

Territorial Innovation in Urban and Peri-urban Agriculture in the Mediterranean region

White Paper



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1. Introduction

The disappearance of fertile agricultural land due to the rapid spread of urban construction and the consolidation of metropolises is a real issue for both urban planners and rural populations. **While agriculture weakens as an economic activity, urban and peri-urban agriculture is becoming an increasingly important factor for supplying food to city dwellers and creating sustainable links between natural and urban areas.** Local, metropolitan, regional and national authorities are trying to find new solutions to the challenge of integrating food issues into their territorial planning processes at different scales and levels.

This report has been prepared in the context of **MADRE, a capitalization Interreg Med project that addresses urban and peri-urban agriculture in 6 metropolitan areas** (Barcelona, Montpellier, Marseille, Bologna, Tirana and Thessaloniki) with the objective of sharing good practices and creating a Mediterranean network of cooperation. Building on local participatory diagnoses, a series of transnational meetings were held in order to discuss different aspects of this issue. This report is one of the 6 'white papers' deriving from these meetings. In particular, **the territorial innovation dimension was addressed in a workshop held in Montpellier on 24 and 25 January 2018 with about 40 participants** from different stakeholder groups of the 6 metropolitan areas: farmers and business sphere (15%), academia and research (22%), civil society (17%) and public authorities (46%). The case studies presented in this document are included in the 'Urban and Peri-Urban Agriculture Best Practice Catalogue', a collection of 36 key initiatives from the 6 MADRE metropolitan areas. The analysis presented here also complements a more succinct policy recommendations report. All these documents can be accessed through MADRE's website.

The review of the topic and recommendations that follow aim to address all Mediterranean metropolises. As they emerge to a great extent from the discussions held in the context of the project's participatory meetings, their relevance and comprehensiveness might be somehow limited by the diversity, expertise and geographic scope of participants. Nevertheless, they pursue a regional dimension of the issue.

The report consists of a general description of territorial innovation in the context of urban and peri-urban agriculture, after which the main discussions from the project are presented. The last section presents succinct recommendations for farmers, civil society and policy-makers on how to further foster this topic.

2. What is territorial innovation in metropolitan agriculture?

Territorial innovation can be understood as a set of policies and initiatives that represent "a new response to a problem and/or need collectively identified in a territory, with a view to improving well-being and sustainable local development"¹. **Maintaining agriculture in rural and peri-urban areas and re-introducing it in urban areas** plays a major role in such responses, for it **can significantly contribute to the resilience of metropolises from an economic, social, environmental and cultural points of view.**

This report is grounded on the conviction that metropolitan agricultural and food systems in the Mediterranean should be based on the development of metropolitan green belts and strong rural-urban linkages rather than more technological models, such as vertical farming or hydroponic systems, which are considered less appropriate to the geographic, cultural and environmental characteristics of the region. Consequently, territorial innovations discussed here are those **actions and instruments that create and support emergent, small-scale, alternative food networks and encourage territorial cohesion,** especially through their potential to enable sustainable systems at a larger scale. Alternative food networks can be defined as localized initiatives mainly aimed at re-connecting production and consumption on the basis of shared goals of environmental and social sustainability.

Territorial innovations involve different types of stakeholders, such as public authorities and affiliates, but also civil society organisations, universities and research institutes, businesses, etc. In this wide perspective, it is important to underline the **interdependencies and possible complementarities between all the stakeholders in the agri-food chain** (producers, processors, distributors, traders and consumers).

Some examples of territorial innovations in the context of metropolitan agriculture are the protection of arable land around the city, the integration of food systems into local and regional planning, the adoption of strategies to guarantee farmers' access to agricultural land in the metropolis, the development of rooftop and community gardens to foster self-consumption, etc.

