SIMON ROJO, Marian

COST Action Urban Agriculture Europe:

French programs to facilitate periruban agriculture Short Term Scientific Mission

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French programs to facilitate periruban agriculture

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Purpose of the STSM

As it is stated in the MOU of the COST Action Td1106, urban agriculture (which encompass urban as well as peri-urban agriculture) may have a positive impact on socio economic local conditions, as well as on the environment. Different projects that are being developed in Spain have been successful in providing technical training and creating networks between consumers and new farmers. They offer good examples of the potential benefits of integrating urban agriculture in public programs for social and economic development. In a context of deep economic crisis, with high unemployment rates, increasing undernourishment levels and a general pessimistic atmosphere, peri-urban agriculture could be part of a solid strategy of local development.

Nevertheless limited access to agrarian land for new farmers is a serious obstacle for spreading and up-scaling these initiatives. In a previous research I learnt about different SCOT plans and different instruments and measures to facilitate access to land. In order to examine in depth the technical and operative aspects of those instruments as well as to identify in which way they could be applied in different contexts I made a STSM at the INRA (French National Institute for Agricultural Research) in Avignon.

INRA-Unite Ecodeveoppement is a reference research centre about the transition towards a more sustainable agriculture, including public politics and institutional regulations. The STSM was aimed to:

a) Learn about public politics and institutional regulations that enable the continuity of peri-urban agriculture enhance the transition of agriculture towards ecological production

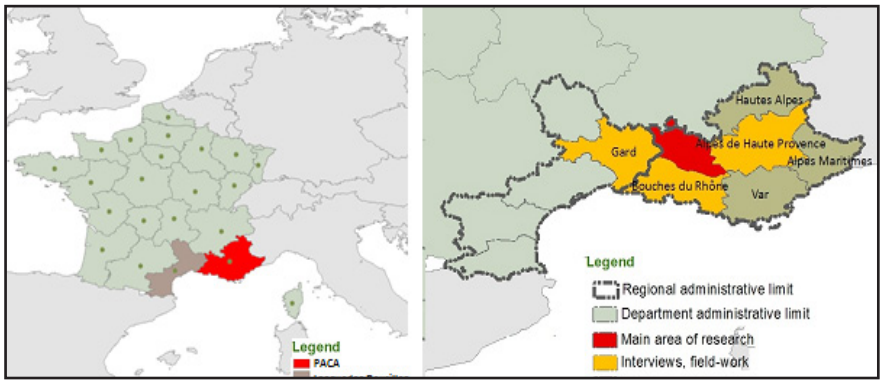
b) Learn about the available instruments to protect peri-urban agrarian land in urban and territorial planning (i.e. Périmètres de Protection et de Mise en Valeur des Espaces Agricoles et Naturels Piurbains).

c) Learn about the UA types in the French context (PACA) and the influence of public policies on each one.

Methodology

The area of study was the French Region Provence-Alpes-Côte d'Azur (PACA), located in the Mediterranean cost. Interviews and field-work were conducted in specific areas of three departments: Vaucluse (Avignon), Bouches-du-Rhône (Velaux) and Alpes-de-Haute-Provence (Manosque), as well as in the Department of Gard (Nîmes),which is part of the Region Languedoc-Rousillon.

Figure 1. Area of study. Region PACA, Departments of Vaucluse, Bouches du Rhone, Alpes-de-Haute-Provence and Region Languedoc-Rousillon, Department of Gard



The work revolved around semi-structured interviews. Complementary tasks were field work, attendance to a seminar on LUC modelling with Urban Simul and desk-work, which was aimed to complete, when possible, the missing data and to design a sheet to systematize the information about each UA type.

