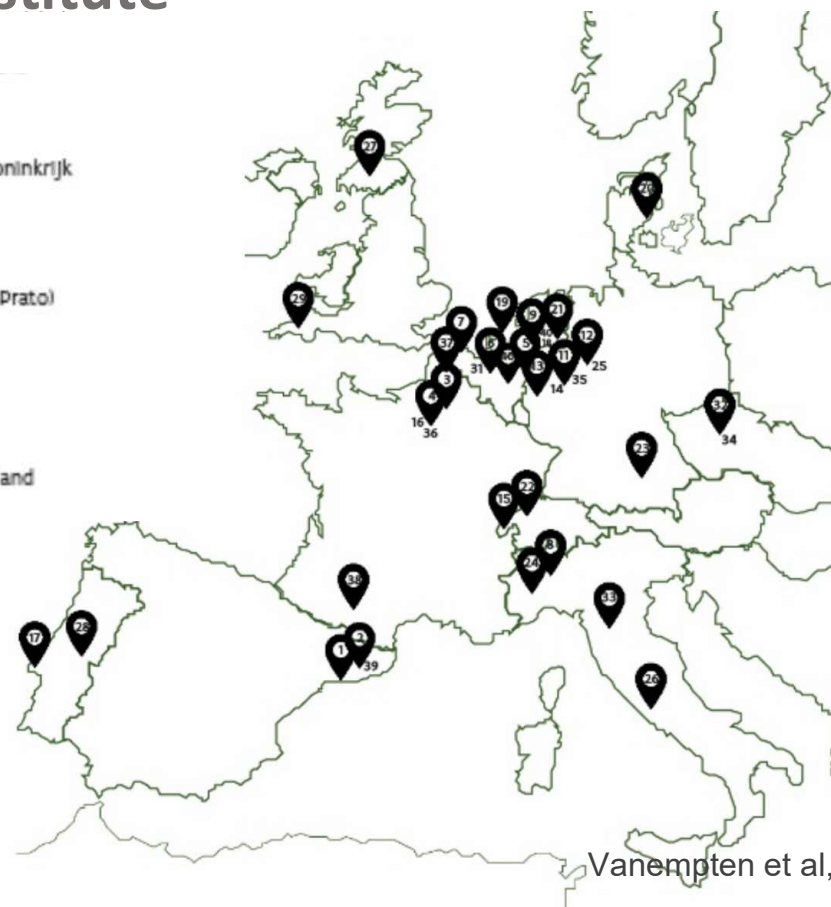
Vanempten et al, 2018

Quickscan by ILVO

Flemish Agriculture Research Institute

- 1/ Parc Agrari del Baix Llobregat, Barcelona, Spanje
- 2/ Espai rural Gallecs, Barcelona, Spanje
- 3/ Parc départemental des Lilas, Parijs, Frankrijk
- 4/ Triangle vert du Hurepoix, Parijs, Frankrijk
- 5/ Agropolis Kinrool, België
- 6/ Agrobiopool/Boeren Brussel Paysans, Brussel, België
- 7/ Landbouwpark Tuinen van Stene, Oostende, België
- 8/ Parco Agricolo Sud Milano, Italië
- 9/ Park Lingezegen, Nijmegen, Nederland
- 10/ Stadsakker Tienen, België
- 11/ Belvédère Landschaftspark, Keulen, Duitsland
- 12/ Bio Masse Park Hugo, Gelsenkirchen, Duitsland
- 13/ Pferdelandpark, Aachen, Duitsland
- 14/ Waldlabor, Keulen, Duitsland
- 15/ Parcfertile/Parc Agro-urbain Bernex, Genève, Zwitseri
- 16/ Plateau du Saclay, Parijs, Frankrijk
- 17/ Agricultural Park of Alta de Lisboa, Portugal
- 18/ Voedselbossen Nederlands Limburg
- 19/ Deltapark Agropark, Rotterdam, Nederland
- 20/ AFD - Agro Food Park, Aarhus, Denemarken
- 21/ Greenport Venlo, Nederland
- 22/ P.A.R.C. - Schéma Directeur, Lausanne, Zwitserland
- 23/ Agropolis Munich, Duitsland
- 24/ Parco Agricolo Urbano di Mirafiori/parco agricolo del sangone/Mirafiori Sud, Turijn, Italië
- 25/ Landschaftspark Mechtenberg, Essen, Duitsland