¹ Oural, A. (2015) *L'innovation au pouvoir! Pour une action publique reinventée au service des Territoires.* [http://www.modernisation.gouv.fr/sites/default/files/fichiers-attaches/innovation_territoriale-rapport-2015-04.pdf]

3. How to foster territorial innovation: lessons and challenges

Territorial innovations in urban and peri-urban areas are strongly related to the context in which they take place. Within the MADRE project, a participatory analysis with local stakeholders from the metropolitan areas of Thessaloniki, Tirana, Bologna, Marseille, Montpellier and Barcelona highlighted a number of elements that hamper and foster territorial innovation. The following table presents the **most relevant common factors from each local analysis**, which can be adopted as a first approach to the situation of this issue in the Mediterranean area.

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Strengths and opportunities

- Increasing **social awareness on food quality and the risks of territorial degradation** regarding food security, biodiversity, climate change, etc.
- Renewed interest in finding alternative uses, often food-related, to **abandoned or unexploited public spaces**.
- **Wide array of existing policies and financing tools** at different levels and sectors: strategic plans, local town planning, territorial food plans, protected agricultural areas, land banks, land regulations, etc.
- Consolidation of **short distribution channels as a central concept** to the definition of food systems, including the commitment of some elected officials to the idea.

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Weaknesses and risks

- Competition between different land uses leading to a **strong pressure on agricultural land** and numerous reconversions into other uses.
- **Difficulties to coordinate urban and peri-urban farmers** in the same territory and across different territorial scales due to the heterogeneity of their agricultural practices.
- **Poor availability of data** on the logistic flows of agricultural and food products at the territorial level.
- Absence of a **legal framework around metropolitan agriculture** and public structures that support the various types of farming activities.
- **Shortage of public administration staff** trained in food systems planning and management.

The combination of these factors opens up a number of issues that are highly relevant in any effort to strengthen territorial innovation practices in urban and peri-urban agriculture. In order to further explore these strengths and weaknesses, representatives from the MADRE metropolises developed a transnational analysis which led to more in-depth discussions around two main dimensions of territorial innovation. The first one, strategies and tools for territorial planning, is presented through 4 main issues: guaranteeing the access of farmers to agricultural land (3.1), ensuring the protection of agricultural land (3.2), promoting the multifunctionality of metropolitan agriculture (3.3) and developing appropriate legal frameworks and urban plans (3.4). The following issues belong to the second dimension discussed, governance systems, and they are: coordinating across different scales of planning (3.5), improving participation and governance models (3.6), decompartmentalising food policies (3.7) and raising awareness of the importance of food systems (3.7).

3.1 Guaranteeing the access of farmers to agricultural land

Land is an increasingly scarce resource in metropolitan areas and it should be one of the main issues to address from the perspective of territorial planning. Access to water and other productive resources, as well as to basic services such as sanitation and electricity, is often conditioned by **access to land rights**. Thus, any concept of sustainable development of metropolitan agriculture relies heavily on both the tenure and security of those rights.



In this sense, some tools and instruments are useful in order to facilitate access to land and guarantee its proper use. One of them is **land stewardship** (see example 1), which materializes in voluntary agreements between land owners, managers and stewardship entities to maintain and recover the natural environment and landscape. Land trusts are public or private non-profit organisations that take an active part in preserving land and its values through mechanisms making land stewardship easier. Local authorities can facilitate trust between parts, help in the negotiation process, provide funds or, if the land is public, offer it to responsible farming activities. This kind of agreements prove to be very useful, not only to open access to private or public land, but also to involve new stakeholders in the process and make metropolitan agriculture activities feasible in difficult land tenure contexts.

Example 1

Xarxa de Custòdia del Territori (XCT) (Barcelona, Spain)

XCT (Land Stewardship Network) is a non-profit organisation established in 2003 that aims to foster land stewardship agreements in the Catalonia region. XCT has successfully developed a number of agreements for using livestock grazing to prevent fire on private forests, using agriculture as firewall in urban-natural transition areas or working with social inclusion NGOs to perform conservation tasks on private land, among others.

More info on: <http://custodiaterritori.org/ca/english.html>

On the other hand, public authorities can play a significant role in **reassigning unexploited land** (see example 2, 3 and 4), especially that in the public domain, and involve civil society in the process of definition, installation and management of new activities. This strategy can be applied in the regeneration of abandoned urban spaces and their transformation into productive gardens, but it may also serve other purposes related to metropolitan food systems, such as the creation of distribution centres or logistic points for consumer groups and cooperatives. If unexploited land in metropolitan areas happens to be of private ownership, local authorities can even consider its purchase or act as mediators to ensure that urban spaces are put into profitable use.

