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Luis Maldonado (ed.)

COST Action Urban Agriculture Europe: Documentation of 2nd Working Group Meeting

Castelldefels (Barcelona), 12-15/3/2013



COST Action Urban Agriculture Europe Documentation of 2nd Working Group Meeting

Castelldefels (Barcelona), 12-15/3/2013

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Index

Introduction

- 6 COST Action Urban Agriculture Europe: 2nd WGs Meeting
- 8 Program of the Barcelona Meeting

Barcelona Stakeholders on UA Typologies

- 11 Agriculture in the Barcelona Area: a key issue, multiple landscapes and various solutions
Dr. Valerià Paül, Santiago de Compostela University
- 21 Peri-urban Agriculture in Baix Llobregat's District
Mr. Martí Sucarrats, Unió de Pagesos (Farmers Trade Union)
- 25 Agroterritori: the Foundation for the peri-urban Agricultural Areas
Dr. Anna Roca, Girona University, Agroterritori Foundation
Mrs. Cristina Tous, Agroterritori Foundation
- 29 Viticulture and Urban Wine Culture
Mr. Oriol Guevara, Abicon Wines S.L.
- 35 The Baix Llobregat Agricultural Park: A Model to Re-connect the City and its Countryside?
Mrs. Sònia Callau Berenguer, Baix Llobregat Agrarian Park (Barcelona's Provincial Council)
- 47 The Urban Planning and the Management of Rural Undeveloped Land
Prof. Dr. Carles Llop, UPC (Universitat Politècnica de Catalunya. Barcelona Tech)
- 55 The Gallecs Experience
Mr. Xavier de Pablo, Gallecs Consortium (Generalitat de Catalunya)
Prof. Luis Maldonado, UPC (Universitat Politècnica de Catalunya. Barcelona Tech)
- 63 Assessing and Valuing Ecosystem Services Provided by Urban Allotments: case studies in Madrid and Barcelona, Spain.
Dr. Laura Calvet-Mir, UAB (Barcelona Autonomous University), COST Action TU 1201 UA
- 67 Short Term Scientific Mission (STSM) in Barcelona Metropolitan Region
Dr. Giulia Giacchè, Dr. Attila Toth, COST Action TD 1106 UAE
- 73 The Retired City: some notes on informal allotment gardens and autonomous urban practices
Mr. Pau Faus, artist

Working Group 1: Urban Agriculture Definitions and Common Agrarian Policy

- 77 Notes on Barcelona WG1 meeting
Dona Pickard

Working Group 2: Urban Governance and Local Policies

- 81 1 Notes on Barcelona WG2 meeting
Mary Corcoran
- 86 2 Urban Agriculture Europe: governance models and policy contexts
Mary Corcoran and Jöelle Salomon-Cavin
- 90 3 Policy innovation and implementation
Mary Corcoran
- 93 4 Progress of WG2
Mary Corcoran and Jöelle Salomon-Cavin

Working Group 3: Entrepreneurial Models of Urban Agriculture

- 97 1 Notes on Barcelona WG3 meeting
Wolf Lorleberg
- 99 2 Macroeconomic benefits of urban and peri-urban agricultural activities
- 101 3 Standard questionnaire for case studies for urban agriculture activities

Working Group 4: Spatial Visions of Urban Agriculture

- 107 1 Notes on Barcelona WG4 meeting
Lilli Licka and Luis Maldonado
- 109 2 Charts Report of Barcelona WG4
Deniz Altay, Paola Branduini, Michel Dehaene, Axel Timpe and Attila Tóth
- 128 3 On WG4 Method
Axel Timpe

131 Case Study Visits to Baix Llobregat Agrarian Park

- 132 Can Amat
- 132 Can Perol
- 133 Can Comas
- 134 The Parc Agrari del Baix Llobregat: an excuse to think about peri-urban agricultural spaces
Josep Montasell i Dorda

147 Region Visits to Northern Metropolitan region of Barcelona

- 148 Torre Codina Community Gardens (Badalona)
- 149 Alta Alella Cellar (Alella)
- 151 Gallecs Rural Consortium (Mollet del Vallés)

Impressions from Barcelona

- 153 (h)orthophotography: images captured from Google Maps
Pau Faus
- 158 Cases of study and visits situation map
- 160 Photo report

Barcelona Declaration

- 162 Barcelona Declaration on Urban Agriculture and the Common Agricultural Policy
COST Action TD 1106, WG1

Introduction

COST Action Urban Agriculture Europe: showing Urban Agriculture diversity



Prof. Luis Maldonado
UPC Local Organizer

After starting the working process at Aachen, the COST Action 1106 Urban Agriculture Europe (UAE) held its second working group meeting in Castelldefels (Barcelona), 12th-15th of March 2013.

The Department of Agri-Food Engineering and Biotechnology (DEAB) and the Barcelona School of Agricultural Engineering (ESAB) of the Universitat Politècnica de Catalunya Barcelona Tech (UPC) were pleased to host the Action members. The list of attendants included representatives from Belgium, Czech Republic, Estonia and Slovakia that recently joined the Action. It was also possible to have representatives from Turkey.

After the welcome speech by Lourdes Reig, head of the ESAB, and the introduction speeches by Frank Lohrberg (Chair of the action) and Luis Maldonado (Event Organiser) the meeting began with the open session of presentations by the stakeholders of the Metropolitan Region of Barcelona.

According to the reports of the first Working Group meeting the action had a good start that highlighted the need to develop a previous definition of Urban Agriculture concept that all working groups, from different points of view, educations and national or geographical situations, arose at the same time. To focus the work of the various groups and collaborate and discuss the previous definition to be developed by Working Group 1 was raised searching for an initial group of key characteristics and types through various approaches and working methods specific to the knowledge fields intervening in each of the groups. It was also agreed the drafting of the Barcelona Declaration, a summary document about the potentials of UA for European Policies with a particular emphasize on CAP, to be presented at the end of the second meeting in Barcelona.

Hence, the purpose of the open session and of the field trips and visits of the meeting was offering to the attendants a wide range of different types, situations, approaches, opinions and stakeholders that can be found at the hosting region to feed the discussion on Urban Agriculture definition and types and the work to be developed by the working groups.

The selection included from farmers or producers as Martí Sucarrats and Oriol Guevara and people involved in the management of two of the three existing agrarian parks of the region: Sonia Callau and Xavier De Pablo; to researchers: Valerià Paül, Cristina Tous and urban researchers and planners as Carles Llop. It included also other realities that are being strongly discussed at the region, as the informal allotment gardens arising along the rivers and transport infrastructures around Barcelona, by the contribution of Pau Faus who lent his voice to that always odd and silent group. Laura Calvet-Mir from the COST Action TU1201 (Urban allotment gardens in European cities: Future, challenges and lessons learned) was invited to foster the cooperation between the two Actions but also to clarify the subject of work of each of them and avoid possible overlaps. Finally, the STSMs Giulia Giacchè and Attila Tóth explained their work giving an outer vision from the region case of study.

In the same sense, the visit to two different companies (that can be understood also as two different models) at the Baix Llobregat Agrarian Park, to its offices and the trip to Badalona, Alella and Mollet samples fulfilled the bottom-up approach including social, economic and natural issues for further discussions. Let me stand out that both visits included 'eating the parks' as a simple and pleasant way of summarizing the complex and multiple benefits for cities and its citizens that Urban Agriculture provides.

The working process of the groups and the final summary of results at the end of the meeting proceed as that followed at Aachen. Throughout the days of the meeting the draft of the Barcelona Declaration remained exposed so meeting attendees could leave the comments they deemed appropriate. This volume includes the final version submitted to Brussels and summarizes the main issues of the meeting.

Acknowledgments

I want to express my sincere gratitude to all those who contributed for the organization of the meeting or attended to it: to the speakers for their contribution to the open session and their later work; to Joan Amat and Laia Mateu for hosting the Action and sharing their experience with us during the visit to their enterprises at the Baix Llobregat Agricultural Park; to Ana Zazo and Sonia Callau for guiding us through the Park and to Josep Montasell, former director of the Agricultural Park during fifteen years, for receiving us.

To Helena Fusté, Valerie Veilleux and Xavier De Pablo for guiding the visits to Torre Codina Community Gardens at Badalona, Alta Alella Cellar and to Gallecs Rural Consortium respectively. Mr. Josep Maria Pujol-Busquets, owner of Alta Alella vineyard made the effort of greeting us as a “scientific mission” and not as a tourist visit what finally made it possible.

Deserve special mention from me Sonia Callau of the Barcelona Provincial Council and Xavier De Pablo of the Generalitat de Catalunya that not only presented their work in the agricultural parks and the institutions they represented, and guided us in our visit to them but also worked to get the necessary permissions and cooperated in the organization of the meals that, as part of the visit, were offered to the attendees.

Among those who helped to organize the meeting, I want to highlight the work of Xavier Recasens assisting the STSMs and the work and support of Enric Ibarz who managed the meeting organization budget and its reporting before, during and after it and lastly to Xavier Fàbregas: the meeting would’nt be possible without his support.

Finally, thanks to those who attended to the meeting, belonging to the action or to other organizations and institutions, or as simply interested from the rest of the Metropolitan Area, Catalonia or Spain, for their attendance and patience. To all them thank you very much.

Luis Maldonado
UPC Local Organizer



Programm

Tuesday 12th March 2013

"UA Barcelona", D4 (ESAB) and C3 (EETAC) buildings at Campus Baix Llobregat

Time	Place	Activity
9:00 - 10:00	D4 (ESAB) lobby, ground fl.	Welcome coffe and registration. Distribution of Meeting material
10:00 - 10:30	C3 (EETAC) Hall, ground fl.	Welcome Addresses and Introduction
10:30 - 12:30		Local Presentations I
12:30 - 14:00	D4 (ESAB) entr. courtyard	Lunch
14:00 - 16:00	C3 (EETAC) Hall	Local Presentations II
16:00 - 16:30	D4 (ESAB) entr. courtyard	Coffee Break
16:30 - 18:30	C3 (EETAC) Hall	Discussion between region and COST experts
18:30	Castelldefels station	Back to Barcelona (Last train to BCN at 22:00 - 22:30)
appr. 20:30	"El Salero", c/Rec, 60	Common Dinner at Barcelona old town

Wednesday 13th March 2013

"Visit day" to Llobregat Agrarian Park: Masia de can Comas - 08820 - El Prat de Llobregat

Time	Place	Activity
8:00 - 9:00	Ronda Sant Pere-c/Girona Trip	Bus departure
9:00 - 9:30		Bus Transfer from Barcelona to Baix Llobregat Agrarian Park
9:30 - 12:30	Agrarian Park	Visit to different farms or enterprises at the Agrarian Park - Can Amat - Can Perol
12:30 - 14:00	Masia Can Comas	Common Lunch based on regional seasonal products
14:00 - 14:30		Bus Transfer from Baix Llobregat Agrarian Park to ESAB - UPC
14:30 - 16:15	D4 (ESAB), 2nd floor	WGs start and work
16:15 - 16:45	D4 (ESAB) entr. courtyard	Coffee Break
16:45 - 18:30		WGs work
17:30 - 18:30	D4 (ESAB), 2nd floor	MC Meeting
appr. 20:30	Castelldefels station	Back to Barcelona

Thursday 14th March 2013

“Working Day and Closing”

Time	Place	Activity
9:00 - 12:00	D4 (ESAB), 2nd floor	WGs Work / Break for General Announcements
12:00 - 13:30	D4 (ESAB) ent.courtyard	Lunch
13:30 - 15:30	D4 (ESAB) Sala de graus,	WGs Work
15:30 - 17:30	ground floor	Closing Plenary Session - report from Working Groups - Barcelona Declaration - objectives for Action Workplan and next events
17:30		Back to Barcelona and leisure
appr. 20:30		Possibility of Common Dinner at Barcelona

Friday 15th March 2013

Trip around Barcelona Metropolitan Region Agriculture (optional, NO COST reimbursment)

Time	Place	Activity
8:30	Ronda Sant Pere-c/Girona	Bus departure
	Badalona	Visit to Badalona Community Gardens
	Alella	Visit to Alella Vineyards PDO
12:30	Mollet del Vallés	Common lunch based on park seasonal products Visit to Gallecs Consortium
14:45 - 15:30		Return trip to Barcelona

Barcelona Stakeholders on UA Typologies

Agriculture in the Metropolitan Area of Barcelona: A Key Issue, Multiple Landscapes and Various Solutions

Valerià Paül Carril

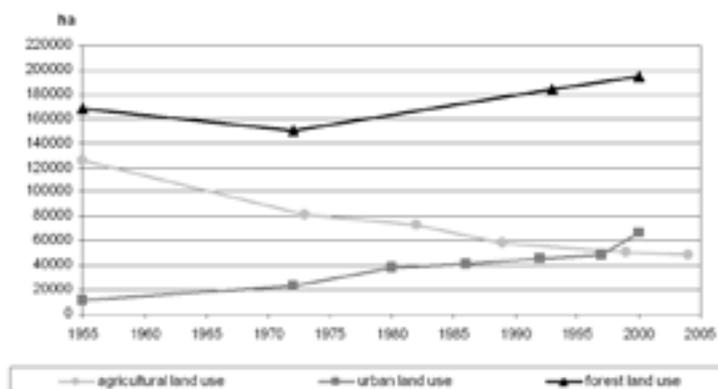
Barcelona today enjoys international recognition as one of the world's leading cities, its reputation having been launched by the successful 1992 Olympic Games and cemented by the subsequent tourist boom. Closely linked to its success, the city has come to be considered a model of "good practice" for urban policy, although this is a matter of some debate amongst scholars (e.g. Delgado, 2007; Capel, 2005; Marshall, 2004; Monclús, 2003).

The aim of this paper is not to analyse Barcelona's urban policy but rather to focus on the policy and prospects for agriculture in the Barcelona area. Some of the policies for farming in the environs of Barcelona have been suggested as models for the planning and managing of agricultural spaces in countries such as Belgium (Dewaelheyns and Gulinck, 2008) and Australia (Paül and Haslam McKenzie, 2011). In the conclusion to this paper I will pose the question as to whether Barcelona can be considered a model of "good practice" in planning and management for peri-urban agriculture as it is, arguably, in the case of its urban policy.

The paper begins by exploring peri-urban agricultural spaces in the Metropolitan Area of Barcelona. Following this it examines the landscape diversity of the peri-urban agriculture as it stands today. Finally, initiatives for the recognition of the value of these landscapes, for their protection against urban encroachment and the management of peri-urban agricultural spaces through the adoption of specific policies and strategies will be discussed.

1. A Key Issue: Peri-Urban Agriculture in an Expanding Metropolis

Agricultural areas in the metropolitan area of Barcelona¹ are exposed to enormous urban pressures. This constitutes a concern of the first order for all of Barcelona's peri-urban farmlands. From 1965 to the present day, agricultural land use has fallen dramatically at the expense of urban land use — the latter becoming predominant between 1995 and the year 2000 (Figure 1). In 2004, 50,000 of the 320,000 hectares of the metropolitan area were agricultural, while 50 years ago agrarian land use amounted to more than 120,000 hectares. The pattern described by this loss of agricultural land has been explained by Paül and Tonts (2005), and Paül (2010).

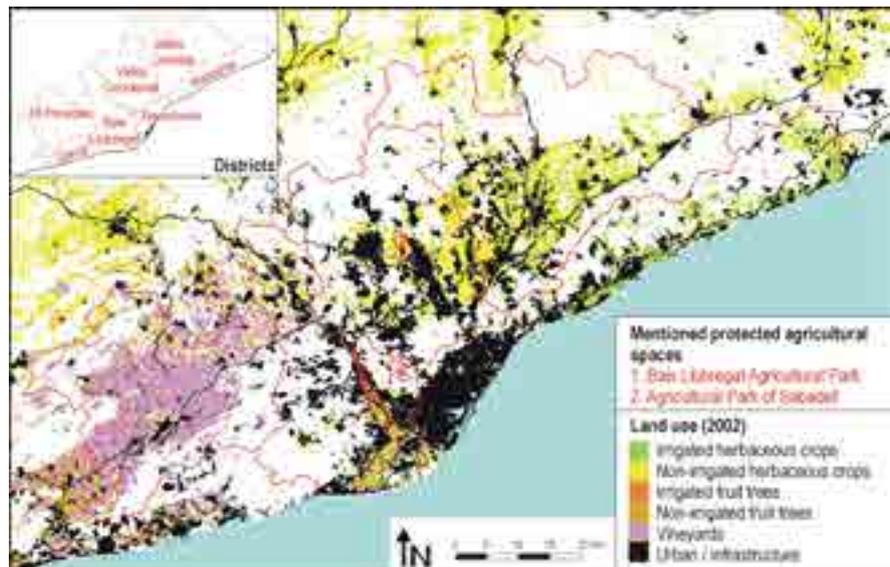


Prof. Dr. Valerià Paül Carril
University of Santiago de Compostela

1. Land use evolution in the metropolitan area of Barcelona (1955-2004).
Source: Paül (2006: 570)

¹ Defined by the Act 1/1995, establishing the "Region of Barcelona" in terms of spatial planning and covering seven districts (see Figure 2). Recently, the Act 23/2010 has split two districts (Alt Penedès and Garraf) from this region. However, I will use the region as defined until 2010. This area has 5.05 M inhabitants (2012), that is, 67% of Catalonia, in 32,016 km², that is, 10% of Catalonia land area.

2. Land use map and mentioned protected agricultural spaces in the metropolitan area of Barcelona. Map prepared by the author.



It should be stressed that most of this agricultural land loss has occurred in a period of democratic government, following the end of the dictatorship in 1975 and the first democratic election of local councils in 1979. In places this loss can be attributed to plans inherited from the dictatorship, but elsewhere it has occurred at the instigation of democratic local councils and in a context (from 1979 to 2000, broadly speaking) in which no demographic growth has been recorded. In short, the urban expansion and the agricultural contraction have not been accidental but rather the result of planned processes, which moreover cannot be attributed simply to the pressures of population growth (Paül, 2009; 2006).

Despite these circumstances, a sixth of the metropolitan area remains in some form of agricultural land use. Most of these surviving agricultural lands are vibrant and very much alive, especially those devoted to horticulture and viticulture. This is especially true of those lands protected by urban or local plans, where further urban encroachment is theoretically impossible. Orchards and market gardens devoted to horticultural practices are concentrated along the coastal strip, while vineyards occupy the Protected Designation of Origin (PDO) lands lying within the metropolitan area (Figure 2).²

Cereal production areas (see Figure 2 for their location) have encountered a number of problems, and idle land is common in these areas, but a number of innovative solutions have been developed, for example:

- Agricultural diversification: using irrigation to produce quality goods that can be regionally branded. Examples include a variety of high-quality white bean (*mongeta del ganxet*).
- Innovative commodity development and branding: examples include the breads of *Sant Julià* and *Gallecs*, and the pastry *coca de Sant Galdric*. These products of urban consumption are sold at local bakeries where they are labelled as having been produced locally.

Obviously, the proximity to the city benefits agriculture, not only from the perspective of Von Thünen's classical model (lower transport costs and a captive market that allow for intensive and productive agricultural practices), but also in terms of various innovations: guarantees of produce freshness, short supply chains, traceability, reduction in 'food miles', etc. In the case of horticulture, 75% of production in the Barcelona metropolitan area is for the urban market, while 15% of the fresh fruit and vegetables distributed at the Barcelona Central Market are grown in the metropolitan area (Paül and Haslam McKenzie, 2013; Paül, 2009). This is particularly significant in terms of mitigating the city's ecological footprint and ensuring metropolitan food security and quality. Barcelona does not have to depend only on foreign food markets; rather it has come to maintain its own metropolitan

² Two wine PDOs lie in the metropolitan area of Barcelona: the small Alella wine region, on the city's doorstep, with direct links to the urban consumption of the central city (Paül, 2011); and, Penedès, where two PDOs co-exist: the world-renowned Catalan sparkling wines (cava) and the Penedès wines.

agricultural produce. In addition, the environmental costs of CO₂ transport emissions are not as great in Barcelona as they might be elsewhere thanks to the proximity of this agricultural production.

Commodities are generally perceived as being differentiated and there is a thriving geography of consumer networks seeking to locate production in the city's surrounding lands (Paül and Haslam McKenzie, 2013). In Metropolitan Barcelona major efforts are being devoted to organic farming and integrated pest management, in particular through voluntary farmer associations (for example, plant protection initiatives), some of which receive partial public funding.

In addition to these characterising features of Barcelona's peri-urban agricultural zones, agriculture in these areas contributes to:

- Conservation of open spaces and maintenance of a spatial equilibrium in the metropolitan area.
- Maintenance of biodiversity and environmental outcomes.
- Protection of water cycle and storage.
- Provision of leisure areas.
- Upholding landscape quality and diversity, creating a sense of landscape identity among local citizens, as we shall see in the next section.

It is important to note that we are referring to *peri-urban agriculture*, which in the case of Barcelona is clearly distinguishable from *urban agriculture*. First of all, because geographically *peri-urban agriculture* surrounds urban settings (it is located around cities), while *urban agriculture* is surrounded by urban areas and has an intra-urban location. Furthermore, the former is developed in farmlands, while the latter can be based on different types of "soils", including brownfields or roofs. Beyond these obvious differences, we can mention the following ones, always taking into consideration the particular context of the region of Barcelona:

Urban agriculture	Peri-urban agriculture
Non-profit agriculture	Agriculture based on farms
Usually 'hobby-farmers', who are not farmers at all	Farmers as main actors of these farmlands
Sometimes it is illegal or 'non-legal'	It must be legal, for instance in terms of land tenure or taxation
Usually, municipal responsibility. Local land-use plans can implement urban agriculture areas	It is supposed to be a governmental responsibility (the Catalan Government has a Ministry of Agriculture) and spatial plans at the regional scale can establish farmland protection precincts

2. Multiple Landscapes: an Outstanding Diversity

Barcelona and its region comprise an outstanding diversity of agricultural landscapes. The city has a strong urban market that can be traced back to the Middle Ages, while the region has a richly diverse physical geography and a highly differentiated pattern of agricultural production that dates back centuries. In terms of its physical geography, four major geomorphological units can be identified — two continuous plains and two mountain ranges, each conditioning agriculture in their own way. Apart from this, the region has an uneven geography of irrigated lands, not solely dictated by physical conditions (proximity to rivers) but also reflecting historical interventions, including the building of irrigation channels.

Barcelona's agricultural landscapes boast a very long history. For centuries the main orchards lay within the city's medieval wall, while outside the walls horticulture was practised on the plain over which the present city has expanded. All these areas were gradually built over, either before or during the 19th century, but above all in the years following the introduction of the city's Expansion Plan in 1859. This means that all the medieval orchards are now paved over, although some old farmhouses (*masies*) can be seen to have survived in today's city neighbourhood districts (Tort and Paül, 2009).

Following this initial phase of urban encroachment, new orchards were created with the transformation of less intensive agricultural uses into horticulture practices to satisfy the city's growing demands for more and more food. These 'new' orchards and market gardens were located in the Maresme and Baix Llobregat areas and today they constitute the principal agricultural areas, outstanding in terms of their landscape heritage. This includes the irrigation infrastructure (channels, shafts, wells, etc.) and other farming artefacts such as the terraces and hedgerows separating the agricultural plots. This rural infrastructure is not only typical of the orchard landscapes but has also come to typify, albeit with numerous variations, the landscapes of vineyards and fruit groves.

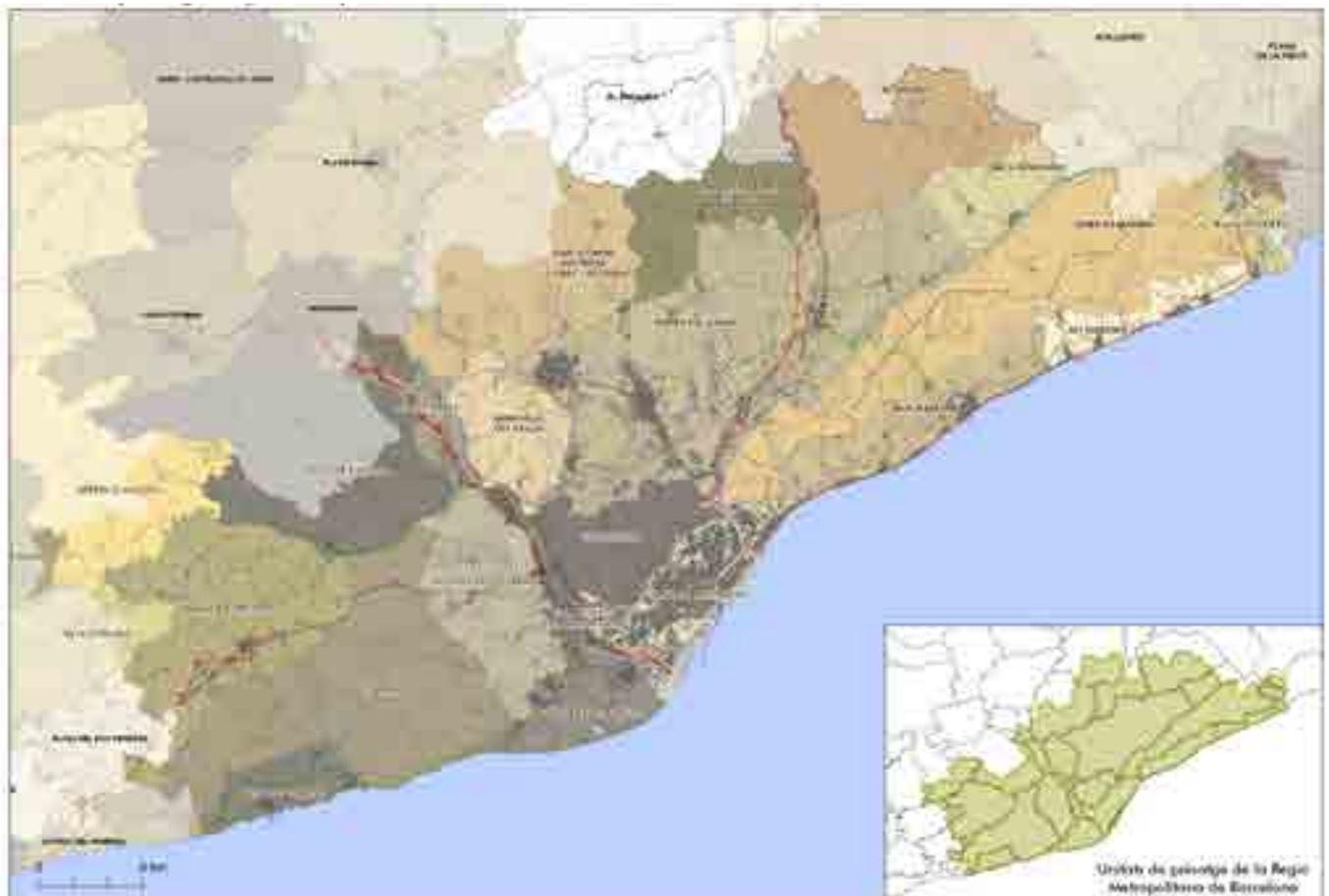
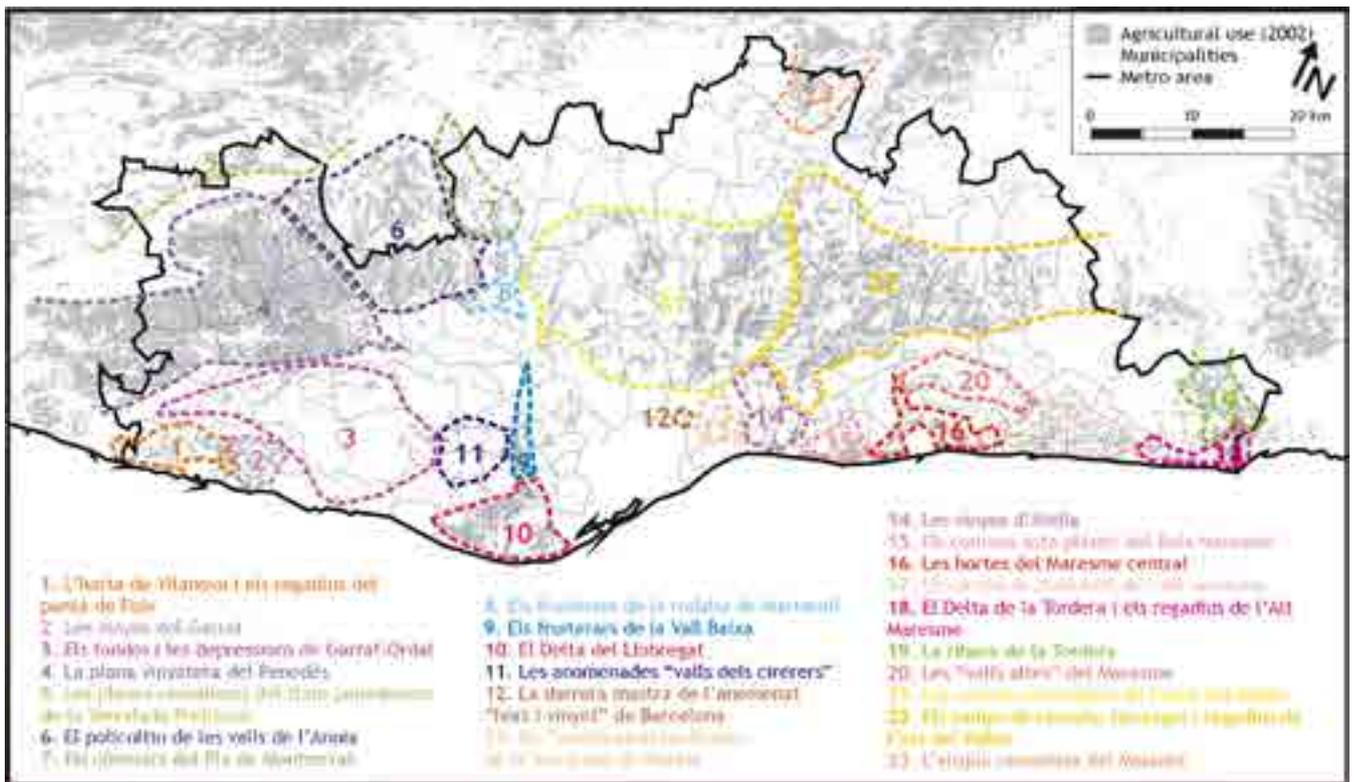
It would be impossible to cover here the great diversity of agricultural landscapes in the Barcelona area. In Figure 3, however, an attempt is made to divide the region into agricultural landscape units. This analysis was undertaken by Paül (2006) and first published in Paül et al. (2006). Twenty-three agricultural landscape units can be identified, demarcated, characterised and assessed in terms of proposals for their conservation. The study was undertaken on the premise that each landscape unit should be linked to at least one agricultural commodity. In so doing, a link between a specific landscape quality and a distinctive agricultural product could be established, the idea being that future agricultural plans might emphasise this connection. In this way, the promotion of the consumption of specific agricultural commodities should ensure a dynamic landscape. Thus, for example, we have cherries picked from the fruit tree groves on the terraces of Muntanyes d'Ordal, strawberries from the hillside plots of the Alt Maresme, and artichokes in the Baix Llobregat (Figure 3).

However, this landscape-based scheme has not been granted any official recognition and remains merely an idea for scholarly discussion. Indeed, until recently, no single global study had attempted to describe the heterogeneous landscapes of the Barcelona region in any official way. This applies not only to agricultural landscapes, but landscapes of all descriptions. However, since 2007 work has been underway on compiling an official Metropolitan Landscape Catalogue. This Catalogue forms part of the European Landscape Convention (2000) framework that was incorporated into Catalan law by means of Act 8/2005. One of the main aims of the Metropolitan Landscape Catalogue is to define an official map of landscape units that can be considered as 'global' units, taking into account a whole range of attributes that include agricultural, urban and forestry characteristics (Nogué and Sala, 2006) (Figure 4). In order to achieve this, an overall landscape characterisation of the region has been carried out, based on a broad ranging consultation process.

One interesting outcome of this cataloguing process is the degree to which agricultural landscapes are valued by local citizens. Indeed, in several areas (or landscape units), the central element in the perception of those consulted was the unit's agriculture, deemed to give the 'landscape' its distinctive character. Farming is defended by these citizens, who in certain areas have come out and demonstrated in favour of the preservation of farmlands. This means that the agricultural attribute is considered important not only because of its inherent features but because of the popular attribution of meanings, values, etc. This, for instance, is the case of the Vallès landscape unit, where, although cereal crops are not particularly important (see earlier discussion) in terms of their agricultural production, the fields of cereals are valued highly by local people and they are in favour of their conservation (Paül and Sala, 2010).

3. Various Solutions: Managing and Planning Metropolitan Agriculture

Since the transition to democracy in Spain, and the devolution of powers in matters of agriculture and urban planning to the Catalan government, various local municipalities have sought to protect agricultural spaces within their boundaries, primarily in response to popular pressure. For instance, the Agricultural Park of Sabadell was established by this city of more than 200,000 inhabitants in order to protect and manage a specific area of 600 ha of essentially agricultural land use in the municipality (Figure 2). The 1993 local plan made the creation of this park possible, but it was not until 2005 that a Strategic Management Plan was passed. The municipality then had to wait a further two years for the introduction of a Land

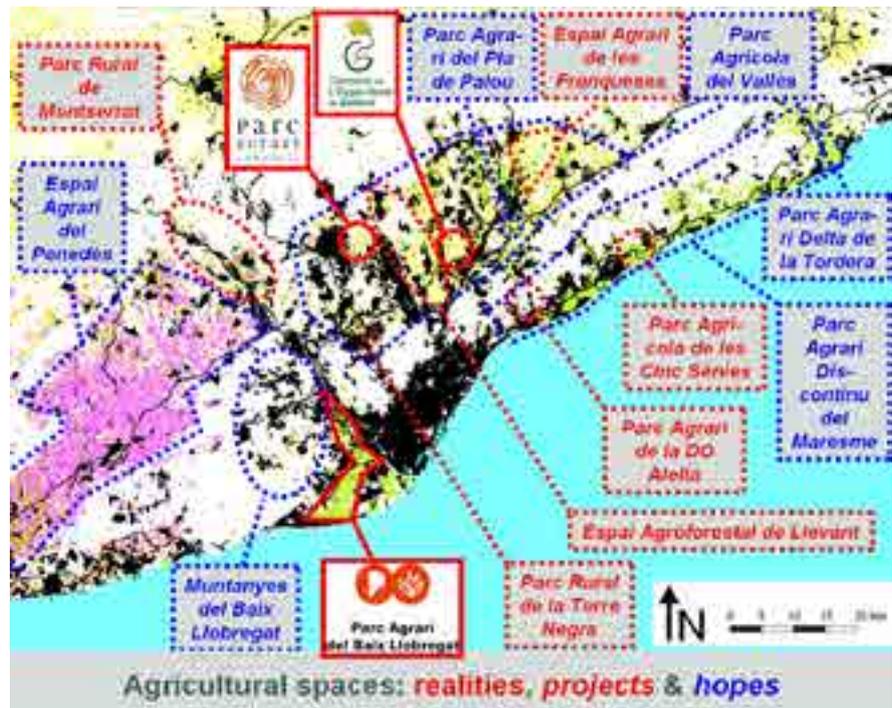


3. Map of the agricultural landscape units of the metropolitan area of Barcelona. Source: Paül (2006: 372).

4. Official map of the landscape units of the metropolitan area of Barcelona. Source: Observatori del Paisatge.

5. Agricultural spaces in the metropolitan area of Barcelona: “realities”, “projects” and “hopes”.
Map prepared by the author.

6. Protected open spaces by the Metropolitan Spatial Plan (2010).
Source: Generalitat de Catalunya.



Use Plan to implement the Agricultural Plan. These plans are managed by a local office, whose main goal is to encourage consumers in the Sabadell area to consume local agricultural commodities. The policy adopted involves linking municipal production with the city by using labelling strategies and creating adjacent markets.

However, such initiatives have tended to be local and intermittent, affecting only small areas. There has been no overall attempt to protect and manage agricultural spaces or to pass a specific landscape policy for these areas, and the Catalan government has failed to deliver any type of policy for peri-urban agriculture (Montasell, 2009; Paül, 2006). As a result, there have been considerable losses in agricultural spaces over the last 30 years.

Over the last 15 years, there has been a shift in the planning tools being adopted so as to reduce these losses. Thus we have seen the introduction of more flexible bodies set up in collaboration with various local government authorities, farmers and other partners, through the establishment of consortia. This shift in approach is consistent with a new idea of governance. Individual areas are now developing their own projects, from which new proposals for agricultural management are emerging. However, not all the efforts have been successful, and today there is an uneven geography of agricultural spaces that are being protected and managed

(“realities” in Figure 5), spaces that are in the process of being designated with such a status (“projects”) and spaces calling for protection but where the process has not yet been officially initiated (“hopes”) (Montasell, 2009). Broadly speaking, farmers, environmentalists and civil society in general have taken the initiative in drawing up this map. And, typically, local councils or government bodies only become involved once the process is up and running.

The best example of an “innovative agricultural space” is the Baix Llobregat Agricultural Park (BLAP), which comprises the surviving orchards of the area following years of urban encroachment. Located on the southern edge of the Barcelona conurbation, the Park extends over almost 2,000 hectares of very fertile farmland in the delta and lower valley of the Llobregat River. The main agricultural produce in the park are vegetables, above all artichokes, lettuce and chard.

The BLAP was created following years of demands for such a protected space from the principal farmers’ union (*Unió de Pagesos*). Local farmers had taken the decision some decades earlier not to urbanise their lands, but they required a long-term guarantee that they could continue to farm without any threat to their livelihood. Agricultural Park status was achieved in 1998, when a consortium of the *Unió de Pagesos*, the Baix Llobregat District Council, the Barcelona Provincial Council and 14 municipalities was created. The Catalan Government did not initially grant the body formal recognition, but in 2006 it agreed to join the consortium.