- 26/ Sacrofano, Rome, Italië
- 27/ Schotse Crofts, Verenigd Koninkrijk
- 28/ Portugese Baldios
- 29/ Dartmoore Commons Council, Verenigd Koninkrijk
- 30/ Intervale Eco-Park, Vermont, USA
- 31/ Landbouwproject Afsnee, Gent, België
- 32/ Soutok Peri-urban park, Praag, Tsjechië
- 33/ Parco Agricolo della Piana, Florence, Italië
(waarvan onderdeel: parco agricolo prato/Gran Prato)
- 34/ Praha-Troja Nature Park, Praag, Tsjechië
- 35/ Landschaftspark Dulsburg-Nord, Duitsland
- 36/ Plaines de Versailles, Parijs, Frankrijk
- 37/ Parc de la Deûle, Lille, Frankrijk
- 38/ Parc Natural Agrícola Pin-Bàlma, Frankrijk
- 39/ Sabadell Agricultural Park, Spanje
- 40/ Voedselpark Beek, Eetbaar Nijmegen, Nederland

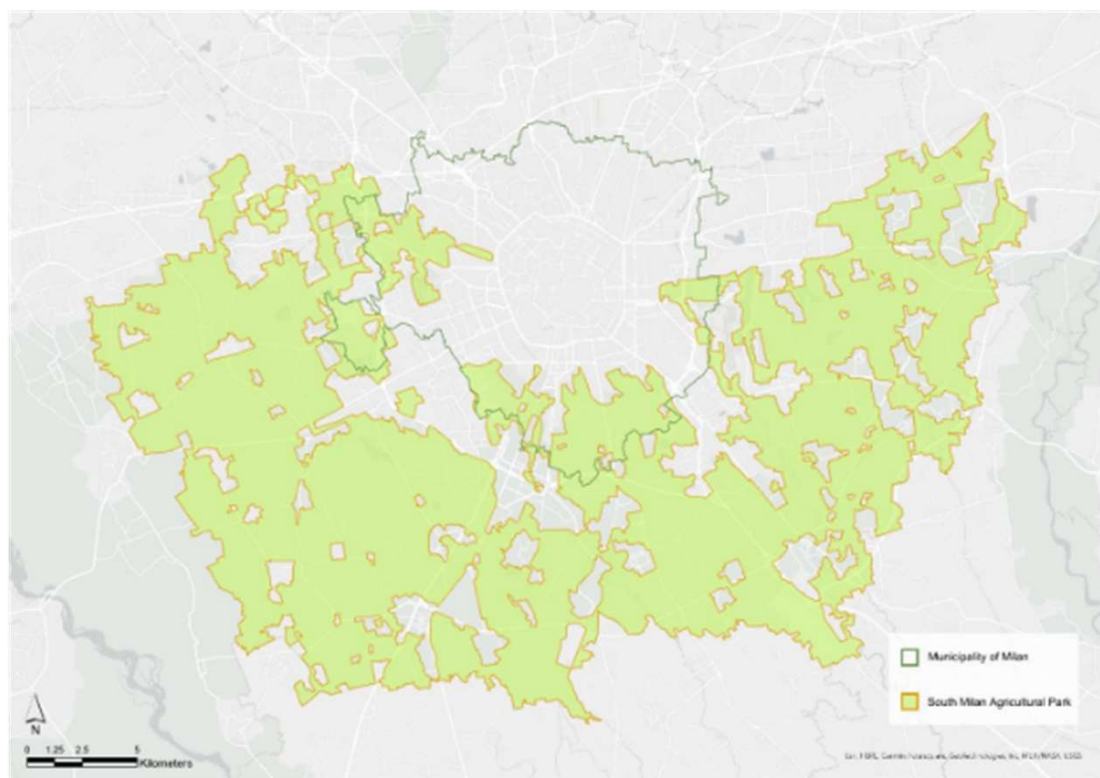


Vanempen et al, 2018

Range of size of the Agriparcs

- Small like Agro Food Park in Aarhus, DK 4,4 ha -> 28 ha and Waldlabor, Cologne, DE 26 ha, Tuinen van Stene, Oostend, BE 35 ha.
- Larger like Lingezegen, near Arnhem, NL 1300 ha, Parc Agrari del Baix Llobregat, Barcelona, ES over 3300 ha, le Triangle Vert de Hurlepoix, Paris, FR, 4200 ha and Parco Agricolo Sud Milano, IT, 37000 ha.