Example 2

BUIITS Plan (Barcelona, Spain)

'BUIITS' (Urban Empty Spaces with Social and Territorial Implications) is a comprehensive programme carried out by the City Council of Barcelona which gives the right of usage of vacant urban plots to non-profit organisations and associations that have proposals and ideas to perform activities in these spaces. Since 2012, many community gardens and urban agriculture activities have been initiated through this programme and resulted in important social benefits regarding the creation of social bonds, the exercise of collaborative practices and an increasing community awareness of the importance of local food and agriculture.

More info in: [<http://ajuntament.barcelona.cat/ecologiaurbana/ca/pla-buits>]

Example 3

Le Serre dei Giardini Margherita (Bologna, Italy)

This former municipal greenhouse had been abandoned for 10 years when the Municipality of Bologna decided to open a call for tenders to rehabilitate it. Kilowatt, a cooperative company, was entrusted with this mission in 2013 and transformed the site into a place of experimentation and a new platform for many local activities, including urban agriculture, circular economy, training, entrepreneurship and innovation. The site is now multi-functional, with a community garden, a natural eating bistro, a solidarity purchasing group, a co-working space and a daycare centre.

More info on MADRE online catalogue (link in the last page)



Example 4 PER.KA (Thessaloniki, Greece)

PER.KA are the initials for “PERiastikoi KAlliergites”, which means suburban cultivators in Greek. It was created in 2011 by 30 families living in Thessaloniki who wanted to grow their own food in an appropriate space near the city of Thessaloniki. After 3 months of fermentation of ideas, they settled in the abandoned 70 ha military camp of Karatasou to protest against the privatisation, segmentation and selling out of the land. By now, over 130 plots are being cultivated in 7 PER.KA self-organised gardens.

More info on MADRE online catalogue (link in the last page)

3.2 Ensuring the protection of agricultural land

Territorial planning and land zoning tools have difficulties to protect agricultural land from its conversion into other uses due to urban sprawl and competing interests. To prevent this damaging process, strategies and policies need to be developed to **discourage speculation and conversion of agricultural land**. Some legal and regulatory provisions can improve the protection of such areas, for example protection perimeters (see example 5 and 6) or agricultural parks, which forbid further building or impose a list of criteria regarding sustainable practices. Concerning this protection perimeters, it is important to take into account existing boundaries between natural and urban areas and build transition (or buffer) zones between them, which must also have some kind of special protection.

Example 5 CPIE Bassin de Thau (Montpellier, France)

PAEN regulations (France)

PAEN (Perimeter of Protection and Enhancement of Natural and Agricultural Areas) is a tool created by the French Government to preserve agricultural uses in urban and peri-urban areas. These perimeters come together with an action plan to preserve the value of these areas, provide access to special funding and technical assessment to producers.

Example 6 Baix Llobregat Agrarian Park (Barcelona, Spain)

The Baix Llobregat Agrarian Park was created in 1998 as a joint initiative to counter the pressure on agricultural land resulting from the urban and industrial expansion of Barcelona and neighbouring towns in the River Llobregat Delta. It covers a total area of around 3,490 hectares, mostly of private tenure, spread over 14 municipalities of the Metropolitan Area of Barcelona. The Park has a broad governance structure that ensures the correct management of its regulations and the development of marketing campaigns for local products.

More info on MADRE online catalogue (link in the last page)

Land taxation is another way to deal with the protection of agricultural land. Appropriate taxes can help to make land sales less attractive and therefore discourage speculation and conversion of agricultural land into other uses. Similar instruments can be applied to abandoned private spaces, charging a special tax to agricultural lands that remain unexploited for too long.

3.3 Promoting the multifunctionality of metropolitan agriculture

The benefits and services that sustainable agriculture provides to society go beyond food supply to include environmental protection, landscape preservation, local employment or food security, among others. All these non-monetary benefits tend to be improperly valued, either in the form of economic compensation or social recognition. In this sense, there is a **need to give visibility to these positive externalities and capitalize them in the form of added value products and services**.