The consortium was created with a view to protecting the area as a vibrant agrarian landscape with links to its urban environment (Paül and Haslam McKenzie, 2013; 2011). The BLAP has subsequently adopted its own Management and Development Plan (2002) and a Land Use Plan (2004), in addition to other strategic documents. The main goal of the BLAP is to furnish the mechanisms that safeguard the competitiveness of the Park’s farms, not only in economic terms but also in terms of broader environmental and socio-cultural issues. The Park’s main agricultural products are promoted on the urban market by using labelling schemes. The BLAP has also developed tools, such as a website, informing consumers which commodities are produced by which farmer, where they are located and where they sell their commodities.³

Finally, until 2010 there was no overall planning document for the Barcelona Metropolitan Area. In April 2010, a Metropolitan Spatial Plan was eventually adopted. This Plan recognises some specific lands as strict agricultural reserves (the BLAP orchards, vineyards, etc.) (Figure 6). This means that the Catalan Government has finally involved itself — after more than 30 years of having the power to do so — in the effective protection of farmlands.

Be that as it may, the recent proposal to build a huge leisure complex in the BLAP area (the so-called ‘EuroVegas’) indicates that even multi-layer planning policy is not a guarantee of protection in the face of urban development pressures. The current financial crisis was used by the Catalan Government to justify consideration of this proposal, allegedly able to create thousands of jobs in a region seriously touched by unemployment. The Government showed the willingness to introduce changes in land-use planning, accepting the requirements of the developer. The output might be the complete loss of almost 1,000 hectares of prime farmland in the middle of the BLAP area, splitting the remaining farmlands into two parts, and in the process making them more attractive to developers. Even if it is true that the project has not finally been passed, it remains doubtful if there is a real commitment that the planning protecting farmlands — even with double protection (the Barcelona Metropolitan Area, 2010 and the BLAP Land Use Plan, 2004) — will be maintained at medium or long term.

³ See (Catalan version only): <http://www.elcampacasa.com/>. Accessed 28 July 2013.

4. Conclusions

Based on the experience of the consultation process for the compilation of the Landscape Catalogue since 2007 and the achievements made in terms of the designation of protected agricultural spaces since the 1990s, we can infer that groups such as farmers, environmentalists, and civil society as a whole hold the key to the future conservation of agricultural landscapes. This means that while agricultural landscapes must be sustained by farmers, the agricultural economy and the sector's commodities (elements that are unavoidable), the affection of the local people is an essential element as well. The recent intention of the 'Euro-Vegas' implementation, fiercely opposed by the civil society (and farmers and environmentalists), confirms this hypothesis.

Agricultural landscapes are obviously physical entities with direct links to farming, but collective complicity is substantial in at least two ways. On the one hand, people consume and the links between the place of production and the consumer constitute essential connections for upholding landscape functionality, especially in peri-urban areas. On the other hand, only by feeling attached to these landscapes can people defend them from urban encroachment. Whether this defence is ultimately effective, however, is another matter, directly related on occasions to agreements with municipalities and governmental agencies.

Consequently, landscape can no longer be seen as an artefact that lies outside us, but rather as something that is inherent to our thoughts, beliefs, behaviour and feelings. A landscape is shaped by collective perceptions, and politicians and planners should avoid adopting "ivory tower" attitudes and accept that the landscape does not belong to them but rather to us all. In the case of agricultural landscapes, farmers are obviously the first party to be considered and consulted, as has occurred in the strategies that form part of the BLAP for example (Paül and Haslam McKenzie, 2013). But, in addition, the whole of society needs to be heard.

Returning to the question raised at the beginning of this discussion as to whether Barcelona might be considered a model for planning and management in peri-urban agricultural areas, the evidence seems to suggest that it may well be. Not because of the actions, policies or plans adopted and implemented by various tiers of government, but because of the concern expressed by local communities and the collective vision of farmers, who in most areas have contributed successfully to the preservation of agricultural practices. Why has this state of protection arisen in the current situation? Because maintaining peri-urban agriculture is a successful strategy in facing the challenges and threats to the metropolitan area, threats that include urban sprawl, climate change, an impoverishment of biodiversity and landscape variety and the risks to food security and quality.

Acknowledgements

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Peri-urban Agriculture in Baix Llobregat's District

Marti Sucarrats

Baix Llobregat is a district placed in the lower course of the river Llobregat; that is the stretch from the mountain of Montserrat to the delta of the river, in the south of the city of Barcelona. This area is one of the most populated regions of Catalonia, and it has an economic activity that is based on the industry.

The population growth has been steady since the early 60's. The first immigration wave came from other regions of Spain, and since the 90's immigration came from different countries. However, this process seems to have stopped now. In the other hand, all this process of industrial and population growth that started in the 60's has involved an unavoidable strong impact in the region. So now we find that a large part of the area is built with residential areas, industrial zones and several infrastructures, which are essential for good communication in Barcelona and its metropolitan area.

Thus, despite of the large amount of urbanized surface in Baix Llobregat, they are still remaining open spaces. Some of these open spaces are engaged in agriculture and the rest are natural spaces that we can find in mountainous areas in the north of the district and in the communities bordering the neighboring districts of Alt Penedès and Vallès Occidental, as well as the natural interest zones of the Llobregat's Delta.

Baix Llobregat is a region that can be differentiated clearly into two zones well defined in many aspects (geographical, historical, social and agricultural): north and south, and where the border would be in the narrow pass of Martorell.

From the agricultural point of view, the most productive zone is the south's, above all thanks to the fertile land of the Llobregat Delta. Agriculture is mainly irrigated, and it's devoted to growing vegetables and fruit.

In contrast, in the north, the terrain is more rugged, and it has predominantly rainfed cultivation. The most common crops are vineyards, olives, almonds, cereals and dried fruit. However, in the north there are vegetables and fruit crops irrigated, concentrated in areas close to the river.

To conclude this brief overview of the agricultural sector in Baix Llobregat, it's important to know that in north and south there are livestock farming, especially sheep.

Finally, another remarkable fact of the differences between north and south: the southern agricultural area is protected by the figure of the Baix Llobregat Agricultural Park (in catalan, Parc Agrari del Baix Llobregat), whereas in the north there is no protection, except for a part of the communities of Collbató, Esparreguera and Olesa de Montserrat, which are under the influence of the Natural Park of Montserrat.

However, the Agriculture in Baix Llobregat has three distinguishing characteristics that are common and notable:

1. Agricultural production unimportant with regard to its economic weight, compared with the predominantly industrial area as well as in relation to the total agricultural output in Catalonia.
2. Agricultural output extraordinarily diverse in terms of the variety of crops, one of the most valued aspects of the Baix Llobregat's agriculture.
3. Character peri-urban of the agriculture.

The peri-urban agriculture, which defines all agricultural activity in the district, is the reality with which we live every day. Like all reality, there are negative aspects which we have to transform them, but also positive aspects to be promoted. In this speech I'll try to analyze this situation and I'll try to present some proposals that I



Mr. Marti Sucarrats
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hope may be of your interest, and if it's possible, they are going to be considered for the future CAP (Common Agricultural Policy), because the current CAP is not useful for agriculture in Baix Llobregat, because the current European legislation has many more restrictions than facilities.

With the aim of agricultural policy can be useful for agriculture in Baix Llobregat, it's essential to define what functions must satisfy. I think the features are:

1. Feature Production: crops for the production of healthy food, quality, local and accessible to the population of Baix Llobregat.
2. Social function: agriculture as an economic activity, professional, creator of wealth and employment.
3. Function landscape: in a peri-urban environment, the agricultural area is an element that balances the territory between the urbanized and natural space.

To have a productive agriculture, which is its main function, people must know the constraints that come up against the normal development of our work as farmers; and it's important to know that many of these limitations are due to the current European regulations.

In a Mediterranean area like Baix Llobregat, one of the problems that the farmers have to address is the proliferation of diseases and insect pests, which are enhanced by a Mediterranean climate, especially during the months when the weather is warm and damp. To deal with it's necessary the crop treatment, and we agree with that treatments must to be less aggressive as possible, but we must not forget that the goal should be to save the crops. This is one of the places where European legislation has created problems because of the increasing restrictions on the use of pesticides.

Another serious problem that we are suffering is the attacks of wild animals, with an excessive population that is increasing. This causes great harm to our crops, and no government applies any truly effective measures to resolve it. This is one of the biggest problems the farmers have (in Baix Llobregat and in the rest of Catalonia) and the response we have found from the various authorities is generally speaking an almost insulting indifference and insensitivity.

From my point of view, the current European regulation is not adapted to the reality of agriculture in Baix Llobregat, which is peri-urban and Mediterranean. We need a policy in favor of local agricultural production, taking into account the economic viability of farms, because otherwise we have no future. It can't be that while farmers from here we have increasingly more interventionist and regulatory constraints to do our job, which leads to loss of profitability of our farms and threatens our future, the European Union allows the arrival of agricultural products from non-EU countries, which they hardly any complies any environmental legislation, social legislation, the ecological footprint, or the safety of European citizens.

Agricultural policy we need has to have as a fundamental principle that the farmer is a producer of food. To ensure the Baix Llobregat's crops, it's necessary to take into account the effects of pests and diseases and, therefore, it's required the application of treatments, rationally, without the strict restrictions of European legislation and with the the main objective of saving the crops.

As for wildlife, it is essential to carry out a wide and multidisciplinary study of the effects caused on farming. We need to know which species there are, what population, how we have come to this situation, what are the damages on agriculture and at the end we have to receive effective solutions. Unfortunately, so far I'm not able to predict the slightest interest from any administration to conduct any study in this regard, they are only applying the inefficient and obsolete laws.

The social use of the agricultural area is another important issue in peri-urban agriculture. Lately there has appeared a new phenomenon: the leisure orchards, which are small and have a recreational purpose for those who use them. It's possible that there is social demand in this respect, but we should regulate this activity: their presence may interfere with the professional activity of farming, so we should avoid this happening. Therefore, the existence of leisure orchard

is viable if they are regulated and if they are located in places where no bother professional farming.

The agricultural area is composed of farmers working fields, roads and other auxiliary elements needed for agriculture. It is common that many people make use of ways to go for a walk or bike. At first glance there is nothing negative, and even has positive aspects: It's good that people know they have an agricultural area beside, and it's good they love and appreciate this area; and it's also good to show our products, it's a way to make easier marketing in local markets. However, sometimes there have been conflicts in the use of roads because an excessive movement of people can be dangerous for agricultural vehicles that they are which circulate on these paths. In this respect, it's necessary to educate people about what is the agricultural area and about what it represents: that is an area where there are people working to earn a living, where there are people producing quality food to make them available for population. Therefore, it's important that people understand that this is a fragile area that can be enjoyed, but that it also has its constraints. Achieving this goal is something that will benefit all.

While peri-urban agriculture has to cope with the unavoidable demographic pressure that can lead to some easements, we must also mention that this is where there is one of its main assets: the existence of a local market. We are increasingly farmers who we are orienting our production closer to the market, which increases the value of our work. Also dealing directly with the client helps us to establish links, so that over time we have become aware of the importance of local agriculture, as a value to be protected.

Finally, it's important not forget that just a year ago Baix Llobregat Agricultural Park was threatened by a huge construction project without sense called Eurovegas. Farmers and many people worked shoulder to shoulder to fight against a project so foolish like that. Thanks to the great mobilization, this project was definitely retired. So I finish my speech by thanking to all those who struggled last year, and also to all those who, from many years ago, have made possible that agriculture to become a reality of the present and the future in the Baix Llobregat district.

Agroterritori: the Foundation for the peri-urban Agricultural Areas

Anna Roca and Cristina Tous

Background

There were many reasons than justified and promote the creation of the Agroterritori Foundation.

1. There has been a dramatic loss of agricultural land caused by spatial expansion of the urban areas and their services. A trend that has affected and damaged the agricultural land.
2. The regional and local planning of Catalonia has very low consideration of the agricultural land, especially to the peri-urban areas in comparison with the attention and protection of urban or forest areas.
3. The own-initiative opinion of the European Economic and Social Committee on "Agriculture in peri-urban areas" (NAT/204, 16 September 2004, section 3.3) has been a good starting point for Agroterritori initiative. The EESC report declares that "peri-urban areas with agricultural activity are facing specific constraints: socially, politically and administratively" and "believes that it is essential to establish a European Observatory for peri-urban agriculture".



Mrs. Cristina Tous
Agroterritori Foundation

About agroterritori

Agroterritori is a private non-profit-making foundation created in 2007 by the initiative of the University of Girona, the farmers union called "Unió de Pagesos de Catalunya" and the Agricultural Chamber of Girona.

The platform consists of researchers from the agricultural and peri-urban research topics and includes experts in different knowledge areas, like agronomy, biology, environmental sciences or geography. Agroterritori is organized into the following working and decision groups:

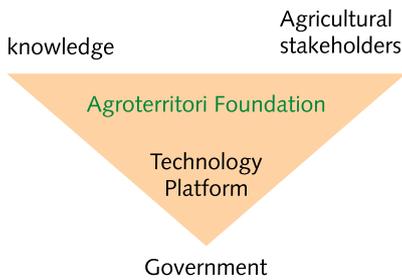
- Board: management and administration body of the foundation, with a representation from the founder institutions (12 people).
- Executive committee: responsible for adopting decisions and the evaluation of the working lines proposed by the technical-scientific committee. It consists of one member from each of the founding institution (3 people).
- Technical-Scientific committee: advisory body of the foundation composed by specialists that are responsible for promoting and implementing the activities of the foundation. It consists of one member from each of the founding institution and a representation from the Baix Llobregat Agricultural Park (7 people).
- Advisory committee: participation body made up by professionals from higher research system, government and civil society (14 people).



Agroterritori's basis

The work carried out by Agroterritori Foundation is based on the following principles:

1. Agricultural areas would not exist without farmers. Therefore, Agroterritori Foundation deals with peri-urban agricultural areas and the continuity of agricultural activities.



2. Source: Agroterritori Foundation

2. The territory, the landscape and the peri-urban agricultural culture have a specific nature and that is the reason why Agroterritori Foundation provides information about all the initiatives undertaken with the aim of promoting changes in current trends that affect agricultural areas. The aim is to achieve territorial stability and ensure the peri-urban activity in the future (that is, diversity, social and environmental sustainability and landscape).

3. Society as a whole (and not just the agricultural sector) must assume the responsibility for the preservation, development and management of peri-urban areas. Thus, Agroterritori Foundation is open to everyone and performs studies that discloses to the whole society.

Agroterritori aims to promote initiatives for preserving, developing and managing agricultural areas and specifically peri-urban agricultural areas and to encourage new initiatives.

To comply with these objectives, Agroterritori is structured into several axes:

- The website Agroterritori www.agroterritori.org: a communication instrument.
- The Peri-urban Agricultural Observatory: a tool to monitor, evaluate and provide information about the current situation of peri-urban agriculture.
- Applied research about peri-urban areas and the agricultural activity comprised (territorial planning, agricultural policies, land use and land cover changes)
- Seminars, meetings and workshops to encourage reflections, exchanges and debates.
- Publications about peri-urban areas like the "Letter on peri-urban agriculture" (Agroterritori, Baix Llobregat Agricultural Park and Red Agroterritorial, 2010. in: www.agroterritori.org/ficha.php?doc=533&cid=3).
- Online social and professional networking: Facebook, Twitter and LinkedIn.

A successful case: threats and opportunities of a dairy farming peri-urban area in Catalonia

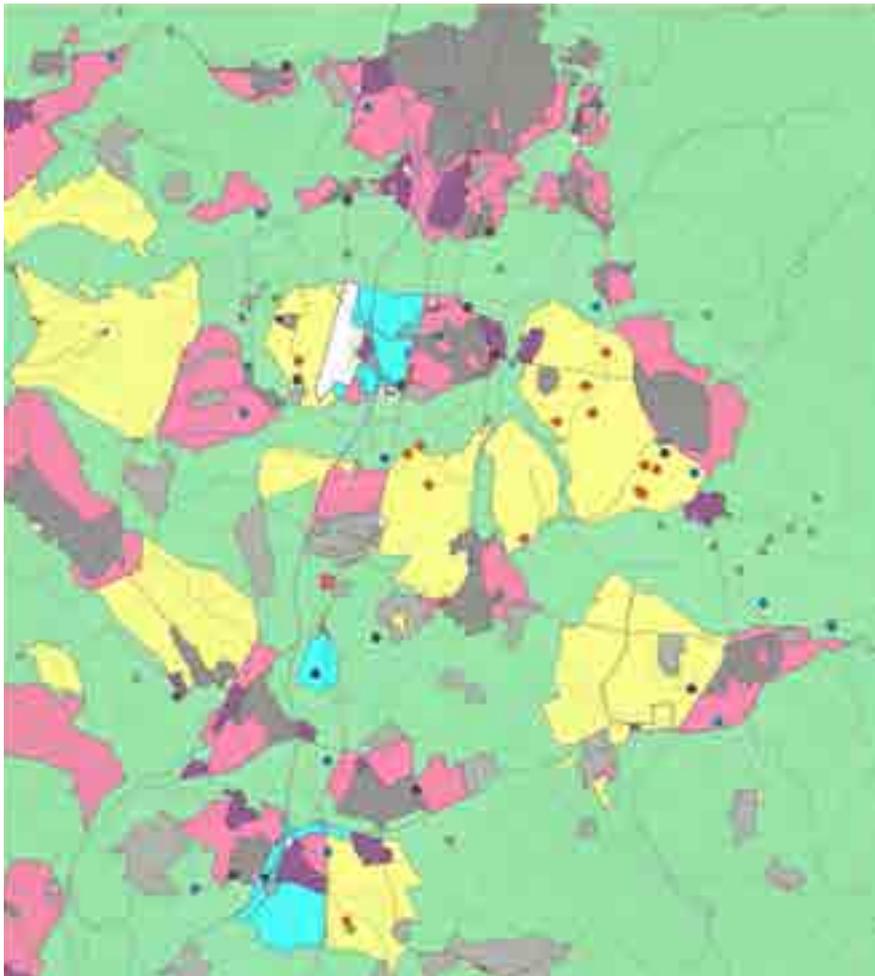
This project had the support of the Milk Observatory of the Department of Agriculture and the area of Economic Cooperative and Entrepreneurship of the Department of Labour (both department of the Catalonia government); the Service of Applied Genetics of the Regional Government (Diputació de Girona) and Lletera Campllong, the moZst important dairy cooperative in the area case study.

The study area covers an extension of 83,000 hectares. It includes 17 municipalities that cover two alluvial plains with long tradition in agriculture sector. It is crossed from north to south by the main roads and railroads, as well as by heavy infrastructures (airport) and first class facilities and services.

The study brings together seventy-two farms specialized in bovine milk of which some stand out as highly productive, well-sized and very dynamic when referring to business and transformative strategies based on sustainable criteria such as: Llet Nostra, ATO Natura, organic milk for schools, milk vending machines which along with the dairy cooperative Campllong -with experience as a bank-land- are the real protagonists of how to reverse the market behaviour. In addition, these dairy companies are complemented with about forty farms that ensure grain and forage to feed the cattle. Within this framework of analysis various alternatives are discussed to improve the management of this agricultural area.

To summaries, in the area of study, dairy farming has made a significant investment in technology and has created about 1,000 employments (farmers, farm advisers, veterinaries,...). Transversally, in order to be more self-sufficient in animal food production, dairy farming requires a large land base, and also gets limited by the territorial and urban planning regulations, which in some cases encourage an agroterritorial transformation and in others generate constraints on the farm factors of production. This becomes emphasized in peri-urban areas, too often threatened by their dynamic and unstable character.

3. The case of the dairy farming south peri-urban of the city of Girona. Source: Agroterritori Foundation



Results

Settlements

■ Historical center	■ Business use
■ Residential use	■ Industrial use

Present

■ Landscape and agricultural interest
■ Forest land

Expected

■ Future urban development
■ Future industrial development

- farms < 500 m to urban area
- less than 500 m to future urban area
- to landscape or agricultural interest area
- to forest area (special protection)

The goal of the study is to describe the dynamic of the area: firstly diagnosing of the peri-urban area of southern Girona from the public subsidy payment of the CAP, and secondly, categorizing different forms of peri-urban areas through the study of existing planning laws and tools. The ultimate objective pursued is to study the effects on the agroterritorial matrix about competitiveness in the dairy sector and about the implementation of various common directives to identify synergies and possible contradictions and establish guidelines to improve the complementarity of both policies.

The 25 % of dairy farms on the study area could disappear because they are localized very close to a future urban areas or future industrial areas (Fig. 3).

At the moment, Agroterritori and several agents are working together to:

- The promotion of "land reserve" managed by the dairy cooperative Campllong to ensure animal food supply.
- The promotion of a dairy farming cluster and encourage local trademarks to add it.
- The promotion of a buying centre of inputs (grain, forage, semen, etc.) in order to reduce farming costs and build a better adaptation.
- To promote the inclusion of the peri-urban areas into the CAP proposals.
- To develop an Agricultural Soils Map of Catalonia.
- To develop an Agricultural Areas Plan of Catalonia.
- To develop an Agricultural Impact Assessment (similar as in France).

Viticulture and Urban Wine Culture¹

Oriol Guevara

As you can see we always we all do, you are politicians, researchers, almost everyone does, look up at practical things from the back of the pile of papers.

I'm going to talk about this subject from the perspective of a sector, an industrial sector. Wine in Catalonia is something like a 2% of the GDP, that's moving around two billion euros. It's not the first agricultural industry in Catalonia anyway but it's the third one. So it's pretty important and we also tend, which is wrong in my opinion too, to look at ourselves and the entire world from our own perspective. Probably you are expecting me to talk about this sector that is really close to the urban area of Barcelona. So I'll talk about from that perspective anyway. The reflection that I'll do is probably different from the one that, for instance, made Mr. Paül this morning, thinking about the urban agriculture on its own. I think off what is feeding the own sector in this urban agriculture.

The Penedès is very close to Barcelona. It's about 20-25 Km outside Barcelona but its fairly long: around 50 Km long and around 40-50 Km wide. And it's not a municipality. It involves a lot of municipalities, countries, territories and a lot of people. The Penedès area is really related to Barcelona although it's very big but I'll show to you that it's not dependent on Barcelona anymore. It's like this probably for industrial and specialized economic reasons, probably due to evolution (Figs. 1 to 3).



Mr. Oriol Guevara
Abicon Wines S.L.



1. 25 Km away from Barcelona I
You can see fields, some little villages, farms, a mountain chain (the north limit of the Penedès) and Barcelona behind this other mountains that close the horizon. So we don't feel the pressure of Barcelona or directly not feel it but we have the pressure.



2. 25 Km away from Barcelona II
Again vineyards, again mountain chains and Barcelona at the back but you begin to see some industries and a piece of land not cultivated. There was a plan to build a jail here, a prison. The prison was not built, probably due to lack of budget but we don't know. There have been a lot of references to those developments that are not built and that never think about agriculture.



3. Quiet and rural after all.

¹ Transcribed and edited from tapes -00450 to 00451- of the lecture given in Castelldefels (ESAB/UPC), 12th March 2013

Some key questions:

- Is the Penedès Area within the influence of Barcelona?
- Is the territorial planning or agricultural politic involving wine and the Penedès?
- Is the future of the Penedès strictly related only to viticulture?
- Is the Penedès more dependent of Barcelona than any other wine growing areas?

Is the Penedès Area within the influence of Barcelona?

Obviously it is because it's really close to Barcelona. There are other areas that make wine and are closer to Barcelona or as close as Penedès area. I'm refereeing to Maresme, about 20 Km north to Barcelona but it's a much smaller area. Both two are the traditional areas that served Barcelona with wine in past centuries. As a matter of fact since the Romans although at that time Barcelona was not the main city in the Spanish coast. So in that point of view it has been an urban agricultural park if I may say.

Table 1: Penedès area production
Source: INCAVI 2010

DO	Kg 2008	Kg 2009	Kg 2010	Have harvested x DO	Total reg. viticultural
Catalunya	26,488,291	32,224,761	29,657,251	1109	
Cava	89,703,613	97,485,559	202,065,470	4396	8034
Penedès	173,320,424	185,944,846	120,076,479	2810	5592

So far as I related Penedès is so close to Barcelona. We can say that Penedès is a Metropolitan Agricultural Area but looking at this table (Table 1) you will see that the Penedès it's about 5592 viticulturalists so people that live of agriculture. But of Penedès appellation there are 2810 which means that the rest are registered in other wine areas as Cava and Catalonia.

Table 2: Production evolution of Penedès area
Source: RCDOPenedès

	Production in hectolit.	PDO Penedès	No PDO wine	Cava and Catalonia PDO
1994	1,310,000	581,427	139,717	588,856
1995	1,469,685	602,178	147,323	720,184
1996	1,951,000	675,000	316,000	970,000
1997	1,933,000	630,000	353,000	950,000
1998	1,630,140	450,726	154,838	1,024,576
1999	1,984,926	540,325	255,450	1,189,151
2000	1,929,443	587,935	227,674	1,113,834
2001	1,428,467	455,172	155,437	817,858
2002	1,611,538	523,451	115,148	972,939
2003	1,925,248	518,413	262,711	1,144,124
2004	2,068,436	468,565	352,285	1,247,586
2005	1,339,498	380,802	131,247	827,449
2006	1,653,700	402,702	236,639	1,014,359
2007	1,590,588	247,601	198,013	1,144,974
2008	1.461.079	223.011	169.888	1.068.180

You can see that the 50% of the registered people that work the fields of the Penedès make only Penedès, the other have made either Cava or Catalonia that are not strictly Penedès appellations. In fact Catalonia is an appellation. In fact Catalonia is an appellation that includes all the other Catalan appellations as Alella, Empordà, Terra Alta... only Priorat is not included but is in the middle of the Catalonia area and it's so small. Catalonia involves all these areas and Cava involves not only most of them but also some areas in the rest of Spain. If you think of hydraulic systems, if the system is not independent it means that there are flows in and out of the system which means that the Penedès is not depending on Barcelona strictly speaking. It's not an area that serves Barcelona. It serves Barcelona and many other territories because if lacking it comes, -it's flowing- from other places. That's the industry, that's the sector and this is the way it works.

The Penedès area produced in 2008 about 1,461,079 million liters of wine. This means a lot of grapes, a lot of production. That's why I'm talking about it as a sector. As a matter of fact, as I said before, when we work in then work sector we think of it as a world on itself. So we don't take into account other agricultural practices or other cultural terms. The same thing happens to other people: if they cultivate cereals they don't think about wine. I've been introduced as having been in the regional government for a pair of years and this was one of my discussions with the people and the politicians that were around me when I was there because for me it's a matter of models. I look at the wine sector as a product that should be regarded on its own and then regarded to other products.

The wine sector is the third in Catalonia. The first one would be meat; the second one would be fruits and the third one is wine. Olive oil is probably the fourth. Now, the difference between the first two ones and the third and the fourth is that third and fourth are one product. Meat and fruits, are very broad sectors so should politics take into account products or models of production. What I think you are discussing today is a change of model. That's very interesting and I think it's the right way to go because what we have been doing for centuries has nothing to do with what we'll do in the future. And the future starts yesterday.

The several population always jokes and fun about the regulations, the laws and, of course, politicians. I'm sorry to speak yet that about politicians because after all we all are politicians. When we wake up we do politics. It's the way it is.

Penedès production is very high but never regular, increasing and decreasing; you know how it works, with the years. It depends on climate, in the fields and the biology of plant, physiology. Penedès production goes in the same fluctuation way than the other but at the end it decreases whereas Cava and Catalonia go pretty much the other way down. What's that mean? That means that the Penedès, as I explained previously, is related to other areas in Catalonia even in Spain. We can easily imagine that Penedès is nothing like a Barcelona's agricultural or viticultural area. Penedès is a world's area.

To show a little bit that just need to go into the regulatory Council of the Appellation Penedès where, in the web site, you'll find the table of Sales in liters (RCDO Penedès).

It says that they sold a lot more at Spain than outside, abroad. But if you further inside you'll see all the countries where they sell. Penedès is not focused on Barcelona anymore. It's focused on the world, setting a product as if it was an industry. Cava does that even more. So today, for some reasons, if you look it as a whole, all people that works in Cava or Penedès area look at the product as a commodity. They think of price more than what they think of proximity or of integration to the land. There are some residual groups of people that do that, especially small groups of wine producers that are into landscape and that are focused in very specific things. Maybe I'll say it roughly but that doesn't give money. What gives money is, by the way, the biological production that is inside millions and millions of bottles of Cava, because that's biological production. The volume that is in these bottles is as the volume that is produced all around Barcelona.

So, is the Penedès Area within the influence of Barcelona?

- Within distance? ... More or less
- Created in 1960 originally to protect origin and quality
- 5700 viticulturalists; 270 wineries, 148 companies, 150 to 200 million liters /year
- Year 2009/10: 24,000 Ha (19,000 white grapes)
- Year 2000/01: 27,000 Ha (22,000 white grapes)
- Production 146 million liters in 2008

According to IDESCAT, Barcelona Metropolitan area was around 4.3 million people in 2000 (5.7 in 2012) and as we see RCDO Penedès total production in 2008 was 146 million liters. So if you divide:

$$146 \text{ Mlts} / 4.3 \text{ M} = 35 \text{ lts} / \text{pers} \times \text{year}$$



4. These areas were planted, tilled and plowed until 1950s

We need to drink at least 35 lts / pers x year in order to drink the production of the whole Penedès. There is 365 days every year, some years even more so you can have this amount of wine easily. But the real thing is that we don't have that.

Up to 2006 wine consumption decreased in quantity but increased in quality; after 2006 consumption decreased both in quantity and quality / value. According to the OIV, the International Wine Organization that surveys the sector, in 2010 we drank no more than 22 lts / pers x year in Spain. In 1987 / 88 it was of 47 lts / pers x year. The consumption is decreasing. Apparently we started drinking more quality instead of so much quantity. The reasons are some: recession or crisis is one for sure but also drinking habits are changing; prices used to go up; now they go down.

According to Penedès numbers:

- Barcelona (Metrop.) cannot consume today's production
- No basic commodity but important
- Consumption trends are changing
- Barcelona (Metrop.) relies more and more on export
- Barcelona (Metrop.) is a target / competitive market (It's a very cosmopolitan area that attracts many other wines from other areas)
- Only 1 out of 5 bottles consumed in Catalonia – Barcelona is produced in Catalonia; 2 in la Rioja; another from Ribera del Duero and these areas and the fifth one comes from the rest of the world)
- Barcelona (Metrop.) is a great potential public for consumption, promotion and tourism
 - 4.3 million people
 - 10 million visitors / year

So a very high producing area of wine in the world, I would say, is not drinking its wine so definitively Barcelona has turned its back to Penedès or we have turned our back to. Put it in the way you want. Penedès is close to Barcelona physically but metaphysically speaking spirit is far away outside.

Is the territorial planning or agricultural politic involving wine and the Penedès?

As a matter of fact when we talk about models we probably tend to think about a model that existed before. I don't remember it because I was not born at that time but the street where I was raised in my town there are houses that still have a winery down under so all the vineyards that were cultivated around my town have grapes that were brought to the houses where people made their own wine. Little by little, by the coast in Vilanova there was a port for these ones to sail to anywhere. In the middle age it sailed to Barcelona. In the 17th century they sailed to America. They sailed everywhere. And that was a model of agriculture, an Urban Agriculture Model.

People that thought to put this road here never thought about what was there before or probably never tried to think if it was necessary or not (Fig. 4). I see this road everyday and I have to use it but can somebody think things as a whole and

not just of one sector product; one road to make; one thing to cover. We have a lot of variables so we need to think about a few at least at the same time, not just one. I know this is difficult.

Is the future of the Penedès strictly related only to viticulture?

We cannot compete in price, neither in volume nor qualities. The answer is NO so, what to do?

- Pulling out vineyard acreage is economically unfeasible
- Pulling out vineyard acreage makes no sense as the market is not Barcelona but the world
- Replace vines by what? It's not possible: climate, soil, water supply, culture, know how and difficulties for restructuring a sector that is responsible for more than a 2% of the GAP.

What is possible to do? Study, study and research.

- Look for realistic added value of commodity
- Study integration of commodity in overall agriculture (region, state, continent... world). But Agriculture, Urban Agriculture, Viticulture, wine, whatever must survive on its own. Otherwise it doesn't make sense.
- Restructuring of sector according to studies of strengths / weaknesses report, enotourism, legacy, complementary tourism, etc.
- Research, development and innovation and implementation with control, redesign and reimplementation loop strategies.

What is happening?

- Lack in reference figures (diluted in competent authorities and privates)
- Results: subjective, vague, conditioned, numerous and inconsistent...
- Goals: if any, partial or not achieved

What should happen?

- Need of valid questionnaires, modelization, productive decisions, evaluation of results, redesign, reimplementation, reevaluation...
- By independent group/s
- With scientific methodology
- With objectives marked by politicians and method and implementation by technicians.

Important things to look after:

- Wine is culture, is a part of *daily* culture
- Wine is landscape: vineyards vs?
- Vines must be sustainable: to avoid all shorts of erosion or degradation
- Vines must give agricultural income, enough to maintain it all

Which one is the most important? We cannot look at it as one variable but at many at the same time. All of them are important.

The Baix Llobregat Agricultural Park: A Model to Re-connect the City and its Countryside? ¹

Sònia Callau Berenguer

Foreword

A significant challenge is involved in the task of explaining the Baix Llobregat Agricultural Park from within the Park itself, with the intention of assessing the validity –or not– of the model and the work done. Assessing oneself is always challenging and, in this case, there is the added difficulty of having very few points of reference to enable a comparative assessment. A realistic assessment is probably best gained from the people of the city and the representatives of the management body. However, we do not currently have the necessary instruments in place for this type of assessment. The fact is, however, that the 15 years in which the Baix Llobregat Agricultural Park² (from now on BLAP) has been in operation enables us to hold ourselves up for inspection more comfortably with the aid of hindsight.

Moreover, a concerted effort has been made within the BLAP itself to generate 'debate' and 'reflection' with respect to the critical importance of peri-urban agricultural areas, encouraging dialogue with collaborators in other regions of Spain, across Europe and around the world. Thanks to this constructive exercise, the BLAP has been able to create its 'own discourse', as can be seen from the numerous articles that have been written about it (see the list of publications of interest) and the various visitors from around the world who have come to discover the essence of the project and attempt to replicate it elsewhere in other metropolitan agricultural areas. A key role in this wide-reaching discourse about the BLAP in particular and the peri-urban reality in general has been played by the former Director of the Park, Josep Montasell.

In view of all this, it is not the aim of this article to offer an explanatory and statistical overview of the BLAP, but rather to provide an opportunity to look back over the evolution of the project and share doubts and desires in terms of the model's validity or otherwise, as well as the future of peri-urban agricultural areas, particularly within Europe. Lessons must be learned from each success and failure. This is the key to continuing building a project and gradually consolidate a model that can be used as a reference for other projects and even for land-use and management policies at a national and perhaps even a European level.

With this in mind, we will begin with a brief description of the context of this agricultural land at a regional level, not only from a geographical perspective but also within the context of land-use planning and management. There follows a brief overview of the evolution of the BLAP, always bearing in mind that it is a living and dynamic project and that its fifteen years in operation have enabled us to be both 'judge and party' when it comes to giving an assessment and making a sufficiently objective evaluation with the benefit of hindsight. In the second chapter, we shall undertake a more in-depth examination of the concept of an agricultural park. We develop this idea with reference to some of the most 'unique' and 'creative' projects around which have contributed most towards achieving the general objective and specific aims of the BLAP, with information presented in the Park's various planning



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¹ The definitive version of this text was drafted in August 2013, five months after a meeting was held of the European Urban Agriculture Research Group of the COST Project Management Committee (COST-UAE). This additional time enabled the author to update the contents, especially with respect to the 15th Anniversary of the Constitution of the Baix Llobregat Agricultural Park Consortium.

² The Baix Llobregat Agricultural Park Consortium was officially constituted in a plenary session of all of its members held on the 26th June 1998, after unanimous approval from all attendees of the constitution of the organisation and its statutes, which were published on 10th April 1998 in the Official Gazette of the Province of Barcelona.

and management documents (Management and Development Plan³, Land Use Plan⁴ and numerous Action Plans⁵). The experience gained over the last 15 years taking an active role in both the management and the design of the agricultural park model has also enabled us to share our concerns for agriculture and peri-urban agricultural areas with other national and international territories. To this end, we believe it would be useful to offer some reflections that we have made based on exchanges with external parties that may be worth bearing in mind when designing future management and planning policies for peri-urban agricultural areas. Following this less orthodox train of thought, in the concluding chapter, I shall take the liberty of proposing, or perhaps speculating with a vested interest, a vision of the future of peri-urban agricultural areas in Europe.

1. Introduction

1.1 Regional context

In the same way as the other agricultural areas located within the Barcelona Metropolitan Area, the BLAP is a space characterized by a strong human impact, not only in terms of agricultural production but also with respect to significant levels of urbanization. In fact, if we analyse the history of this agricultural plain located between 10 km (at its nearest point) and 30 km (at its furthest point) from Barcelona city centre, we reach conclusion that is somewhat paradoxical. While demographic and urban growth in Barcelona in the mid-19th Century was largely the driving force behind the exponential growth of agriculture within the Llobregat Delta (Pomès, 2001), it also became the main threat to agriculture from the beginning of the 20th Century onwards. The region's first land-use planning policies, which were developed precisely around this period, included planning proposals for agricultural areas for the very first time (Paül, 2009). Probably one of the most interesting proposals in terms of recognition of metropolitan agriculture was '*The Distribution Plan in Zones of the Catalan Region*', known more commonly simply as '*Regional Planning*'. Although never approved, this Plan already alludes to what would today form part of the concept of food planning and self-sufficiency:

«In tomorrow's world, agriculture will be necessary for us to feed ourselves» to the extent that «the global exchange of products between distant lands (with the wasted effort of economically inefficient transport) shall become a thing of the past [...]. We do not wish to dedicate more resources than necessary to transport and industry. We shall not completely sacrifice agriculture, woodlands or rivers for them». (Rubió i Rubió 1932:32, quoted in Paül, 2009).