Interviews were conducted in French and registered (except the first one, I.1). The interviewees covered a wide range of actors and disciplines, they were selected following the advice of C. Napoléone who also facilitated details for contact. They included different researches at INRA, a representative body of professional farmers (Chamber of Agriculture - Nîmes), the founder of a private firm of landscape architecture: (Agence Paysage), a municipality (Municipality of Velaux), a private-public institution for territorial management (SAFER) and a member of a relevant association of civic society (Jardins de Cocagne). The semi-structured interview was designed with a few common key questions about the different types of peri-urban agriculture and other questions grouped thematically that depended on the interviewee expertise.

INRA:
- 3.1.14 I.1_Esther Sanz: architect
- 6.1.14 I.2_Claude Napoleone, economist
- 13.1.14 I.3_ Marc Tchamitchian, agronomist, directeur de l'Unité
- 16.1.14 I.4_Naoufel Mzoughi, economist
- 16.1.14 I.5_Guillaume Ollivier, sociolog
- 16.1.14 I.6_Laurance Delattre, economist

Agence Paysages
- 7.1.14 I.7_Sebastien Giorgis, founder Agence Paysages

Chamber of Agriculture of Nîmes:
- 7.1.14 I.8_Xavier Picot, Chef de service

SAFER:
- 14.1.14 I.9_Max Lefevre, Directeur Opérationnel et Développement

Municipality of Velaux
- 15.1.14 I.10_Lynda Bouakaz, Chargée de mission PAEN

Civil society: Jardins de Cocagne
- 17.1.14 I.11_Jacques Pouly, Directeur de Semailles-Jardin de Cocagne d'Avignon

Main results

The concept of Urban Agriculture

Most of the interviewees indicated that they were not specialized in UA, their field of knowledge is broader: agriculture, sociology economy, landscape, etc. they tried to size up their expertise to the peri-urban context and declared that the urban (gardening) level was not comparable with the peri-urban (farming) level. The STSM focussed in the latter.

Many of the interviewees raised criticism on the "peri-urban" concept. In France, the National Institute of Statistics and Economic Studies (INSEE) uses the term peri-urban to reefer to those municipalities under the influence of urban areas in terms of commuting between home and work. In peri-urban areas over 40% of the workforce works in a major urban centre (pôle urbain with more than 5.000 jobs) or in other municipalities within this urban centre's attraction area. At the same time, the INSEE delimits urban areas in terms of continuity of built-up areas: 200 meters between buildings is the cut-off distance of areas to be considered urban. As a result, and given the extension of urban sprawl (étalement), specially in the Mediterranean regions, some departments are considered almost entirely peri-urban. This delimitation does not always match the social perception, i.e taking into account statistical parameters, the municipality of Velaux is part of the peri-urban area of Marseille, nevertheless according to the technician interviewed, their habitants don't have a sense of belonging to it (I.10).

The problem with such a definition is that if it ends up covering almost all the territory, its potential to interpret dynamics and to orientate policies vanishes. According to Agreste 2010, by 2000, 40% of French farms (agricultural exploitations) were located in urban or peri-urban areas, by 2010 the proportion has raised to 75% (INSEE, Agreste, 2010, quoted from Chamber of Agriculture webpage).

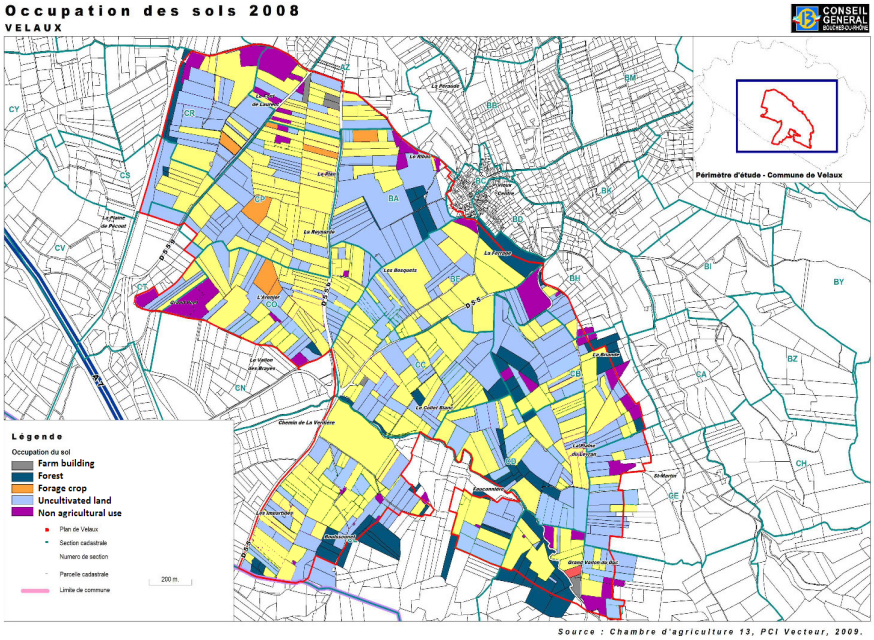
General context of Peri-urban agriculture in French Mediterranean regions