South Milan Agricultural Park



Source: Geoportal of Lombardy,
elaborate by Weicheng Li, 2024

Aims of current agricultural parks

| | Aspect | Aims |
|-------------|----------------------------|--|
| governance | land use | Regain control of land use & Counter urban sprawl |
| | organisation of governance | Including stakeholders at multi levels Co-production by actors & co-creation of strategies |
| economy | income | Fair income for farmers |
| | | Workplaces: production, processing, environmental protection, education |
| | land use | Access to land for (new) farmers |
| | stability | Promoting innovation / diversification for a sustainable production model |
| social | infrastructure | Common infrastructure: machinery, facilities for sales, storage, composting. |
| | sales | Connection to urban markets / short chains |
| | well-being | Providing opportunities for leisure, recreation, nature experience, mainly in the form of routes for walking, cycling. |
| environment | food security | Providing fresh, healthy food |
| | territorial assets | Stewardship of: farmland, cultural heritage, nature areas |
| | ecosystem services | Climate mitigation, city cooling, water retention, clean water, healthy soils, clean air, improving biodiversity, landscape improvement. |

Principles for future agricultural parks -1

active land use protection
strategies

profitability enhancement of agriculture
locally driven market form: short chains
circular flows of matter and energy

logistic & processing
capabilities

community shared infrastructure

civic, fair, interactive local agrifood system

Local Food Hubs

hubs in the urban area: public space for selling,
marketing, farmers' services provision and education

Principles for future agricultural parks - 2

facilitation & support
farmers cooperation

nature based and agroecological farming systems
cooperative and aggregative schemes between farmers
agroecological patterns design
landscape aesthetic improvement and sustainability

common & mutual
learning space

collective intelligence and cross-disciplinary approach
involving producers, urban consumers, and policy
environment. farm incubator place.
production pacts (e.g. community supported agriculture)
short food supply chains schemes
food prosumerism and social inclusion