Almost 80 years on, the architect, professor and writer Carolyn Steel⁶ makes a very similar reflection:

³ The Management and Development Plan of the Baix Llobregat Agricultural Park (PGD by its Catalan acronym) defines the general framework of operation of the Agricultural Park Consortium. The PGD was approved by the Plenary Council of the Agricultural Park in a session held of 5th June 2002.

⁴ The Agricultural Park's Land Use Plan is the legal and administrative instrument which regulates economic activities in a way that is compatible with the conservation of natural resources, ecological balance and cultural heritage. As such, the Land Use Plan for the BLAP is not only limited to the scope of the Agricultural Park, but rather it also covers agricultural, urban and leisure land use and the creation of infrastructures and general services, as well as establishing management instruments. The Land Use Plan of the BLAP was approved in sessions of the Barcelona Regional City Planning Committee held on 17th December 2003 and 16th June 2004, published in the Official Gazette of the Autonomous Government of Catalonia n° 4,216 dated 10th September 2004, pages 16,582-92.

⁵ Based within the general framework established in the Management and Development Plan, the Action Plans are management documents which establish the priority lines of action for two-year periods. The first Action Plan of the Agricultural Park was for the period 2002-2003, just after the PDG had been approved. The most recent Plan covers the period 2012-2013.

⁶ Carolyn Steel is an architect, professor and writer living in London. She is the author of the book '*Hungry City: How Food Shapes Our Lives*'.

«If we need food to survive, why do we not build cities around food? And, if that is not possible, why do we destroy the best lands for food production nearest to the cities, almost without a second thought?»

Two reflections separated by 80 years but extremely similar in essence which cannot leave us unmoved. Can we now state that the agricultural land protection policies in the last 70-80 years have been sufficient and efficient for their purposes? What is the current status of the London Green Belt or the Dutch Randstad Green Heart, pioneers in the movement to establish and protect agricultural lands? How much remains of the agricultural green area established in Milan's General Regulatory Plan (Piano regolatore generale AR) drafted in 1953⁷ or the rural areas set aside for conservation by the SDAURIF of 1976⁸? Without wishing to enter into an in-depth analysis of the regional transformations that have taken place in these areas, nobody could disagree that agricultural land is often subject to encroachment through subtle changes, inaction or purposeful legislation or regulation (Paül, 2009). Agricultural land is a transparent object that appears not to exist. As a result, 'territorial conflicts' are becoming increasingly common, as are movements campaigning against continued attacks on agricultural areas.⁹

It has been demonstrated that only those agricultural areas that have been subject to some type of land-use or regional planning scheme have been safeguarded in the long term from being swallowed up by urban encroachment. Along these lines, returning to the Barcelona metropolitan area, the approval of the 1976 General Metropolitan Plan (PGM by its Catalan acronym), the zoning of which, in point 24, incorporates a reference to 'rural land protected of high agricultural value' would lead, 20 years later to the incorporation of this agricultural land within the BLAP. The situation was similar in Milan's Parco Sud. The idea of creating an agricultural park in the southern swathe of the city was first introduced as part of the metropolitan area planning towards the end of the 1960s. In the mid-1970s, the idea of an agricultural park as 'a great green ring' gradually gained momentum. The aim was to create a large area in which the development of agriculture and leisure activities could coexist. To this end, Milan Parco Sud National Park was created and classified in an integral legislative document as a 'metropolitan ring and agricultural park'. In 1990, thanks to a proposal committee formed of cities and villages with an interest in the project, Regional Law n° 24 was passed and came into force. This Law formed the basis of the creation of the 'Institution of the Milan Parco Sud Agricultural Park'. One of the most interesting aspects of the Milan Agricultural Park is precisely the use of the adjective 'agricultural' which defines the park not only in terms of an attractive name, but rather a name that expresses the character of a space as predominantly agricultural. This protected peri-urban agricultural area covers a total of 47,383 hectares of which 35,000 are cultivated. Within the park, there are a total of 910 active agricultural farms.

Returning to the scope of our study and to round off this section, we turn our attention to the most recent regional plan approved for the Barcelona metropolitan area. The PTMB¹⁰ sets out the establishment of open spaces in the metropolitan area:

⁷ In Milan in 1953, the General Regulatory Plan ('Piano regolatore generale AR') was approved, the zoning of which included the identification of open (green) spaces, differentiating between 'existing green public areas and those in development' and 'green agricultural areas'.

⁸ In Paris in 1976, the Regional Plan for the Metropolitan Area (SDAURIF) was approved, which established the rural areas to be preserved and also set out the general planning resolutions for protection and planning of rural land.

⁹ There are several clear examples of this in various European metropolitan areas: 'Mouvement pour une insurrection des consciences' fighting against the Project of National Interest (OIN) on the Saclay Plateau in the Ile de France region. See : <http://www.appel-consciences.info/spip.php?article39/> Accessed 26 July 2013; 'Forum italiano dei movimenti per la terra e il paesaggio' which, among other campaigns, included a proposal for an agricultural park in the north-east of Milan, separate from the city's Parco Sud Agricultural Park See: <http://www.salviamoilpaesaggio.it/blog/> Accessed 26 July 2013; 'Campaign to Project Rural England' which, among other campaigns, included a defence against projects which threaten London's green belt See: <http://www.cpre.org.uk/what-we-do/housing-and-planning/green-belts/in-depth/item/3027-major-threats-to-the-green-belt/> Accessed 26 July 2013.

¹⁰ The Barcelona Metropolitan Regional Plan (PTMB) was approved by the Catalan Government on 20th April (Official Gazette of the Autonomous Government of Catalonia n° 5627-12/05/2010).

1. Natural and agricultural parks network within Barcelona's Province.

Source: Barcelona's Provincial Council, 2009

the plan 'strives to set the way forward for areas that have a wide range of levels of legal protection but which do not necessarily have a physical continuity in terms of a system of open spaces [...]. In other words, the aim of the plan is to structure and complete the existing entities in order to provide them with a level of consistency, robustness and the ability to achieve the functions that have been allocated to a system of open spaces". In short, the PTMB assigns the maximum level of protection (special protection) to areas that were already subject to certain legal protection, such as the agricultural park now enjoys, or the natural parks network (Figure 1), and leaves the rest of the areas with the minimum level of protection (preventive protection) or categorizes it as new land suitable for urban development. Of the 242,143 areas involved in the system, 53,503 ha (22%) correspond to agricultural land, while the rest are nature reserves. Of the agricultural land, 91% are subject to the maximum level of protection (orchards, vinyards and other agricultural land uses), while the protection for the remainder is significantly lower. Unfortunately, food sufficiency criteria that are given a key role in the planning processes of certain cities are completely omitted in the PTMB.



1.2 Retrospective assessment

In comparison to other models such as nature reserves, rural parks and peri-urban parks, the level of consistency throughout the Agricultural Park model is essentially based on the emphasis on its productive structure. This must always be predominant due to the very nature of this agricultural area itself. With this in mind, the Agricultural Park Management and Development Plan defines the Agricultural Park's objective as follows: "The general aim of the BLAP is to consolidate and develop the territorial basis of agricultural activity and facilitate its continuity, promoting specific programmes that enable values to be preserved whilst developing the functions of the agricultural area within a framework of integrated sustainable agriculture in the region, in harmony with the environment". The same document goes on to define five strategic lines that must act as guidelines for the management of this area. Without stating them one by one, it is worth underlining once again the emphasis of the strategic lines on improving the productive agricultural structure, without forgetting the environmental and social aspects. With this in mind, we can confirm that, since its creation in 1998, the BLAP has dedicated a significant proportion of its human and financial resources to consolidating the productive agricultural network and improving the territorial structure of agriculture.

Like the space itself, management has to be dynamic and flexible, and adapt to the needs at any given time. To this end, and once the obvious lacks that this space suffered had been overcome in terms of infrastructure and services, a turning point was reached in the management of the Agricultural Park. As a result, over recent years, renewed efforts have been made to bring this agricultural area closer to the people/consumers and to re-establish the link between the city and its countryside. This is highlighted by the growing demand for leisure uses of agricultural areas. Well

managed, this demand could provide an opportunity to bridge the gap between these areas and the city, as well as dismantling physical and mental barriers between urban and rural areas. There is an obvious risk that one runs by using agricultural areas for leisure activities rather than food production. There are plenty of examples where this has occurred and, in fact, it is a recurring issue in European debates about the role or functions of peri-urban agricultural areas. This issue gave rise, to a large extent, to the title of this article. Answering the question in the title from within the Agricultural Park itself is, once again, a significant challenge. At the very least, we would venture a response that, without the Agricultural Park and the measures taken to incorporate this space into the metropolitan process, it would be difficult, not to say impossible, to ensure that this land was not gradually swallowed up by the urban onslaught of the metropolis of Barcelona.

Moreover, with respect to other open spaces that are under the care of conservation and management bodies, such as nature reserves, we want to confirm there is still generally an imbalanced emphasis on the land management and planning of these spaces compared to agricultural areas. While it may well be true that natural spaces have long been subject to more traditional and established attention, it is now time to take a step forward with the construction of a unique model for peri-urban agricultural areas. In the following section of this article, we take a more in-depth look at the definition of the Baix Llobregat Agricultural Park model and outline some of the lines of action which, in our opinion, have contributed most to the re-establishment of the link between city and countryside, otherwise so over-used and with so few real points of reference in terms of land-use planning and management.

2. The Baix Llobregat Agricultural Park

2.1 The concept

In 1993, a professor from the Milan Architecture faculty, Giorgio Ferraresi, made a first attempt at defining the concept of a 'Parco Agricolo' (Agricultural Park): "The Agricultural Park is a spatial structure of which primary production is the main objective, as well as its conservation and appreciation. In context, its aim is also the promotion of cultural, leisure and recreational activities in the environment for people of the city, within a framework that is compatible with the primary purpose". He goes on to add that "valuing the environment and the balance of the ecosystem is also a necessary prerequisite for fulfilling the purpose of the Park" (Ferraresi, 1993). The same year, in their ruling on the General Land-Use Plan of Catalonia (1993), the Nature Protection Committee gave the following definition of an agricultural park: "Any area in which public administrations want to intervene actively in order to keep the area from being incorporated into the urban process and for which there are economic, political, social, technical, educational and environmental measures in place in order to ensure the continuity of the area in terms of use, promoting the incorporation and technological improvement of agricultural operations". While this may be the only institutional definition that we have been able to find, the Catalan Encyclopaedia gives us a second definition within a Catalan context: "An agricultural park is a peri-urban agricultural area established and managed with the aim of preserving the agricultural activities therein and, in addition, promoting the economic development of the area and the agricultural operations, conserving and disseminating the related ecological and cultural values"¹¹.

Without going into a comprehensive comparison of the three definitions, there are three aspects shared by all of them which, in our opinion, would need to be included in any definition: an agricultural park is an agricultural area which has the primary function of agricultural production (taken to mean an economic activity), to which may be added an ecological function. In contrast to other economic activities, agricultural activities are intrinsically linked to certain social and cultural values that are unique for each region. Therefore, we cannot understand an agricultural park without comprehending its relationship with the city and its people.

¹¹ Gran Enciclopedia Catalana. See : <http://www.enciclopedia.cat/cerca?s.q=parc+agrari&mode=federated&search-go=Cerca#.UhpflqubvIU/> Accessed 23 July 2013.



2.2 Unique projects for reconnecting the Agricultural Park with the city

In the foreword to this article, we spoke of the Agricultural Park using adjectives such as 'living' and 'dynamic'. With this in mind, it should be noted that the management of the Agricultural Park has been developed based on this vision and with the desire to adapt to the needs and situations that may arise at any given time. A clear demonstration of this is the fact that, in the same year in which the Agricultural Park Management and Development Plan was approved, establishing the general framework within which the Agricultural Park Consortium would operate, a fourth element of management was introduced, namely the two-yearly Action Plans, which set and develop the priority lines of action within the Park. We therefore propose undertaking a retrospective analysis of the six Action Plans that have been approved to date. Once again, our objective is not to provide an explanatory description of the various plans, but rather to study the strategies used in order to contribute towards the reconnection between the city and the countryside through effective management. In our opinion, discussing the city-countryside relationship is synonymous with discussing the relationship between farmers, agricultural areas and farming produce with the consumer. Therefore, we shall focus on activities that aim to enhance the relationship between these elements.

Of the five strategic lines of the Agricultural Park Management and Development Plan, there are two that we would particularly highlight:

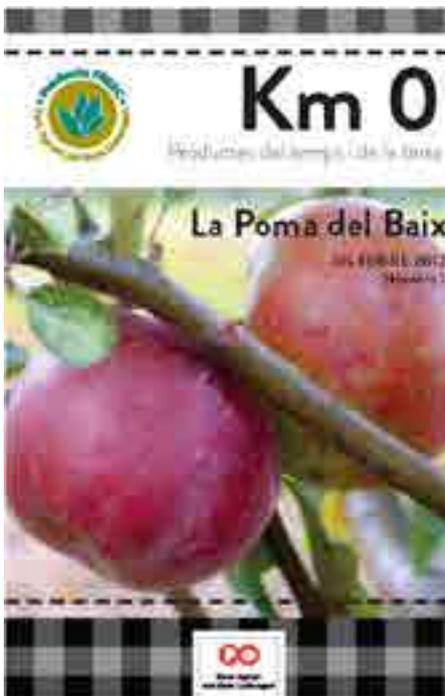
SL 2 Promoting production and commercialization systems which promote the increase in yields generated by agricultural farms.

SL 5 Consolidating and disseminating knowledge of the cultural and natural heritage of the Agricultural Park without interfering with its agricultural activities.

In terms of the commercialization of the Park's agricultural produce, the first action proposals can be found in the 2002-2003 Action Plans, with proposals for the redefinition of the protocol of use for the label 'Producte FRESC' (Fresh Produce) of the BLAP, an proprietary accreditation of the Consortium which is awarded to all producers that agree to meet the established quality standards. In the same document, the first measures can also be found that aim to bring the Agricultural Park closer to the people of the city, including the promotion of a pedagogical programme aimed at children between 10 and 12 years old that was started in the year 2000. Other such measures include drafting informational material to explain the concept and operations of the Agricultural Park, and participation in the main trade fairs in the county. The 2004-2005 Action Plan went a step beyond simply strengthening the Producte FRESC brand to propose the launch of a campaign involving 18 restaurants around the county to promote the use of local and seasonal produce from the Baix Llobregat region in catering establishments. Another proposal involved drafting regulations for the use of the Producte FRESC brand. In terms of building awareness of the Agricultural Park, the focus was predominantly towards institutional dissemination rather than specifically towards the people of the city. In addition, a measure was implemented to organize the entrances to the Agricultural Park, as well as defining and signposting 'leisure' and 'educational' itineraries.

No longer following the PGD structure, the 2006-2007 two-year Plan, incorporated priority focuses for action and the development of actions with programmes. In terms of commercialization, the Plan included the 'Active Park' programme aimed exclusively at promoting and improving commercialization networks. The aim of this programme was "to boost the entrepreneurial spirit of the agricultural sector and economic development based on a drive to conduct economic developmental actions and business cooperation within the field of commercializing agricultural produce". It is worth highlighting the appearance of the term 'entrepreneur', which most likely refers to the profile of a professional and business-oriented rural producer, in a manner of speaking. With respect to building awareness, the Plan called for an increase in the number of informative publications for the general public (including a permanent exhibition). A new development was the proposal to conduct guided tours for the public to the Agricultural Park.

The last plan before the Park's tenth anniversary (2008-2009) developed the 'Active Park' programme set out in the previous Plan with a set of new actions. In this case, a platform was proposed which would go on to become one of the most



Vegetables tourism



important points of contact between people in the countryside and city dwellers/ consumers. A website (www.elcampacasa.com) was proposed that brings together all of the information regarding farmers that have signed up to the Producte FRESC accreditation scheme, as well as information about the products cultivated in the Agricultural Park and the activities on offer to the people of the city in order to discover the Park. Along the same lines, in terms of building awareness, the Park began an intense communication campaign with the 'Communicating Park' programme, involving a digital newsletter with news about the Park, as well as visits and specialized actions to bring the people of the city closer to the agricultural area. We may venture that a turning point was reached here. The Park shifted from simply disseminating information to communicating, with the introduction of 2.0 technologies as a means of achieving the desired change of direction. The drive to enhance the Park's communication was reinforced with the following Action Plan (2010-2011), which strove to strengthen the Agricultural Park's presence in the media, in addition to continuing the previous Plan's proposals (the park's @genda, the km0 newsletter). In the same way, there was a certain continuity between this Plan and its predecessor in terms of economic development, albeit with a subtle and interesting difference. The 'Active Park' programme, previously introduced in the 2006-2007 Plan incorporated the concept of 'holeriturisme', tourism involving the discovery of vegetable cultivation, an awareness building initiative that presumably fell under the remit of the 'Communicating Park' programme. In other words, from within the Park, it becomes clear that its ability to attract tourism, or the use of the Park for leisure purposes, has to be interpreted as a commercialization strategy and not simply a leisure service. We would like to underline this point because it reaffirms the primary purpose of the Agricultural Park, which is the production of food, rather than social or leisure reasons. The most recent Action Plan (2012-2013), which is still currently in progress, has introduced certain interesting elements, above and beyond the new methodology used in terms of drafting the Plan¹². Moreover, and returning to actions for the development of commercialization, a particularly interesting concept to be introduced is that of 'Proximity Course Circuits', which lead

¹² In the drafting process for the 2012-2013 Action Plan, a prior consultation was conducted with all 'Agricultural Park agents', any party with interests in the Baix Llobregat Agricultural Park, people that use the park and anybody involved in its management. This involves agents, people or organizations that, due to their link to the Agricultural Park, possess information or have a direct impact on the conservation, planning, development and management of the region.

us unequivocally to a set of measures that have the consumer as its core principle. For the sake of example, the most representative measures included gastronomy workshops for consumers, 'AGRIPROXIMAIT' sessions in which consumers are invited to take part in a round table with local farmers that sell their produce directly, campaigns to promote the use of local produce in catering establishments, farmers' markets, identification of all the 'Fresh produce' selling points, mobile app. In short, there was an important turning point in terms of management actions, with the introduction of the concept of proximity and direct selling from the farmer to the consumer, making the Agricultural Park, the 'food place' for the people of the city and consumers within the Barcelona metropolitan area.

2.3 The Agricultural Park in the world

Over the years, the Agricultural Park has become a leading model of a methodology of preserving, developing and managing a peri-urban agricultural area. The numerous visitors to the Agricultural Park (both in terms of individuals from the political, technical and university sphere and from the agricultural sector itself) and invitations to participate in conferences, conventions and seminars in order to give an explanation of the Agricultural Park highlight the interest in discovering what is being done at the Park, not only here at home but also across Europe and around the world.

Being a leading model is a difficult challenge which involves an internal commitment to do things in the best possible way on the one hand, going beyond the inherent demands of the agricultural sector and the consortium members, and being able to explain the experience coherently on the other. One difficulty that is faced by people in charge of organizing and managing peri-urban agricultural areas is the fact that such spaces are part of a newly-emerging category, with very few points of reference and where an assessment of their significance is still challenging. With this in mind, and bringing together some reflections and points of debate that have been gathered through interactions and exchanges with external parties, in 2012, the Agroterritori Seminar¹³ was initiated from within the Agricultural Park in collaboration with the Agroterritori Foundation and the Agroterritorial Network. At this seminar, the Letter on Peri-urban Agriculture¹⁴ was debated, with the aim of encouraging public authorities to adopt policies and measures at a local, regional, national and international level to protect, plan, develop and manage European peri-urban agricultural areas. We believe that the document sets out the concerns, debates and reflections that have arisen through the years. It is therefore compulsory reading for anybody interested in promoting protection, management and development measures for peri-urban agricultural areas.

Conclusions

The existence of Baix Llobregat Agricultural Park (BLAP) as a model for the preservation and management of a peri-urban agricultural area has led to numerous visits from around the world, as has been repeatedly mentioned above. This leads to the conclusion that the concept of 'Agricultural Park', while being a leading model that can be exported to other regions, may also be seen as unique and, in a certain respect, rare. This results in the concept not being present in the minds of politicians, town planners or other agents that are involved in land-use management. A clear demonstration of this is the near complete absence of national networks of protected agricultural areas and protective legislation for agricultural land, or the lack of integrated projects that blend the preservation of agricultural space with its management. All these facts mean that projects and initiatives such as the BLAP find themselves in an extremely delicate situation. No legal framework is in place to define and protect agricultural areas. Neither are there coordinated instruments to take action with respect to such protected areas. It all comes down to the good will of each region. A simple and clear parallel can be drawn with nature reserves.

¹³ The Regional Agricultural seminar took place in Castelldefels (Barcelona) on 8th and 9th September 2010 in the Degree Room of the Escola Superior d'Agricultura de Barcelona (ESAB-UPC), within the framework of the AGRIPROXI project – 'Local agriculture for reinventing the relation between urban and rural areas', as part of the Operational Programme of Regional Cooperation between Spain, France and Andorra 2007-2013 (POCTEFA).

¹⁴ Charter on Peri-urban Agriculture. See: http://www.agroterritori.org/ficha.php?id_nivell2=16

Which European countries do not have laws in place nowadays to protect its areas of ecological importance? Which countries do not have national parks or protected and managed nature reserves? Perhaps there are no such countries. At a European level, significant efforts have also been made to construct a European network of nature protection areas (the well-known and highly-respected Natura 2000 Network), despite the lack of powers at a European level to influence land-use planning. It would appear that agriculture spaces and farming itself are not European strategic objectives. However, as is well documented, the CAP is one of the European policies that takes the lion's share of the budget. One has to wonder why protection and management models for agricultural spaces are not promoted at a European level, and why no Agriculture 2020 Network exists which guarantees, at the very least, the survival of the best agricultural lands across Europe, which are currently being significantly depleted.

Returning to the question that was posed in the title of this article, as to whether the BLAP is a valid model for reconnecting the countryside and the city, as well as whether, in relation to the earlier reflection, this could be exported across Europe, we believe that the answer is YES. Without the creative effort made from within the Agricultural Park to find strategies for bringing the people of the city closer to farmers and the areas of cultivation, progress may well have been less. If projects such as the Agricultural Park evolve from being microprojects to become part of a macro perspective of agricultural land, it will be much easier to ensure that these agricultural areas are seen as a strategic element in the collective imagination, and locally produced food will be seen as a value asset for the future of smart cities.

Acknowledgements

This article is the result of the experience gathered over the years working at the Baix Llobregat Agricultural Park, but above all, from the work of two of the people that I consider to have played a critical role in this project: Ramón Terricabras, Manager of the Agricultural Park, and Josep Montasell, the park's director until February last year. I would also like to thank Valerià Paül for his contribution towards enriching the debate and his reflections about the Park in particular and the reality of peri-urban areas in general. To all of them, I would like to express my deep appreciation for their masterful skill. I would also like to thank Marc Delgado for his work reviewing certain parts of the text in Catalan and Nick Southey for the translation into English.

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The Urban Planning and the Management of Rural Undeveloped Land: the preservation of values, heritage and landscape in balance with the economic activity versus the natural resources exploitation of the SNU

Carles Llop

First we must clarify that, on the development of urban and regional planning issues, we have had a name (a category) that has conditioned us: the so-called undeveloped land (SNU) in our urban legislation.

Indeed, this is a great inaccuracy. Our territories which are not city or more or less dense settlements, have a wealth of situations that justify *per se*, its value, without having to understand them as the city's negative (that is not developable, and a reservoir for urbanization growth). The planning legislation has never faced rural land from a positive and proactive approach, defining its values and potential. It has always made certain definitions and arrangements from the ban.

Perhaps, we should look for the causes and consequences of the lack of attention to rural land in the uprooting between society and countryside, so to speak, in the transformation of agrarian societies into industrial societies that caused:

- The progressive loss of weight and number of farmers and the rural sector
- The gradual loss of weight in the setting of gross domestic product (GDP)

However, lets highlight a significant advance in the definition proposed in the Legislative Decree 1/2005 revised text of the Urbanism Law ('Llei d'Urbanisme', Art. 46 to 60), which determines the quality of the territory, and therefore, a more holistic vision of it, considering that:

- The land is a finite space, a not reproducible resource
- Soil is the basic raw material that determines the location of productive activities
- In urban and in developable land what counts is the benefit/profit of urban use; while in the SNU what counts are the qualities of the soil and the agronomic suitability to their destination
- The effects on urban development are often irreversible

That's why, from a renewed view of urban planning we must take into account:

1. A renewed vision of rural ecology role
2. An environmental and SNU resources management for an efficient decontamination
3. The SNU only can be approached from an overall territorial vision
4. A necessary balance between urban and rural, taking into account the effects of intensive uses that affect both intensive agriculture and urban spread
5. Arrangement of (the) transition from countryside to city, the regulation of the effects between the processes of growth, urban spreading and suburban uses.

And especially a renewed way of understanding the undeveloped land, there's no need for links between undeveloped land and other "natures" and land regimes

6. The territorial-mosaic city
7. The heritage and territorial wealth of the SNU productive space + living heritage
8. The agro-food sector as a strategic sector for a sustainable economic development
9. The need of procedures to improve and modernize rural land
10. To introduce the concept of ecological network in urban and regional planning, ensuring that the introduction of new uses is carried out so as to



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keep the structure and operation of the territory avoiding the fragmentation and isolation of natural elements .

Ultimately to tackle an integrated planning approach: 'flight', soil and subsoil; taking into account the *tangible* and *intangible values*: ecological, environmental (habitats, ecosystems, structuring of the territory, biological corridors, ecological connecting etc.), cultural-historical, aesthetic, social (leisure and education), economic (agriculture, forest, industrial), symbolic, identity, taking care of the good healing of its *own functions*: natural, environmental, agricultural, forestry, livestock, farming-cattle, and the compatibility with other *functions and new productive activities or soft functions (slow)*: training, walking, leisure, sport, family gardens.

To develop a good arrangement we'll preserve biodiversity and the mosaic space multiplicity in each document and define the spaces, areas and basic elements in the ordering of SNU:

- Rivers, streams, canals and streams, ponds and natural water course edges
- Areas of orchards and agricultural value
- Large forests and environmental units of the biophysical matrix
- Hills, embankments
- Natural areas, areas of natural interest, ecological corridors

The key words for planning and management of undeveloped land (SNU) will be:

- Protection
- Preservation
- Environmental Management
- Custody
- Ownership and Operating Units
- Recovery of environmental quality
- Biodiversity Management
- Establishment of delimitation degrees, protection and management of natural areas
- State of the natural environment and its biodiversity

And the figures of project and management that we are:

- National Park
- Natural Park
- Integral Nature Reserve
- Partial Nature Reserve
- Natural Space of National Interest
- Wildlife Nature Reserves
- Wetlands streams
- Controlled hunting zones
- Wildlife Refuge
- Wetlands of southern streams
- Areas of geological interest: geotops and geozones
- Habitats of Community interest, classified by the Habitats Directive 97/62/EC
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- Areas under stewardship agreements. "The Land Stewardship Network" was declared of Public Utility by the order INT/3558/2006 of 26 October
- Natura 2000 Grid
- ZEPA (Zona de Especial Protección para las Aves) or Birds Spetial Protection Areas
- Agricultural Park
- Rural Park
- Regional Parks
- Territorial Park
- Greenways
- Cycling Network
- Special Plan for protection of the environment and landscape

The planning legislation has never faced the undeveloped land from a positive and proactive approach defining values and potential, and has always made certain definitions and ordering patterns from the ban. As it's defined by current law, the undeveloped land to be protected is this in which its connector interest, natural, agricultural, forest or others has to avoid its transformation; this in which the objective of it is to ensure the rational use of land and the quality of life that has a high agricultural value and is included in protected geographical indications or designations of origin and subject to the limitations easements to protect the public good. Given the shortcomings of legislation, some examples of rural landscapes management provide some possibilities for a renewed protection of its values.

The examples of planning and action in undeveloped land that we can present for the discussion we have introduced are: The Special Plans for Gallecs, the "Cinc Sènies" at Mataró and the Sabadell Agrarian Park:

Gallecs at Mollet del Vallès



The modification of the General Urban Plan of Mollet del Vallès was performed to change the developable land classification of the Gallecs area into unscheduled - undeveloped land of special protection. This change in classification is based on the need to provide a coherent legal framework to the real situation that the spatial area of Gallecs presents. An area especially characterized by the presence of significant environmental, agricultural and landscape values, fully accredited. The importance of these values not only justified but required making this change in the classification of the land in order to maintain the necessary consistency between land classification



Gallecs, forestry and agrarian activities



and the existing circumstances. The maintenance of the unscheduled urban land classification and the possible urban development of Gallecs would represent the destruction of these values that would be inadmissible in law as being a decision likely to breach the duty of public authorities to ensure a suitable environment and the reasonable use of natural resources.

Despite is in the 90's when plans began to incorporate rural land into the planning, not as a residual element that serves as a reserve for urban growth, but as necessary equipment built in the territory. It is understood that it becomes an equipment due to the input values of tangible and intangible assets, among which are the ecological, environmental performance (habitats, ecosystems, structuring of the territory, biological corridors, ecological corridors etc.), cultural-historical, aesthetic, social (education and leisure), economic (agriculture, forestry, industrial), symbolic an of identity.

Sabadell Agrarian Park



Sabadell, landscape components: areas, traces and settlements

The main objective of the Special Plan for the Sabadell Agrarian Park is the stability of the agricultural area as incentive for agricultural investment. The purpose of the document is the establishment of all the necessary settings and measures for the its proper preservation, consolidation, promotion, development and improvement, which must be characterized by a planning and management geared to get viable farms in the framework of sustainable agriculture, integrated in land and in natural environment, and to grant the ordered social use of the space, forming a characteristic and quality agricultural landscape that gives identity to the area.

The territory included within the scope of the plan is especially noted for its production values with economic investment and fresh product closer to consumers, environmental values as separator of densely populated areas, cultural values that can have a tidy and competitive territory and historical values indicating the history of the region and its population.

The planning and management model proposed for the Agricultural Park is to strengthen the agricultural space and to make it possible improving the income of the companies, to boost production and marketing systems tailored to the needs of the market and to modernize farms as a whole, so that they can improve or achieve

its business viability. Also, the agricultural model of the Park will have to move towards sustainability, that is, it must conserve resources of water, soil and genetics without environmental damage, while must be economically viable and socially acceptable.

Both for its position under pressure from the expansion of the city, as for the current situation of agriculture in general, it is absolutely necessary that the document of the Agrarian Park is not considered a classic planning instrument, in the sense of establishing basic regulations without land management, but must establish a set of tools whose purpose is to promote and ensure the stability of agriculture, treating the whole unit, as a balanced ecosystem in which productive, environmental and cultural values are present which is determined by a set of actions necessary to ensure its viability and sustainability. In this regard, the plan proposed the writing of some documents: the management plan of properties or operating units linked to the production license application; setting up a registry of uncultivated farms to allow local government intervention in those estates that do not meet the objectives of the plan; drafting sectorial development programs that aim to strengthen the agricultural space and enable the improvement of the income management of agricultural enterprises and the establishment of the potential constitution of the organ manager who will be given the powers deemed necessary to improve the management of the park.

With the aim of organizing and managing the undeveloped land we must work with the concepts of protection, preservation, environmental management, custody, property, exploitation unit, recovery, biodiversity, bounding etc... that we must apply to the basic elements, spaces and areas of the territory. In this sense, we have to identify the water elements of the land, rivers, irrigation systems, streams, channels, lakes and others, the areas of agricultural value or orchards, large forests, hills and embankments, the natural areas, areas of natural beauty and the ecological corridors.

The Special Plan “Cinc Sènies” at Mataró

The identification of the elements that make the region is the first step to create an agile document with executive perspective. The Special Plan “Cinc Sènies” at Mataró with an area of 460 Ha located on both sides of the N-II, comprises the “Cinc Sènies” area at the lower band, and the neighborhoods of Mata and Valldeix at the upper part. The proposed plan recognizes the special regulations of Mataró's General Plan and the basic zoning that will be adjusted according to five levels.

The first of these levels are the “Areas” in which the land is recognized from its production values, the usefulness of soils and the role of environment outlining the following: forestry, the agricultural development of Valldeix-Mata, San Simon, the Forcat stream and Sant Andreu de Llevaneras. The second level corresponds to the “connectors” which are the streams, roads and banks, so to speak, those elements of planning which ensure that everything runs as a structured and interconnected system. In the third level, “Special Elements”, are included those who due to their uniqueness require a specific and complementary treatment that tends to protect and ensure the continuity of the value they represent. These are, among others, carob fields, chasteberry areas and clumps of trees in private gardens, etc... The meadows would be the fourth level. These correspond to non-cultivated land, which by their nature may be important to maintain as islands – shelter or housing of various species of flora and fauna that promote the biodiversity of the set and can be a center of potentially useful species in the integrated fight against pests. The last level corresponds to soil uses and activities in disagreement with the plan. It shall establish the relevant processes and measures intended for their suitability with respect to the main agricultural uses of the sector.

The Special Plan also adjusts the regulation parameters of plot, building and use in accordance with the executed and analyzed reality. It also establishes criteria for location and priority on the most suitable soils to be qualified as agricultural system, which will be added to a “land bank”, to exclusively be intended to this purpose, and for the later definition and drafting of the Management and Development Plan and subsequent priority action in the action phases, the stages plan for its development and the necessary infrastructure to ensure the proper development of the sector.



Cinc Sèries, environmental systems and biologic values



Regarding farming activity the plan poses three main actions: the development of a water management program to ensure sustainable management of water resources by establishing a code of good practices regarding local agricultural irrigation systems and the dosing of nitrates; making a support program to promote the implementation of essential elements for the development and technological improvement of farms and, finally, the development of a waste management program to improve the agricultural environment and reduce the negative effects of agriculture on it.

The Gallecs Experience ¹

Xavier de Pablo and Luis Maldonado



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Gallecs is an Agricultural Territorial Park, located at 15 Km north of Barcelona. It has got 733 ha of agroforestry landscape (Fig. 1) which has kept their natural values in a highly populated area. The main activity is agriculture and nowadays is under a conversion plan to organic farming. It is also a leisure and cultural referent to the nearby inhabitants and has become a green lung to this developed region.

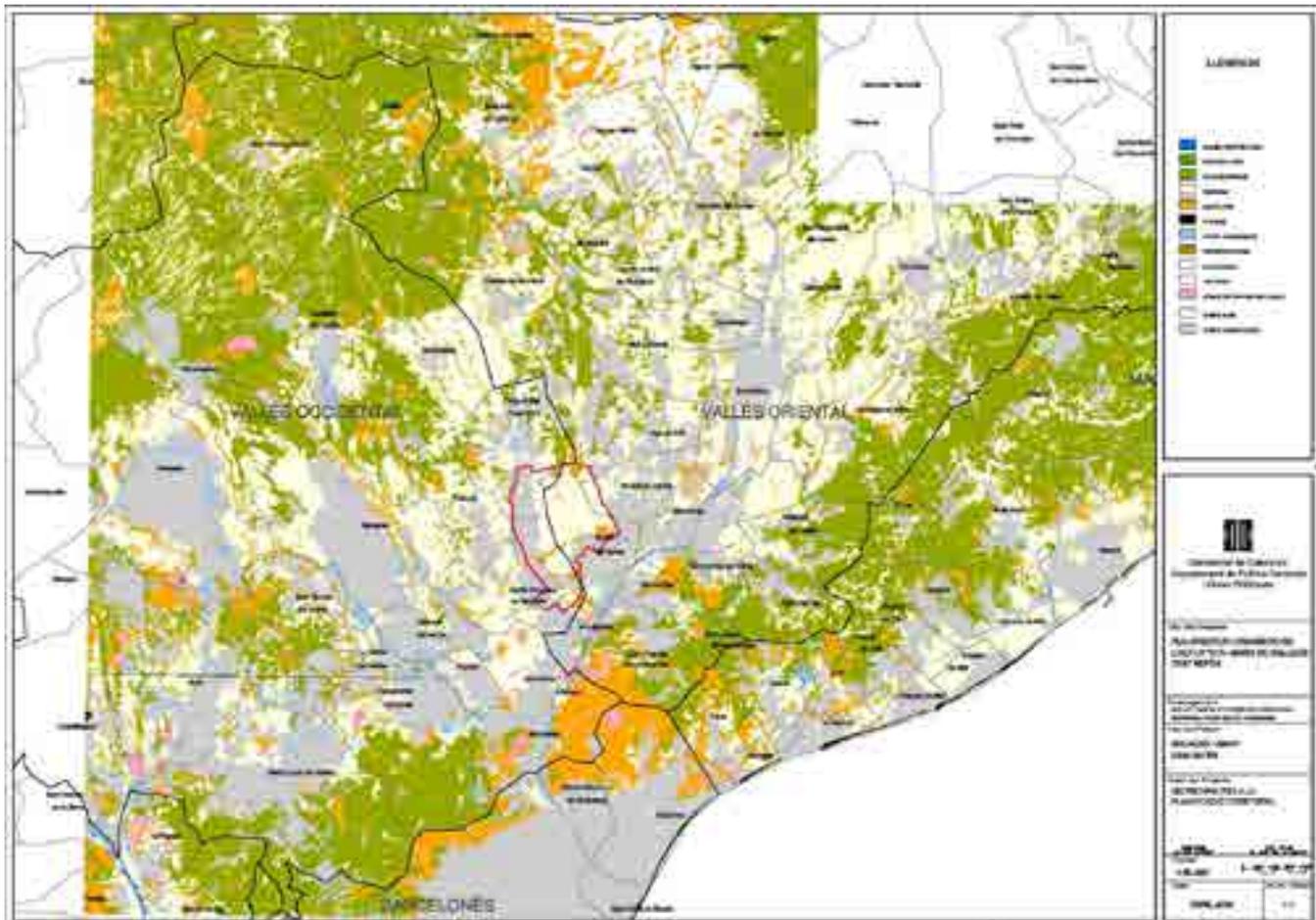
In this urban context, the Gallecs' agrarian model is based in a more sustainable management, in both environmental and economic terms. At the same time agriculture has got also to be compatible to cultural and leisure activities. Only with a rational management of the agricultural activity it will be able to preserve the agroforestry landscape together with the natural and social values of the site.