Peri-urban agriculture faces strong urban pressure in French Mediterranean regions. One of the main problems is land speculation: in terms of land values, agriculture can not compete with urban uses. Average agricultural land price is around 1 euro per m2, (0.5 to 3) whereas the price of land classified for future urban development may rise to 30 euros or more (I.8). In France, Master plans (Plan Local d'Urbanism which replaces previous Plan d'Occupation des Sols) define land use zoning and set the areas for future urban development. Nevertheless owners anticipations tend to supplant the public policy (Geniaux & Napoleone 2005). In practice, owners of land in the peri-urban fringe tend to retain the land, not selling or renting it, waiting to benefit from an increase in its value, associated to future urban zoning (I.2). For the last 20-30 years this has proven to be a practical way for farmers to obtain an extra income (which is seen as a "logical" complement to retirement) (1.1, 1.6, 1.8).

As a result, a considerable number of plots in the urban fringe are not exploited any longer.The map of land uses in the municipality of Velaux (Figure 3) exemplifies the impact of this mechanism of anticipation: 40% of the total area is not cultivated (coloured azure).

Confronted with these dynamics, in recent times a new attitude towards peri-urban agriculture is emerging (I.2, I.3, I.4, I.5, I.8, I.9). On the one hand a portion of farmers became aware that the process has adverse effects on active farmers or on new potential farmers. On the other hand majors have realized that the cost of sprawl for municipalities is very high, it is them that have to provide utilities and facilities to the new areas, and maintain them. Food scandals gave a big boost to the interest of people towards healthy food. People is also concerned about the negative impact of pesticides. Even if it is not necessary the case, in the collective imagination local food, which is produced close to the city for all to see, is associated to healthy food. All these trends converge in a new legitimacy to preserve agricultural land in the hinterland of cities (I.2). From different fronts (technicians, academic, civil society...) there is a request for new devices that contribute to preserve agricultural land and to enhance organic production linked to local markets.

Figure 2. Land uses in the municipality of Velaux 2008. Abandonment of agriculture

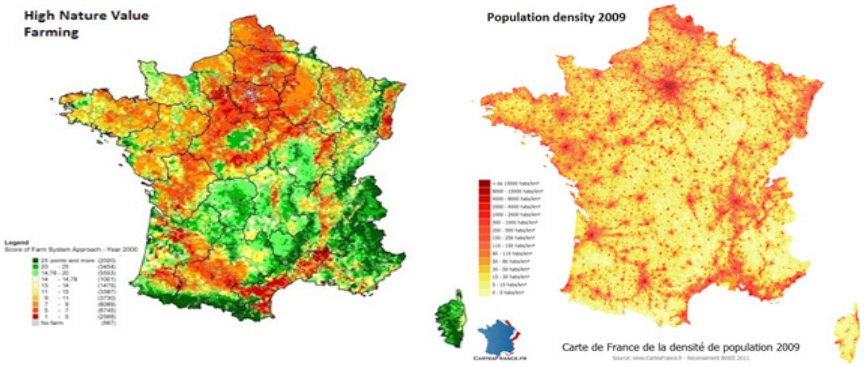


Source Source: Agreste 2010

Peri-urban agriculture, biodiversity and environmental performance

When population density and high natural heritage are compared it may be observed that there is an inverse relationship between them. As can be seen in figure 3, High Nature Value Farming are lower in areas with high human density. The concept of High Nature Value farming developed from a growing recognition that the conservation of biodiversity in Europe depends on the continuation of low-intensity farming systems (Pointereau et al. 2010).