place tailored farming,
food management &
technology

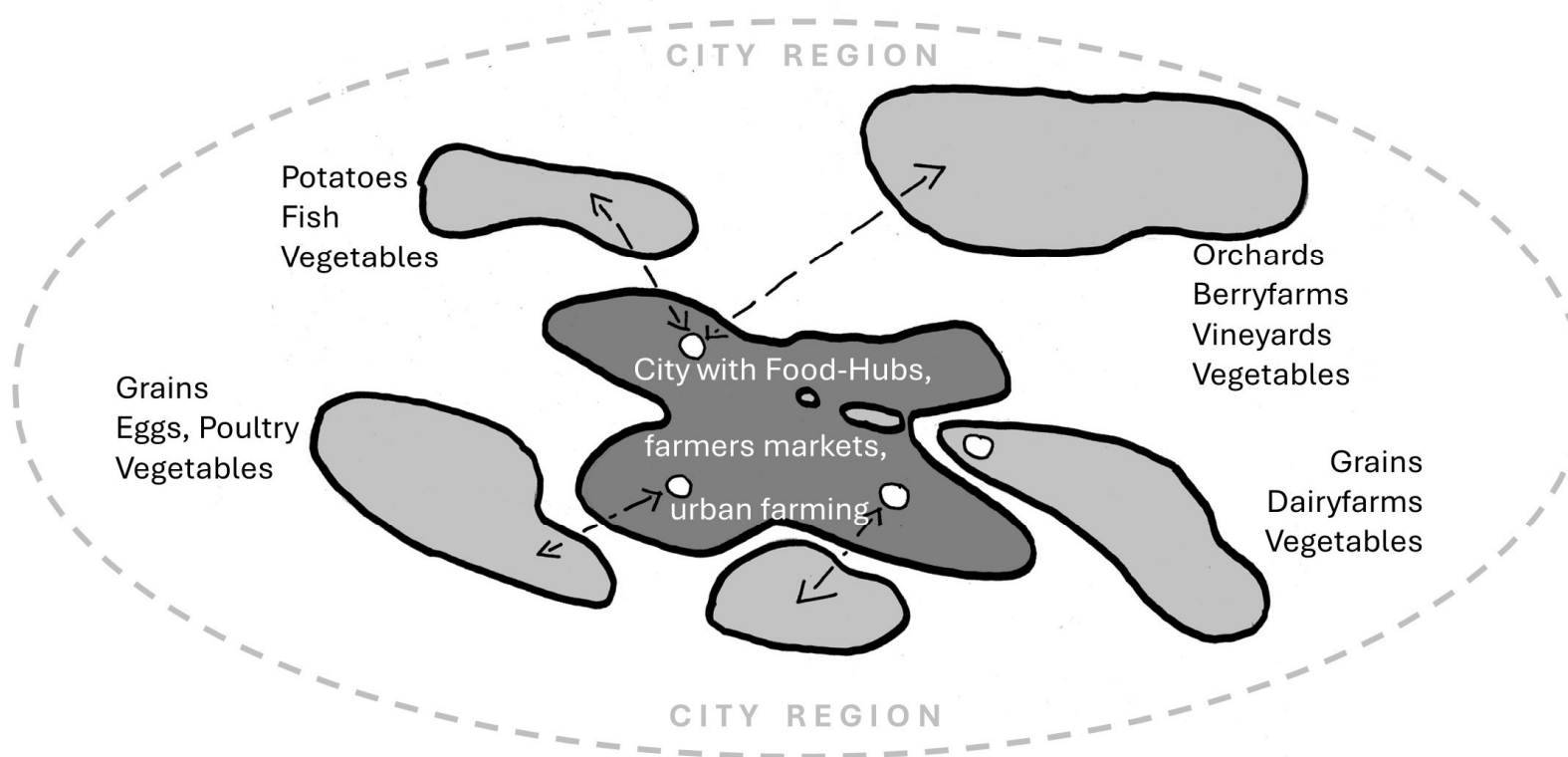
innovative technologies & organisation for small scaled
farming
diversification of farming, to meet the local food demands