Agriculture, with 535 hectares, represents the 75% of the total area. The forest and other vegetation represent 106 hectares and the rest of the surface includes the buildings and their surroundings, the 200 urban allotments and the 30 kilometres of country lanes.

The Park was created in 2005 as a result of the 'Pla Director Urbanistic Sta. Maria de Gallecs' (Fig. 2), a Catalan planning act. In 2009 the area was incorporated to the Pla d'Espais d'Interés Natural, a further environmental protection, in order to protect a fragile landscape, with many natural, forestry and agricultural values and also to integrate an increasing social use of the space.

The Park is managed by the Consortium representing the six municipalities with area on the Park and the Catalan government. The aim of the Consortium is to establish the long term strategies and the annual programmes in order to consolidate the space and make viable all functions, agriculture, forestry, nature, heritage, infrastructures, environmental education and leisure.

¹ Partly published in English as "Gallecs, an inherited landscape" in [Paisea: revista de paisajismo](#), num. 20, 2012, pp. 105-111.



2. Urban Plan of Gallecs: situation
(Source: Generalitat de Catalunya, 2005)

3. Gallecs protected central section

4. 'Consorti del Parc de l'Espai d'interès Natural de Gallecs'



Inherited landscape

Gallecs is the work of anonymous men (...) who worked this land for hundred of years, creating this unique landscape (...). The fragile, ethereal beauty of this inherited landscape means that it has become a big agricultural park.

Gallecs formed part of a large area of agriculture and livestock farming in an area that was considered to be of great strategic value, so much so that in 1973, as part of the Development Plans, 1500 Ha were expropriated in order to create a new town. Fortunately, the economic crisis of that period, together with great social and political opposition, paralysed the project and the land was handed over to the Generalitat de Catalunya. Since then, half of the area has been urbanized and, with the approval in 2005 of an Urban Management Plan, the 750 hectare central section of Gallecs (Fig. 3) has been protected by the creation of a large Metropolitan Park which is helping to preserve its landscape.

Management of space

In 2006 the 'Consorci del Parc de l'Espai d'interès Natural de Gallecs' (Fig. 4) was created to manage and enliven the area, focusing on a balance between the three main features of this rural space: agriculture, nature and social-recreational use. Agriculture was the activity that created the space over the centuries and must therefore continue to be its principal activity and to form the basis for the park. There is a specific commitment to organic farming, as this is what can provide most of the other two main features.

Management plans have been put in place to meet the stated objectives and, to conserve and improve the landscape there is an agricultural management plan, a technical management plan and a landscape plan.

Involved agents

Besides the Consortium (Consorci del Parc de l'Espai d'Interès Natural de Gallecs), other institutions or associations cooperate to maintain and develop the place. Farmers of the park are associated in order to carry out the project (Associació agroecològica de Gallecs). The park cooperates in research projects with several universities (University of Barcelona, UB; Polytechnical University of Catalonia, UPC and University of Girona, UdG).

Strategic objectives

The different management plans must: promote and regulate the public and private use (agriculture and residential); promote the necessary infrastructure in order to develop the place within an environmental sustainable framework; promote an ecological agricultural model as a means to achieve economic viability and a better integration to the natural values; promote both agricultural and natural biodiversity in order to maintain and improve the landscape; promote the knowledge of Gallecs' natural, agricultural and cultural heritage; promote the exchange of experiences with the Gallecs' presence in national and European associations and the cooperation with other entities.

Opportunities for its strategic situation

In spite of seeming isolated, Gallecs Agrarian Park is completely surrounded by urban fabrics (See Fig. 1). Instead of understanding it as a problem the fact is perceived as a chance for its development. The strategic position of the park in the middle of the so populated Vallès area allows: a big nearby market with an increasing awareness by the consumers about food quality, safety and traceability; strategies to make agriculture viable in an urban situation in which there's an new and increasing



- 5. Experimental plots of different wheat
- 6. Community gardens
- 7 Gallecs traditional flours
- 8. Gallecs grains

demand for outdoor recreational activities as leisure, sport and environmental education; identify the best soil and give them planning protection to guarantee food supply and provide long term stability to carry out the activity by suppressing any urban development pressure, and, lastly, creation of management organs to promote the activity and to deal with other no agricultural uses and the economic diversification, such organic farming, agro-tourism, environmental education.

Commitment to organic farming

The conversion to organic farming begun in 2006 by the 'Consorti' and the 'Associació Agroecològica de Gallecs'. The main objective was to bring about a transition to a new, economically viable and environmentally friendly management model which would lead to a greater biodiversity, the protection and improvement of soil quality, the return of traditional and local varieties, the production of high quality food, the development of agricultural associationism, and short-distance trade with a direct link between the producer and the consumer.

At present there are 16 local farmers involved in the project, registered by the 'Consell català de la Producció Agrària Ecològica' (CCPAE), over a total area of 200 hectares, with participation in the form of scientific monitoring by the "Ecologia dels Sistemes Agrícoles" research group at the University of Barcelona.

Initial situation and alternatives to existing crops

Following the expropriation of the land in 1973, there was a sense of provisionality and insecurity which led to a simplification of agriculture: the small irrigated area was lost, leaving almost the entire area to the farming of barley for animal consumption, and losing almost all the existing cattle.

To put an end to barley monoculture, the conversion project proposed a search for alternative crops (Figs. 5 and 6). The soil and topography of the area were analysed and its climate and hydrology studied. With all this in mind, new methods were proposed for soil preparation, fertilization and weed control, and a new, more economically and agriculturally viable crop rotation programme was proposed. This programme is revised annually.

Soil preparation, fertility and pests and weed control

Vertical and superficial ploughing are given priority in order to preserve structure and promote microbial activity and preserve organic matter. A cultivator or chisel is used with a maximum depth of 20 cm, and a disc harrow to bury crop waste, green plant covers and also to control weeds, working at 10 cm.

The strategy for the improvement of soil fertility is based on the application of composted manure, legume rotation and the incorporation of crop waste. Sowing is carried out using a line seeder or precision seeder depending on the crop.

The crops planted are not susceptible to pests or diseases, so no special measures were necessary.

However, weed control is a different matter, and is indeed one of the greatest challenges in organic farming. Basically, it is tackled by using a good rotation of crops, combining legumes and cereals, as this involves using different methods throughout the year, which means that weeds are unable to complete their cycle and produce seeds. Another mechanical method is to use a flexible spiked harrow between the lines of germinated cereal, preferably with three blades, and when the weeds are at the seeding stage.

Extensive crop rotation

Cereals are combined with both legumes and crucifers, preventing soil exhaustion through selective absorption of nutrients, promoting nitrogen fixation through the legumes, increasing the level of organic matter, improving the structure and texture of the soil and helping to control pests and diseases.

The planning of rotation is of vital importance to ensure the success of the project. It has been drawn up in response to both agricultural factors and social and economic issues. The most representative rotation is:

	jan	feb	mar	apr	may	jun	jul	aug	sep	oct	nov	dec
1	cover	cover	chick	chick	chick	chick	chick				spelt	spelt
2	spelt	spelt	spelt	spelt	spelt	spelt	spelt		cover	cover	cover	cover
3	cover	lentil	lentil	lentil	lentil	lentil	lentil				wheat	wheat
4	wheat	wheat	wheat	wheat	wheat	wheat	wheat		cover	cover	cover	cover

Where: small chickpea, spelt, cover crop, Pardina lentil and Montcada wheat

Gallecs products

In addition to promoting crop rotation, an effort has been made to recover traditional local varieties of extensive crops for human consumption. With this in mind, old varieties of wheat such as "xeixa", spelt, Montcada wheat and Persian wheat have been promoted along with legumes such as the Pardina lentil or the small chickpea. Another crop that has been brought back and improved is the "ganxet" bean, a bastion of the slow food movement. Also of note is the organic wheat beer 'Toc d'espelta' and products that are made in the area such as jams and preserves (Figs. 7 to 9).

All these products are certified as organic by the CCPAE and are sold under the label of origin "Producto de Gallecs" (Fig. 10).

Product retail

The main objective is to achieve a direct bond between producer and consumer, guarantees traceability and avoids merchants. For this purpose Gallecs Consortium, in cooperation with Gallec's farmers has promoted a local shop (Fig.11), managed by the farmers , fairs and local markets (Fig. 12), consumer cooperatives. (vegetables baskets) a school catering (Ecomenja) and a restaurant : Can Major (KM 0). The Park also offers educational workshops to schools and consumers (Fig. 13).



9. Gallecs organic beer

10. Processing workshop: tinned pepper confit

11. Label of origin

12. Gallecs local agroshop

13. Gallecs product retail: fairs

14. Environmental education on site







Field edge management

The ecological role played by the edges of fields is undeniable, as many studies have shown that they act as a reserve for an abundance of species of both flora and fauna, many of which are beneficial to agriculture. Their linear structures also serve as corridors for fauna, form part of our traditional cultural landscape and have a visual presence which structures and affects the composition of the agricultural landscape.

Results of the conversion to organic farming

The scientific monitoring of the conversion process by the “Ecologia dels Sistemes Agrícoles” research group at the University of Barcelona has studied the advantages of this new model for the area and concluded that after five years of organic farming in Gallecs, certain benefits can already be seen, such as the positive effect of the rotation of cereals and legumes on the fertility of crops and fields as well as weed control. Also, in these five years of monitoring, crop biodiversity has increased from barley monoculture to 17 varieties of high-quality cereals and legumes, all for human consumption, which gives them added value. There has also been an increase in wild plant biodiversity, with species that have never been seen before in Gallecs.

The future

The transformation to a new ecological management model has been consolidated, and the experience of these last few years has served to help define new objectives for the next agricultural management plan, which is currently being drawn up with the aim of converting the entire area to organic farming.

The landscape inherited from (...) so many farmers unknown for us has been greatly enhanced, and the Gallecs Consortium is working with today's farmers and nature organizations to guarantee the survival of this fragile living mosaic.

Assessing and Valuing Ecosystem Services Provided by Urban Allotments: case studies in Madrid and Barcelona, Spain

Laura Calvet-Mir

I'm going to structure the presentation in two parts. The first one is going to be devoted to the explanation of what COST ACTION TU1201 (Urban allotment gardens in European cities. Future, challenges and lessons learned) is about, and the second one is going to be focused on the concrete case study on urban allotments in Spain.

COST ACTION TU1201 was devised due to the growing importance of urban allotment gardens in European cities. Urban allotment gardens can be defined as urban areas principally used for growing food that constitute a particular urban landscape. Various studies have highlighted the positive effects of allotment garden on individuals and families, society and community, household and economy, urban ecosystem and urban character. This action aims to fully comprehend and manage the relevance of allotment gardens in political, social, ecological and urban design aspects within the urban context of European cities. It tries to expand the knowledge in urban development by the identification of municipal/national planning policies, assess social and cultural aspects of urban gardening, gather information about ecological functions of allotment gardens by studying their role/impacts in urban green network and evaluate the spatial distribution and impacts to the urban morphology of allotment gardens. In order to assess these objectives the action designed a scientific program divided in four working groups: (1) Policy and urban development, (2) Sociology, (3) Ecology and (4) Urban design. Currently the total number of participants in the actions is 57 from 36 institutions representing 23 countries.

I'm jumping now to introduce the case studies we are going to develop in Madrid and Barcelona.

The provision of ecosystem services (i.e. set of goods and services provided by ecosystems, modified or natural, that contribute to human well-being) by urban allotments has been highlighted. This ecosystem services include provision of urban vegetation, habitat conservation for pollinators and seed dispersers, local food production, therapeutic and nutritional values, mental recreation, social well-being of gardeners and local residents, social cohesion and the increase of socio-ecological memories, maintenance of traditional ecological knowledge and sources of resilience, especially in crisis contexts.

The objectives of our study are: (1) to inventory and characterize urban allotment gardens in the municipalities of Madrid and Barcelona, (2) identify and characterize the most important ecosystem services provided by urban allotment gardens and (3) conduct a valuation of the social importance of urban allotment gardens ecosystem services.

In Spain there is no culture of urban allotment gardens comparable to Northern Europe because of late industrialization and urbanization, largely due to the Spanish civil war. However, recently is having a resurgence of urban allotment gardens managed individually or communally. Urban gardens are emerging as a suitable tool for improving cities' integrated sustainability under current energy, environmental and economic crisis.

Madrid (3,294,110 inhabitants) and Barcelona (1,615,448 inhabitants) are the largest cities of Spain. In both cities exist municipal, private and squatted allotments and have had a parallel development of urban allotment gardens during the last years. In Madrid we just started to study 29 urban allotment gardens belonging to the "Red de huertos urbanos comunitarios de Madrid" (Fig.1), a network that includes allotments managed communally and normally placed in squatted plots. In Barcelona, on April we are going to start the fieldwork assessing 13 municipal allotments and 16 allotments belonging to the "Xarxa d'hortos ubans comunitaris de



Dr. Laura Calvet-Mir
Autonomous University of Barcelona



1. Madrid

Barcelona" (Fig.2), within this network the gardens are placed in squatted plots and can be managed individually or communally.

The methods for our fieldwork include literature review, participant and non-participant observation, semi-structured interviews, free listings and surveys.

The expected results are: (1) the identification and characterization of urban allotment gardens in Madrid and Barcelona, (2) the identification and characterization of ecosystem services provide by urban allotment gardens (regulation, habitat, provision and cultural services), (3) obtain a socio-cultural valuation of ecosystem services provided by urban allotment gardens, (4) highlight the importance of urban allotment gardens for the well-being of practitioners and the urban society as a whole and (5) get a base for the municipal council to integrate the management of urban allotment gardens within the urban green spaces (Fig.3).

2. Barcelona

3. Madrid





4. We're seeded!



Short Term Scientific Mission (STSM) in Barcelona Metropolitan Region

Giulia Giacchè and Attila Toth

Introduction

This paper introduces a research action conducted during a Short Term Scientific Mission (STSM) in *Barcelona Metropolitan Region* that aims to point out the main issues in urban agriculture (definition / description / analysis of different types of urban agriculture) and to find a common interdisciplinary way of working and to propose tools to deal with key issues of urban agriculture in the reference region.



Giulia Giacchè
University of Perugia

Attila Toth
University of Slovakia

Materials and methods

The methodology bases on the work of the COST Action programme in progress and it has been tested on the Barcelona Metropolitan Area. According to the definition of UA (elaborated by WG1) different components (spatial, functional, market, origin, actor, stakeholders, motivation) can characterise UA in a given context. The relative importance may also vary with geographical location, however all components are relevant in all contexts. In order to grasp the diverse reality of urban agriculture in Europe, participants of the WG2 dealing with “UA and governance” suggest to think about UA along a “continuum”. The “continuum” between all forms of UA expresses the diverse links between “actors” and the varying degree of professionalism in farming (professional, hobby, part-time, recreational, educational, etc.). The “continuum” concept has been interpreted on the one hand regarding the links between urban and rural, on the other hand regarding actors and the professionalism degree in farming. Therefore, the gradient has been considered with respect to greater or lesser interaction (farmers/agriculture «» consumers/city) and the level of professionalism (citizens cultivating their garden as a hobby «» entrepreneurs producing for the global market). So the two poles of the continuum are urban actors interested in gardening (at the point 1) and farmers producing and selling their products on the global market (at the point 10). Within the “UA continuum”, we define ten types of urban agriculture: agriculture preserved as cultural heritage, family gardening, community gardening, vertical or roof-top gardening, agro-quarter, agro-park, proximity agriculture (e.g. community supported agriculture, residential agriculture, social farming), agriculture oriented to local market (public procurement), agriculture in transition, agriculture oriented to global market. We develop this concept considering the spatial dimension of UA and mainly its location aspect (in- or outside the city) according to Ejderyan and Salomon Cavin (2012) and some elements in order to describe features and the characteristics of governance and ongoing public policies supporting each type of UA. We propose some diagrams also to figure out the quantitative and qualitative elements based on available information.

Few case studies have been selected in order to describe the types of agriculture and to discover public policies supporting them. In order to gain a complex knowledge of diverse components of UA we have analysed the selected case studies by field trips and interviews in Barcelona Metropolitan Area. Therefore, in all case studies according to methodology proposed by WG3 on “Entrepreneurial models of Urban Agriculture” a questionnaire has been provided in order to point out the difference between diverse types of UA according to various components. The outcomes of our survey are presented in the results and the selected case studies are described and presented by “UA identity cards”. Each identity card has been elaborated basing on two main analyses: socio-economic aspect and spatial-perceptual dimension.

1. Squat Farm: Can Masdeu
2. Community Gardens at Barcelona

Socio-economical analyses

Our aim was to better understand the project and the motivation of involved people in order to define related policies with a supporting effect.

Our aim is to figure out the origin and the purpose of projects in relation to the number of involved people, their origin and the reason for their participation in the project.

The gained information were on the one hand quantitative (number of people involved, level of participation, support provided by public or private subjects) and on the other hand qualitative (origin and purpose of the project, type of produced goods and provided services etc.). All these information have been obtained by interviews and questionnaires.

Spatial and perceptual analyses

Our analyses focus on 1) spatial situations (how is UA occurring in landscape and urban structures and how is it impacted by 3-dimensional elements like buildings, vegetation etc.); 2) uses / users and observers (actual and if applicable, potential uses in the space) and 3) atmosphere (explored by observation and perception of the space, captured by sketches, drawings, cross sections, photos and diagrams). We use terms as an additional tool to describe overall characteristics, atmosphere and perception of selected case studies. Spatial analysis is provided on sketches, topographical and orthophoto maps in order to locate UA sites within urban or landscape structures. We analyse the relation between different land use types in smaller urban context (built-up space / open space) and in wider territorial context (open land / urban area). The emphasis is laid on definition of spatial qualities related to real and perceived ownership relations (private / semi-public / public). We define visual and functional linkages between UA sites and its surroundings represented either by dense urban fabric, scattered suburban structures or open land. A description of diverse spatial perceptions (inner / outer space » private / semi-public / public space) is provided by diagrams. The perception of selected UA sites bases on observation, experiencing their essence, multifunctionality and multilevel values. Within our interviews several questions have been formed in order to find out the role of UA for the actors (users of the space, stakeholders, observers) and their perception of the space and its surroundings.

Urban Agriculture Identity Cards

"Identity cards" are used as a tool to summarise the most important issues and information about selected case studies in the form of factsheets in order to provide comparability. These include 1) graphical information concerning UA typology, geographical localisation, spatial, visual and perceptual characteristics; 2) text information concerning general data about start date, origin and aims of the project; surface of the analysed area; provided products and services; users; management; governmental support and network. In order to provide a more complex information about the space we describe perception by users in the form of terms and keywords and our perception in the form of sketches, drawings and diagrams accompanied by additional terms and description (Figs. 1 to 4). The aim of this method is on the one hand to emphasise diversity, contrasts between different land use types and the whole range of what UA is and on the other hand to point out identity, uniqueness and values of UA case areas and typologies.

Case studies

The Metropolitan Region of Barcelona has 5.029.181 inhabitants (2011) which means 70% of the regional population. It is the 2nd most populated region in Spain. We visited 4 different types of urban agriculture (UA) represented by seven case areas in the *Barcelona Metropolitan Region*, at diverse scales: 1) Urban Gardens: a) *Hort del Xino*, b) *Hort Sant Pau del Camp*, c) *L'hortet del Forat*; 2) Squat Farming:





AGRICULTURAL PARKS
18 SEPTEMBER 2012 - 10 OCTOBER 2012 - 10 NOVEMBER 2012



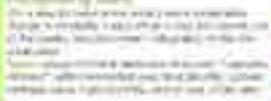
PARK AGRARI DEL BAIX LLOBREGAT



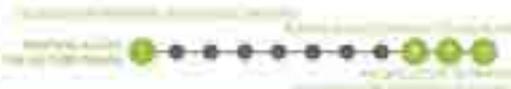


L'ESPAI RURAL GALLECS









VINEYARD LANDSCAPE
18 SEPTEMBER 2012 - 10 OCTOBER 2012 - 10 NOVEMBER 2012



MASIA CASA GRAN, ST JOANNES WINERY & VINEYARD














3. Agricultural Parks at Baix Llobregat and Vallès

4. Vineyards at Penedès

5. "Men at work"

Can Masdeu; 3) Vineyard Landscape: *Masia Casa Gran*, *St Joannes Winery* and Vineyard; 4) Agricultural Parks: a) *Parc Agrari del Baix Llobregat*, b) *L'espai Rural de Gallecs*. The smallest scale is represented by urban gardens situated directly in the city centre of Barcelona in a dense urban fabric. The contemporary phenomenon of squat farming is described on the case of *Can Masdeu* (Fig. 5) located on the hillside above Barcelona. Within the category of agricultural parks we compare two cases differing mainly in management and use. Professional agriculture is described on the case of a traditional vineyard and winery located in the *Penedès* region near Barcelona.

The Retired City: some notes on informal allotment gardens and autonomous urban practices

Pau Faus

The research I present today proposes a kaleidoscopic approach to the informal allotment gardens phenomenon. The study focuses on the extended practice of this activity along the rivers of the urban area of Barcelona. However, the phenomenon as such gives rise to considerations that for the most part can be applied to other cities and other informal urban practices. There are several reasons to limit this study to the rivers of the city of Barcelona. If the connection between crop cultivation and river areas is obvious due to the fertility of the land, there is also an evident correlation between the road networks and the rivers, as natural passageways through the region. Hence, just as these relations are elementary, it should also be simple and predictable that the left-over spaces generated by the road networks in the areas around rivers are later reused for informal crop cultivation. The surroundings of Barcelona's rivers are no exception to this rule, and indeed, informal gardens are abundant there. Bearing in mind that the city has already developed the final sections of both its rivers, most of the gardens documented in this study are located far from the city centre, on its periphery, where urban control mechanisms tend to be more flexible.



Mr. Pau Faus

The term “periphery” is undoubtedly condemned to reinvention, however it continues to be valid when referring to that “urban beyond” where urbanism is often outside of its own jurisdiction. The periphery is also the place where the city's new inhabitants tend to settle. It is on the outer edges of the city where newcomers can find more affordable housing to embark on this new chapter of their lives. Among the different waves of migration that Barcelona has experienced, we can mention that of the 1960s, when thousands of people, mainly from the Spanish countryside, came to live in the city. The young workers of that era are now retired citizens who have not forgotten their rural roots, despite the fact that they have spent more than half their lives in the city. It is precisely some of these people who, faced with the outlook of retirement, decided to spend their free time cultivating the abandoned plots of land that sprang up around them. It is important to point out here that what gives rise to these gardens is primarily the convergence of three types of ‘waste’ elements that are very common on the periphery of all cities. The first of these, as already mentioned above, consists of the empty spaces generated by the development of the region's infrastructures (highways, railways, etc.), which emerge in the form of parallel safety strips of land. The second is the rubbish generated by the city itself, which is often dumped in the outer limits of the city, with no disciplinary consequences whatsoever. The third element consists of the leftover remains of the labour system: The city's retired inhabitants. When these three types of ‘leftovers’ come together near a fertile and abandoned plot of land on the city's periphery, the gardens can almost always be found. The empty spaces provide the land; the rubbish serves as construction material; and the retired citizens are the work force.

These informal gardens can be interpreted in countless different ways, but here we would like to highlight two appraisals that are just as common as they are contrasting. One is seeing these illegal settlements as derelict and obsolete, associating their appearance with the now long-gone shanty-town eras. The other view, conversely, is the one that praises such “horticultural occupation” from an eco-urban standpoint, associating this practice with sustainable development, self-sufficient consumption and respect for nature. Both of these apparently contradictory views share the same ideal: that of a harmonious urban order. Yet like it or not, the fact is that all cities are always an unforeseeable mixture of diverse and contradictory realities that have little, if not to say nothing, to do with a single harmonious ideal. Only by interpreting the city from the perspective of its complexity can we understand that those informal allotment gardens are simply one of the many realities that shape what we refer to as a city. The gardens represent neither a threat to the pre-established urban order nor an alternative to the very definition of



a city. Perhaps their sole message is to remind us that urbanity is only possible when its members uphold their autonomy within it. Unfortunately, we often see that these types of autonomous practices are associated with disobedience, an uncivil spirit and illegality. The primary objective of this study is to defend and claim the importance of such urban independence. Their existence should not be criminalized without understanding before the reasons that caused them and the possible benefits they provide. Whether these are rare exceptions within the presumed urban uniformity is of little importance. Like any other kind of relationship, a city without exceptions is a tyranny.

Some years ago, I had the chance to present this same study in a display area on the outskirts of Barcelona. It was a municipality with countless informal gardens next to the Besós River that the local government was planning to dismantle, in keeping with its environmental and aesthetic criteria. I used that opportunity to raise new arguments in the debate by posing the following questions: "How much money has the local town council saved in river maintenance over the past thirty years thanks to the ongoing presence of the 'gardeners' who clean, look after and watch over the river every day? And how much more would it cost to build and maintain day centres for the elderly to accommodate all those hundreds of retirees who keep themselves healthy and busy on their own, with no need for even one euro of governmental funding?" I felt that bringing up some economical aspects would get the attention of a local administration that, until that moment, considered this project another harmless artistic work. But the questions did not have the feedback I expected, or maybe they did. I was immediately forced to remove them from the walls of the exhibition hall where they were shown. It was of no use to emphasise the virtues of those gardens in the face of the looming threats of their urban transformation. The only possible solution to the situation was to study the possibility of accommodating and organising part of the gardens into municipal plots of land. No other arguments would be considered, not even those that were apparently profitable for the city and its inhabitants. But the problem resides in the fact that the 'gardeners' do not need plots in better condition; nor do they need fatherly protection. Quite the contrary, their wish is precisely to remain outside of any external control or surveillance mechanism. They have already more than proven that they are not harming anything at all and that they know how to look out for themselves, according to their own rules. Hence, it comes to no surprise that most of the 'gardeners' reject the institutionalised gardens promoted by some of the municipalities. In such allotments the autonomy that gives a sense to their activities is cancelled.

Urbanism, far from accepting that some aspects that keep the city running must stay out of its authority, will continue to apply its usual methods to handle practices that elude its control, whether by persecuting or submitting them. Yet paradoxically, at the same time that the administration absorbs and removes them from their course, it will also be creating them. Although development continues alongside Barcelona's rivers, accommodating new infrastructures and ample greenways, the blurred limit that defines what is and what is no longer urban will always remain intact. The new infrastructures that entomb former empty spaces will inevitably generate new ones, and no matter how many parks and nature reserves are planned upstream, the city will fade out again, sooner or later. And it will be just there, when the urban presence is once again a rumble far enough away yet close enough, where that fertile debris will emerge once again. Because, however mysterious it may seem to some people, the city fringes never disappear.

In Spanish, the word *Jubilar* ("to retire") means both "to discard something due to being useless" and "to be delighted or rejoice". Thus, the *Ciudad Jubilada* (The Retired City) is, on the one hand, that discarded city that has refused to be a city; that planned and neatly sectioned city that chews up and mistreats the land; that unsustainable and commercial city that refuses to bother at all about its future; that specialised and regulated city that does not allow spontaneity. In a word, a city with no soul, as it has pulled away from the very essence of what it means to be a city. Yet, at the same time, the *Ciudad Jubilada* (The Jubilant City) is also that happy city that celebrates its very existence; that creative and diverse city that constantly reinvents itself; that independent and free city that will not give in to subordination; that naive yet wise city only following its own instincts. At the end of the day, a city that is alive; that resists subjugation and asserts its right to self management. These are two opposing yet inseparable realities. In this book we explore both, placing emphasis on the contrasts and the tensions between them. We have decided to



approach the task in dictionary form, thus renouncing any linear narration. The alphabetical order is a mere convention. We like to think that each individual term is independent in itself and that the relationships among the different terms are as multiple as they are free.

See also at pg. 153-157

(h)orthophotography

exhibited at the ESAB of Castelldefels from 12th to 19th March 2013

[by the same author]

Additional information

www.paufaus.net

about the author

www.laciudadjubilada.net

about the book

vimeo.com/9317178

about the documentary

Working Group 1: Urban Agriculture Definitions and Common Agrarian Policy

Notes on Barcelona WG1 Meeting March 2013

Dona Pickard

First session: 2013-03-13

Participants introduce themselves: Henrik Vejre – Chair, Marian Simon Rojo – Co-chair, Frank Lohrberg – Action chair, Lionella Scazzosi – Action vice-chair, Barbora Duzi, Sebastian Eiter, Veronica Hernandez Jimenez, Isabel Loupa, Filomena Miguens, Dona Pickard, Raffaella Raviscio, Henk Renting, Colin Sage.

1. Setting the agenda:

The major aims of the working group 1 workshop were defined by the chairman as:

- The Development of UA typology
- Future work process and tasks
- Decision on the outcomes of the WG1 work

2. Introduction by Henrik Vejre, state of the work:

- on the state of the “Components” paper – it remains work in progress, we will keep it as a dynamic paper on the wiki, but everyone can use it with reference to the wiki. If no new comments have been put forward by the end of 2013 we will call it a final version of the working paper, pdf it and post it on the web.
- regarding the work on typologies - there is a need to link policy issues to the discussion of the typology of UA, as we need to know what we need this typology for. There may be many potential uses of a typology.

3. Presentation of “UA in institutional documents” paper by Raffaella Raviscio and Lionella Scazzosi

4. Comments on the definition issue

Henk – approved the concept of “local understanding of urban”, but suggests more general terminology; we should identify the crucial areas of conflict, especially for policy issues.

Frank – clarified the subdivision of Urban agriculture into peri-urban and intra-urban UA.

Discussion on the usefulness of the rural-urban continuum. We decided not to resolve this eternal problem as we have in the definition the local understanding of the context.

5. Veronica Hernandez Jimenez presents “CAP Mechanisms” paper

Discussion on why we are focusing on the CAP, as it is not the agricultural sector that is the driving force behind UA, but rather health, climate and other sectorial issues. We should consider other issues, such as the short-chain production system, environmental programmes, food security, and social justice as a part of a food policy. Common understanding achieved that we are not focusing on the CAP exclusively. Still, the discussion of the CAP is one of our expected outcomes as set up in the original Action agreement and this is why we started from that reference point.

6. Dona Pickard presents "CAP and Urban agriculture" paper

Suggested organizations and existing research and publications to be consulted: PURPLE (Peri Urban Regions Platform Europe), AMAP (Association pour le Maintien de l'Agriculture Paysanne), Group of Bruges.

7. Frank Lohrberg presents the Barcelona Declaration

Discussion

Suggestions for alteration:

- to try and focus on influencing Pillar 2 rather than rearrange the direct payments (the latter might also create a conflict between new and old member states)
- to press for transparency in the food supply chain
- to define more precisely farmer – professional/unprofessional/hobby etc.

Second session: 2013-03-14

1. Barbora presents comments on the UA definition and Barcelona declaration

Discussion:

- to point policy recommendations to national and regional level policy-making, as it is the most potent one and could be directed at specific cities.
- suggestion to connect to and work with ICLEI (International Council for Local Environmental Initiatives) - put a link to their site on the COST wiki page. However, this might not be very useful as such organizations take a more technical stand on the issues that concern us (modernization and technology rather than social and environmental issues). Also, they are quite productivist in outlook and not too interested in the sustainability problems of cities. Still, we could urge to put the agriculture and social issues higher up on their agendas.
- to include public health in the Barcelona declaration
- to remove "excessively" in the sentence "The multifunctional character of farms is excessively well developed in the Urban Agriculture of Europe"
- to add "predominantly" before "small" in the sentence "Due to its small size it does not really benefit from the direct payments pillar."
- to get in touch with the people on the "ground" - each country representative to talk to people who would be directly affected by any UA policy

Final decision: to keep the declaration open for editing on the COST wiki page for a period of 2 weeks before it is closed and finalized.

2. Henrik Vejre and Marian Simon Rojo present the Typologies within UA

- typology is policy-oriented

3. Isabel Loupa Ramos presents study on the motivation and features of three community "hortas" in Portugal.

4. Group breaks into sub-groups to brainstorm dimensions upon which to build UA typologies.

Bringing the different dimensions together:

- "informality banana" - the widening belt of informality/illegality of urban agriculture from North-West to the South and then narrowing again from South to North-East.
- problem of plotting each dimensions on one graph.
- distinction between descriptive and normative characteristics.

Categories of dimensions:

- Spatial
- Size - related
- territorial
- economic

- Functional relations
- degree of formality
- individual/collective orientation
- segregation/integration
- Market orientation
- Property structure
- Income share from UA activity
- Motivation
- Origin/Cultural dimension
- Production method and diversity
- Products and services
- Actors
- degree of involvement
- position along the production chain
- Environmental performance
- Stakeholders

Current decision is to plot the values of the main dimensions on a spider/radar-gram. Using both inductive and deductive methods.

Following Tasks

Overview of existing typologies. Due by June

- Colin, Marian, ...

Deductive identification of typologies. Due by June

- Henk, ...

Description of dimensions and setting the scaling for them. Due by June

- Henrik, Isabel, Veronica, Filomena, Dona, ...

Barcelona declaration (*)

- Everyone

To involve all other WG-s to contribute to the dimensions – on Wiki

(*) See de submitted version of the 'Barcelona Declarartion' at the end of the volume, pg. 162-163.

Working Group 2: Urban Governance and Local Policies

1 Notes on Barcelona WG2 Meeting March 2013

Mary Corcoran

First Session: 2013-03-13

Participants: Mary Corcoran – Chair, Jöelle Salomón – Co-chair, Hans Peter Andersen, Johan Barstad, Maria Bihunova, Olivier Ejderyan, Giulia Giacché, Salvor Jónsdóttir, Denise Kemper, Galina Koleva, Salma Loudiyi, Alberto Matarán, Cyril Mumenthaler, Carlos Verdager.

There was a general discussion on the concept of typologies, their usefulness and how they might be construed.

Different policies will impact different actors in the UAE field:

URBANITES _____ PROFESSIONAL
FARMERS

Buying local produce /gardening for partial self provision/farming for self consumption/ advising gardeners on community gardens/ farmers mass producing with no functional relation to the city.

Some of the dichotomies which can be devised for understanding UAE: Individual/Community; private/public; urban/peri-urban; productive/leisure; contiguous/non-contiguous; integration/separation; autonomous projects/projects controlled by the state.

Policies may impact within (1) the city and also (2) the peri-urban area.

There is a need to take into account space- where you are located, as well as people and what they do.

Activity dimension

Non-professional/ Leisure	Professional/ Making a living
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Spatial dimension

Different types of ownership and control structures prevail for example in Community Gardening you can have municipally owned, privately owned, municipally supported.

Have to be aware of conflicts over different land uses.

There is a need to embed urban agriculture issues in urban/town planning.

There are three key actors involved: state, market and civil society. Part of the governance issue would be to provide civil society with a platform for advancing UAE and provide for greater motivation and communication around UAE initiatives. This might require the development of tools to enhance civil society participation. If UA is important, then people will engage. It was suggested that rather than promoting city-wide campaigns, UA lends itself to a very local organisational model: people can see and identify a site for instance, take it over, lobby for UA and municipal support. Effectively this is mobilisation from the ground up. There should be an interface, however, between bottom up and top down policies so the city should be engaged in forward planning, identifying potential projects, designating sites etc so that the two forces (city govt. and civil society) intersect.

Regional marketing: farms could deliver for civil society, by developing marketing strategies, co-operating with the locals, producing food close to the city, diversifying uses with state support for target groups in civil society.

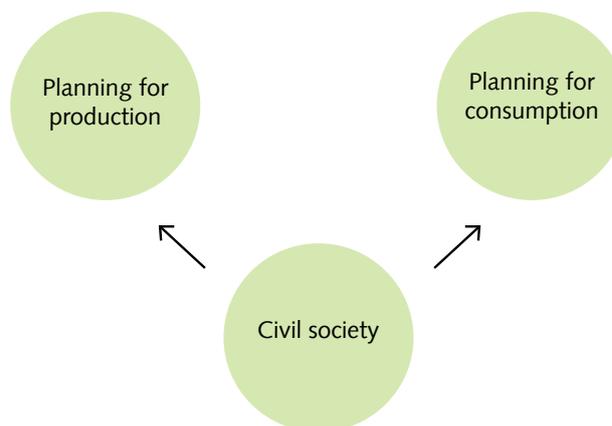
European comparison is crucial. We need to know what is going on in other places. What is the role of civil society groups in the reference regions?

Consumer autonomy is a challenge to any kind of policy agenda.

Can there be agreements between government and civil society, partnerships of different actors (e.g. Land Trust)? Can civil society be meaningfully involved in public policy making?

Do public policies take account of consumer interests? Consumers are individualized, they are not a political actor? Should we pay attention to consumer organisations?

Food is a growing issue and is very dynamic.



If there is a green area such as an agri-park, it must allow access to land that is multifunctional i.e. it can provide for allotments but also should include cycle paths, running tracks, etc.

Local production is very important. Must link Local councils to local production. Education is also important here.

The real importance of the above questions is how can consumers be actors? How can we citizenize the consumer? How can they get a platform to get in and get heard?

UA policy must include the citizens/consumers. A food strategy is one way of doing this in the context of the city as a bio-region. Such a policy can cover UA and related policy areas as well as appeal to the citizen consumer. Need to emphasise the

genesis of food, the value of food production, the advantage of short food chain. It is an opportune time given the food scandals to spread the urban agriculture message.

The media, state and civil society can create and communicate a UA platform which can address itself to the citizenry.

Need to work from and with the local level, at the point of intersection where the urban farmer meets the urban citizen.

Peri-urban is frequently unrepresented in these deliberations.

Use examples to build representativeness over time, build knowledge through local consultations.

The status quo is that mostly there is no policy. We need to provide visions and solutions.

Case studies can have a quantitative dimension through categorisation, typologies, the application of analytical criteria. These should be complemented by qualitative 'thick descriptions' of the reality.

There was a discussion about what input the WG2 should have into the Atlas on Urban Agriculture.