Figure 3. Inverse Correlation between agricultural system with natural value and human population density in France



Source: solagro.org

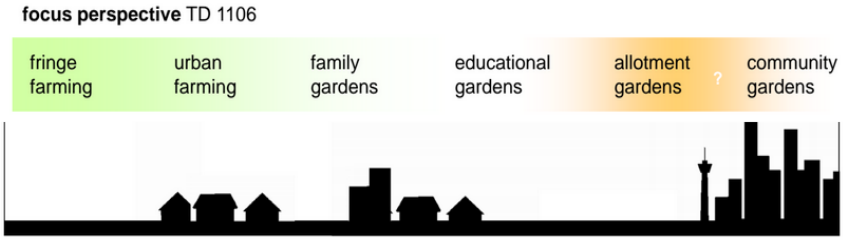
Source: cartesfrance.fr

The French National strategy for biodiversity foresees fostering farmers engagement to preserve biodiversity. There is considerable room for improvement in periurban agriculture and research shows that farmers willingness to adopt ecologically-friendly practices is high. The motivations are not mainly economic, but stem from a sincere wish of showing their commitment to the society (I.4). These results have implications for public policies, in the sense that "awards can constitute a more effective policy tool than monetary compensations",(Mzoughi 2011) and economic measures should be isolated from others oriented to rise social recognition of the value of farmers (I.4). Social networks of farmers and consumers, as explained in the following section can be understood this perspective.

UA types in Avignon and Region PACA

The analysis of UA types is based on the different types adopted in the COST Action Urban Agriculture Europe (WG1)

Figure 5. Urban Agriculture types COST Action UAE WG1



Source: Lohrberg presentation

Fringe and urban farming, as well as family, educational and allotment gardens will be briefly explained. In the region it was not possible to identify community gardens. One allotment garden was visited (Jardins de Fauvet). Communitarian space and social activities seemed to be important. Therefore some typical characteristics of community gardens can be found in allotment gardens, but not all. Plots are individually divided The same happens with all works on the plot and the distribution of harvest, which follow not collective but individual schemes.

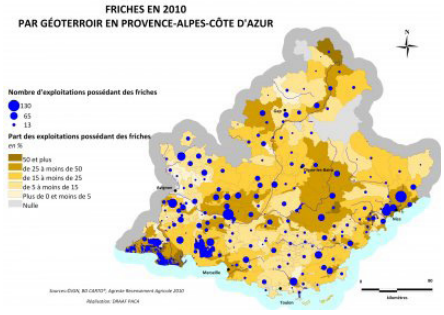
Family gardens, as understood in the COST Action differs from the use of the term in France, which correlates with Allotment gardens. Family gardens which take place not in backyards but in plots outside the city or in its fringe are usually refereed to as farming for leisure.

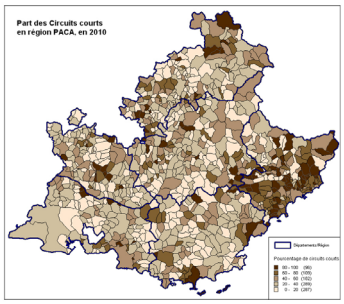
Fringe farms

Presence in urban/peri-urban areas and trend	• • • • • Conventional agricultural systems are still important, but their extension is diminishing, whereas urban farming and family gardens expand. They are subject to theft and specific difficulties because of their peri-urban location
Functions	Food production (also flowers). The region is noted for viticulture and fruit production (Vacluse). Landscape and cultural heritage (traditional vineyards).
Actors	Farmers, sometimes integrated in cooperatives
Any public policy addressing this UA?	There is no specific public policy for peri-urban areas, policies to support new farmers, or ecological production not oriented to local markets may be applied to fringe farming. They may benefit from different labelling (Protected designation of origin, ecological production...) without any connexion with local markets. Also within PAEN limits both for fringe and urban farming can be found. The delimitation criteria is not based on production.