New Agricultural Park Model - NAPM

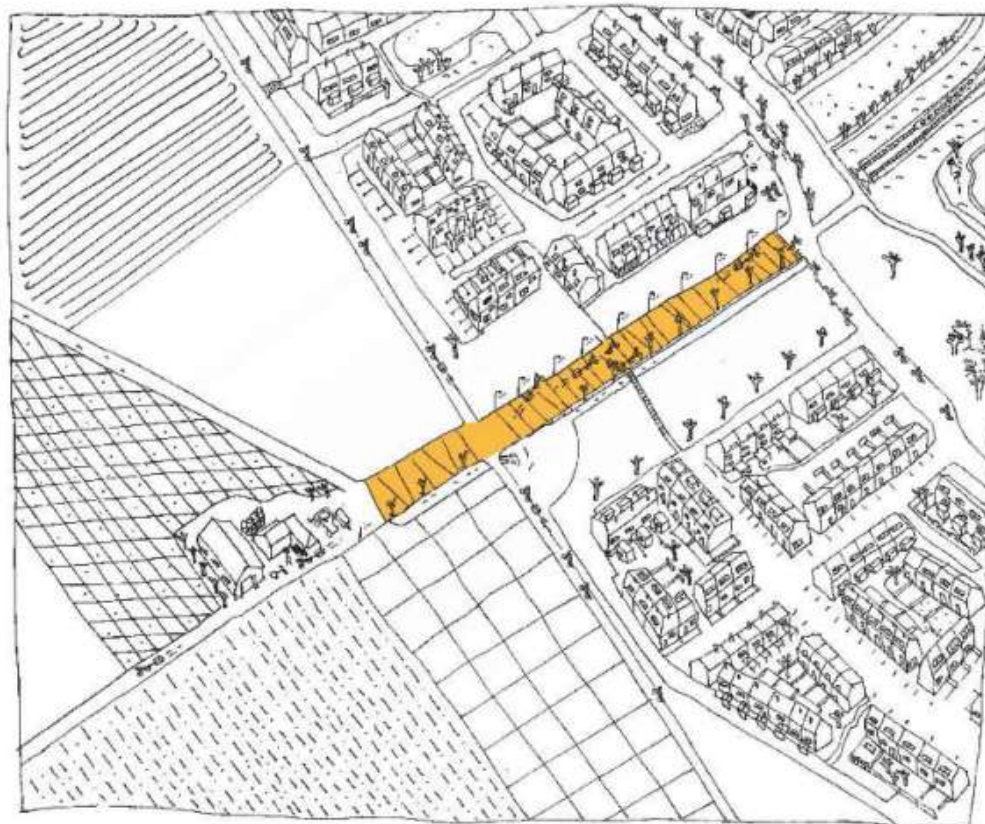
network of agricultural parks

concept for the organisation and structure of
the separate parks

network of agricultural parks



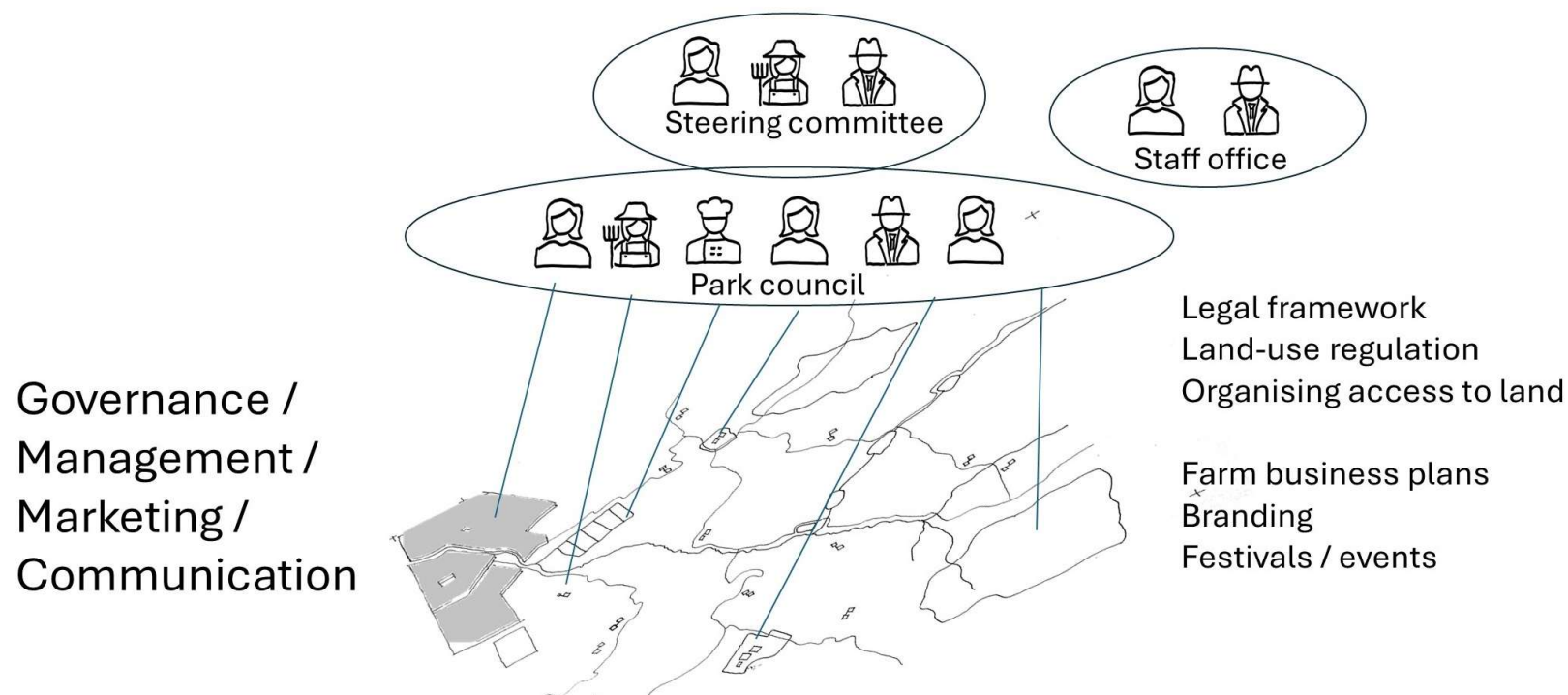
Foodgate



The transition between city and rural area is activated by creating Foodgates on specific sites.