There was a suggestion for the production of a Civil Society Tool Kit which could have practical implications across Europe, as a parallel to the mapping devices. We need to visualise people and their movements.

[We also provided feedback comments on the Barcelona Declaration which are contained in a separate document]

Second session: 2013-03-14

Giulia noted that we need to develop an urban/periurban policy framework. This means identifying which tools, policies and devices can be suggested to advance UA in the context of CAP and other social policy domains.

Peter noted that in Switzerland and Norway there are multifunctional agricultural policies.

Maria noted that land ownership in Slovakia is a key issue_ owners have to agree with planning activities. There are no UA laws, but it is indirectly present in many Acts on agriculture and nature/landscape protection. The Slovak Land Fund.

Civil society actors: ekopolis.sk, www.hidepark.sk, green schools programme.

Allotment gardens were used as a leisure space during the Soviet era and were important for food supply because of failure of collectivist approach. There is also a village tradition and grandparents have gardens (and are not so far removed from the land). They have experience and knowledge of the land. As a practice it is changing from working class to middle class production as a recreational or social activity.

We discussed a framework for analysing policies. Jöelle presented a framework derived from Knoepfel et al (2006) which emphasises the processual dimension of environmental public policies. (See Jöelle's ppt).

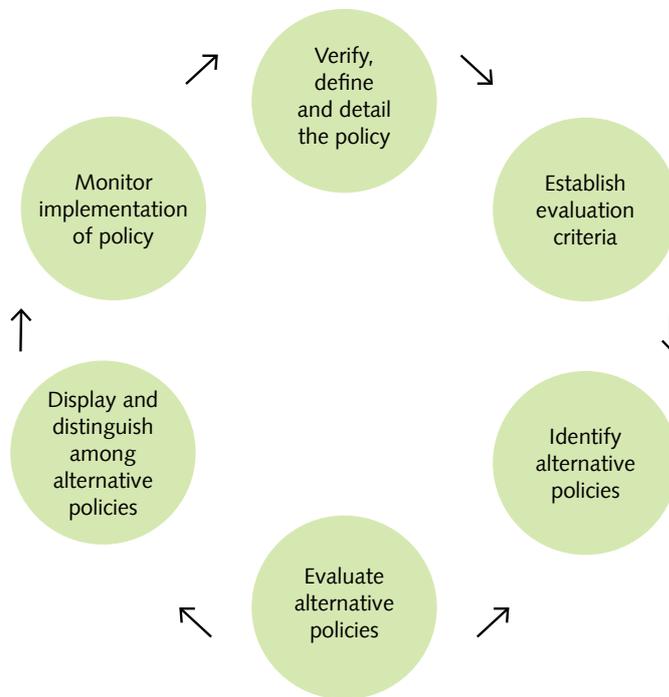
The focus of the model is on:

- Identification of a problem: definition and delimitation,
- Programming objectives: legal/regulatory issues, decision-making,
- Outputs: action plan, activities and implementation
- Outcomes: impact and assessment of effects

Patton, Swicki and Clarke (2013) Policy analysis process

Keys of political policy analysis:

Actors, institutional rules/regulations; resources as in political support, law, money, consensus, communication, expertise and policy (content of programme and action plan.



There are additional feedback loops between evaluation box, definition box, and evaluation criteria box.

This is a basic method of policy analysis and planning but implies more power than one actually has.

WG2 needs to (1) map out policies (2) establish evaluation criterial
 Need to analyse a set of case studies which exemplify top down/bottom up approaches.

Alberto: In the reference regions need to (1) assess experiences- have some feedback from the people involved. The methodology for achieving this is up to the partners. (2) identify criteria in terms of what we are offering to people and to government. Define a hierarchy of factors which can be checked with people on the ground. *We should have a draft on this for the Dublin meeting, September 2013.* Feedback should be sought from all actors including farmers, civil society, and public bodies. Link the market and the food system.

Carlos developed a framework for categorising policies which he circulated at the meeting. It was agreed that this model be posted on the wiki, and that it be commented upon by members up to mid April 2013. Thereafter, each reference region should attempt to complete the table for their own region.

It was agreed that we should aim to have an intermediate report on policies and governance structures by 2014, with a view to producing a final report in 2016 when the COST comes to an end.

The Journal of Risk and Governance was mentioned as a possible outlet for a publication for WG2.

Further Steps

1. Between Aachen and Barcelona we produced reference region reports according to an agreed template. These are available on the website.
2. We engaged in a process of creative conceptualisation revisiting our UA continuum devised in Aachen and considering additional factors that need to be introduced into the analysis.
3. We divided into three sub-working groups to explore the issues of governance and policy generation in the context of the market, the state and civil society. Each group reported back on their deliberations.
4. We discussed the Barcelona Declaration and suggested some amendments to it which were subsequently communicated to the MC Chair.
5. We heard presentations from members who had not had the opportunity to brief us on their reference regions in Aachen.
6. A number of models for analysing the governance perspective were introduced and discussed (see my ppt presentation previously sent, and Jöelle's at Barcelona and at Brussels).
7. We developed a working model (Carlos model) which offered the opportunity to map UA and the sectors with which it intersects to add policy value. In addition, this model allows us to identify the manifestation of governance issues at the levels of state, market or civil society. This model is to be elaborated and refined and used as a basis for data processing in the coming months.
8. We aim to produce a mid-term report/publication in 2014.

2 Urban Agriculture Europe: governance models and policy contexts

Mary P. Corcoran and Joëlle Salomon-Cavin (co-leaders)

WG2 will establish reviews of policies on UA collected from existing research and four reference regions. These best practices will be analysed addressing the different policy fields they are linked to (e.g. social, ecological, economic policies, spatial development, leisure and tourism etc.). Also the governance models of regional and local UA strategies will be analysed: In which way stakeholders are implied, which modes of cooperation are adopted and how the integration of private economies in the production of public goods have been organized. The best practices collected and analysed will lead the WG to edit a Whitebook on public policies on UA that regroups recommendations on policy options and the contexts in which they will be applied, (MoU, December 2011).

WG2 Objectives:

- Survey of existing public policies on Urban Agriculture
- Policy analysis against background of national and regional institutional settings
- Whitebook Urban Agriculture and Public Policies / Governance (Presentation, Brussels March 14, 2012).

UAE is a complex set of practices. Farmers working in and serving the urban and peri-urban area, allotment plot holders, community garden volunteers, people selling their produce through farmers markets in the city or schools 'grow it yourself projects' are all engaging in a form of urban agriculture. All of these practices when seen together present us with a picture of agriculture which is linked to concerns about food quality and traceability, sustainability, environmental awareness, consumer literacy, knowledge transfer, leisure gardening and sensitivity to nature. One question is to what extent does government and civil society acknowledge these linkages in terms of their policies and practices? Is there an intersectional dimension at policy level in relation to urban agriculture, or are these various concerns dealt with separately within national and international policy contexts? Where and how is urban agriculture embedded in local, regional and national policy contexts? To what extent does urban agriculture feature at the EU level of policy? What kinds of advocacy groups exist or are emergent in relation to urban agriculture? Are such groups locally, nationally or transnationally based? What is the extent of networking between such civil society groups? What role do urban agriculture entrepreneurs play in advancing policy in this field? (this links us with WG3)

As a first step in developing a profile of UAE policies and governance contexts we need to identify the key policy actors and stakeholders in each participating city/country/region, across the state, civil society and the market. We may wish to consider our information gathering/research foci in terms of a regional approach aligning ourselves with the four reference regions indicated in the MoU.

The State

1. Identify city case studies, i.e. a city in each participating country which can be the focus of analysis.

Since the meeting in Aachen 2012, we have received information on 11 reference regions. (We anticipate that this number will expand to include Portugal and Norway both of whom made positive contributions at the Aachen meeting. Other partners may also choose to join the WG2).

2. How is urban agriculture defined (if at all) at urban policy level and what is the remit adapted by the urban regime in relation to urban agriculture?

At Aachen we grappled with the challenge of coming up with a working definition of urban agriculture for the purposes of WG2's agenda. Post Aachen the Swiss team (Ejderyan & Cavin) elaborated and refined our initial continuum and this has been adapted by a number of other teams. This is a very useful heuristic device which will

be helpful in setting the parameters within which the overall work will be situated. The Swiss team (Ejderyan and Cavin) propose that we explore UA along two dimensions: a spatial dimension which runs from central to peripheral (in terms of urban location) and an actor's dimension which runs from the involvement of urbanites in UA on the one hand to the involvement of professional farmers on the other. Different types of UA can be situated along this two dimensional continuum. We can also consider adding a temporal dimension, i.e. taking a socio-historical approach to the history of urban agriculture in Europe, exploring how it has been governed in the past, and how its revival is being manifest at present.

All participants report that there is policy development and innovation at municipal level around UA, though frequently this may be only indirectly aimed at UA. For instance, urban planning includes attention to open and natural spaces and enhancing biodiversity (Toulouse), the provision of green spaces (Malmo) and active public participation in the planning process (Reykjavik). In each case these policies have implications for devising and implementing an UA policy. Moreover, agricultural activities are often key elements in policies of other departments such as environment, city planning, food security and architecture (Rhur). In the reference region of Assisi & Milan, public policies on education, food and health care indirectly support UA and can impact on the form it takes, (Giacche et al). Furthermore, there may be important inter-institutional linkages such as the local provisioning of schools in Milan and the focus on the procurement of food from local suppliers in public canteens (Toulouse). Thus, there is a degree of policy intersectionality at work to which we may wish to pay analytical attention.

3. How is urban agriculture defined (if at all) at national policy level and what is the remit of national government policy in relation to urban agriculture?

It seems that in all of the reference regions for which we have information there is no state or national level policy directed at UA. Is this a significant gap in the policy framework? Could part of our task be to sketch the outlines of such a national (or supra-national) policy? Is there scope for reviewing other case studies where a national approach to urban agriculture has been elaborated and implemented?

4. Is there a coherent framework in place for managing urban agriculture? If so, can we identify examples of good practice in relation to policy responses: e.g. quality assurance schemes for farmers markets, communication instruments such as a register of allotment provision, advocacy work such as urban agriculture education programmes.

The reports on the reference regions all provide explicit examples of good practice in relation to the development and implementation of UA and UA sensitive projects. Amongst the examples that have been identified include: the Emscher Landscape Park in the metropolitan Rhur area (Kemper); agricultural parks in Milan (Giacche et al) and in Toulouse (Duvernoy), the VegaEduca Project across all education sectors in the Granada region (Ruiz), funding of garden facilitators to promote UA to strengthen social cohesion in Malmo (Delshammar) and the creation of an internet platform for linking consumers and producers directly within a locality (Clermont-Ferrand). These and other examples are documented in the reports produced after Aachen. Our challenge is to decide how to devise a common format for categorizing and writing up these examples of good practice. At the moment, they are detailed by region, we might want to categorise them by an agreed set of criteria.

5. What sorts of policy tools have been found to be most effective in relation to UAE?

We have a good example of a UA policy in preparation in the city of Reykjavik which can serve as a case study of policy deliberation, generation and implementation. Amongst the issues to be dealt with is that of animal husbandry which did not come up in any of the other reference regions.

It seems from the reference region reports that there is a somewhat 'ad hoc' quality to UA policy. It is not envisioned as a policy field in its own right, but cross cuts with a number of policy domains including environmental and biodiversity policy, tourism, planning and development. For instance, in the region of Vitoria-Gasteiz, urban agriculture is mainly related to leisure, training and environmental education and not to productive activity. This point is also made in relation to Geneva, where agriculture is not addressed directly nor in terms of its economic value. Rather it is integrated into the category of nature and landscape. It could be argued that the

potential of UA across Europe is not fully realized, because it is viewed as marginal both by the national and local state. Other policy goals appear to take precedence over ones that would directly address UA. This might be an issue we could investigate further.

A number of contributors advocate that UA policy should be integral to wider European CAP policies.

Civil Society

1. Identify civil society groups that are focused on promoting Urban Agriculture within the city/state/region.
2. Select one such group for deep analysis. What are the objectives of that group? How is it set up and governed? To what extent is it networked with similar groups across national boundaries?
3. What kinds of activities does the group engage in and with what outcomes?
4. What are the Strengths, Weaknesses, Opportunities and Threats facing this sector?
5. What kinds of policy innovation would enhance the work of civil society advocates for UA?
6. What is the nature of public understanding of urban agriculture and how might that be improved?

Each of the reference region reports detail examples of bottom- up strategies emerging from civil society that are pushing for a greener city agenda and to have UA incorporated into the urban regime. These range from initiatives aimed at professional farmers to those aimed at gardening urbanites. In Vitoria-Gasteiz, for instance, the Zadorra Foundation is a civil society initiative aimed at promoting sustainable practices in the farming sector in the region. In Toulouse, the municipality has contracted an NGO, SaluTerre, to organise local participation to create new community gardens. The municipality also provides direct support in identifying spaces, offering expertise and classes, providing plants, trees and water supply. There are examples of networks of partners working together for UA. Malmo has a city urban agriculture network that includes municipal officials, NGOs and local universities (Delshammar). In Granada citizen actors such as environmentalists, residents associations, farmers associations and committed consumers confront and collaborate with local government to protect the urban and peri-urban landscape and promote UA.

In the Dublin region, the Grow It Yourself organization actively aims to empower people to grow their own by bringing them together in community groups and online to share tips, advice and expertise. Similarly, in Malmo the Somali association Hidde Iyo Dhaqan, has developed a social entrepreneur model for promoting UA. Like the Grow It Yourself organization it relies on funding from the philanthropic sector. The agric parks in Milan have also relied on the support of private sponsors as well as municipality support creating a co-creation or public-private model of provision. We might wish to explore further the prevalence of public-private partnership in the UA sphere.

There is some evidence of the institutionalization of the UA sector with people moving from guerrilla gardening and informal initiatives to more permanent allotments and garden space (Malmo, Dublin and Vitoria-Gasteiz). Nevertheless, in some contexts municipally supported initiatives co-exist with illegal allotments (Milan).

Reykjavik offers an important example of consultation with urban dwellers on how policy can be developed through neighbourhood committees, community requests, and public submissions made through a citizens website. The momentum built through these has promoted the municipality to develop specific policy on UA. In a comparison of two cities Cologne and Edmondton, Lovstrom (2012) notes that city administrations should pay attention to the motivations of participants and their perception of the key functions of UA in order to best support and promote the greening of the city, (Lovstrom, 2012).

Markets

1. What kinds of policy frameworks are in place at urban, national and supranational level to promote urban agricultural entrepreneurs?
2. Is there evidence of success in this sector, and how is that success measured?

3. Is urban agriculture viewed as a sustainable economic activity by policy makers?
4. What could be done policy-wise to enhance the opportunities for entrepreneurs in this sector?

Community supported agriculture is prominent in a number of reference regions (Geneva, Milan and Clermont-Ferrand) for instance. In Geneva, where vegetable baskets and other preserved goods are delivered to paying customers every week. The goal is to recreate producer-consumer links, to support agriculture that is not fully embedded in the market and to promote food sovereignty. Solidarity purchase groups (GAS) in Milan, are consumer networks collectively organised to make purchases direct from selected manufacturers based on quality and ethics criteria. Agrilocal63 in Clermont Ferrand similarly uses new technology to to geo-localise the food chain linking consumers with local producers.

The municipality of Granada along with other institutional and non-institutional bodies has developed a project, Basaldea- the objective of which is to generate employment and businesses related to the sector of ecological production and distribution of farming products. Entrepreneurs will be encouraged to respond to local demand and distribution and marketing mechanisms will be improved. In some reference regions there are active farmers markets, and local shops selling local produce.

To answer these questions we will need to liaise closely with WG3 on urban agriculture entrepreneurs.

Preliminary SWOT Analysis on UA in Europe

Strengths:

- Increasing interest in civic agriculture (DeLind, 2002) and Alternative agrifood initiatives (Allen et al 2003, Jarosz, 2008) particularly in light of the economic downturn that has negatively impacted many European cities.
- urban gardening as a multi-beneficial activity for regenerating derelict plots,
- promoting the values of sharing, creativity,
- re-acquaintanceship with land and respect for the environment.

Weaknesses:

- national state more or less absent from the UA agenda playing no major role
- Municipality partially engaged with UA, often indirectly rather than directly
- Many municipalities see UA as a marginal, leisure time activity.
- Some regions lack adequate mechanisms for getting citizens involved in planning for and implementing a UA strategy

Challenges:

- Pressure on land for development purposes
- Inexorable spread of urban creating sprawl
- Decline of agriculture generally in peri-urban areas
- Consumerist culture
- Aesthetization of countryside for tourist purposes may sideline agriculture further

Opportunities :

- Crisis as an opportunity- decline in real estate values, vacant lots, disused urban buildings create possibilities for greening initiatives
- Citizens may be more motivated to grow their own given the new focus on food security, sustainability and traceability.
- Growing interest in UA as an integral part of public spaces
- Growing media attention
- To strengthen social cohesion by focusing on UA as a means towards social inclusion.
- To reverse urban sprawl, re-green the city and suburbs.
- To rekindle dialogue between urban and suburban, built up areas, open spaces and daily leisure (Giacche et al).

3 Policy innovation and implementation

Mary P. Corcoran

Policy making context

- Top down' factors are important e.g. objectives, structures, plans
 - 'Bottom up' factors are important e.g. Involvement, training, incentives
 - 'Transformative factors' Values, behaviours, attitudes, culture (below the surface)
 - Factors common to all approaches e.g. Resources, communication, evidence, public support
- Source: (H.Johnston, Determinants of Implementation, Dublin 2013)

Theoretical approach

Top Down variables	Bottom Up variables	Transformative
<ul style="list-style-type: none"> - Objectives - Structures - Plans - Leadership - Skills - Political support 	<ul style="list-style-type: none"> - Involvement - Incentives - Innovation - Co-Ordination/Networking - Staff training - Industrial Relations 	<ul style="list-style-type: none"> - Culture - Behaviour change - Vested Interests - Beliefs / values - Tacit assumptions - Power imbalances
Common *Resources *Communication *Context *Technology *Information *Public Support		
Political priority, accountability leadership	Local buy in, ideas and creativity are important but not enough on their own	Cultural shift required, address resistance/ vested interests, harness change makers

Source: Helen Johnston, 2013

Thinking about governance and policy in relation to urban agriculture

The Urban Farming Guidebook (Canada, British Columbia (2013)

1. Dimensions of urban farming (a subset of UA) include:

- Land and Land Access
- Production
- Processing and Distribution
- Celebration and Education
- Waste Recovery

2. Key policy, land use, and administrative barriers for urban farmers:

- A lack of policy and regulations addressing urban farming in statutory plans and zoning bylaws
- Possible noise, dust, traffic, pesticide use, and odour associated with farming activities
- An increase in real or perceived risks to health and safety
- A lack of appreciation of the regulatory and farming realities
- A lack of licensing specific to the nature and operations of farming businesses
- Restrictions on the selling of produce from farm sites

- Restrictions on keeping small livestock and farm animals (e.g., chickens and bees)
- Restrictions on farm structures such as greenhouses and storage sheds

3. Best practice Vancouver

I. Food charter: Adopted in 2007, this charter sets out a vision for a sustainable food system. It outlines five key principles that show the City's commitment to municipal food policy and support for activity related to food security. http://vancouver.ca/files/cov/Van_Food_Charter.pdf

II. Food Policy Council: The Vancouver Food Policy Council (VFPC) is comprised of individuals from a range of sectors that collaboratively examine the operation of the local food system and provide ideas and policy recommendations for how it can be improved. The Food Policy Council has recognized urban farming as an important contributor to the local food system and has been supportive of urban farming initiatives.

III. Greenest City 2020: The local food goal aims to increase city and neighbourhood food assets by a minimum of 50% (over 2010 levels) while the green economy goal aims to double the number of green jobs in the city by 2020 (over 2010 levels). In the draft action plan, urban farming is recognized as a neighbourhood food asset.

IV. Food Strategy: focuses on specific goals and actions to improve the local food system. Looks at policies that affect how food is produced, processed, distributed, accessed, consumed, and recycled. It identifies strategies to support urban farming through land use, zoning, and supportive regulations. <http://vancouver.ca/files/cov/vancouver-food-strategy-final.PDF>

V. Beekeeping Guidelines: In 2005, the city amended the health and safety bylaw to allow hobby beekeeping.

Backyard Hens Bylaw: In March 2010, policy guidelines were developed for the keeping of backyard chickens.



4. Fostering urban agriculture in municipalities:

- Providing a local food source for cities (increasing resilience)
- Increasing access to fresh, healthy food
- Contributing to the vitality of the local economy
- Providing green jobs and fostering innovation
- Expanding the awareness and understanding of the food system
- Decreasing GHG emissions by using alternative distribution methods and decreasing the distance food travels

5. Planning processes (state):

- Support urban farming, and local food activities in Official Community Plans and related community plans.
- Review existing policy and regulations to identify barriers and how policy and regulations can be changed and updated to support urban farming.
- Identify how urban farming can align with and support other policies or strategies.
- Established a food policy council to support local food initiatives such as urban farming.

6. Land access and restrictions (state):

- Conduct a land inventory to identify viable land for food production and to identify sites suitable for urban farming.
- Consider allowing agriculture in most or all zones, including residential.
- Explore the suitability of urban farming in public parks
- Explore temporary or long-term leases for farming on city-owned land (ideally, leases are a minimum of three years).
- Consider tax incentives for land holders to lease land for urban agriculture projects, including community gardens and urban farms

7. Urban farming as a new business and a new market evolving over time (market):

- Urban farming, as a business, does not fit into many current zoning codes and licensing bylaws and may require creative governance.
- Issues such as traffic, smell, or aesthetics related to urban farming may be real or perceived; municipalities should explore the realities of urban farming with existing farmers and neighbours before creating regulations. Both the urban farmer and the municipality play a role in the process.
- Collaboration, interdepartmental communication and understanding of both urban farming and municipal perspectives are imperative to create successful policies, regulation, and best practices on the part of farming.

8. Licensing and permitting (market):

- Develop a business license suitable for urban farming businesses
- Explore ways to support farmgate sales from urban farms
- Allow for small urban farm buildings such as greenhouses and storage sheds in zoning bylaws
- Work with urban farmers to collaboratively develop a code of best practices and regulations/guidelines that establish a standard of good farming
- Consider implementing short-term policy amendments in order to measure risk, challenges, and opportunities before implementing long-term regulations
- Consider adopting bylaws that allow for chickens and beekeeping
- Avoid reactive regulations by separating real versus perceived risks associated with urban farming.

9. Collaboration and support (civil society)

- Work with urban farmers to develop a mutual understanding of urban farming and the planning practice, and identify common challenges and opportunities.
- Bring together and facilitate discussions between different partners to support the practice of urban farming
- Support education and training programs through grants or in-kind support for farmer training and public education workshops
- Subsidize soil testing for nutrients and contamination
- Subsidize and support urban farming efforts and innovations for diverting food waste into compost for urban farming.
- Collaborate with local chefs, food retailers, farmer's markets, and urban and peri-urban farmers to assess the local food supply chain and identify the gaps and opportunities for business improvement, job creation, and supportive services
- Support farmer's markets and food hubs as key conduits for local food distribution.

4 Progress of WG2

Joëlle Salomon-Cavin and Mary Corcoran

1. WG2 Objectives:

- Survey of existing public policies on Urban Agriculture
- Policy analysis against background of national and regional institutional settings
- Whitebook Urban Agriculture and Public Policies / Governance :

With example of best practices
With recommendations

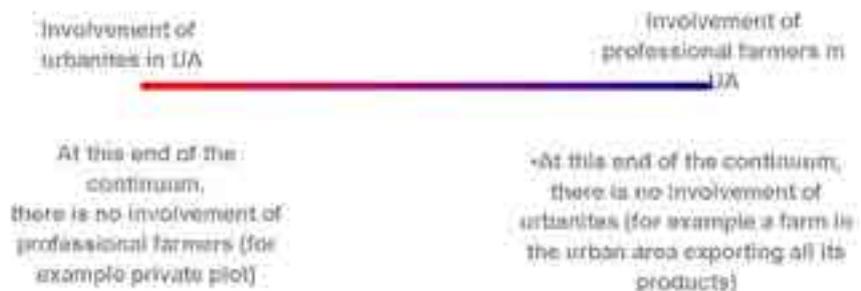
2. WG2 Done:

1 – Nice compilation of references (12) on :

- Governance models of UA at regional and local level
- Identification of key actors and stakeholders
- Review of policies of UA / or the different policy fields to which it is linked

2 – Common frame to analyse and compare UA governance

3 – The “Swiss” continuum to UA types:



Giulia Giacchè – Attila Toth, STSM Barcelona:



4 – Carlos Verdaguer's model Policy making vectors:



3. WG2: Main results

SECTORS	URBAN AGRICULTURE ADDED VALUE	MAIN UA ACTORS INVOLVED		
		MARKET	STATE	CIVIL SOCIETY
AGRICULTURE	DISTRIBUTION SHORT CIRCUITS LOCAL FOOD SYSTEM			
MOBILITY	PROXIMITY ENERGY REDUCTION			
TOWN PLANNING	CITY GREENING, URBAN METABOLISM, DERELICT SPACES, LAND USES			
REGIONAL AND TERRITORIAL PLANNING	LANDSCAPE CONSERVATION AND STEWARDSHIP, GREEN INFRASTRUCTURE, LAND USE			
SOCIAL AND WORK	INTEGRATION, ANTICIPAZIE, IMMIGRATION			
ENVIRONMENT	CLIMATE CHANGE RESOURCES, WATER, ENERGY, WASTE REDUCTION, ECOSYSTEMS SERVICES, GREEN INFRASTRUCTURE			
HEALTH AND WELFARE	LOCAL FOOD, FOOD SECURITY			
ECONOMY	SELF SUFFICIENCY, LOCAL DEVELOPMENT, SHORT CIRCUITS			
EDUCATION AND CULTURE	SCHOOL GARDENING LAND ART			

1 – UA is below the policy radar (Peter, Bergen)

- Not a policy field in its own but cross cut with a number of policy domains:
 - Between landscape and economy
 - Between planning and agriculture
 - Etc..
- Viewed as marginal at least by national state
- Gap between policies focusing on landscape/leisure and the need to promote economic production

2 – Importance of bottom up strategies

- Emerging from civil societies (NGO's, neighborhood communities (Malmö, Dublin, Reyjavick), private-public partnership (Milan)
- Meeting between farmers and civil society (Baix Llobregat)
- The initiative comes from below and is supported and sustained by the local authorities

4. WG2: to be done

- To consolidate the information gathered into a common coherent format
- To develop a categorization and write up examples
- To identify theoretical models of governance to analyse the type of information we have gathered :
- Work with experts in public policy (e.g. political scientist)
- To develop cooperation and knowledge transfer with key policy actors and stakeholders.

5. Deliverables

- Comparative analysis of governance and local policies of selected European case studies for submission to academic journals
- White Paper

6. WG2: Next steps

Work plan:

- By Dublin each reference region reviews there case study in light of the Carlos model as a first stape towards developping a categorization of knowledge

Need for 2020 research

- Identify policy intersections and the potential for their integration with urban agriculture as a key fulchrum

Working Group 3: Entrepreneurial Models of Urban Agriculture

1 Notes on Barcelona WG3 Meeting March 2013

Wolf Lorleberg

Participants: Wolf Lorleberg Chair, Pedro Mendes-Moreira Co – Chair, Óscar Alfranca, Gunilla Anderson, Ingve Berntsen, Galia Koleva, Terje Ong, Oleg Paulen, Bernd Pölling, Andreas Spornberger, Baincamaria Torquati, Jan-Willem van der Schans

In Barcelona WG3 was joined by three new members: Prof. Dr. Oleg Paulen (Slovakia), Terje Ong (Estonia) and Ingve Berntsen (Norway). *Oleg Paulen* reported the general situation of urban and peri-urban agriculture in Slovakia by highlighting the growing concurrence for land between intensive agriculture, horticulture, viticulture and building plots. The traditional garden union, which offers a broad range of services and support to professional and hobby horticulturists, suffers a dramatic loss of members. *Terje Ong* presented a planning case study for so called food urbanism for the Estonian city of Tartu, where food production is understood as a tool for shaping, re-structuring and designing the city. Food organism can be defined in short as an attempt to integrate elements of sustainable food and agriculture systems in city communities. She also presented a program matrix as a possible typology for food urbanism initiatives, further developed by her on the basis of a scheme originally from Portland University.

General discussion started with a look on WG's general working program (see wiki-file "General working program COST Urban Agriculture Europe for WG3"), followed by the joint elaboration of a standardized questionnaire for case studies (see wiki-file "Standard questionnaire for case studies for urban agriculture activities"). In autumn 2012 two more comprehensive questionnaires were already proposed and sent around, but first tests with an urban farm and a community project in Germany showed, that they might be to complex for most cases. They can be used for deeper analysis (see wiki-files "Questionnaire for urban agriculture projects/communities/non profit organizations" and "Questionnaire for urban agriculture enterprises"). The new "Standard questionnaire" was open up to 7th of April 2013 for further refinement and feedback on the wiki-platform. After this date the members of WG3 will start to test the questionnaire in the field with first case studies. Every WG3 participant promises to work out one or two case studies by testing the questionnaire up to the 3rd Working group meeting in Dublin 11th – 13th of September 2013.

Further considerations and proposals are:

Presenting every case of UA in the future "Atlas of Urban Agriculture" with a short identity card, which has for all reviewed cases within the COST action the same layout, so achieving a homogenous appearance. The identity card can be linked with the map tool and the files of case studies of one or more working groups. Good proposals for identity cards were made by Giulia Giacchè and Attila Tóth (see Short Term Scientific Mission Report: UA in Barcelona Metropolitan Region). A template for the identity card should be developed.

For a common layout of case studies of WG3 based on the standardized questionnaire a further templates could be helpful, one for case studies files in the wiki (later in the atlas), one for posters for poster sessions in the coming WG meetings.

The use of the standard questionnaire should be offered to all members of the COST action (not only WG3).

WG3 case studies cannot only focus on single enterprise/projects, but also on higher organization levels (like coops, umbrella organizations, agricultural parks...).

Next working steps for WG3 are (see also "General working program COST Urban Agriculture Europe for WG3"):

- Refining the standard questionnaire (deadline 7th of April 2013)
- Testing it with and elaborating first case studies
- Presenting first case studies with identity cards, linked with the map tool and following templates in the wiki (first elements for the "European Atlas")
- Checking out possibilities of comparative analysis of data from first case studies
- If necessary, starting a new round for improving the standard questionnaire and/or developing further ones for deeper analysis.

References

Ong, Terje (2013): FOOD URBANISM INITIATIVE. Food as a tool in shaping, re-structuring and designing the city; using Tartu as a testing site to map the potentialities. Presentation on 2nd Working group meeting of COST Urban Agriculture Europe, Barcelona, 14th of March 2013.

Paulen, Oleg (2013): Country introduction Slovakia. Presentation on 2nd Working group meeting of COST Urban Agriculture Europe, Barcelona, 14th of March 2013.

2 Macroeconomic benefits of urban and peri-urban agricultural activities (Version 2013-02-25)

Agricultural activities in general – not only urban and peri-urban ones – are multifunctional. The working definition of multifunctionality used by OECD and WTO links multifunctionality with specific characteristics of the agricultural production process:

“The existence of multiple commodity and non-commodity outputs that are jointly produced by agriculture, and that some of the non-commodity outputs may exhibit the characteristics of externalities or public goods, such that markets for these goods function poorly or are non-existent.” (Glossary of statistical terms by OECD 2013).

Due to their direct neighbourhood to houses of the citizens and enterprises of others sectors urban and peri-urban agricultural activities have a strong focus on multifunctionality – and on positive or negative externalities of their production processes. Overall, urban and peri-urban agricultural activities offer a broad range of potential macroeconomic benefits, which can be subdivided into economic, social and ecological contributions (see table).

Economic benefits	Social benefits	Ecological benefits
Production of food, feed, energy, raw materials, ornamental plants.... Added value, income and taxes Multiplying effects to local/regional economy including demand and supply to forward or backward linked industries Preservation of cultural heritage (historical buildings, traditional local knowledge...) Creation and supply of leisure opportunities by own supply and by management of free areas Valorisation of areas – f.e. Brown site redevelopment (valorisation of industrial fallows)	Employment Contributions to quality of life / well-being of people in general Social inclusion / integration / taking care of disadvantaged social groups (jobless or disabled people, migrants.....) Environmental, nutritional, social and cultural education Food security / food sovereignty for social groups with low income	Protection and renovation of abiotic natural resources: soil, water, air Climate protection by CO ₂ -storage in plants and soil Improvement of micro-climate / controlling air pollution Protection and improvement of biodiversity Cost-effective management of green belts and green areas up to landscape design Improvement of the use of resources: lower transport costs by short value chains, use of waste heat, waste water...

Table: Potential macroeconomic benefits of urban and peri-urban agricultural activities

It may be an interesting task especially for ESRs, to quantify and describe, to analyse and to compare macroeconomic benefits of urban/peri-urban agricultural activities of enterprises and projects as well. One way could be defining indicators for describing/quantifying benefits, each with different levels of distinctness, f.e. taking for the benefit "production" the indicator "production value per year" and for the benefit "employment" the indicator "number of full time jobs per year" (seasonal work has to be taken into account by weighting factors):

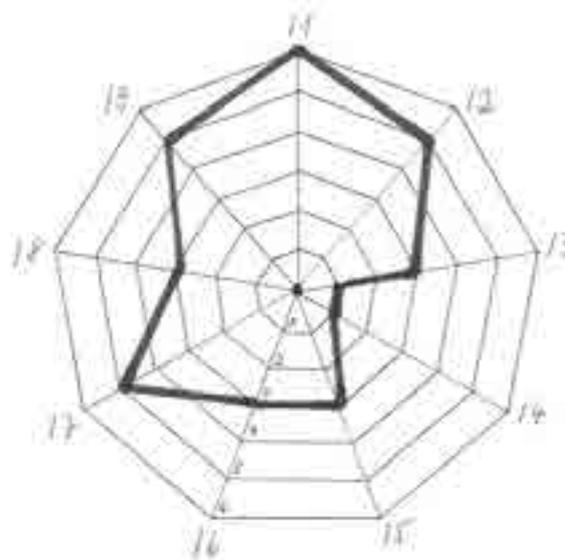
- Level 1: < 1.000 Euro p.a. 0
- Level 2: > 1.000 Euro up to 5.000 p.a. < 0,25 jobs p.a.
- Level 3: > 5.000 Euro up to 20.000 Euro p.a. > 0,25 jobs up to 1,0 jobs p.a.
- Level 4: > 20.000 Euro up to 50.000 Euro p.a. > 1,0 jobs up to 2,0 jobs p.a.
- Level 5: > 50.000 Euro up to 100.000 Euro p.a. > 2,0 jobs up to 5,0 jobs p.a.
- Level 6: > 100.000 Euro > 5,0 jobs p.a.

Table: Examples for indicators for comparing macroeconomic benefits of agricultural activities

Economic benefits	Social benefits	Ecological benefits
Production value per year	Number of full time jobs per year	Managed free area (ha) per year
Value of purchased inputs and services per year (excl. labor)	Persons x hours in educational activities per year	Biodiversity of production: number of different species produced
Value of preserved historical buildings, building or natural monuments including historical/traditional parks and gardens	Persons x hours in social activities per year	Biodiversity on managed areas: number of different species on 10 sqm

Remark: However, tax payments would be a further indicator, but to ask for it is to sensible ...

Finally, macroeconomic benefits can be visualized and compared by cobweb diagrams, for example like this:



Picture: Example of a cobweb diagram. The small numbers indicate the levels of fulfilment of different indicators; the indicators are shown by numbers I1 to I9. Cobweb diagrams allow visualizing and comparing different levels of realization of multiple objectives.

3 Standard questionnaire for case studies for urban agriculture activities

Preliminary remarks: COST Urban Agriculture Europe is a network of more than 120 European researchers from 61 universities and research institutions of 21 countries, which aims on putting issues of urban and peri-urban agricultural activities on the European policy agenda. Part of the project is to show the great diversity of activities and to demonstrate the important benefits for citizens and society - a base for public support. By giving us information and allowing us representing your activity in our "European Atlas on Urban Agriculture", you help to strengthen the position of urban agriculture in Europe and to bring this sector in the awareness of local, regional and European politicians. Further on your participation in the "Atlas" can help you for your own public relations work.

Every publication about your activity will be coordinated with you in advance; so we ask for your contact data (e-mail):

Name of responsible person:

E-Mail:

Website:

Name of enterprise / project:

Post address:

1. Short description of the activity:

Enterprise:

Association:

Project:

Year of foundation:

Years of activity:

Production area (aprox. ha or square meter):

Total area (apron. ha or square meter):

Employed persons (paid, full time equivalent):

Involved persons (volunteers, aprox.):

Kind of crops and livestock:

Production system (f.e. integrated, organic certified, organic, permaculture, conventional.....):

Main services (f.e. educational activities, business events....):

2. What is / are the purpose(s) of your activities? Please indicate us, how important the proposed purposes are from your point of view:

Purpose of the activity is...

- Commercial:

(Please tick): has no importance has little importance has certain importance
has high importance I can't say/I can't judge

- Self consumption/social consumption:

(Please tick): has no importance has little importance has certain importance
has high importance I can't say/I can't judge

- Subsistence (= production for food security):

(Please tick): has no importance has little importance has certain importance
has high importance I can't say/I can't judge

- Educational:

(Please tick): has no importance has little importance has certain importance
has high importance I can't say/I can't judge

- Environment Protection / Area management:

(Please tick): has no importance has little importance has certain importance
has high importance I can't say/I can't judge

- Social:

(Please tick): has no importance has little importance has certain importance
has high importance I can't say/I can't judge

- Leisure / Well-being:

(Please tick): has no importance has little importance has certain importance
has high importance I can't say/I can't judge

- Customary use of land (= tradition, expression of culture):

(Please tick): has no importance has little importance has certain importance
has high importance I can't say/I can't judge

- Research & Development:

(Please tick): has no importance has little importance has certain importance
has high importance I can't say/I can't judge

- Others: which?.....