Examples	Spread all around. I.e. at the Barthelasse Island, north to Avignon, conventional agriculture (mainly orchards) is a majority.
Is there any register, database?	Public data available at municipal level. Research Institutions like INRA have access to detailed data, SAFER-PACA has an observatory with land uses and prices available to municipalites

Example of maps from Agreste 2010: Uncultivated land and short-chain circuits





Source: DRAAF-PACA

Urban farms

Presence in urban/peri-urban areas and trend	• • • • • An important -and increasing- proportion of peri-urban agricultural land is dedicated to urban farming. In the Department of Gard they account for around 50% of periu-urban farms (I.8), in PACA for around 60% (I.9) with a major presence of equestrian activities and food short supply chain. Generally speaking, when experts reefer to urban farming, the term is understood as an umbrella that embraces everything which differs from conventional farming..
Functions	Mainly food production for local markets, leisure and recreation. But also in some cases social functions, educational...
Actors	Wide range of actors, from individual farmers, to cooperatives, or municipalities, different associations, etc
Any public policy addressing this UA?	In general terms, urban farming has to accommodate to public policies addressing better environmental performance of agriculture, or public policies addressing social goals. In some municipalities or regions there are specific policies to promote what we have called urban farming, i.e agreements with local farmers for public procurement, facilitating municipal land to produce local organic food, and so on. (See other examples under the section 'Public politics and institutional regulations')
Examples	Semailles in Avignon. Located in the green belt of the city and managed by an association which is part of the Jardins de Cocagne's network. Their mission is to help persons at risk of poverty and social exclusion. Agriculture is the overarching element to improve their social and professional skills (I.11). Each participant stays for two years. The production is sold through a box scheme and in a lower proportion, through direct sale at the farm.
Is there any register, database?	The new Agrarian Census incorporates information about signals of quality, in which short-supply chain is included.

Avignon Semailles_Jardin de Cocagne

Family gardens

Presence in urban/peri-urban areas and trend	• • ◦ ◦ ◦ Emerging phenomenon in peri-urban areas. In the region there is a considerable amount of family gardens, up to 20% (I.9). They are located in quite small plots close to the city, and quite often they produce wine or oil in very small quantities.
Functions	Health (physical activity) and probably also mental health associated to the value of a hobby that reconnects people to the territory. Social value in terms of sense of belonging.
Actors	Families, individual farming
Any public policy addressing this UA?	No
Examples	Not specific examples, but recognisable in field-work. The dynamic has been highlighted by different interviewees (I.8, I.9)
Is there any register, database?	-

Educational gardens

Presence in urban/peri-urban areas and trend	• • • • • Minimal, anecdotal. Educational function sometimes integrated in farms whose main objective is not pedagogical
Functions	Educational, Social,
Actors	Schools and associations
Any public policy addressing this UA?	Not clear. Strategy of Montpellier declares its intention of connecting agriculture to environmental education
Examples	Jardins de Cocagne in Avignon have an educational garden which offers activities to schools and individuals.
Is there any register, database?	-