One possible approach from the perspective of territorial innovation is the creation of **labels** that provide information of this added value. Urban agriculture can be an attracting element for consumers and it is usually close to markets, so there is an important marketing potential that can be exploited with a proper communication and awareness strategy. Also, this could help promote local products and differentiate them from the conventional market.

From an economic perspective, **environmental compensation** can be a useful tool to foster metropolitan agriculture while providing stability and economic viability to productive projects. These compensation systems are based on payments per hectare provided to farms as a reward for their commitment to sustainable agricultural practices, which are proved to be beneficial for the environment and for society.

Lastly, there is a need to consider agriculture multifunctionality when **planning**. This means to take into account other economic activities that can be carried out in farms which are not directly linked with food production, such as agri-tourism or educational activities. Local authorities should develop a wide strategy to connect civil society and public services to these alternative activities.

3.4 Developing appropriate legal frameworks and urban plans

The legal framework regulating metropolitan agriculture and its lack of specificity is a major issue. In the agricultural sector, European laws only apply to rural areas, and there is no special distinction for urban and peri-urban activities. Therefore, there is a **need to design a specific legal framework for urban and peri-urban productive systems** to enable the creation of such projects, foster them and guarantee their sustainability. This adaptation should also differentiate between professional and non-professional agriculture.

On the other hand, it is necessary to **develop urban and food planning together**, so that food becomes an important dimension in territorial planning, which means taking logistics and consumption into consideration, among others. Paying special attention to the relations between food planning and other relevant policies (such as poverty reduction, food waste treatment or social inclusion plans) is also important. In this sense, local authorities must be pushed to create solid master plans that become powerful tools for food planning, and comprehensively consider land uses with their correspondent technical analysis (see example 7). It is also important to develop long term legislation that does not change continuously, so that businesses and civil society organisations can plan activities ahead and be sure that their activity will be sustainable over time.

Example 7 Territorial Food Project (Marseille, France)

The Territorial Food Project (PAT) of Bouches-du-Rhône was initiated by Aix-Marseille Provence Metropole and Pays d'Arles in the context of the national call for projects launched by the Ministry of Agriculture in 2016. Over a 36-month period, it will launch an ambitious agricultural and food strategy for the territory. The main innovation of the PAT is its collaborative governance and its participative development approach. It involves representatives of the entire agricultural and food chain in a continuous diagnostic process.

More info on MADRE online catalogue ([link in the last page](#))

Finally, in relation with the first topic, all considerations regarding access to land should be compiled in a land law. It is worth noting that law may provide access to land while cultural barriers and poverty traps may limit ability to own land, especially for minority groups and vulnerable populations. To reach equality, these groups must obtain adequate land rights that are both socially and legally recognized.



Food systems normally extend beyond cities and even metropolitan areas to reach whole regions if not larger areas. Considering the **broad scale of food chains and their environmental footprint** is key to formulate good policies that engage with all relevant stakeholders (both public and private). Regional plans are also useful for putting in place long-term actions, which are often needed for significant changes in land and real estate development.

An interesting way to deal with issues of scale is to start with local experiences and plans and then seek their coordination with broader schemes – a kind of **territorialisation of plans and regulations**, or a bottom-up geographic approach in territorial planning. If the opposite process is made (that is, starting with a general plan and subsequently develop local schemes), it is important to recognize the diversity of approaches and political options that can dominate in the local level. Otherwise, there is a strong risk to create masterplans that crash with local preferences and/or overlook local specificities.

The design of regional plans has to find a compromise between, on the one hand, making sure that local schemes fit into a coherent global strategy and, on the other hand, keeping the commitment of local stakeholders and their community, which is needed in order to make the plans viable and relevant.