(Please tick): has no importance has little importance has certain importance
has high importance I can't say/I can't judge

3. Short description of geographical situation, type of urban surrounding, agro-ecology, landscape scenery (photos welcome! At least six: fields, products, people, buildings, landscape.....)

4. Markets and Marketing:

What kind of specific expectations do the clients of your enterprise/project have, e.g. the population in the neighborhood of the enterprise/project (especially those which are taken into account)?

How would you describe the specific demand or need, which your enterprise/project can cover with its offer?

What is the offer of the enterprise/project and the approach used to achieve it?

Which marketing channels are used to hand out products and services to clients?

How important is the local/regional market and the national/international market (rough estimate in %)?

- Product 1:
local/regional market (%) national/international market (%)

- Product 2:
 local/regional market (%)national/international market (%)

- Product 3:
 local/regional market (%)national/international market (%)

- Product 4:
 local/regional market (%)national/international market (%)

-

What makes your products or services unique compared to alternative providers?

5. Institutional environment:

How is the public support of your enterprise?

How does the public limits your enterprise?

How is the landownership?

Which partnerships are you involved in? (f.e. professional organizations, marketing alliances....)

How is the physical planning designation for your operation? (f.e. agricultural zone, industrial zone, residential zone, nature reserve.....)

How does the Common Agricultural Policy affect your operation?

- No affect:
- Positively? Please give examples:
- Negatively? Please give examples:

VERY IMPORTANT! Which propositions, expectations and wishes do you have towards public support for your activities (including Common Agricultural Policy) and towards your clients?

6. Success factors: Which factors (reasons) make your activities successful?

7. Which are the principal problems that your activities are facing?

8. Macroeconomic benefits – or showing, what advantages bring your activities to the citizens and to the society as a whole! (Please help us with your data to strengthen the position of urban and peri-urban agriculture.

Production value (attention: not profit!!, aprox., estimated):

- < 1.000 Euro per year
- > 1.000 Euro up to 5.000 Euro per year
- > 5.000 Euro up to 20.000 Euro per year
- > 20.000 Euro up to 100.000 Euro per year
- > 100.000 Euro up to 500.000 Euro per year
- > 500.000 Euro per year

Number of full time jobs per year with salary including entrepreneurs (in full time equivalent, for taking into account half time and seasonal workers)

- None
- < 0,25 jobs per year
- > 0,25 jobs up to 1,0 jobs per year
- > 1,0 jobs up to 5,0 jobs per year
- > 5,0 jobs up to 10,0 jobs per year
- > 10,0 jobs per year

Number of full time jobs without salary per year (volunteers; in full time equivalent)

- None
- < 0,25 jobs per year
- > 0,25 jobs up to 1,0 jobs per year
- > 1,0 jobs up to 5,0 jobs per year
- > 5,0 jobs up to 10,0 jobs per year
- > 10,0 jobs per year

Persons receiving educational activities (in persons x hours per year; aprox., estimated)

Remark: For estimation, ask for persons and hours per day or per week.

- None
- < 100 persons x hours per year
- > 100 up to 1.000 persons x hours per year
- > 1.000 up to 5.000 persons x hours per year
- > 5.000 up to 10.000 persons x hours per year
- > 10.000 persons x hours per year

Persons receiving social activities (in persons x hours per year; aprox., estimated)

Remark: For estimation, ask for persons and hours per day or per week.

- None
- < 100 persons x hours per year
- > 100 up to 1.000 persons x hours per year
- > 1.000 up to 5.000 persons x hours per year
- > 5.000 up to 10.000 persons x hours per year
- > 10.000 persons x hours per year

Managed green open space land (ha) per year (aprox.)

- None
- < 0,1 ha
- > 0,1 ha up to 1,0 ha
- > 1,0 ha up to 10,0 ha
- > 10,0 ha up to 50,0 ha
- > 50 ha

Agrobiodiversity of production: Number of different varieties and races (plants and animals) produced

- 1
- < 1 up to 5
- > 5 up to 10
- > 10 up to 20
- > 20 up to 30
- > 30

Maintenance costs of preserved historical buildings, building monuments or natural monuments, if present (including historical/traditional parks and gardens; aprox., estimated), also urban green development costs, roads and foot paths for public use..... Remark: Value of own work has to be estimated and included

None

< 5.000 Euro per year

> 5.000 Euro up to 20.000 Euro per year

> 20.000 Euro up to 50.000 Euro per year

> 50.000 Euro up to 100.000 Euro per year

> 100.000 Euro per year

9. Personal Profile of the initiator/owner:

Age:

Profession:

Education:

Gender:

Family participation in the project/enterprise:

Personal motivation: How did you get the idea for entering urban agriculture?

Space for own remarks and feedback:

Name and institution of the interviewer:

Thank you very much for your cooperation!

Developed by Working group 3 "Professionals and entrepreneurial models of Urban agriculture" of COST-Action Urban Agriculture Europe (UAE): Oskar Alfranca, Gunilla Anderson, Ingve Berntsen, Galina Koleva, Wolf Lorleberg, Pedro Mendes Moreira, Terje Ong, Oleg Paulen, Bernd Pölling, Andreas Spornberger, Biancamaria Torquati and Jan-Willem van der Schans at COST Working group meeting Barcelona, 2013-03-14.

FINAL REMARK: This questionnaire was open for further modifications and feedback by COST members up to April 7th 2013. After this date the members of WG3 started to test the questionnaire in the field with first case studies. The use by other COST members will be welcome!

Working Group 4: Spatial Visions of Urban Agriculture

1 Notes on Barcelona WG4 Meeting March 2013

Lilli Licka and Luis Maldonado

Participants: Lilli Licka Chair, Luis Maldonado Co – chair, Axel Timpe Science Cost, Deniz Altay, Kumru Arapgirlioglu, Paola Branduini, Michel Dehaene, Dan De Vree, Pixie Jacobs, Patricia Kettle, Friederich Kuhlmann, Isabel Loupa, Xavier Recasens, Daniela Santos, Jan Supuka, Barbara Szulczewska, Attila Toth, Xin Wang

WG program for Barcelona meeting

To allow for intense discussion was proposed the method of CHARTS (Groat Linda et al, 2002, *Architectural Research Methods*, New York: Wiley, 225 ff), where the analysis can be worked through grouping and sorting of images and terms. The overall goal is to find a common language of the essentials of the landscape of urban agriculture.

Charts are large posters where the images can be hung up and then be sorted and grouped in order or find new ways of defining qualities. It is a frequently used method for spatial analysis.

Therefore all members were asked to bring along the images printed out on A3 (landscape format) with the following contents on the landscapes of urban agriculture which people are working on.

1. Spatial situations how UA is occurring in the projects (meaning topography and 3-dimensional elements - buildings, vegetation):
 - One MAP perhaps one aerial photograph
 - SECTIONS on A3 (various detailing and scales as you find necessary 1:5.000, 1:1.000, 1:500, 1:100)
2. Uses (meaning the actual and the potential uses in the landscapes)
 - ICONOGRAPHIC SCHEMES on A3 (based on maps in scale 1:1.000, 1:500)
3. Atmosphere
 - Other ILLUSTRATIONS on A3, eg. collages, sketches
4. TERMS connected to the topics 1-3 and to the presentations in Aachen.
 - Words on A6

According to the following schedule:

- Wednesday 13th March: 16.-18.00: Producing the Chart
- Thursday 14th March: 9-12.00: Discussing grouping and sorting
- Thursday 14th March: 13.-15.00: Conclusions and further steps

As some reference, Axel Timpe suggested the atlas on River Scapes by Martin Prominski: *River Space Design* (2012) Basel: Birkhäuser.

WG work

At the first session, after self presentations – a half of the attendants to Barcelona Meeting were new at the group- the developed work was explained. There was a general discussion on a systematic approach for varying representation potentials and a possible common visual language was tackled:

First, the typology study that was conducted by Giacché & Tóth was evaluated for its positive aspects, but due to the weakness of its capability to convey spatial information, the method was not chosen to take part in the WG 4 tools. The "Urban Agriculture Identity Cards" will be again posed as a first step for an integrated explanation of the cases of study off the Action by all the groups. As another tool a "matrix" that can contribute to discern differentiated urban landscapes has been examined. Nonetheless the descriptive and restrictive form of the "matrix" has been evaluated in a highly critical way.

Eventually, the discussions ended up with the idea of developing a "common description / interpretation approach" that will give the means to diagnose and identify different types of open and green spaces and to make a rich and multilayered categorization of urban green landscapes.

At the second stage of the WG4 meeting, graphic information was grouped in five differentiated charts. Every sub group worked on the making of this "common description / interpretation approach" related to their sub fields, to be able to realize the structure of a common graphic approach to the subject of the group and to the "Atlas of Landscapes for Europe". The results of every group were discussed and their results have been submitted during past months.

Tasks

- To summarize the results of the five different charts posed at Barcelona.
By Deniz Altay (1), Axel Timpe (2), Attila Tóth (3), Michal Dehaene (4) and Paola Branduini (5).
- To check and to discuss graphically the proposed drawings by mail or at the Wiki (By all).
- To propose other possible issues to be explained with the explained charts or with others (By all).
- For Dublin, testing the charts on selected case study integrating their individual character with other possible categories (By all).
Before Dublin Meeting the chairs of the group will send a working group program for the next workshop and discussion.

2 Charts Report of Barcelona WG4 Meeting March 2013

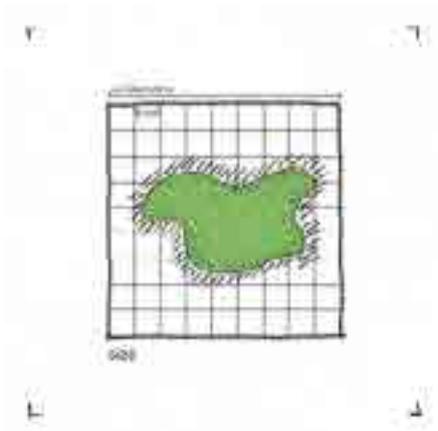
1. General Situation by Axel Timpe

To be able to situate a case study some general information has to be given on its geographical, topographic and historic context:

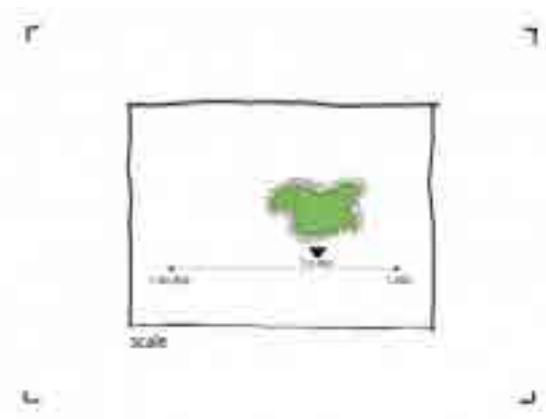
General geographic information to be provided on case studies



location in Europe

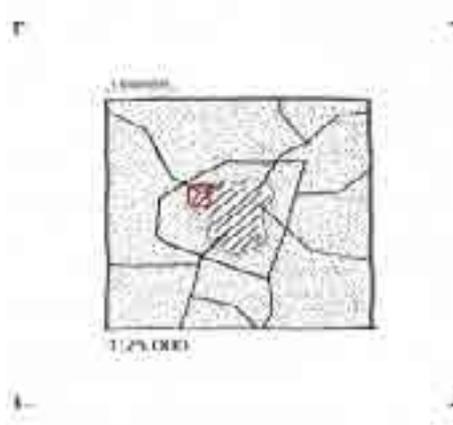


size of presented area

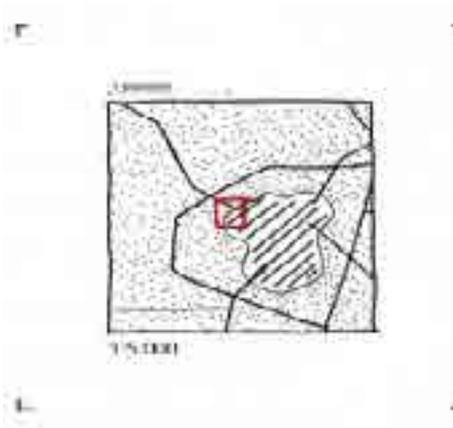


scale(s) of presented plans

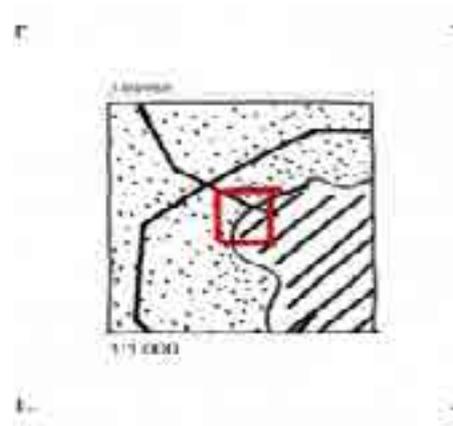
Zoom-in of topographic context (scales to be discussed)



topographic context 1:25.000

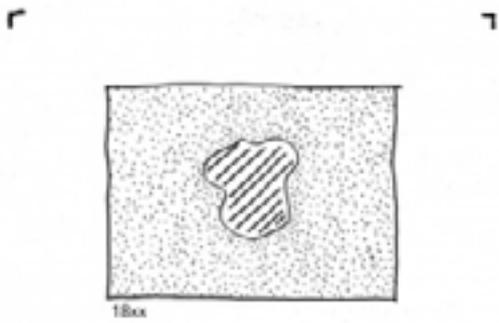


topographic context 1:5.000

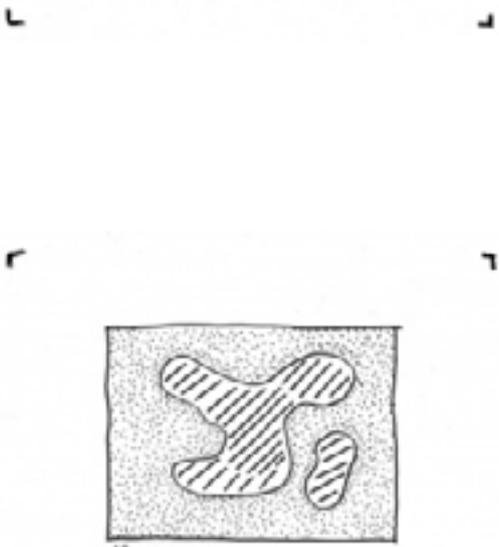


topographic context 1:1.000

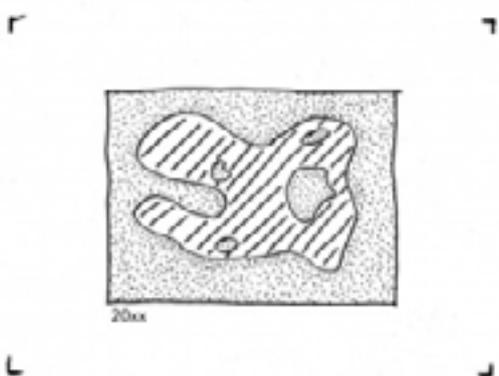
Historic evolution of study area and context (years depending on case study)



historic evolution 1



historic evolution 2



historic evolution 3 ...

2. Aerial View/Scale Layout Report by Deniz Altay

This part will summarize the meeting results of Working Sub Group 1; Aerial view/Space/Layout/Scale. The aim of the sub group was to find a "common language-way to describe" it for different settings and landscapes.

Sub Group 1, has started with the discussion of developing a common "visual vocabulary" that can be used for the interpretation and representation of different urban landscapes/landscape systems by divergent grammar structures. At this point, the main problematic of the sub working group was to derive a systematic representation and interpretation vocabulary for a given landscape. This vocabulary will be extracted by the simple evaluation of visual materials such as maps, aerial views and layouts in different scales. Another critical question was to acquire similar information and evaluation instruments from visual materials for the representation of dissimilar cases.

For a common "visual vocabulary" the subgroup defined two basic components -variables that can mark any landscape :

- EDGES (edge: the outside limit of an object, area, or surface; a place or part farthest away from the center of something) which linearly represents the border relations and shows the area with its external periphery.
- PATTERNS (pattern: a repeated decorative design, an arrangement or sequence regularly found in comparable objects or events. a regular and intelligible form or sequence discernible in certain actions or situations) gives spatial descriptions and aims to determine the area within its totality. Related to this concept the internal structure and own characteristics can be revealed. Within this framework the concepts pattern and edge have been itemized.

As it can be figured out from the table the 'edge' can be classified into two, such as types of edges and qualities of edges.

The types are; structural elements, vegetation or morphologic (related to land use) and/or natural elements. During the analysis of different landscape areas new edge types can appear and the typology of edge components can be increased to create more specific perimeter narrations.

In terms of quality, edge components can be classified into 4. Defined to be the degrees of density and continuity, level of sharpness, homogeneity of the edge.

Pattern can be also defined some sub categories such as spatial, systems of measurement and Elements.

Spatial features such as morphological and natural characteristics can specify and distinguish different settings and landscapes from one another. The technology used and the functions of the area are also other important features that will be used as a marker.

In the visual vocabulary the scale and sizes (parcel/lot sizes, sizes of businesses, the ratio of the landscape area to the surrounding functions...) are very important to show differentiated patterns of the landscape settings.

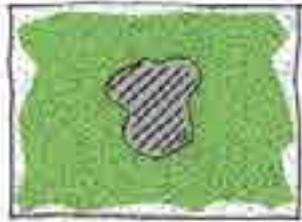
The identification of different elements such as structural units, vegetation, water elements, their places, position and directions, area, shape and appearance, size and ratio, internal limits are also a significant for our purpose.

3. Spatial Situation: plans & sections by Axel Timpe

The plans and sections worked on in the group are representations of a landscape planners or other stakeholders have already worked on, either as a project area (future) or as an area of deeper spatial analysis (present and past).

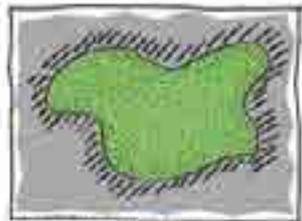
3.1. Plans

The plans available at the meeting show two types of agricultural spaces that follow a logic of inside/outside or figure/ground. A third type of agricultural space where the inside/outside and figure/ground logics are difficult to apply has been found in one case study. The different cases can be described as follows:



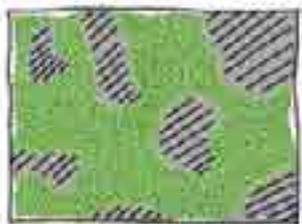
peri-urban agricultural spaces

peri-urban spaces, that surround built-up areas, the second are often occupying the centre of the plan



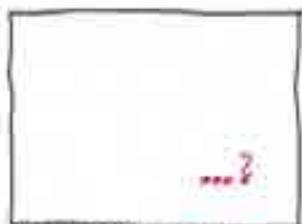
intra-urban agricultural spaces

intra-urban spaces, which are surrounded by more or less dense built-up areas on at least three sides, represented in the center of the plan as well



transurban agricultural spaces

scattered(?) or transurban(?) spaces, where agricultural and built-up areas are closely interwoven



additional types to be defined

additional types to be defined if necessary

Conclusion: A case study should situate the study area in the peri-urban/intra-urban/transurban typology. Additional types are to be defined based on further case studies.

The available case studies all show a concern about the contact situations between urban space and agricultural space. The contact situations are approached in two ways:

1. following the inside/outside resp. figure/ground logic the contact situations can be described as boundaries, fringes, limits, buffers etc. Different types of boundaries have been identified:

- natural boundaries (relief etc.)
- infrastructural boundaries, planned from a monofunctional perspective without attention to the context
- "planned" boundaries with the intention to organise space and landscape
- additional types have to be identified on the basis of further case studies...

2. contact situations could as well be found as integrated into the agricultural space itself, shown as or following linear elements or being organised as punctual elements (dots, stations, satellites etc.). Combinations of linear and punctual exist as well. These integrated contact situations were e.g.:

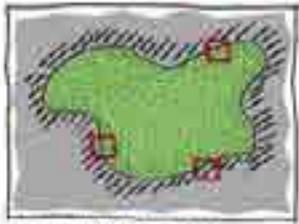
- farmsteads with growing built-up area, e.g. for housing
- farmsteads with additional uses attracting public: shops, restaurants, leisure activities, etc.
- lookout-towers or vistas
- small constructions with cultural heritage values
- small areas for gardening lots or exhibition gardens
- pathways with special appearance or signage to attract and canalise public use
- additional types have to be identified on the basis of further case studies...

The following pictographs aim to show the contact situations found (without detailing the situations themselves). A typification of contact situations in trans-urban agricultural spaces has however not been possible.

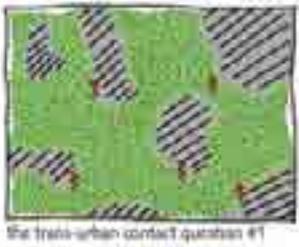
1. contact situations following the inside/outside or figure/ground logic



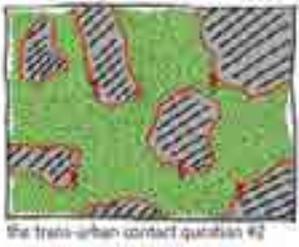
peri-urban contact situation



intra-urban contact situations

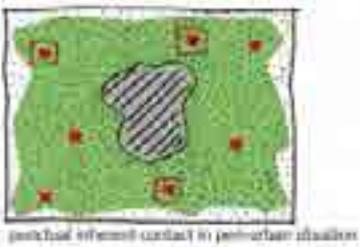


trans-urban contact question #1



trans-urban contact question #2

2. contact situations integrated to agricultural space



punctual integrated contact in peri-urban situation



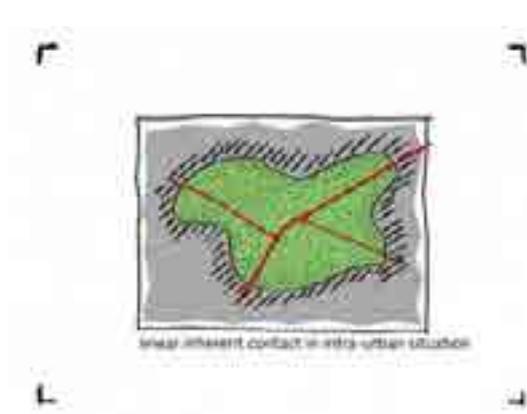
punctual integrated contact in intra-urban situation



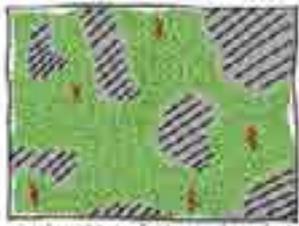
Which punctual contacts exist in trans-urban situations?



linear integrated contact in peri-urban situation

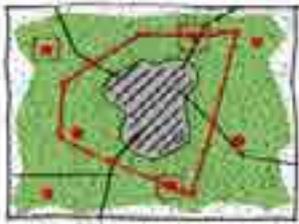


linear integrated contact in intra-urban situation



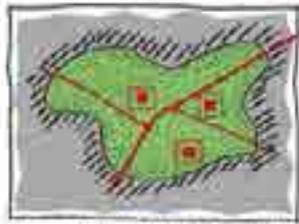
Which linear contacts exist in trans-urban situations?

no inherent types for trans-urban situation?



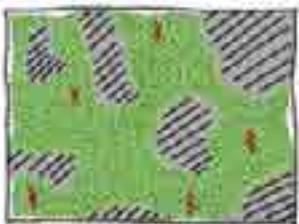
combined integrated contact in peri-urban situation

combined integrated contact in peri-urban situation



combined integrated contact in intra-urban situation

combined integrated contact in intra-urban situation



Which combined contacts exist in trans-urban situations?

no inherent types for trans-urban situation?

The different urban-agricultural contact situations described as boundaries etc. under 1. can be symbolised by the following pictographs. Types found in the case studies in Barcelona and potential types discussed in the group are shown, additional types are to be found: at 1. types of linear urban-agricultural boundaries discussed



boundary without special character



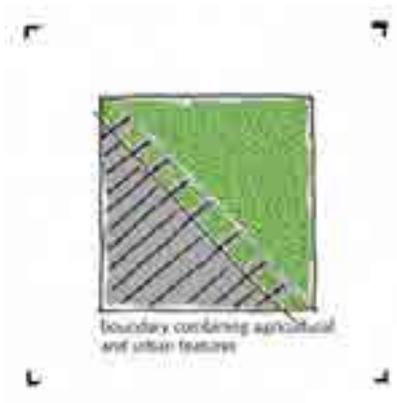
natural boundary e.g. relief



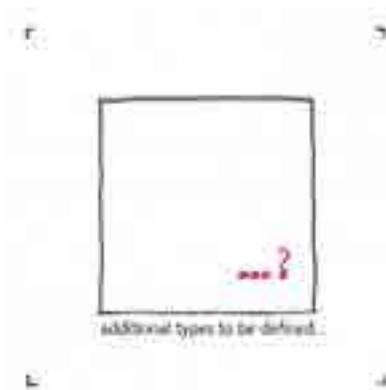
infrastructural boundary



planned boundary with proper spatial character e.g. greenbelt



(planned) boundary combining urban and agricultural features



additional types to be defined if necessary

The will to show and to act upon the contact situations seems to be driven by different motivations:

- urbanisation pressure and the will to protect agricultural open space by defining its boundaries, either to control urban expansion or to giving spatial quality by representing agricultural space as a defined and readable unit
- the need to introduce and organise multifunctional uses in the agricultural space to bring out the inherent landscape qualities of these spaces

The reviewed projects suggest that the interest of the planners in urban agricultural spaces is specially oriented towards the connection of urbanity and agriculture. To be put in a short phrase: **Spatial structure of Urban Agriculture is not about zoning but about linking!**

The combination of agricultural space and urban space can be perceived as a new kind of urbanity that may create added value to both.

Conclusion:

- For every case study the urban and agricultural dynamics should be specified: urban expansion, urban shrinking, agricultural vitality, agricultural retreat, ...
- The spatial strategies used in the case studies to cope with the dynamics of agriculture and urban development should be classified following the above described typology

3.2. Cross-sections and Transects as a working tool

To understand the spatial configuration of the urban-agricultural spaces examined in the case studies, the cross-section or transect has proven to be an important tool because it can add the third dimension to cartographic representations of space. Based on the size and scale of the presented case study the third dimension can be shown in an actual cross-section, which shows the situation in correct scale renditions, or in a transect, which resumes the spatial situation by using different scales in the horizontal and the vertical representation of space and limits the representation to key elements of the landscape. The transect is an analytic tool in itself by actively choosing the elements of the landscape and the way they are represented.

A common graphical language for cross-sections and transects could be developed, the illustrations presented here are chosen from the case studies shown in Barcelona.

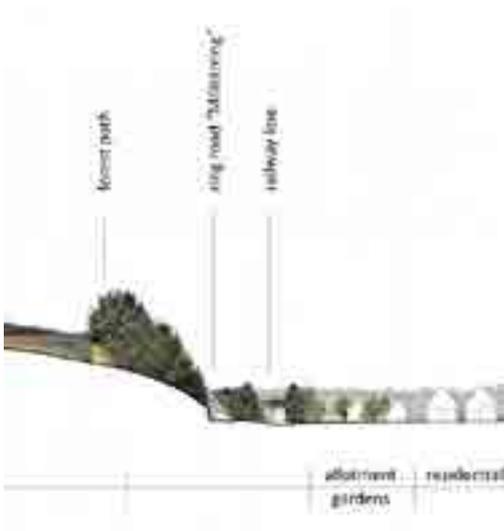
A transect can represent the whole urban-agricultural space analysed:



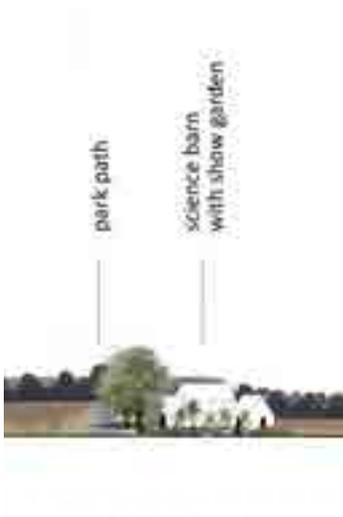
Cross sections may be used to exemplify the contact situations between urban and agricultural spaces:



- contact situation types in cross section



- infrastructural boundary (motorway)



- natural boundary (relief) combined with infrastructural boundary (ringroad/railway) and planned buffer (allotment gardens)



- linear (path with alley) and punctual (science barn/garden) contact situation in combination

additional types to be defined if necessary.

4.

4.1 Atmospheres by Michel Dehaene

Documenting the various 'atmospheres' associated with urban agriculture is anything but obvious. Not only is 'atmosphere' hard to pin down, it also defies easy representation. The position articulated here is based on the assumption that, following qualitative research methodologies, a subject such as atmospheres can only be studied indirectly. Atmosphere is studied not as a characteristic of a place which can be described as such, but rather as a quality of a place which is socially constructed, and of which, hence, the meaning can only be inferred. The social meaning of a place can typically be inferred from what people make, say or do, from material artifacts, from speech acts and from practices. In the context of a proposed methodology to study a number of urban agriculture cases an elegant way to come to some qualification of the various atmospheres might be to look at visual media that in one way or another speak about the atmospheric qualities of urban agriculture and the way people enact their implication in the atmosphere of a place.

We propose to make a distinction between three types of images. The distinction is based on the connection between the image and the place about which it speaks:

The first category includes images that belong to projects, plans and projections. These images are virtual representations of the way in which urban agriculture could be inscribed within a designerly form of place making. In the process they are involved in the construction of a web of social imaginaries that qualify the way in which urban agriculture is lived and perceived.

Landscape park 'Belvedere', Cologne,
Lohrberg Stadlandschaftsarchitektur
(Source: <http://www.competitionline.com/fr/contributions/18922>)



The second category includes images that try to document and describe sites in which forms of urban agriculture can be found. These images belong to a form of documentary photography. They frame these sites in a certain way. At the same time, they are rich vehicles to describe and analyze the way in which multiple dimensions of urban agriculture come together in a place and are part of a concrete tangible urban landscape.

Urban Agriculture in the East Zone of
Sao Paulo, Brazil
(Source: <http://matthewpike.wordpress.com/2012/07/02/urban-agriculture-in-sao-paulo/>)



The **third** category includes images that actively seek to represent what the case study is about. These pictures typically have a narrative dimension and in many instances are produced by people active within the case study. Such pictures tell a story, portray the casestudy in a particular way.

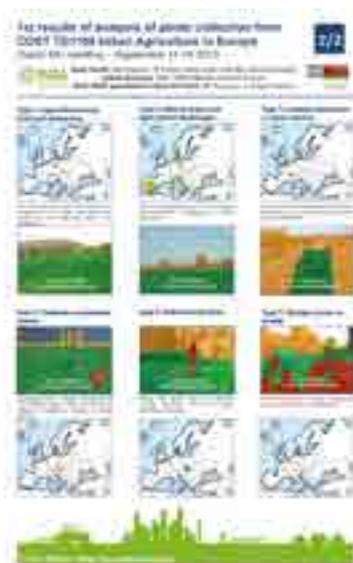


Urban Agriculture project 'de site', Ghent, Belgium
(Source: http://www.nieuwsblad.be/article/detail.aspx?articleid=DMF20121213_00401436)

The aim of these categories is not to classify pictures according to these categories, but rather to highlight the extent to which these categories open up different interpretative paths. This could take the form of collections of pictures with lengthy captions which use the picture as an inroad to narrate less tangible dimensions that often remain outside of conventional case descriptions.

4.2 Photographic analysis by Sylvie Paradis and Isabelle Duvernoy

The work Analysis of Photo Collection from COST TD 1106 Urban agriculture Europe was drafted in French for the Barcelona Meeting and will be presented in its first English version at the 3rd Working Groups Meeting at Maynooth – Dublin (Ireland). Its poses a different and interesting approach to the topic developed at Barcelona.



1st results of analysis of photo collection from COST TD1108 Urban Agriculture in Europe

Dublin MC meeting – September 11-14 2013

1/2



Sylvie Paradis, INP Toulouse - El Purpan / INRA, UMR 1248 Agir, Toulouse (France)
 Isabelle Duvernoy, INRA, UMR 1248 Agir, Toulouse (France)
 & the AREM specialization cohort 2012-2013, INP Toulouse - El Purpan (France)



Context and goal

Urban and periurban agriculture is a research topic since several decades, but what recovers these terms, since the way of defining them varies from one to another? To describe and understand this diversity we first analyze the visual components of the photo collection proposed by the research members of the COST TD1108 action Urban Agriculture Europe (UAE). These photos were asked to be produced by the participants for the July 2012 NAC meeting of Aachen (Germany), to illustrate what for European researchers represented Urban Agriculture. This material was rich and significant to tend to identify various models of UAE, and understand better the research concerns that were pointed out by the members of the COST UAE action. In connection with our previous works of analysis of perceptions by photo inquiry, we addressed an email call during fall 2012 to give a title and a short comment (explanation of the comment and choice) for each photo proposed. We also asked the authors to specify their research concerns and fields of interest.

Fig. 2. Origins of photos (by Country)



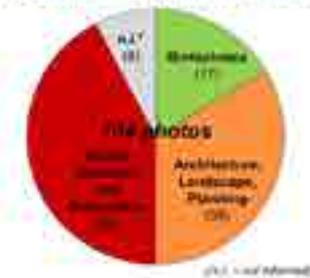
Fig. 1. Photo collection poster of July 2012 - Aachen (Germany) and one example of a filled photo form returned



Datas

A total of 104 photos compose the photo collection of COST UAE action (data set). 76 of them were proposed for July 2012 meeting and permitted the realization of a poster by Mr Axel Timpe (Fig.1). 28 extra photos were collected after our email call addressed to members during fall 2012. The photos of this collection of UAE cover 23 EU countries (Fig.2) and were proposed by 50 different European researchers (approximately 11-14 males and females) from 3 major scientific domains (Fig.3): 1- Social Sciences, and Economics, 2- Biotechnics, 3- Architecture, Landscape and Planning. In this data set, only 54 photos were returned titled and commented by 27 researchers (see example on Fig.1 of filled form with photo, 50 photos remained identified only by their author's name (not commented and not titled).

Fig. 3. Distribution by main research domains



Approach

An interpretation of the composition of each of the collection of UAE photos was made by a group of 16 students of the "Agro-resources and Environmental Management" (MEM) master level specialization of 2012-2013 cohort of the El Purpan (preparing to agriculture engineering degree). Under our supervision, this exploratory analysis was realized by the class during fall 2012. The main composition elements of each 104 photos were visually identified and quantified according to their proportion on every photo, their shape and their place in the composition (foreground, background, etc.). The analysis of the comments and titles of the 54 filled and illustrated forms was also initiated with the construction of a database of information about the photographed situations and the associated research topics.

Results

The photo collection seems to highlight 3 major elements of composition which are 1) spaces and elements of agricultural production (often in the foreground), 2) construction and built spaces, people or groups of people. Considering the importance of these, a total of 6 visual types of interface urban - agriculture were identified (Fig. 4) on the base of the 104 photos of the data set. Photos describing a foreground of vast productive agricultural spaces on an urbanized background (type 2) represent 30% of the corpus. Those describing small productive spaces on an urbanized background (type 4) represent 20% of the corpus. The rest of the corpus is distributed in a balanced way in the other types (1, 3, 5 and 6) approximately 10-15% each. People or groups appear in half of the types (4, 5 and 6), generally on photos describing small agricultural spaces (gardens), when taking care of productions or while interacting (group 1). These photos focusing on people in action seem to be proposed mostly by 2 of the main scientific domains (planning and Social Sc. and Economics) and less by Biotechnics researchers in the corpus, but fewer photos from Biotechnics researchers (16%) than the others scientific domains. But, globally the researchers who participated in this exercise work on varied questions: social (making a commitment in the production, landscapes and patrimony, governance of spaces and politics of support and development, partnerships and coordinations, environment, environmental forms, etc.). Agricultural productions and activities are studied for their food purpose, in particular if in autoconsumption or in short marketing chains, but also for other services such as the strengthening of the social link, landscape,....

Fig. 4. Distribution by visual types identified

Visual types	Total	Scientific domains				
		Biotech	Arch	Landsc	Soc/Eco	Unsp
1. Agricultural lands and rural ambiances	55	0	4	0	0	0
2. Urban and agricultural mixed landscapes	32	0	12	0	0	0
3. Isolated agriculture in urban spaces	14	0	0	0	0	0
4. Collective production spaces	20	0	6	0	0	0
5. Individual gardens	11	0	0	0	0	0
6. Groups, focus on people	12	0	0	0	0	0
Total	104	0	22	0	0	0

Elements of discussion

The visual analysis of photos allowed to identify a variety of interfaces and spatial contacts between agricultural production and city. The UAE researchers seem to be concerned by varied forms of production, whatever are their scientific domains. The agroecologic and biotechnic questions arise in urban context whereas the questions of architecture and landscape on contexts less apparently urbanized. Also, the "farmers" identified in comments are diverse: professional, individuals and not agricultural collectives, etc. The functions identified by these forms of production can be centered on food, health, as quality of life, social life, esthetics, of environment sustainability. However, the number of handled photos is low to verify the solidity of these results, even to describe other forms of interplay between city and production. Furthermore, the analysis of the titles and the comments still is to be completed and can continue during fall 2013 hopefully. Indeed, questions are remaining. For example: who are the persons who make a commitment in these various forms of productions? Who produces these landscapes? For whom and why an urban and suburban production?

1st results of analysis of photo collection from COST TD1108 Urban Agriculture in Europe

Dublin MC meeting – September 11-14 2013

2/2



Sylvie Paradis, INP Toulouse - El Purpan / INRA, UMR 1248 Agir, Toulouse (France)
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 & the AREM specialization cohort 2012-2013, INP Toulouse - El Purpan (France)



Type 1. Agricultural lands and rural ambiances



The agricultural zone takes the majority of the foreground of the photos. Constructions or urban zones are mostly like marks in the background.



Type 2. Mix of urban and agricultural landscapes



Agricultural production over on the foreground and urbanization in background, in similar proportions.