Educational garden within Semailles-Jardin de Cocagne-Avignon

Allotment gardens

Presence in urban/peri-urban areas and trend	• • • • • Increasing interest, but not as important as in other parts of France. There are different situations: Jardins potagers, jardins familieux, jardins ouvriers (a name that is not used any longer) At national level there were 700.000 gardens by 1945, fell to 100.00 by 1980 and since then have seen a renaissance with 150.000 by 1993 and increasing number until nowadays
Functions	They began as a way to improve food self-supply for low income families. They were also a substitute of gardens for those who could not afford living in detached houses. Nowadays the main function is leisure, a way to connect to nature, the food productive function is driven by an increasing interest in organic food. Is not unusual that they have a common area which enhances social activities
Actors	Most allotment gardens are managed by associations. Many of them are affiliated to a National Network Ligue Française du Coin de Terre et du Foyer - Fédération Nationale des Jardins Familiaux, which is itself par of an International Network
Any public policy addressing this UA?	Jardins ouvriers (allotment gardens) were born in the late years of S XIX. Like in many other countries they played a valuable role relieving the famine. They were regulated by law. In the 60s their importance decreased. They were renamed as jardins familiaux and regulated by the law 26.07.1952
Examples	Pernes-les-Fontaines, Les Jardins Favet, "Le Jardin se crée"
Is there any register, database?	http://www.reseaujsm.org/spip.php?rubrique49 Fédération Nationale des Jardins Familiaux et Collectifs

National Federation of allotment and community gardens

Source: Fédération Nationale des Jardins Familiaux et Collectifs

Public policies and institutional regulations

There is no specific policy for peri-urban agriculture. Observatory of agricultural land consumption. Different technical institutions (Chamber of Agriculture, SAFER) work to avoid the abandonment of agricultural land.

In France there is a well-stablished institution which works since 50 years to avoid speculation with agricultural or natural land and to ensure that this land is not diverted to other uses. SAFER regulates the land market to avoid inflation. Whenever a transaction is planned, the SAFER has to be informed. When the potential buyer is not a farmer the institution can intervene. Buying in friendly terms which account for around 80% of the transactions in the region (I.7), but it can also exercises its pre-emption right if there is no agreement.

The Chamber of Agriculture and also local technicians at the municipalities try to persuade owners to rent their land (fermage). There are different institutional devices. With the portage foncière (that sometimes is translated as land piggybacking), a dealer, who may be a municipality or a cooperative or a private as well, buys the land and rents it to the farmer. Sometimes with specific conditions in the form of a Scope statement (cahier des charges) I.g to produce ecologically or to ensure landscape preservation. After a certain amount of years the land is transferred to the farmer for a symbolic price.

At municipal level there is a wide margin of manoeuvre, municipal plans to preserve agricultural land are easier in those areas where the activity is still vibrant, or new habitants want to protect the landscape (1.3). For the rest, effectiveness of preservation plans deepends on a strong commitment from authorities (I.1, I.2) usually linked to a strong personality of the major (I.6).

If not the majority, there are indeed municipalities engaged in policies and plans to protect agricultural land and to foster agriculture. There are municipalities that facilitate acces to land for new farmers. Some buy the land, but it is not indispensable, they can also act as mediators (I.9, I.8). Another way to support new farmers is through nursery entrerprises, in which they can learn ecological production techniques and afterwards they set their own enterprise. With such a gradual scheme, separating learning process from the investment and business launch, the risk is reduced (I.3).

There are also cases in which municipalities set specific criteria, like in Correns, where all the agricultural production has to be ecological.

Municipal engagement can take place in other ways. In Mouans-Sartoux (Department Alpes Maritimes) food production is integrated as a public service.

Planning instruments

The French spatial planning system has two main instruments to protect agricultural land, ZAP and PAEN. In both of them the competent authority for protection is at a higher level (prefecture for ZAP and Conseil d'Etat national government for PAEN) and does not rely in the municipal level.

ZAP, Agricultural protected area,

ZAP (Zone agricole protégée) was established by the Loi d'orientation agricole n° 1999-574, in force since 1999. An area is declared ZAP by a prefectoral order, after municipal request. Their aim is to preserve agricultural land for reasons of general interest, whether because of the quality of their production or because its geographical conditions.