Active engagement from a wide range of stakeholders and community at large is a key factor in the good governance of food systems. In other words, it is necessary to bring people in, to let them get into the policy making. However, this approach encounters a series of difficulties: finding appropriate ways to achieve diverse and active participation of non-public stakeholders (especially private actors), who may often find it useless and/or have problems to participate in the consultation processes; ensuring that the participation of private actors and civil society is interesting and meaningful; sharing the power of local councils and other public administrations with economic actors and civil society in a way that is relevant enough while keeping the overall control of the process; coordinating the participation in different structures and across different territorial levels; and taking into account the diversity of stakeholders when planning participatory processes or structures (with special attention to vulnerable populations, for example).

A general approach that can be useful to overcome some of these difficulties and to **ensure efficient governance in the process of policy making and modelling** is the so-called **'meet in the middle' approach**, a mix between the top-down system of policy making (local authorities can set the overall agenda and give political orientations to the decision-making process) and the bottom-up logic (the community puts forward the issues that matter to them and have a significant impact in the results of the process). Good implementations of this approach let policy-makers see tangible and viable results while making room for civic engagement and the emergence of ideas and issues that do not necessarily derive from the framework strategy or masterplan.

Concrete examples of how to integrate participation into policy making, from lower to higher degree of co-ownership or co-production, are: open forums, committees and boards; advisory boards, external bodies², observatories³ and working tables (consultative organs); participatory budgets; and consortiums, mixed syndicates and food councils (decision-making organs)⁴ (see examples 7 and 8).

2 External bodies can be useful for purposing local and metropolitan policies. They should first evaluate, and then assess the possible solutions according to sustainability indicators. They are formed by different stakeholders, some of whom (but not all) may be working for the government, and they may have their own agendas, e.g. with regards to science and research.

3 The creation of Urban Land Observatories (which already exist in the rural areas) bringing together land operators, professional agriculture organisations and local authorities with the objective of ensuring the visibility of agriculture and coordinating the access to land.

4 The report *Caring together for nature* (2013) has a collection of different models of governance for the social involvement in land stewardship programs across Europe. Available online at: [http://landstewardship.eu/images/pdf/European_manual_LS.pdf]



Example 8 AMB Working Tables (Barcelona, Spain)

Barcelona's Metropolitan Authority (AMB) has used working tables for some time (especially in the case of mobility). They put together groups of decision-makers, scientists and researchers, and civil society. They meet regularly to speak about a series of problems (problem-oriented meetings) and this way strong opposition between certain actors about a specific issue is often softened (because they talk about other issues as well, and because there are other more-neutral people there). The outcomes of these meetings can be made public but they are not enforceable – they support the decision-makers.

More info in: [<http://www.amb.cat/en/home>]

Still another way to deal with participation is to **promote forms of 'food democracy'**: ways to take into account the preferences and ideas of citizens that are different from participatory processes, meetings and consultations. These alternative forms of participation are less linked to talking and discussing and closer to concrete, practical options, such as the facilitation of community-based initiatives (consumer cooperatives, associations for supporting agriculture, cooperative supermarkets, etc.) or systems that ensure transparency and enhance individual responsibility.

3.7 Decomartmentalising food policies

Food systems are complex and far-reaching. The governance of metropolitan agriculture, similarly, has to deal with a wide range of issues. Consequently, **policies and plans for urban and peri-urban agriculture need to bring together stakeholders, concerns and public officials of many different topics** (agriculture, education, energy, health, social inclusion, etc.). This approach is useful not only to address food systems appropriately, but also because it can create fruitful links with organisations from other departments or areas. An example of this is the link between metropolitan agriculture and biodiversity. Natural conservation organisations will be interested in urban and peri-urban agriculture (and might bring efforts and funding into this issue) if they see that agriculture has a direct impact on biodiversity (and in the case of peasant agriculture, a positive one). Recognising this contribution can also add value to local products without having to spend additional resources on it.

Thinking in terms of food systems and producing 'food policies' is a conceptual progress in itself. However, it is all too easy to make food policies that are in fact agri-food policies, health-food policies, and so on. The true challenge is to make plans and strategies with a **holistic view that bring together more topic-specific policies into a common context**. This context has to be the whole metropolis, which is interrelated and evolving. Planning, too, has to be evolving, thought more as a process than as a set of directives. Even though food policies need to be inclusive, agriculture must be addressed as such in these documents, and not as a by-factor of land management or economic development. Different approaches to urban and peri-urban agriculture can lead to different and enriching ideas, but they need then to be merged into a coherent strategy or action.