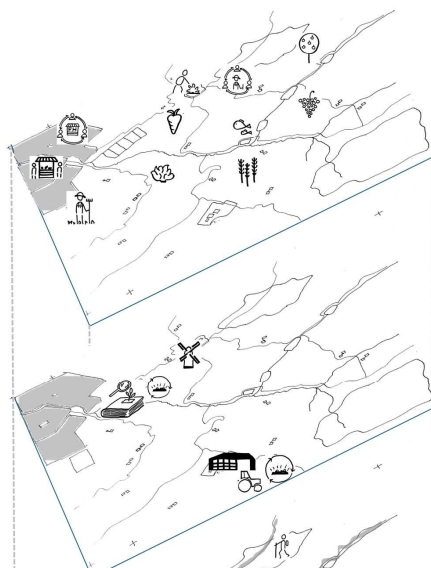
Public spaces connecting producers, processors and consumers.

governance



Structure of the NAPM

agriculture /
food

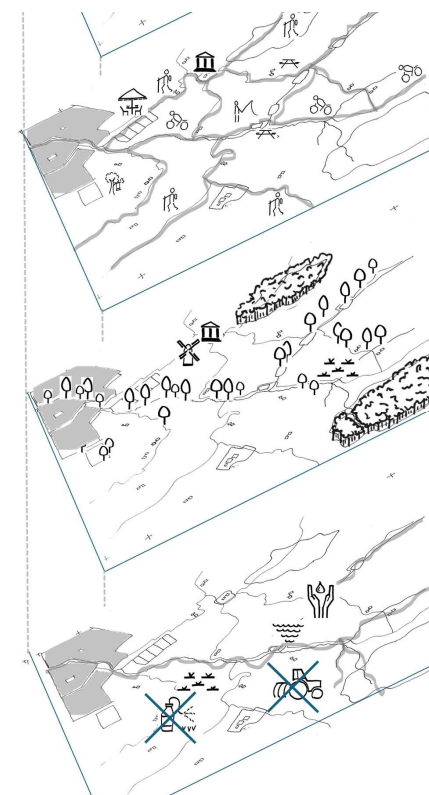


farm
infrastructure

Diversification crops
pick your own
CSA
Allotment gardens
Food forests
City-food hub
Farmers market

Composting plant
Collective storage / machinery
Research / education
Mills / food processing
Farm incubators

recreation /
leisure



nature /
biodiversity /
culture

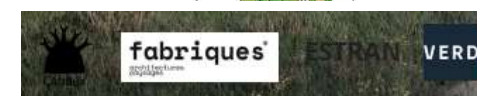
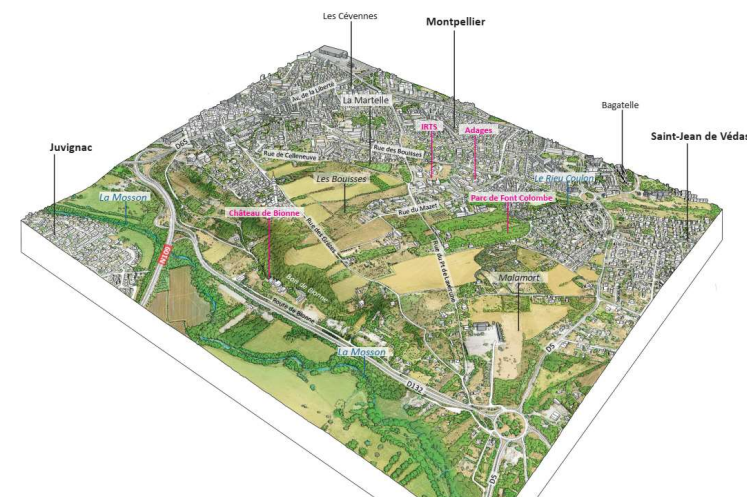
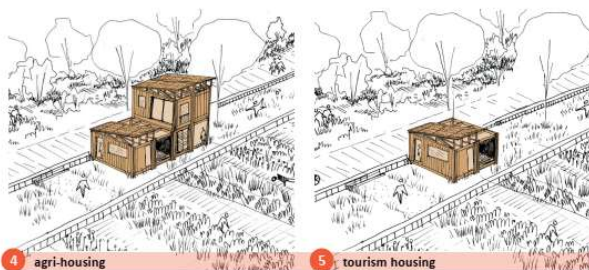
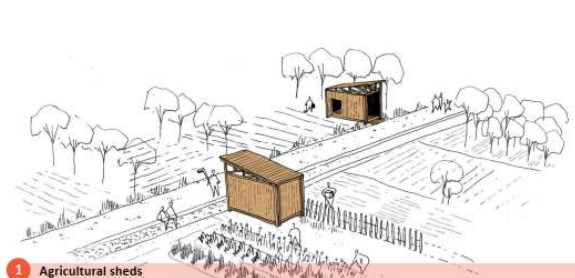
water / soil