PAEN, Perimeters for the protection and value of agricultural and natual areas

The PAEN (Périmètre de Protection et de Mise en Valeur des Espaces Agricoles) were established by the law DTR n° 2005-157, in force since 2006. The department is entitled to declare an area as PAEN, with the agreement of the municipalities involved and after the advise of the Chamber of Agriculture. La delimitation must comply with territorial

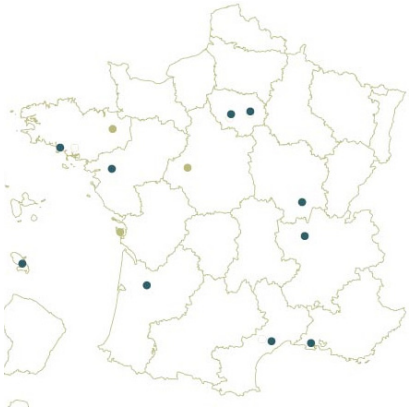
planning (supramunicipal level) whereas municipal urban plan can not modify it.

After the PAEN is approved an action plan is developed. In the case of Velaux, even after 2,5 years, the innertia of land owners to retain the land has not been broken. The PAEN has the residential area to the nord and the industrial area to the south. For a long time with each new master plan incorporates agricultural areas were targeted as developabled and were urbanized.

Even now that the PAEN is in force, land owners keep on thinking that their land will be assigned for urban development in the next future. They know that the PAEN is approved, but they do not believe this time the delimitation is to stay (I.10).

It can be a useful instrument, although muncipalities need time ti see the benefits of adopting it. The FNSafer and Terres en Villes (which was itself created with the aim of favouring public policies for peri-urban agriculture and forestry) have launched a site Experimentation-paen.fr and work to favour the engagement of territories with this type of protection

Figure 3. Territories engaged in a process to implement PAEN



PAEN (in force or in process) per Department:
Bouches du Rhône: 1 Velaux, 300 ha (2001)
Gironde: 2, 1.000 ha
Hérault: 7, 11.700 ha
Isère: 2 3.000 ha
Lore 1, Vallée du Gier Pilatoise 3.100 ha (2011)
Lore-Atlantique: 1-3, 19.000 ha
Mosell: 1, 97 ha
Pas-de-Calais; 1
Pyrénées-Orientales: 2, Canohés 360 ha (2010) and Laroque-des-Albères 15 ha (2011)
Rhône 1, 14.000 ha
Seine-et.Marne 1, 37 ha

Source:http://www.experimentation-paen.fr (Terres en Villes and FNSafer)

Discussion and new perspectives

It is impressive how urban farming is gaining force in the French Mediterranean Region. It emerges from a previous process with serious destructuring impact on the agrarian sector (I.1). Here some ideas are briefly explained. They have been pointed out by the interviewees as compelling evidence that something is changing and that new paths of dialogue open up.

Understanding urban agriculture's specificity

The proximity to urban areas implies specific conditions and potentials about what to do and for whom:

-Two different interviewees agree that agricultural land within urban areas should be public propriety and managed as a public facility (I.7, I.8). A possibility is to apply precarious contracts.

- The potential for agro-forestry in peri urban areas is very high and can be integrated in public policies against flood, mitigation of climate change, etc (I.8)

- Peri-urban location imposes some constrains to farmers to ease coexistance with other uses (in terms of noise, umpleasant smell and other annoyance). There is a request that agriculture close to the city has to be considered handicap and agroenvironmental measures may be applied (I.8). At the same time, there is a consensus on the principle that the closer the farm is to the population, the better environmental practices should be applied, avoiding polluting phytosanitaries and shifting into agro-ecology (I.3).

Historically Chambers of Agriculture and the most important farmers' unions have been a cornerstone in the modernization/industrialization of agriculture whereas alternative unions and associations of agricultures engaged in organic farming were marginal. This has changed in recent years and the call to mainstream agro-ecology has gained support (I.5).