Type 3. Isolated agriculture in urban spaces



The urbanization dominates visually. The case of production, small, is realized in the voids of the constructed space.



Type 4. Collective production spaces



Agricultural zone in majority characterized by small attached plots of land. The urbanization appears in background. Presence of several persons.



Type 5. Individual gardens



houses with garden and small cultivated surface, sometimes presence of people gardening in the photos.



Type 6. Groups, focus on people



Centered on a group of people in interaction, as in an educational or associative stake.



5. Uses by Attila Tóth



6. Terms by Paola Branduini

Words were used in addition to explain concept difficult to illustrate with the design and in help to people that are less familiar with the representation tools. The words coming from the WG participants was regrouped, after several tentative of regrouping and sub grouping in the followings ordered groups.

SPATIAL FEATURES: a landscape system formed by structural elements (dot, area, line) and spatial structure (gardening parcels, fields, path).
 The description of forms in and of the landscape: they are easy translatable into designs. The more complicated concept are landscape system.

CHARACTERS: authenticity, integrity, permanencies of elements
 here the words to explain the characters of places and his relations with the history.

USERS: allotment holder, smallholder, farmer, horses, promenader,
 The different type of actors animating urban agriculture spaces (from humans to animals) depends on the scale of spaces, the economic model, the recreational use,People role are representative with difficulty.

USAGE: recreation, station, equestrian, pasture,
 Some of the main use: they concerns agricultural use (pasture), and uses related to the citizen's use. They are representative with the design.

CONSTRAINTS: pollution (water, soil, air), conflicts of use, proximity (food pollution?)

POTENTIALITIES: agricultural areas as a hope for green belt construction and preservation

OUTCOMES: coexistence of

- Environmental
 agricultural areas as values on the background of the concept of smart city, eco-city, green-city, network, buffer zone, biodiversity
- Economic
 urban agriculture economic value vs social value, innovation in agriculture, ownership, diverse production pattern

- Cultural
conservation, cultural heritage, cultural paths, picturesque scale, continuity of functions
- Social
civil integration, social integration, wellbeing, social face of urban agriculture...
- Between cultural and social: identity

PLANNING POLICIES: planning solution to keep agricultural value by plan protection

Words and representation

Some terms were easy representative (features, users, usage...), others are less representative (authenticity..., policies---maybe most part)

Many terms concerns concepts, relationship... that are difficult to represent: they can be represented with arrows, connections

Terms and UA

This communicate:

- First the need to talk first about elements of landscape
- Than to qualify it, to attribute an evaluation
- To talk about people not only about spaces (use and users)
- To let constraints explicit
- To organise the numerous outcomes, from different point of view
- To have an efficacy in planning tools/policies

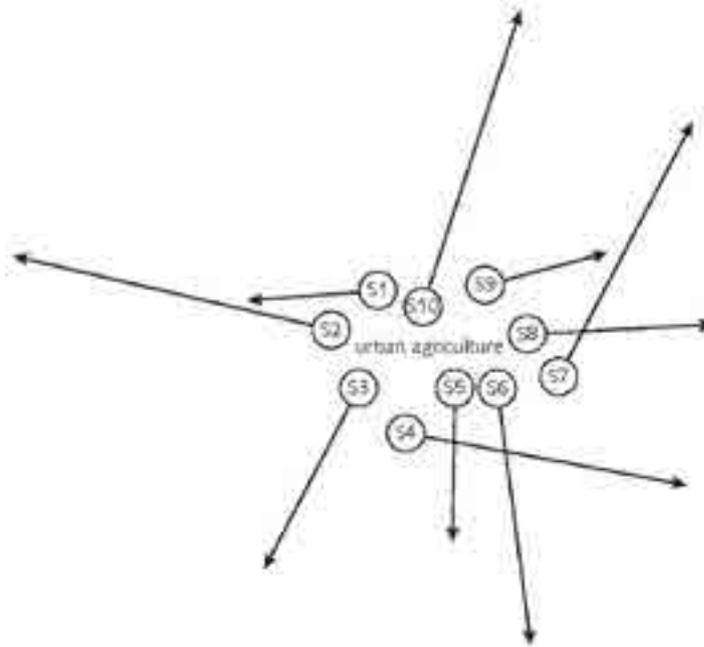
3 On WG4 Method

Axel Timpe

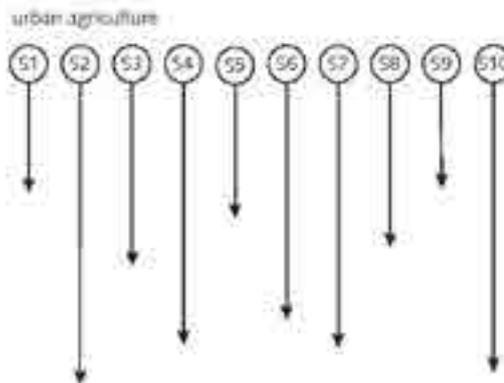
When discussing with the different WG 4 participants at Barcelona concerning the WG 4 Working method our future seemed to be unclear. This seemed due to questions like: What has the WG done before Barcelona (for the newbies)? Why do we separate the case studies into pieces? Will my own case study receive enough attention for its individuality? Are the subjects we are interested in represented? etc.

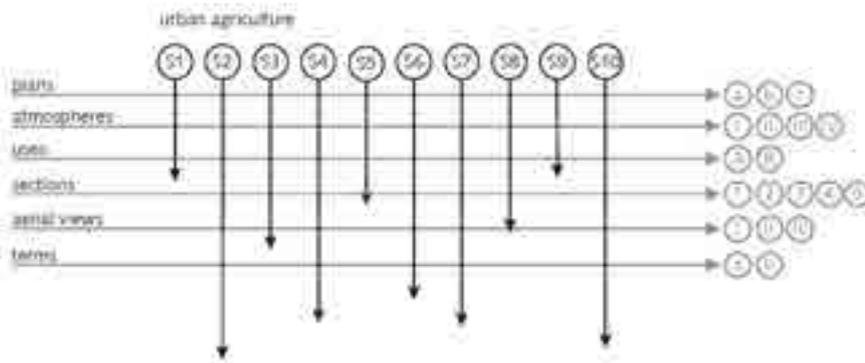
For the cooperation in our WG I have tried to resume what I think about our working method; about the idea of telling different stories with a common language. I didn't consider the question what will be the final product.

Aachen Meeting:
telling the stories of our case studies > a very heterogeneous image

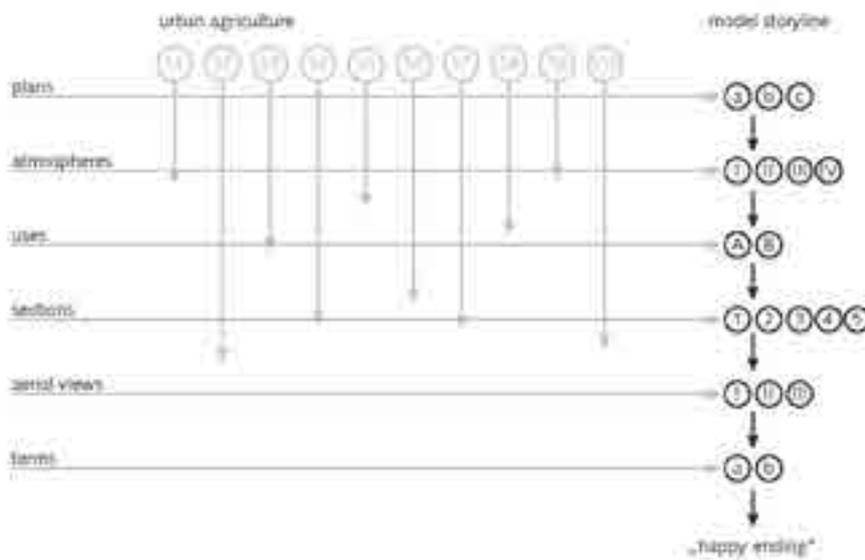


Before Barcelona:
trying to give the stories a common structure, every story stays the same!

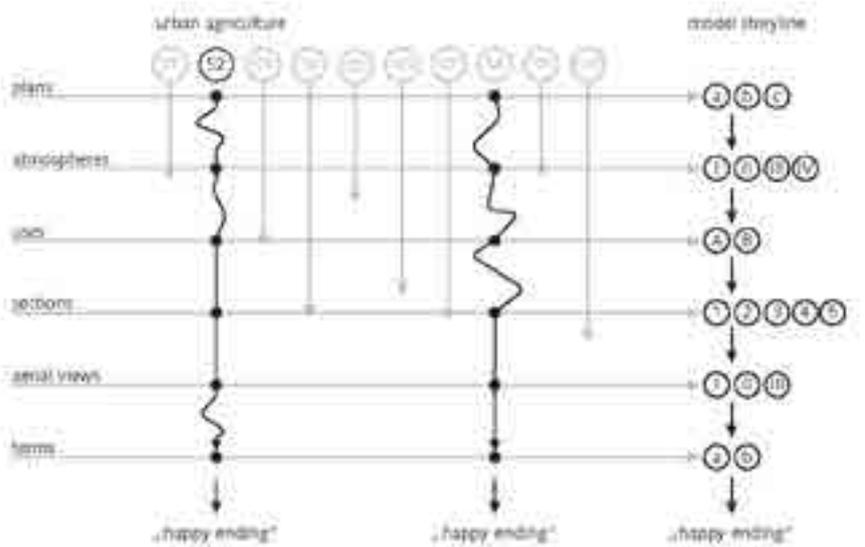




In Barcelona:
looking at only one part of every story,
trying to find common characters and
their typology



After Barcelona:
trying to build a model storyline (that
leaves space for introductions, excurses,
interludes, etc... of every story

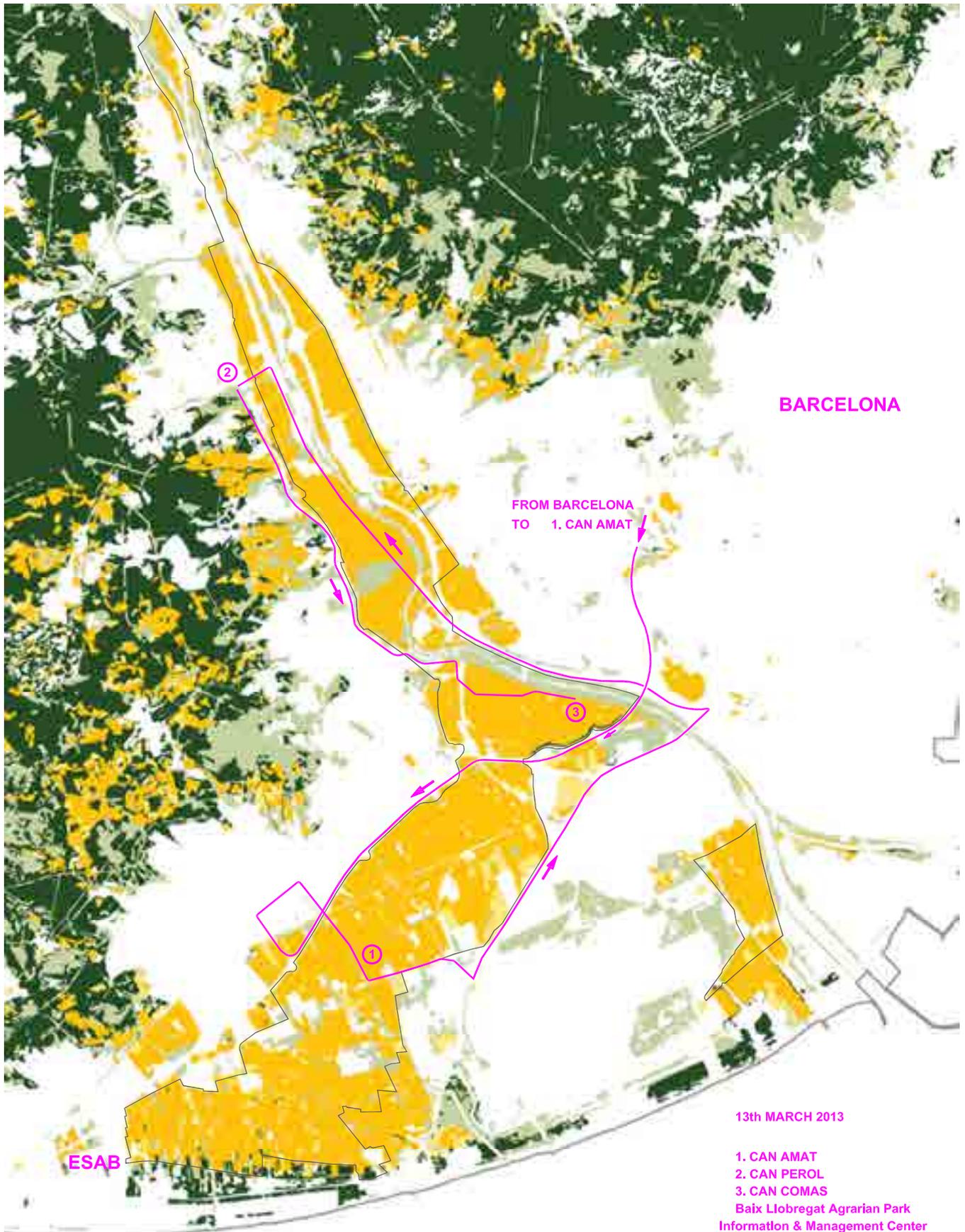


Until Dublin:
testing the model storyline on selected
case study stories, integrating their
individual character

Use it, change it, extend it, etc. ...



Case Study Visits





Can Amat, Viladecans (Baix Llobregat Agrarian Park)

Visit guided by Joan Amat

Fruites i Verdures Amat is a familiar enterprise devoted to the production of fruits and vegetables with a special attention to Baix Llobregat own varieties. The fields are placed in the middle of the delta area where the company has 6 Ha of open fields and 8 Ha of greenhouses. Its main product is the Prat artichoke and its main market is Barcelona (Mercabarna).

At present Amat is cooperating with UPC researchers for the development of “minimally processed foods with added value”¹ looking for alternatives to the disadvantages for sensory and nutritional quality of traditional thermal treatment methods and for lengthening the sales cycle of high quality products based in these values.

The firm cooperates regularly with the Baix Llobregat Agrarian Park in the development of activities that put in contact consumers and farmers as visits, workshops and talks explaining the exploitation model.



Can Perol Association, Sant Vicenç dels Horts (Baix Llobregat Agrarian Park)

Visit guided by Laia Mateu

Can Perol is a company producing and marketing quality agro-food products. It is set up by six families devoted to agriculture. The association that started eight years is an agricultural consulting project to improve the profitability of owners products, ADV Fruit Baix Llobregat. Over time they have achieved introducing agro-ecological processes in their fields. Now we go one step further and have invested heavily in a new project: direct marketing of their products.

Can Perol is going directly to consumers with a high quality product that allows on one side to set a good price for our production and on the other, to meet the demand of some families for a quality food products, healthy (free of chemical residues) with good organoleptic qualities (taste, texture). The produce is picked

¹ Pujola, M. y Achaerandio, I. “Productes mínimament processats amb valor afegit a partir de la carxofa (*cynara scolymus* L.) conreada al Parc agrari del Baix Llobregat” en Quaderns Agraris n. 33, desembre 2012, pp. 79-94.

fresh (within 24 hours will field in the table). All production is grown according to the principles of agro-ecology.

The association seeks to produce and market a product that is environmentally, socially and economically sustainable understanding that neglecting any of these three pillars of the project makes no sense. Can Perol distribute organic food products (with the certification of the Catalan Council of Ecological Agricultural Production) and food products that follow the guidelines of integrated control. In any case, all products are always local.

In addition, Can Perol has the Can Vila Bakery where sells breads and cakes produced in a traditional way, a tradition that dates back to the 50's. Having the bakery, Can Perot can offer both typical products as processed products and / or developed from our fruits and vegetables.

Can Perol Association, its bakery, offices and the workshop on weekly preparing delivery orders are located at Sant Vicenç dels Horts, . The enterprise has developed a website <http://www.canperol.cat/> to commercialize season vegetables and fruits, bread and cakes, meats (chicken and cold meat) and some biological processed products (olive oil, cheese, beer) in boxes. Direct delivery is made at the Metropolitan Area of Barcelona and 30 Km around without charges. Can Perol have a logistical service for further distances. Finally, Can Perol Association also offers catering services.

The firm forms part of the Baix Llobregat Agrarian Park and cooperates with various initiatives including field visits, cooking and tasting workshops. The 13th of March Mrs. Laia Mateu received the COST Action visit to the companies workshop at Sant Vicenç dels Horts, explained their model, answered to attendants questions and later served the lunch of the visit at the head office of the Agrarian Park at Can Comas.

Source: <http://www.canperol.cat/>



Can Comas, El Prat de Llobregat, Agrarian Park Management and Information Center

Visit guided by Sonia Callau and Ana Zazo

Can Comas house the management and information center of the Baix Llobregat Agrarian Park. After visiting Can Amat and Can Perol, the visit went to Can Comas to let the attendants experience one of the most common activities developed by the Park fostering a direct relationship between consumers and producers, between the Park, its products and activities, and the visitors: slow food. Lunch was served by Can Perol using its own local products and services.

Before lunch, the former director of the Agrarian Park, Josep Montasell, explained the philosophy behind the project that has been leading for fifteen years.





Josep Montasell i Dorda
Barcelona Provincial Council

The Parc Agrari del Baix Llobregat: an excuse to think about peri-urban agricultural spaces

Josep Montasell i Dorda

Incentivising means not waiting for things to happen but making them happen

1. Dreams must be made to come true

Why not begin by dreaming? What is your dream for a peri-urban agricultural space or, in a more general way, for peri-urban agriculture? How do you imagine it? How would you like it to be, and what do you expect from it? Without questions there are no answers; the problem arises when we have an answer and do not ask ourselves questions. If we accept that we need to dream to make things better, then we must ask ourselves what we can do to make our dreams come true.

Among elected politicians, managers, farmers and visitors interested in the experience, unique projects like the Baix Llobregat Agricultural Park (from now on BLAP), 15 years old this year, raise questions if nothing else. There is one basic one: what future do spaces like the BLAP have, spaces which have been preserved from urban encroachment and are managed in a specific way but which depend on a consensus of interests which could easily change? Why are there no formulas for the preservation and management of agricultural spaces to ensure their continuity in the future?

I shall attempt to give a clear, concise answer, once again using the analogy of the world of dreams: a dream is only a dream until it is shared with others to make it come true. The future of an agricultural space has to be built, incentivised to make the dream possible. And incentivising does not mean waiting for things to happen but making them happen. A peri-urban project like the BLAP calls for a proactive approach rather than simply watching the passing of time and the sequence of events, both positive and negative, which will surely come about.

We must be aware of and think about three serious situations which are making themselves noticed in the debate and practice concerning agricultural spaces, and which if not properly handled could harm projects like the BLAP or any other like it: the multi-functionality of agricultural spaces as a work method, the lack of generational shift and giving up planning –projects- for immediacy.

Arguments are outlined below according to which we see these three factors as a possible threat to peri-urban agricultural spaces. First of all the concept of 'multi-functionality' will be discussed. This is very widespread in European discourse about the functions agriculture is to perform. As we see it, multi-functionality should not be seen as an end in itself, but as the consequence of agricultural activity, which is what generates multiple functions above and beyond the production of food and raw materials. Europe is giving agriculture environmental (maintaining biodiversity, soil conservation, creating and managing the landscape, supporting habitats and so on) and social (job creation, fixing population in rural settings, protecting cultural heritage, etc.) functions, and the farmer is being given the role of a "one-man band" rather than that of a professional farmer. Why do we consider this person a professional farmer just because they cultivate land? Does this happen in other professions? Is a person who treats a wound considered to be a doctor or nurse? Is a person who gives a few private classes a teacher? We must be careful in undervaluing a profession like farming, and we must be careful in assigning farmers functions other than food production, even if we insist that they do this in certain ways.

Alongside this misconstrued multi-functionality there is a lack of clarity about the delimitation and the features of the agricultural space. Thus, it is increasingly associated with new forms of land speculation, and not only for property development (plots of building land). A new way of dividing up land is appearing based on turning fields into 60-100 m² plots which are rented to people -not

farmers- who wish to grow vegetables for non-commercial purposes. Like the so-called “dinghy apartments”, flats where serious overcrowding with people is a lucrative but regrettable business, we now have “dinghy fields”, which are divided up into small plots which can then be rented out for a much greater return than could be charged to a farmer for agricultural use. Small vegetable plots are like an urban equipment and as such should take up space within the urban area, but must not compete with the productive agricultural space.

Something similar is happening where agricultural land is rented for para-agricultural activities such as riding stables, kennels or garden centres. It is often argued that these activities have a leisure and social function and this justifies their appearance in the -multi-functional - agricultural space, leaving in the hands of the local authorities the decision to carry on eating away at the agricultural space, so transforming agricultural land into urban land.

A final misconception which should be mentioned in this discussion of multi-functionality is that associated with the landscape. It should be understood that the agricultural landscape is the consequence of productive activity and not an end in itself. Farming creates landscapes, in many cases mediated by European Union agricultural policies, as a result of the market and naturally of farmers' know-how. Prioritising landscape over farming not only shows a lack of consideration for the farming profession but can also have serious consequences for the future of farming itself.

A second situation faced by European agricultural spaces is the lack of farmers' generational shift. That the average age of working farmers is between 55 and 60 is an undisputed, worrying fact in many European towns and regions. This figure should be compared to that for farmers aged under 35, who in Europe make up just 7% of the farmers¹. In Catalonia, according to the Agricultural Census of 2009 there is a total of 59,320 farms, declining by 1,000 - 1,100 farms a year. If this trend were to continue, by the year 2060 all the farms in Catalonia would have disappeared. Is this about to happen? Probably not, but the number of farms will fall and their individual size will increase. Catalonia and Europe need to decide what model of farming business they want. This option is not neutral: it has economic, social, environmental and regional consequences.

Determined actions are needed to build a ‘new peasantry’ (nova pagesia)². This could be done by setting up iexperienced youthi (joves amb experiència) teams, in which a young person brings boost, keenness to try new things and optimism, while an established farmer contributes their experience. In short, a way of pairing entrepreneurship with know-how. To do this, the farming sector and the public sector must work together to make agreements covering young people wishing to get into farming. What farmers will be like in the future must be considered, and the right tools found to enable them to join the farming sector. The profile which seems most suitable for these “new peasantry” includes the following features: keen, optimistic young people, with vocation, not generally from a farming background, with a university training, from urban areas and skilled in information and communication technology, a i new peasantry 2.0i (nova pagesia 2.0). It must be asked whether European policies are developing all the possible tools to enable these new peasantry to enter the sector and bring about the change that is badly needed in European agriculture.

New young farmers must be given access to land. Without land there is no farming, and it is common to find young farmers who give up because of the difficulty in getting land to work. The block on farmland must be broken, especially for young people who want to become farmers. Land of agricultural value must be seen as an end in itself and not simply a factor of production. An edaphological, productive and scarce resource which must not be wasted or left unused, but just the opposite. In a global context where accelerating population growth requires more

¹ European Parliament resolution of 18th January 2011 on recognising agriculture as a strategic sector in the context of food security (2010/2112 (INI)).

² This concept is discussed in: Monllor, Neus (2011) Explorant la nova pagesia: camins, pràctiques i actituds en el marc d'un nou paradigma agrosocial. Estudi comparatiu entre el sud-oest de la província d'Ontàrio i les comarques gironines [Exploring the new peasantry: paths, practices and attitudes in the context of a new agro-social paradigm. Comparative study of south-western Ontario province and Girona province]. Doctoral thesis.

food and therefore the need for more farmland, formulas must be established to preserve this type of land and work it.

At the 11th National Environmental Congress (CONAMA 2012) in Madrid, "15 ideas for reinventing ourselves" were put forward. These were "green" proposals, set out by attendees at the congress, for boosting the economy and create employment.

The second of these proposals referred to "promoting consumption of local produce with a reduced carbon footprint" and the fifth insisted on "helping new farmers to establish themselves in rural settings and on the periphery of towns". Out of the 15 proposals, two were clearly aimed at the farming sector in the broadest sense: at producers and consumers. Clearly, a specific, determined commitment is required to attract new farmers and so stop the productive sector disappearing.

A third situation which may harm the prospects for agricultural spaces involves the giving up of 'planning the project' for immediacy and takes the form of using complaint as a way of working. There are those who confuse complaint - meaning a constant attitude of being against everything and feeling harmed by everything - with claiming about a situation with a view to seeking some improvement.

This short-term attitude comes out when individual benefit rather than that of the group is the aim. This is what may be referred to as the "benefit economy," which seeks to meet immediate needs and decontextualised emergencies with the aim of constructing the present on the basis of "my problem" to gain benefits which may be political (votes) or economic (for the authorities to bear the cost of certain measures). On the other hand there is what can be described as the "project economy", which seeks the common good and contributes to the future by constructing the present. Naturally, it does not renounce short-term benefits, but these must be within the framework of a project for the future. In short, and in the words of Ramon Folch "It is one thing to administer the present by instinct and another to work for the future by using and developing the resources built up" (Folch, 2012)³. Projects like the BLAP must go beyond isolated measures or resolving specific issues. Spatial agricultural projects must think essentially about future generations of farmers, and this involves 'project'. All project is a challenge and an adventure in which the satisfaction of a job done is not immediate, but is left for the future on the basis of small, occasional satisfactions. Any challenge means taking a risk and this is what people do not want to make part of their daily work, especially when they think only in terms of electoral cycles or immediate benefits.

2. The wisdom of cities

Projects for the future in peri-urban agricultural spaces cannot ignore the cities. In fact they make up (or should make up) a unit in terms of territory and exchange.

The early 21st century will very likely bring with it a further change in the urban model, one in which economic and environmental vectors will be the main factors in town planning and management. Making the best use of resources and delivering good services to citizens will be fundamental goals, and food and energy self-sufficiency will form part of an intense debate about the future of cities. In this respect, it will be hard to apply the adjective "smart" and "slow" to a city, town or metropolitan area without what is known as food planning. Can a city without an agricultural space be human, smart and sustainable? Probably not, as it does not factor in the food vector.

However, the predictions of an energy and food crisis being made by some specialists may indicate that a concern for the supply and production of foodstuffs for the public should be included in the political agenda, and consequently in the sphere of planning and management.

³ Folch, Ramon (2012) *Ambiente, emoción y Ética. La cultura de la sostenibilidad* [Environment, emotion and ethics: the culture of sustainability]. Pub. RBA Libros, S.A. Second edition. p.125.

In this respect, the BLAP, as a peri-urban agricultural space, has been and must continue to be a key factor in its role as a supplier of fresh foodstuffs close to the Barcelona metropolitan area. It is a genuine larder and a necessary part of any future metropolitan food planning. Nor should it be forgotten that Barcelona, like all cities, is an immense processor of foodstuffs and raw materials, and an enormous 'organism' that concentrates huge quantities of food, water and materials. The consumption of these resources generates vast amounts of refuse and waste water. It is also important to consider what needs such cities may have in the future, in terms not only of food supplies but also of energy and waste flows, and how the agricultural spaces around them can contribute to their management in the most effective, efficient possible way.

All this means that the city of the 21st century cannot be planned without taking into account its agricultural space, the 'city-countryside' relationship and its main function: to produce food for the city. While it is true that the everyday nature of eating means that it is often forgotten that this is one of the basic needs in life, it is also true that when food is scarce people realise how essential it is to them above and beyond the pleasure it may provide or its social role.

The importance of food and having land to grow it explains the fact that all villages, towns and cities have a periphery around them, beyond the limits of the built-up area. The larger the town, the more distant this periphery becomes for its inhabitants. However, these peripheries are moving further away from the city centres, and land is being consumed. The built-up area tends to occupy the best farming land, due to their shared interest in flat ground, water resources and even their long history of cultivation.

This distancing has led to a trivialization of this space, as it has performed the role of receiving and accepting whatever the city did not know where to site, or even become the place where certain activities are deliberately site to take advantage of the lack of planning and environmental oversight in many municipalities beyond their own built-up area.

Widely dispersed urban growth, low agricultural prices, more attractive jobs on offer for young people in the cities and successive compulsory purchase processes to make way for infrastructures over many years, among other factors, have led to the abandonment of land, the scattering of all kinds of installations around the countryside, the loss of agricultural assets, the lack of a younger generation to take over and, in short a major lack of territorial cohesion so that town and country have moved further and further apart.

In the peri-urban spaces where farming goes on - on holdings varying in size which everybody knows where they start and finish - there is the added difficulty of establishing a definition to objectify these areas. There have been and continue to be attempts to arrive at an overall definition which can be accepted and adopted by consensus.

An excellent example is the European Economic and Social Committee (EESC)'s opinion on 'Agriculture in Peri-Urban Areas'⁴, which defines it as professional farming carried on in a peri-urban area.

There are concepts which, while they are clear, are not easy to define. In his Confessions, when Saint Augustine wants to refer to time he says, 'What, then, is time? If no one asks of me, I know; if I wish to explain to him who asks, I know not. Yet I say with confidence, that I know that if nothing passed away, there would not be past time; and if nothing were coming, there would not be future time; and if nothing were, there would not be present time.'⁵ The same is the case with the question, "What is a peri-urban agricultural space? Objectifying the definition poses significant difficulties. However, the fact is that peri-urban agricultural space does exist and can probably even be set down on a map; the problem is establishing the criteria for doing so. Nevertheless, it is certainly a space within a peri-urban area in which many and varied things occur, are done and exist to give it a specific nature.

⁴ European Economic and Social Committee (EESC) (2004) Opinion 'Agriculture in Peri-Urban Areas'. NAT2004-CESE 1324/2003

⁵ Confessions of Saint Augustine, Book 11, Chapter 14

This difficulty is no reason not to establish criteria for its protection and management and defend the importance of recovering the city-countryside relationship as a strategic factor. This has been done of areas of natural interest, even at European level - with the Natura 2000 network - so why should it not be done for agricultural spaces?

Likewise, criteria and attributes used in the templates applied to areas of natural interest could be applied to peri-urban agricultural areas; four in particular: size, fragmentation, heterogeneity and connectivity. To start with the first of these, it is essential for appropriate, justified management (advice, marketing, cooperativism, water management and so on) to have an adequate minimum territorial critical mass - size - and a shape which keeps the centre far enough away from the edges to minimise the external pressures caused by urban pressure. Apart from size, the second attribute mentioned above must be taken into account: fragmentation. An agricultural space can lose its functions (environmental, but also economic and social) if it is highly fragmented by transport and energy infrastructures. The homogeneity of crops can also seriously affect the function, particularly the environmental one, of an agricultural space. In this respect, the third attribute, the heterogeneity of crops, biodiversity (plant and animal), the landscape mosaic and so on, are essential to a vision of the agricultural space as an ecosystem, as is the last attribute mentioned above, that of connectivity. Agricultural spaces must be connected both externally and internally, through physical features (tracks, watercourses) and flows of energy and material.

3. The “Reconnection” city-countryside

The way in which foodstuffs are produced and consumed has changed over the centuries, especially during the 20th century. Developments in technology (systems for classifying, freezing, freeze-drying and so on), industrialisation (variety of formats for a single product: chopped, precooked, processed, etc.), urbanisation (loss of the best farmland to human settlements) and globalisation (everything is available all year round, from a variety of sources) are fundamental factors characterising the current food situation in industrialised countries.

In these same countries, cities have become increasingly dehumanised,⁶ town and countryside have lost contact with one another, and farmers and consumers have no relationship and are even unknown to one another. The population is increasingly distant from production and closer to the end of the food chain. This distancing has a very important implication for the assumed confidence of consumers that all the stages in the food chain ensure the quality and safety of foodstuffs. Consumers, concerned with buying food products and ignorant about how they are produced, lose control and information by depending on the authorities and on experts who perform these functions.

Despite this complexity and the widespread delegation of functions by consumers in an increasingly urban world, growing interest can be seen in quality, reliable foodstuffs, as well as on attaching new importance to the social and cultural traditions associated with eating, and in particular a “reconnection” between towns and their nearest food-producing regions. There is concern about what is produced and how, and where it is produced. Guarantees are sought of food safety

⁶ The UNESCO chair at the University of Lleida (UdL) lays down a criterion for gauging “the human scale or dimension” of medium-sized towns. This concept “refers to the physical size of the town, which allows an individual to access, on foot and without too much effort, the main services and facilities in the town or get to any point in the urban area. In short, towns which are pedestrian-friendly and reasonably accessible to any citizen.” This concept is expressed by calculating the land area, population, density and radius (in km²) of a circle which takes in 70% of the population and the length of a line separating the most distant points in the consolidated urban area (in km). Radii of less than 2.5km can be covered on foot in some 40 minutes. Linear distances of 6km between the furthest points in the town can supposedly be covered in an hour and a half.

UNESCO chair at the UdL in medium-sized towns, urbanisation and development. Document *¡Ciudades intermedias. Perfiles y pautas!* [“Medium-sized towns: Profiles and Patterns”] (Lleida city council, 2002) on the second phase of the UIA-CIMES programme *¡Ciudades intermedias y urbanizaci3n mundial!* [“Medium-Sized Towns and World Urbanisation”], page 26.

and quality, of reduced environmental impact in production and consumption and, above all, the connection between food and the place where it is produced (so-called 'sitopia').

This is the goal: to reforge the link between the city and its countryside on the basis of the idea of the agricultural space as an urban public facility and infrastructure, where mutual knowledge as a physical factor is of fundamental importance. In this respect, the term 'public facility' as used in the town planning context is transferred to the agrarian setting. Thus, in town planning terms, a public facility is taken to mean a spatial or territorial unit linked to a set of human activities of public, social or community interest, necessary to the ordinary, proper functioning of a metropolis, a municipality, a neighbourhood, etc. It is obligatory for the authority charged with town planning and provisions to set aside a minimal module for spaces of this kind.

A peri-urban agricultural area is also an urban public facility because it plays an active role in the metabolism of the urbs by offering its inhabitants a space devoted to producing food and/or raw materials, but also for leisure and contact with nature, even though its degree of humanisation means it is not strictly natural.

At the same time it is also an infrastructure because it is made up of a set of elements or services which are considered necessary for the creation and functioning of a territory (river, streams, wetlands, woodland, biological corridors, control of surface run-off, soil erosion or floods, increased biodiversity, carbon sink, etc.).

The question is whether it is considered a strategic necessity to be able to guarantee citizens an important part of their supply of basic foodstuffs. If the answer is yes, agricultural areas must be understood as urban infrastructure and facilities and there is an evident need to establish a provision of land area devoted to this function.

Towns and cities must be understood as complex, compact entities. Compactness gives diversity and a mixture of uses, which makes it possible to save on transport, foster energy saving and cut emissions of greenhouse gases, while modifying the town's metabolism. This compact urban model must also be complemented by farming, with its function of supplying food, and the agricultural area as the larder of the town, so allowing a reduction in its environmental footprint. In short, the more food from nearby the less the environmental footprint, and therefore the less the greenhouse effect, so helping to mitigate climate change.

4. The agricultural area, a structure of inclusion

In his lectures and publications, Lluís Duch, the anthropologist and monk at Montserrat abbey, posits family (co-descendence), city (co-residence) and religion (co-transcendence) to which he adds the media as structures of inclusion, defining these as what make a person feel they are part of a community and recognised as a member thereof. It would seem entirely pertinent to add a fifth structure of inclusion: the connection between the city and its countryside, in response to one of human beings' basic needs, food (co-nourishment).

Food as a structure of inclusion implies a change in people's relationship with food. Thus, the citizen or person who eats within a community not only acquires food but also seeks services, but above all is made aware of the fact of food. This is a citizen committed to the whole food chain, who wants it to be as short as possible and decides to go from being a consumer to being a co-producer and become an active part of the production process. The co-producer is aware that in eating they are performing an agricultural action, an act of responsibility and not just of consumption. This calls for inclusion, a comfortable meeting point, which also satisfies needs. This consideration illustrates the fact that the consumer as the end user of agricultural produce has replaced the citizen, and there is a growing separation between the city and its countryside.

The architect Carolyn Steel⁷ talks of the need to “recognise the central role played in our lives by food and exploit this potential to shape the world in a better way,” so that on the basis of food we can begin to change the world without waiting for some utopian future. This action of changing the world out of the present on the basis of food is called “sitopia”. The term is derived from the Greek words “sitos” which means to eat, and “topos” which means place. This concept of the connection between food and place leads to the idea that “Food is the sine qua non of life,” and that treating it as such would fundamentally change the way we experience food, as it forms part of the essence of the person and not something additional and peripheral. If we need food to survive, why not build towns and cities around food? And if we cannot do this, why do we unhesitatingly destroy the best food-producing land which lies closest to our cities?

If one set out to recount the history of a municipality or a region on the basis of food, there would certainly be surprises. It would be worthwhile to go into the history of food supplies to Barcelona - to give the example of a specific city - and of its trade circuits (source markets, transport and distribution) and the consequences of these from a regional and urbanistic point of view over the centuries up to the present day.

5. The Barcelona metropolitan area, an agridiverse region

Few cities or metropolitan areas in the world can, like the Barcelona metropolitan area, boast such diversity of farming and livestock production within a 50km radius, as well as varied woodlands and even micro-climates.

This gives it a territorial richness of undoubted value, as well as high quality of life for its inhabitants. This quality of life is also reinforced by a discontinuous distribution in the form of a mosaic of medium-sized towns located around a central core.

Its urban shape and landscape, economy and ecology give the Barcelona metropolitan area and Catalonia in general a durable and therefore sustainable wealth, and are competitive factors which have repercussions in synergies with people’s welfare and on society, which is currently in deficit in terms of natural resources.

Can such sustainability be possible without an agricultural area? Probably not. As pointed out above, the food vector - which is also a form of energy - would be missing. It is important for the collective imagination to include an interest in knowing where food comes from, who produces it and how. This is the only way to discover and appreciate the immediately surrounding region, its farmers and the product they grow and the basis of much of the food local producers seek to offer, produce with the Km 0 label. Ignoring this attitude to what one eats will only worsen the separation between the citizenship and the territory around them.