Walking / cycling routes
Pick nick areas
Farm café / playground
Open air museum
Fishing pond

Nature reserves
Green-blue infrastructure
Green-blue veining
Agroecological farming
Cultural heritage
Agriculture traditions

Water storage
Water retention
River restoration
Reducing tillage
Reducing pesticides
Increasing % organic
matter

Example activity centres proposed Montpellier for Agriparc Les Bouisses



Conditions and Critical Success Factors

1. Creation of a wide and strong support for the concept

- 1.1 Local political support and support region
- 1.2 Local inbedding
- 1.3 Recognised leadership
- 1.4 An active connector
- 1.5 Development of competences

2. Willingness for and organisation of more multifunctional land use

- 2.1 Urban and rural connection
- 2.2 Diverse and innovative park functions
- 2.3 Collaboration of instruments and actors
- 2.4 Building upon a spatial landscape framework
- 2.5 Going beyond the concept of 'the user'

3. Active strengthening of local agriculture

- 3.1 The city as a potential sales market – short chain
- 3.2 Qualitative impulse of multi-functional agriculture
- 3.3 Engagement with the area while allowing various typologies of agriculture – also by large stakeholders

Vanempten et al, 2018

Concluding remarks

a newly developed agricultural park cannot include all features of the model

it must build upon the existing local situation, 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

Main references

Dehaene M. and Tornaghi C. (2021). "Conclusions. The programmatic dimension of an agroecological urbanism", in TORNAGHI C., DEHAENE M. (eds.) (2021), *Resourcing an agroecological urbanism. Political, transformational and territorial dimensions*, London: Routledge; pp. 220-228

Fanfani, D. (2019) Chapter 10. Agricultural Park in Europe as Tool for Agri-Urban Policies and Design: A Critical Overview David Fanfani in © Springer International Publishing AG, part of Springer Nature 2019, E. Gottero (ed.), *Agroubanism*, GeoJournal Library 124, https://doi.org/10.1007/978-3-319-95576-6_10

Lina María Hoyos Rojas. (2022). *Progressing on urban-rural connections: An Exploratory Approach towards an Agro-park Network in the Metropolitan Area of Lisbon*. Dissertação de Mestrado, Mestrado em Ordenamento do Território e Urbanismo Fevereiro de 2022

Ville de Montpellier. (2022). *Présentation du projet lauréat, Futur Agriparc des Bouisses*, accessed from: https://actu.fr/occitanie/montpellier_34172/montpellier-grand-projet-la-metropole-leve-le-voile-sur-l-agriparc-des-bouisses_55553903.html

Vanempten, E., Crivits, M., Nevens, F., Rogge, E., (2018), *Stedelijke landbouwparken in Vlaanderen, een systeeminnovatie met ongekend potentieel*. expertenopdracht uitgevoerd in opdracht van de afdeling Beleidsontwikkeling en Juridische Ondersteuning (BJO).

Webpages

DeHaene, M. and H. Renting, page on Agroecological Parks that resulted the Urbanising in Place project, an international and transdisciplinary project based on the experiences in four local cases (Brussels, London, Riga and Rosario).

<https://www.agroecologicalurbanism.org/building-blocks/agroecological-park>, accessed April 8, 2024.