The experts agree that peri-urban agriculture has to be considered together with rural agriculture. The message that short chains and multifunctionality will save the agriculture is wrong. We have to be cautious when extolling the potential virtues of peri-urban agriculture. Peri-urban agriculture can develop its niche, but necessarily its role has to be complementary to rural agriculture (I.2, I.8).

In any case, there are evidences that the agricultural system which better resist in peri-urban areas are those connected to the city (fruits and legumes for direct selling or short-supply chain) or those ecological and very intensive to increase their value (I.3).

Urban farming to withstand urban pressure. New alliances farmers-citizens

The increasing importance of a new type of relationship between producers and consumers, together with ecological agricultural has led to integrate it as a separate concept in the National Agricultural Census: they are refereed to as "signes of quality". There is large proportion of farms engaged in short circuits, direct selling, box schemes, or through local markets. People demand traceability and food safety.

In peri-urban areas farmers may benefit specially of combining ecological production and short food supply chain "Short food supply chain is the only strategy in which peri-urban agriculture is different from the rest (I.8). In these situations urban farmer becames a new profession. It is a fact that there is a larger proportion of farmers engaged in ecological production that also sell their production through short-supply chains (Mahe & Lerbourg). This type of new farmers are more frequent in peri-urban areas.

Since quite a long time ago civic associations channel the increasing interest of society in food and environment into useful projects and proposals. That is the case of AMAPs (Association pour le maintien d'une agriculture paysanne) a network of Community supported Agriculture.

Another good example is Terre de Liens, a citizenship movement that campaigns for the preservation of agricultural land and for facilitating access to land to farmers.

New devices

The Chambre of Agriculture of Nîmes has also participated in the project of TGV station, with the idea that agriculture can enrich the design and the outcomes of urban planning (1.3, 1.8).

There is an ongoing deliberation about agricultural compension or physical compension, that could adopt similar approaches as ecological compension schemes. (Grenoble). In Nîmes, an investor was interested in developing a photovoltaic farm of 150 ha. The Chamber of Agriculture took part in the negotiations. They argue that some conditions had to be respected and advocate creating a compension fund so that the Chamber could buy new land to secure agriculture in the long term (I.8). This land will not be transformed and it will be rent to farmers.

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http://www.solagro.org/site/419.html

Bio: http://www.agencebio.org/la-bio-dans-les-regions

COST- the acronym for European COoperation in the field of Scientific and Technical Research- is the oldest and widest European intergovernmental network for cooperation in research. Established by the Ministerial Conference in November 1971, COST is presently used by the scientific communities of 35 European countries to cooperate in common research projects supported by national funds.

The funds provided by COST - less than 1% of the total value of the projects - support the COST cooperation networks (COST Actions) through which, with EUR 30 million per year, more than 30.000 European scientists are involved in research having a total value which exceeds EUR 2 billion per year. This is the financial worth of the European added value which COST achieves.

A "bottom up approach" (the initiative of launching a COST Action comes from the European scientists themselves), "à la carte participation" (only countries interested in the Action participate), "equality of access" (participation is open also to the scientific communities of countries not belonging to the European Union) and "flexible structure" (easy implementation and light management of the research initiatives) are the main characteristics of COST.

As precursor of advanced multidisciplinary research COST has a very important role for the realisation of the European Research Area (ERA) anticipating and complementing the activities of the Framework Programmes, constituting a "bridge" towards the scientific communities of emerging countries, increasing the mobility of researchers across Europe and fostering the establishment of "Networks of Excellence" in many key scientific domains such as: Biomedicine and Molecular Biosciences; Food and Agriculture; Forests, their Products and Services; Materials, Physical and Nanosciences; Chemistry and Molecular Sciences and Technologies; Earth System Science and Environmental Management; Information and Communication Technologies; Transport and Urban Development; Individuals, Societies, Cultures and Health. It covers basic and more applied research and also addresses issues of pre-normative nature or of societal importance.