3.8 Raising awareness of the importance of food systems

Another basic enabler of good governance and participation is a high degree of **awareness of the importance of metropolitan agriculture** by civil society, private actors and policy-makers alike. This implies raising the issue, providing relevant and comprehensive information, and generating a feeling of co-responsibility.

Divulging rather difficult or complicated ideas regarding food and food policies can benefit from using a diversity of methods. The more traditional ones, such as informative sessions or media campaigns, can be complemented with more innovative ideas (workshops, short talks, experimentation places...). Avoiding institutional channels (for example, establishing collaborations in which local governments provide the contents to be shared and private organisations deliver the message – see example 9) and using different spaces for divulgation events (such as farms or gardens) can be fruitful as well. Art is another important tool for raising awareness of the importance of food and agricultural land. Cinema debates, performances and cultural events can be much more appealing than articles and papers, as they deliver emotional-driven, culturally-sound messages.



Finally, it is important to address these aspects of communication and awareness-raising right from the start of policy-making processes, even if they are not fully defined. This facilitates that citizens appropriate such dynamics and opens the way for unexpected help and inputs.

Example 9 **Future Food Institute** (Bologna, Italy)

The Future Food Institute is an Italian-based non-profit organisation with global horizons that aims to build a more equitable world through enlightening a world-class breed of innovators, boosting entrepreneurial potential and improving agri-food expertise and tradition. Some of their successful programmes result from collaborations made with the local government and the metropolitan authority, which rely on the organisation for communication campaigns and awareness raising.

More info in: <http://futurefood.network>

4. Recommendations

The territorial innovations discussed in this report concern only a part of the multiple dimensions and stakeholders that metropolitan agriculture brings together. However, the issues presented point towards a number of recommendations that can help to preserve and strengthen urban and peri-urban agriculture.

Civil society, farmers and other private stakeholders:

- Explore different tools in order to gain access to arable land for new farming projects: public tenders, stewardship agreements, agrarian test spaces, cooperative tenures, etc.
- Engage in innovative forms of ‘food democracy’ or active participation that have a direct impact in the design of metropolitan food systems (consumer cooperatives, associations for supporting agriculture, cooperative supermarkets, etc.).

Public authorities:

- Develop policy strategies to discourage speculation and conversion of agricultural land into other uses: territorial planning, land taxation, implementation of agricultural parks and land banks, regulations on protection perimeters, etc.
- Reconvert public unused or abandoned urban land into spaces for developing agricultural projects, involving civil society into their process of definition, installation and management.
- Recognize the multifunctionality of metropolitan agriculture in the development of territorial strategies in order to compensate, both socially and economically, all non-monetary benefits that agriculture provides to society.
- Consider the diversity of economic activities that can be carried out in farms which are not directly linked with food production, such as agri-tourism or educational activities.
- Develop a legal framework that addresses metropolitan agriculture and its specificities (such as social innovation projects, but also urban farmers, certifications and sanitary regulations, etc.) in an inclusive and participatory way.



- Develop and stick to long term legislation and plans that provide stability for metropolitan agricultural initiatives.
- Integrate participation into metropolitan and regional planning and policy making through the diversity of existing tools (advisory boards, open forums, participatory budgets, consortiums, etc.).
- Seek coordination of local experiences and plans with broader regional and national strategies.
- Seek the integration of territorial food plans with strategies and actions from other policy areas, keeping the holistic dimension of food systems in mind.
- Discuss policies and plans for metropolitan agriculture with public officials from a wide range of areas (agriculture, education, energy, health, social inclusion, etc.) to improve the diagnosis and proposals and create fruitful links with other departments or institutions.
- Develop strong and innovative communication strategies to highlight the importance of metropolitan agriculture in the context of local food systems; engage with non-institutional resources and channels to reach wider audiences (partnerships with social organisations, public events, participation in community gardens, etc.).



See the catalogue on-line at the following links:

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