Slogans for gastronomic campaigns or web portals like *iDel camp a casa* [“From the field to home”], *iDel camp al platí* [“From the field to the plate”], *iDel camp a taula* [“From the field to the table”], *iEl Parc a taula* [“The park on your table”] - the BLAP itself runs the gastronomic campaign *iEl s sabors de lihorta* [“The flavours of the orchard”] and has a website at the domain www.elcampacasa.com - are increasingly common. While it is important to bring produce closer to consumers’ plates, tables and homes, it is even more so to bring farmers closer to households. The slogan should be *iels agricul tors al platí* [“farmers to your plate”].

The consumer must see in the food they eat both the skill of the cook who prepared it and the know-how of the farmer who grew it. The writer Josep Pla said, “I like landscape. I have attempted to describe some of them. Not just geological landscapes, but real ones, which are constructed by farmers.”⁸ On another

⁷ Carolyn Steel is an architect, lecturer and writer based in London. She is the author of the book *Hungry City: How Food Shapes Our Lives*.

⁸ Pla, J. (1979). *Notes del capvespre* [Notes from the Evening Sea Breeze], in *Obra completa* [Complete Works]. Barcelona: Destino, volume 35, page 212.



1. Types of farming within a 50km radius around Barcelona. The territory enclosed within the semicircle is centred on the Mediterranean coastline and forms the food basin of the city of Barcelona.

Source: the author

occasion he stated that, “The finest landscapes are those which are born out of a utilitarian, edible beauty.”⁹ Paül and Tort, experts on Josep Pla’s writings, state that, “Gastronomy was a way of understanding the landscape. The gastronomic connotation of the landscape, in Pla, can be manifested in the taste of the fresh produce and the dishes linked in some way to the nearest landscape.”¹⁰ This is the message to get across to the consumer: that food is a way of understanding landscape and farmers, and therefore of loving the territory and with it the farmers who use their know-how to make it distinctive, imbue it with personality and give it added value.

6. Food super-plots and super-blocks: a formula for “reconnection”

When reference is made to urban sustainability mention must be made of regulating a city’s own metabolism: cutting inputs of energy and materials by using local resources (solar power, water and the waste generated by the city itself), cutting outputs in the form of waste and reviving local economies.

To achieve this sustainability, consumption of new land must be minimised by using and consolidating the land already occupied and recovering degraded and abandoned areas. This means centripetal (i.e. inwards) rather than centrifugal (outwards) growth. In this sense, returning to the idea of incorporating the agricultural space as a city urban facility, formulas need to be reinvented to connect the city and its countryside and include them both in town and regional planning.

To do this, we have taken as a starting point the concept of “super-blocks” (supermanÀanain the Catalan original) proposed by BCNecologia¹¹ to improve the functionality of the city. This is a new urban cell made up of a perimetral network measuring 400m x 400m around which traffic is directed, freeing the interior from

⁹ Pla, J. (1976). Tres guies [Three Guides], in *Obra completa* [Complete Works]. Barcelona: Destino, volume 30, page 763.

¹⁰ Paül, V. & Tort, J. (2009) *L’Empordà de Josep Pla* [Josep Pla’s Empordà]. Publicacions de l’Abadia de Montserrat. Descoberta series, no. 17.

¹¹ BCNecologia. Agència d’Ecologia Urbana de Barcelona. BCNecologia (Agència d’Ecologia Urbana de Barcelona - Urban Ecology Agency of Barcelona) is a public consortium made up of Barcelona city council, Barcelona metropolitan area and the Barcelona provincial authority. It works on projects for national and international public institutions, foundations, organisations and businesses, using a systemic approach to realign the management of cities towards a more sustainable model, providing solutions in the areas of mobility, energy, waste, town planning, water, biodiversity and social cohesion. Together with its clients, BCNecologia diagnoses the problems and their causes, puts forward proposals, analyses technical feasibility, quantifies the results and offers support in the running and implementation of the project. [www.bcnecologia.net]

2. Conventional 400m x 400m (16-hectare) urban cell including several blocks of houses in one "super-block". Flows inside it are treated in a different way and are devoted to pedestrians and services. Motor traffic is located around the edge of the "super-block".
 Source: Rueda, 2005



vehicles and public transport. In this way all the uses and functions of public space can be implemented without restrictions.

As well as regulating motor traffic, the "super-block" brings increased public space to pedestrians and less noise. Overall, a carbon-neutral eco-neighbourhood with a high degree of energy self-sufficiency through the use of resources generated within the block itself and exploitation of water resources. Also proposed is selective waste collection involving separation of the organic fraction generated. The latter is then composted or used in the same neighbourhood or nearby.

Salvador Rueda, director of BCNecologia, offers this thought, "Citizens are citizens because they occupy the public space without restrictions, otherwise they are simply urbanites. When we put in traffic lanes, the pavements become a unit of transport, a pedestrian route. This change means that the citizen cannot be free, as they can no longer do any more than move about in an orderly way according to the criteria established for wheeled traffic." Is this change of "personality" for the inhabitants of a city not similar to that which comes about when the fact of food is considered?

The citizen is situated further and further from the source of what they consume. Their - non-existent - knowledge of how it is produced and where it comes from, apart from a few advertising points shown on the label like the denomination of origin, quality certificates and so on makes them a client, a standardised, impersonal consumer. A consumer completely disconnected from the countryside (and the countryside from the city) makes their city into a place which simply swallows whatever it is supplied with.

This is why this "reconnection" between the city and its countryside must include the concept of "co-producers" and "consum-actors" as a result of the inclusion of consumers in the agricultural project and of farmers in consumers' food project. A relationship of "co-nourishment" based on the principle that producing and consuming are cultural actions, as they take place in a specific, unique territory with inherited traditions, with voices and social demands of its own. A territory humanised and shaped by the action of specific, identifiable people.

Recognition of this principle means speaking not of consumers, but of co-producers and consum-actors, as an active part of production, switching from being merely consumers and receivers of food to being the partner of farmers in production. In this way the act of eating becomes an agricultural act (the last in the chain), an act of responsibility rather than simply of consumption.

A further question arises at this point: how can co-production be made possible within the framework of "smart cities", cities focused on information technology or smart infrastructures?

These territories, self-defined as smart, generate the need to manage the city's information on the one hand, through network applications, devices and logics; and also energy on the other, in order to make the input of materials and resource flows and the output of waste to and from the urban metabolism more efficient.

Among the various debates currently raging about urban space and cities is that on what are referred to as "neo-tertiary urban spaces" centred on smart cities. These are spaces designed to highlight and spread values such as innovation and entrepreneurship or spaces in which a digital layer is incorporated with the aim of making them smarter and able to become poles of attraction and generation of knowledge about urban models in terms of environment, mobility and transport, energy, quality of life, culture and knowledge about public-private partnership.

This redesign of urban conurbations has a clear goal: for the city to work by defining an urban anatomy which allows it to develop and be able to structure a city model based on a fusion of town planning, ecology and information technology, on the basis of local resources. The spaces in question facilitate the "glocal" projection of cities. In a globalised world, it is necessary to think globally but act locally, by rediscovering the value of what is close at hand, what is ours, without closing in on oneself.

Once again the question must be posed of what the matter is with foodstuffs. From a glocal point of view, should they not be a local resource and value? Should they not play an important part in the supply of local resources to smart cities? Alongside this "neo-tertiary" sector, should not a new "neo-primary" sector be generated? A sector in which the farming community has a specific vision and training in the whole food chain, so becoming the ideal partner to restaurants, medicine, landscape, biodiversity and so on? A new sector whose professional activity is based on agro-ecology and smart food?

This neo-primary sector must take up the new social and economic opportunities offered by proximity, while taking on the function of generating positive environmental outputs, in particular those of creating and maintaining a landscape and meeting specific social needs and demands. This new farming community must be able to harmonise relations between the city and its countryside while keeping up farming and biodiversity, at the same time fostering the local within the global framework. Productivism must be allied with green technologies (in many cases this will probably mean reviving and rationalising traditional agricultural techniques). The new peasantry of the 21st century will have to do what it has, or should already have been doing: producing foodstuffs while caring for their surroundings and creating a space of high environmental quality.

However, recognition is also necessary for the professional farmer, especially in peri-urban areas, and for the importance of farming in the production and supply of foodstuffs - regularly and variably - for the population around them. This is especially important as transport prices are rising due to the increase in the cost of fossil fuel, and also to achieve targets for cuts in CO₂ emissions. In this context of efficient, sustainable economics, preserving the agricultural space represents a strategic goal.

Therefore, as well as implementing an ecological town planning using with the "super-block" or urban cell proposal, a sustainable region in which food is part of the regional planning must be considered, because of its critical importance to the urban metabolism.

The functionality of this city metabolism, as regards the supply of farming produce, involves associating each urban cell with a food cell or food super-plot to meet the demand for food of the inhabitants of the urban cell.

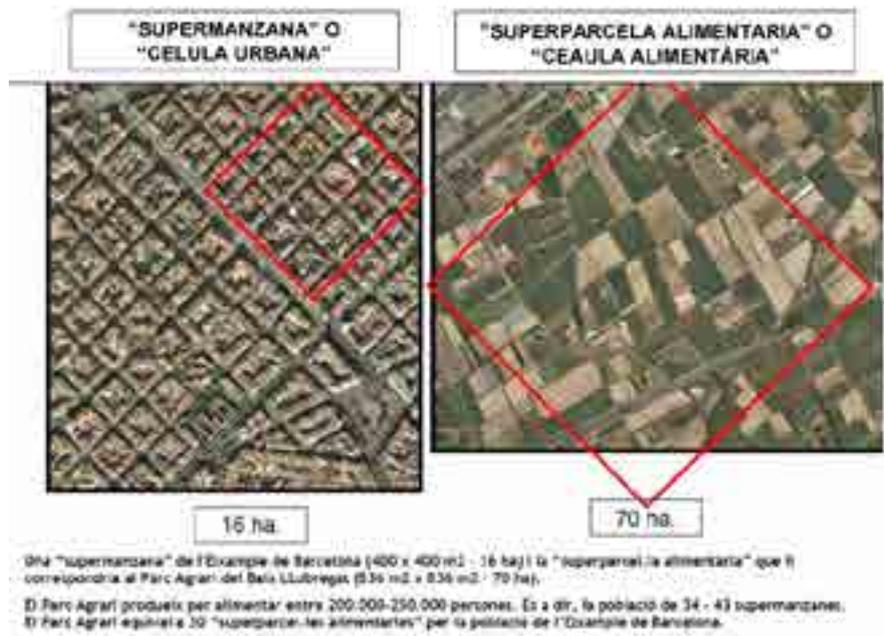
Urban cells and food cells must constitute sub-units of a single agro-urban cell, which is none other than "reconnection" and the inclusion point between cities and their surrounding producing regions, between the city and its countryside.

Super-plots or food cells must be seen as the package of peri-urban agricultural spaces together with the urban facilities and infrastructures necessary for the proper functioning of a metropolis, town or neighbourhood. Urban cells must be obligatory in nature for the town planning authority or developer, with a specific allocation

3. Necessary food cell at the BLAP to feed the citizens living in a super-block in the Eixample district (Barcelona)
Source: the author

including a minimum module of agricultural land (food cell) for each urban cell in order to meet the food needs of each of these urban cells.

In the specific case of the city of Barcelona, for a super-block in the Eixample district, covering a land area of 16 hectares (400m x 400m) and a population density of 360 inhabitants per hectare¹², a food super-plot of 70 hectares (836m x 836m) would need to be reconnected. This land area could supply the fruit and vegetables necessary for the 5,760 homes in the Barcelona super-block through an allocation of 120m² per inhabitant.¹³



Eco-neighbourhoods, with densities of some 60-90 homes per hectare (a figure which represents a population of 180-270 people per hectare), would need to be reconnected with a food super-plot allocation of between 2.2 and 3.2 hectares of nearby fruit and vegetable-growing land.

Table 1: estimates of food cells for three existing eco-neighbourhoods (two located in Catalonia and one in Andalusia)
Source: the author

Three examples of eco-neighbourhoods and their fruit and vegetable reconnection needs	Vallbona (Barcelona)	Sector Llevant (Figueres-Girona)	Costa Tropical (Motril-Granada)
Total land area (hectares)	32,6	20,8	27,3
Number of homes	2.000	1.800	1.638
Density of homes (homes per hectare)	61,3	86,4	60
Total number of inhabitants	6.000	5.400	4.914
Total fruit and vegetable-growing land to reconnect (hectares)	72	65	59

This land area for reconnection could form part of the eco-neighbourhood plan or could be allocated to a space outside but nearby, according to its needs. In some cases converting a dryland area to irrigated farmland could be considered in order to supply the eco-neighbourhood.

The idea of reconnecting the urban cell to a food super-cell is not so much a physical fact but rather a conceptual one, and would not be possible in all cases but could serve to show up the environmental footprint of the super-block and its needs in terms of a nearby food super-plot. In any case, it is important to emphasise that the concept of the food super-plot adds rationality to town planning, making clear the need to always allocate a provision (whether total or partial) devoted to food

¹² The Eixample district of Barcelona covers an area of 748 hectares, in which 269,185 inhabitants live (2009 census)

¹³ This includes the agricultural land used for growing crops and the proportional part of tracks, irrigation network and land use for buildings.

production (the food super-plot), and also - and this should be visible - the need to implement services to make possible the supply of produce by nearby agriculture. In short, study is required of the flows of food between the producing area (the food cell) and the consuming area (the urban cell) and mechanisms must be established in the sphere of mobility to assure these flows, using either traditional distribution systems (daily and weekly local markets, shops and farm shops) or emerging systems (distribution of baskets, consumer cooperatives and so on). All this must be accompanied by active awareness-raising campaigns aimed both at consumers in general and at schools and at specific occupational sectors, as well as an approach to distributing fruit and vegetables which minimises emissions of gases, based on logistics centres as nodes for produce and for distribution to homes, restaurants, schools, consumer cooperatives and so on using electric vehicles.

These are measures to reconnect the city and its countryside where the traceability factor is essential. This traceability must go beyond simple administrative checks and be based on the relationship - as direct as possible - between consumer and producer. Reconnection between super-blocks in the city and super-plots or food cells in the country will serve to revive a loyal relationship between the two, while building a genuine structure of inclusion.

Food super-plots may have to undergo a major structural transformation, but the important change will come about in diversity of crops and the mixed nature of the countryside, which apart from a diversity of crops will also include a diversity of topsoils and beneficial organisms. These transformations will encourage biodiversity and create a new productive landscape of high agro-environmental quality.

7. Conclusion

The agricultural space has become a key factor and will become increasingly so, to the extent that it is a scarce, limited asset and as world population grows. Land of agricultural value - or with productive possibilities - must not be wasted, especially when climate change is having a direct influence on the weather conditions of these same agricultural areas and on the availability of a resource as vital as water.

If having food to meet society's demands is becoming strategic not only in developing countries but also in Europe and in the new drivers of the world economy, the urgency of preserving, regulating and managing agricultural areas - especially those closest to cities - and considering them as infrastructures and urban facilities necessary to those cities must not be neglected. Being able to assure a certain self-sufficiency in food, as well as fostering a cut in energy spending and in the generation of CO₂, must become strategic goals.

This relationship between the city and its countryside must involve a reconnection by means of an "agriurban project" manifested in the linking of urban "super-blocks" to "food super-plots". The two of them make up, or should make up, a common project.

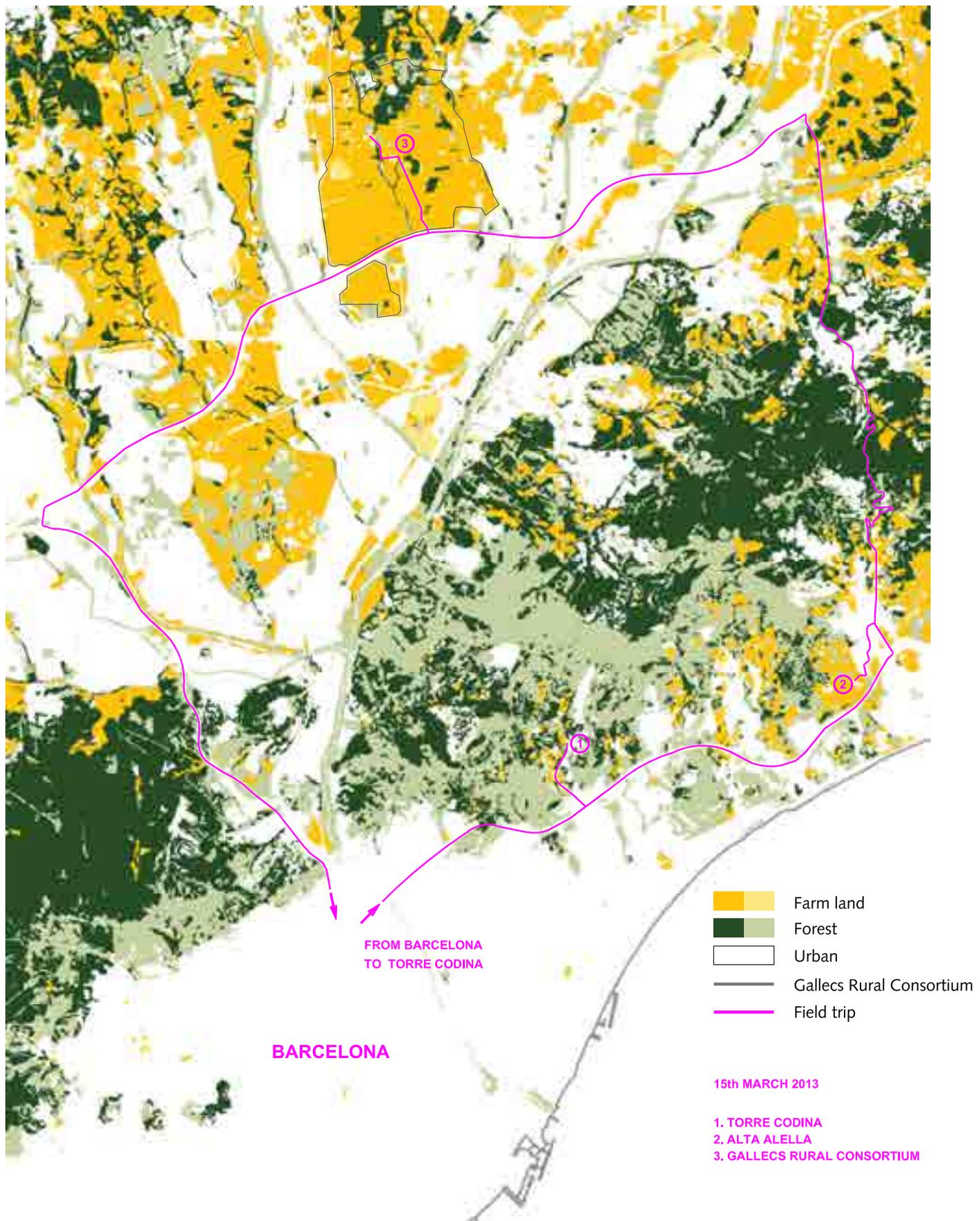
Overall, preserving agricultural areas is a tribute to the history of the people who have worked the land, opening doors for those who want to carry on or go back to working the land. It is putting into practice the desire to give stability to an agricultural space and establishing a management and a firm commitment to the future on the basis of a commitment to managing the present. A commitment which must involve the clear realisation that the goal is to consolidate and develop the territorial basis and foster the continuity of farming activities, while remembering that without farmers there is no farming or agricultural space.

The difficulties are real, but it is worth remembering and taking on board that "When you are young you believe you can change the world but, as you grow older, you think it is impossible. But really you were right when you were young." This is the attitude that must be shared by all of us who believe and want to believe that agricultural spaces have a future, and that assuring food supplies for future generations is a challenge that must be taken up.

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Region Visits





Torre Codina Community Gardens, Badalona (Barcelonés)

Visit guided by Helena Fuste

The space around the 13th century Codina Tower, owned by the City of Badalona, was adapted for social agricultural use in 2007. There are 64 plots of orchards about 25 m² approximately. The place has previous conditions that made it optimal for this purpose: unpolluted and good soil and sufficient irrigation facilities in good condition including a mine, water sprinklers, dams, etc...



The community gardens were created through a municipal program based on the transformation of different spaces of the city in small terraced orchards. This program has a precedent in the school orchards that are coordinated by the School of Nature that for years have been consolidating several community gardens in schools at Badalona.

The program has several objectives:

- To provide an interesting opportunity for participation, training and employment for the elderly incorporating them into environmental improvement activities. All crops are organic.
- To maintain and restore public spaces that has been farmland, guaranteeing its conservation and preserving its scenic values.
- In spite of its shortness, to increase the sustainability of the city reducing its ecological footprint.



Each user has its own plot, a hoe and a minimum infrastructure for change and store clothes, shoes, etc... And also the compound community that will generate between all the plant debris plots. Each plot has groundwater charge up to a certain consumption, from which it has to pay, and a small counter to control this consumption. Gardens are accessible from Monday to Friday, from 9 am to 14 pm. 14 hours. They can grow vegetables, herbs and flowers.



People eligible to apply for an allotment for a maximum period of four years must be sixty or older, a citizen of Badalona and not be performing any type of labour activity.

The plots are awarded by public tender. Persons awarded with an allotment must make a deposit € 100 at the start as grant of the license that will be returned at the end of the period.

The fee for the use of the garden is established by annual tax regulations, at present it's 25 € per semester. However, those who demonstrate the inability to pay the rate due to lack of financial resources, can access and are exempt from paying, as long as their situation is accredited with a report from social services.

According to the rules for the management of these spaces users must:

1. keep the plot it deserves clean
2. only cultivate the plot that has been awarded
3. being dedicated only to the purpose of cultivation
4. have no downtime than a moth except in justified circumstances
5. facilitate and cooperate in educational activities organized by the city until the third year
6. take care of their tools and equipment

The license is non-transferable. Cultivation should be direct and personal, unable to be transferred, subrogated, leased or loaned in any circumstances. It's expressly forbidden to:

1. plant trees
2. the construction of houses, huts and fences
3. the marketing of the obtained products
4. the use of chemical fertilizers, herbicides, insecticides or other products except those authorized by the farming

5. the use of animal manures
6. the presence of plastics
7. the incineration of plant remains. It will be deposited suitably crushed in places reserved for composting

Source: <http://badalona.cat/>

Alta Alella Privat, Tiana (Maresme)

Visit guided by Valerie Veilleux

History

Since Roman times, as early as the 3rd century BC, Alella has had a long tradition of winemaking.

Controlled by the families of Barcino – the Roman name for Barcelona – Alella wines continued to be in demand and in the Middle Ages became the official purveyors of wine to the Crown of Aragon.

In the late 19th century up until the mid 20th century, the wines of Alella became the preferred still and sparkling wines of Barcelona upper classes and were widely exported to the Americas. However, in the late 19th century this period of splendor and expansion was interrupted by the spread of phylloxera.

Given the success of Alella's wine-making, other wine-producing regions began to use the name. To protect D.O. Alella, in 1953 strict rules controlling the use of appellation D.O. Alella were drawn up.

Alta Alella is the culmination of a family business project that started in the early 1990's. Wine entrepreneur and enologist Josep Maria Pujol-Busquets and his wife Cristina Guillén enthusiastically began this winemaking adventure after purchasing the art-deco Can Genis Estate, located in the agricultural part of Serralada de Marina Natural Park between the towns of Alella and Tiana at the Metropolitan Region of Barcelona.

In 1991, Alta Alella planted its first vines alongside the other traditional variety of Alella, Pansa Blanca (Xarel·lo), followed by a diversity of grape varieties, including the long forgotten Mataró grape which had not been cultivated since the phylloxera epidemic. During the 1990's the winery and the laboratory were built and the main house was renovated.

After a period of ten years, in 2001, Alta Alella was about to produce its first still wines, the fruitful result of the 6 hectares distributed over terraces and slopes. Currently, Alta Alella has 17 hectares situated at an altitude of 150-250m above sea level.

Since the undertaking the entire production of Alta Alella has been based on certified organic farming because we are conscious of preserving the biodiversity of the surrounding Natural Park. In our winery we seek to maintain the balance of the agricultural ecosystem in order to respect the fauna and flora of the area. The EU "Certified Organic" legislation excludes all treatments with pesticides and herbicides. Therefore, many of the techniques used are as ancient as winemaking itself. The harvest is carried out manually — the grapes are carefully selected— over a period of about two months. We seek the optimal time to harvest each variety with an expert and rigorous control of maturation.

Today, Alta Alella has evolved into a highly mature vineyard and as a prestigious brand. The newly-built Visitor Center where wine lovers have a chance to discover Alta Alella's privileged location while tasting the still and sparkling wines – the result of an artisan elaboration of maximum expression. This beautiful site is overlooking the magnificent view of the Mediterranean Sea.



Vineyards

The estate is just 2 km away from the Mediterranean Sea with the vineyards planted on slopes and terraces between 100 and 250 m of altitude. The vineyards are all planted on Sauló soil, one of the key distinguishing factors of Alella's wines. Sauló is an acidic, sandy soil with low limestone content, low organic matter, and low water retention.

Each variety has been planted according to the orientation of the plot. The slopes facing south are planted with varieties destined for red and sweet wines requiring higher degree of ripeness, whilst the slopes facing the north give aromatic and floral wines, which is ideal for the whites and cavas.

There are currently 17 hectares of vineyards in production, with Pinot Noir, Syrah, Mataró and Cabernet Sauvignon as red varieties and Pansa Blanca, Chardonnay and Sauvignon Blanc as white, along with other experimental varieties.

The property has been declared and certified organic from the beginning. We carry out the minimum phytosanitary treatments, just using sulphur, copper hydroxide and other surface treatments which do not penetrate the skin of the grapes or leave any type of residue. No herbicides, pesticides or inorganic fertilizers are used. Vineyards undergo green pruning and green harvesting (removal of excess grapes to achieve high quality levels – based on the relation between grape quantity, leaf canopy area and available water). All grapes are hand-picked and put in small harvest boxes.

Cellar

The cellar is specifically designed for micro-vinifications. The small size of the tanks enable each parcel of land to be fermented separately, thus allowing us to wait until the moment of peak ripeness for each variety and for each plot. All wines are fermented under strict temperature control in stainless steel tanks or new French or American oak barrels.

Whenever possible, the wine is moved by gravity rather than pumps even during maceration when the wine is regularly pumped over the floating skins. This is achieved by drawing off the wine into a stainless steel basin and with the help of a forklift truck it's poured back over the floating skins. Moreover, the maceration is done by using the technique known as submerged skins, whereby the grape skins or chapeau– which usually float to the top of a fermenting vat– are artificially kept below the surface of the wine to favor extraction.

The length of maceration varies according to each wine and grape variety but is usually between three to four weeks malolactic fermentation for reds is done in oak barrels, a process which requires a little extra care, but offers significant advantages in fixing color and polyphenols in the wine. The whites and base wines for cavas do not undergo malolactic fermentation to maintain optimum freshness.

For our cava, the base wines are then bottle with additional yeasts and sugar for the second fermentation in the bottle. They are laid in the cellar and left to age between 18 to 36 months before being disgorged.

Enotourism

Alta Alella also offers tours in five languages introducing their project, wines and philosophy. Visits include tasting sessions, visit to the caves, the cellar and different routes through the vineyards. The firm also hosts courses and events.

Source: Previous information, contact details and vintages, wines and cava qualities and attributes available in English at <http://www.altaalella.cat/>

Gallecs Rural Consortium

Visit guided by Xavier de Pablo

The visit to Gallecs closed the last day of the meeting. As in the case of the Baix Llobregat Agrarian Park, lunch was expected to be a part of the visit. It was cooked and served by the Gallecs' Farmers Association using park products.

The Gallecs Rural Consortium foundation, project and management were widely explained at the open session of the meeting. Hence, after lunch and before a walk through the space, Xavier de Pablo spoke and answered to questions or issues that arose in the final discussion of the first day of work as the planning process, the legal situation of the farmers or the shift to organic food and ecological processes at the park. The visit let direct contact with several local farmers and ended at Gallecs' farmers local shop



Impressions from Barcelona

(h)orthophotography: images captured from Google Maps

Pau Faus

According Wikipedia: "An orthophotography (from Greek OrthŪs correct, exact) is a photographic representation of a land area, in which all elements have the same scale, free of errors and distortions, with the same validity of a cartographic map". Orthophotography is frequently consulted by architects and urban planners when studying and interpreting the territory in which they must intervene.

This project questions the supposed absence of deformation in orthographic representation by showing various informal allotment gardens around Barcelona. The gardens are here interpreted as one of the many urban planning distortions.

The work was exhibited at the New Conference Hall of the ESAB during the Working Groups Meeting from 12th to 19th March.

The complete work at www.paufaus.net











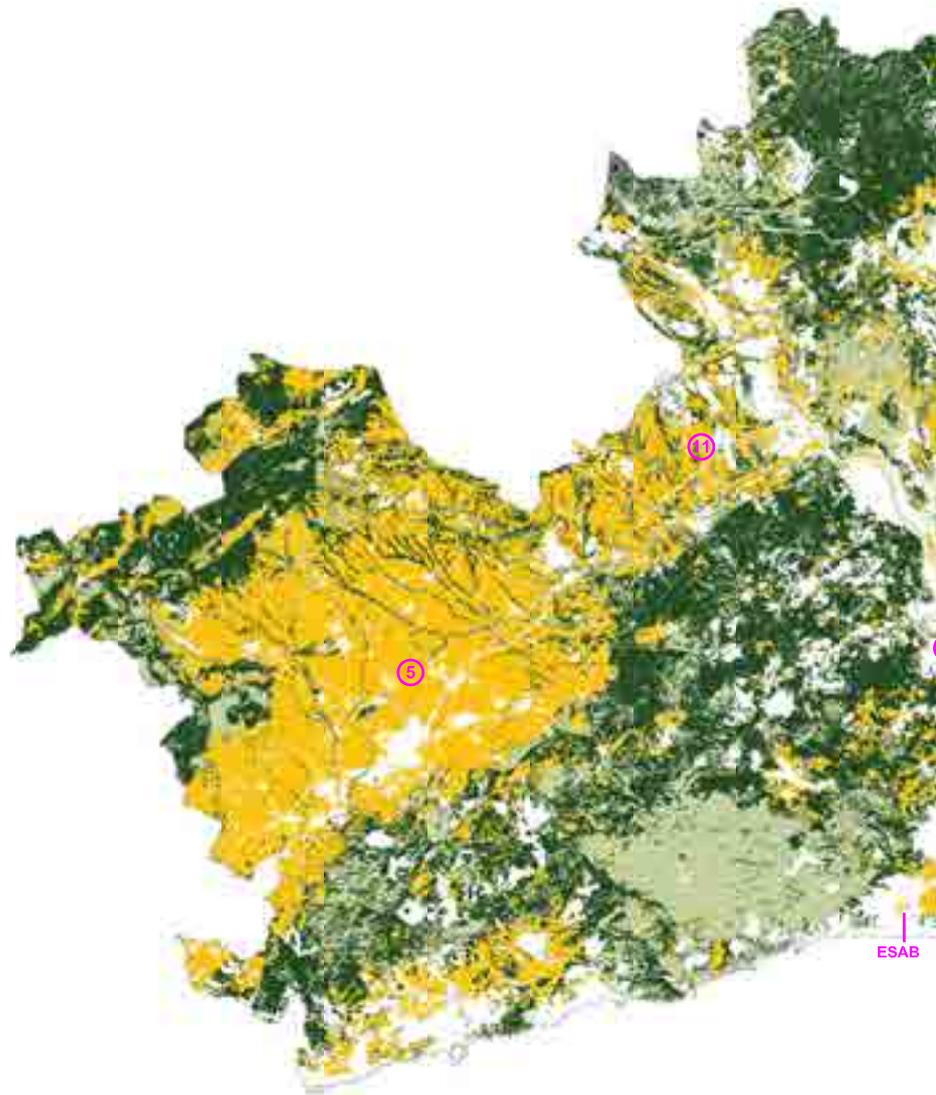
Cases of study and visits situation map

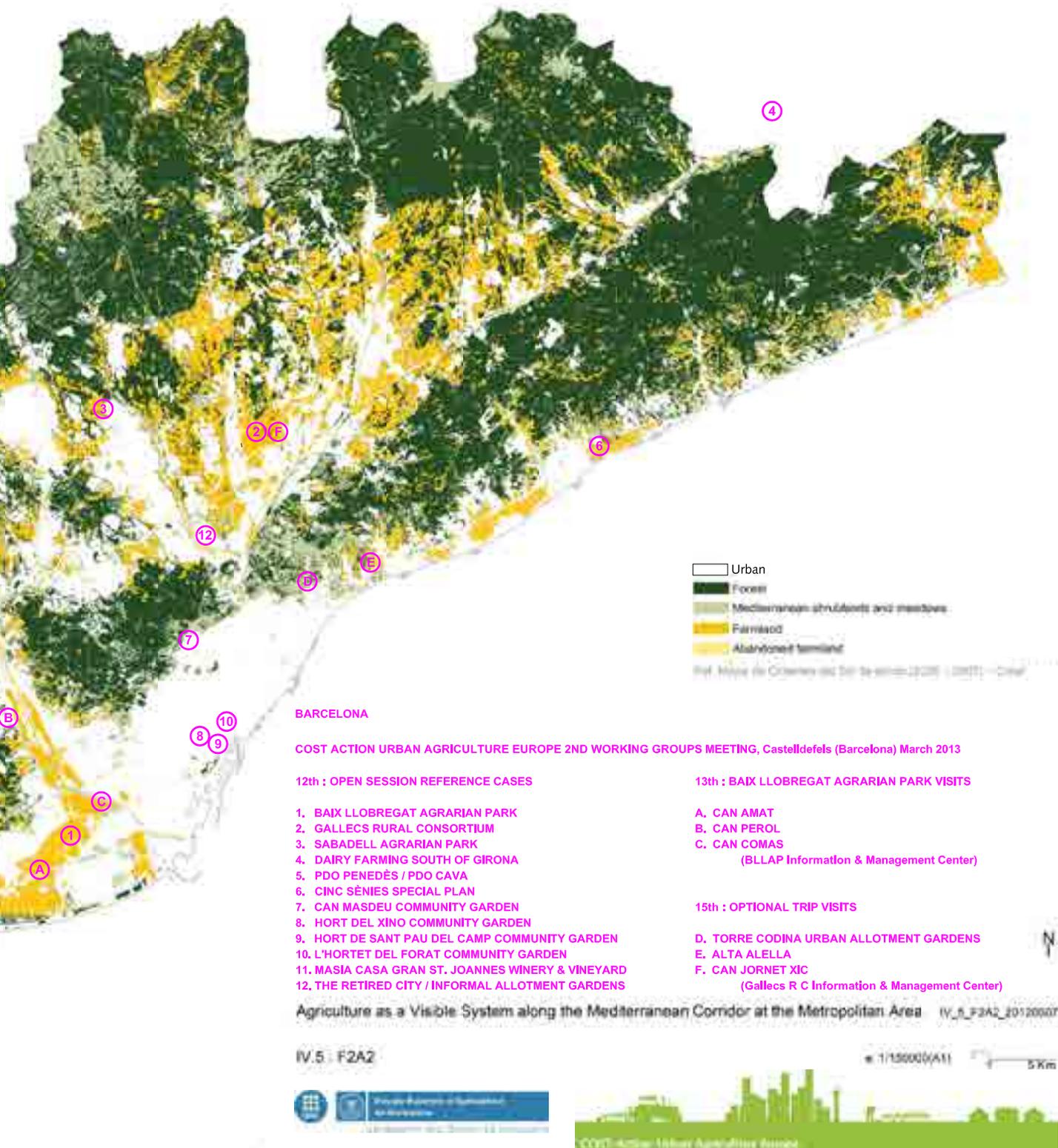
This printout (168 x 118.8 cm) was exhibited together with the STSM charts at the ESAB's future Conference Hall during the Working Groups Meeting from 12th to 19th March to let the visitors place, as here, the cases of study explained at the open session and the programmed visits.

The map belongs to the ongoing project 'Agriculture as a Visible System along the Mediterranean Corridor at the Metropolitan Region of Barcelona'. Contrary to what happens at the planning maps of the region it depicts existing farmland and forest covered areas – the so called undeveloped-land in the Catalan Planning System – instead of the common and ubiquitous urban 'carpet' that appears here as a blank, white negative.

The project seeks for new connections and bonds between city and it's agrarian in/between or surrounding farmland and forests; between citizens and farmers through fostering the change of those spaces programmed but never developed by the existing planning (passed in 2010) due to present economic crisis.

The document is based on the ICC's (Institut Cartogràfic de Catalunya) topographic basis and in the CREAM land cover map of 2006. Drawing by Luis Maldonado, Xavier Recasens and German Estalrich.





BARCELONA

COST ACTION URBAN AGRICULTURE EUROPE 2ND WORKING GROUPS MEETING, Castelldefels (Barcelona) March 2013

12th : OPEN SESSION REFERENCE CASES

- 1. BAIX LLOBREGAT AGRARIAN PARK
- 2. GALLECS RURAL CONSORTIUM
- 3. SABADELL AGRARIAN PARK
- 4. DAIRY FARMING SOUTH OF GIRONA
- 5. PDO Penedès / PDO CAVA
- 6. CINC SÈNIES SPECIAL PLAN
- 7. CAN MASDEU COMMUNITY GARDEN
- 8. HORT DEL XINO COMMUNITY GARDEN
- 9. HORT DE SANT PAU DEL CAMP COMMUNITY GARDEN
- 10. L'HORTET DEL FORAT COMMUNITY GARDEN
- 11. MASIA CASA GRAN ST. JOANNES WINERY & VINEYARD
- 12. THE RETIRED CITY / INFORMAL ALLOTMENT GARDENS

13th : BAIX LLOBREGAT AGRARIAN PARK VISITS

- A. CAN AMAT
- B. CAN PEROL
- C. CAN COMAS
(BLLAP Information & Management Center)

15th : OPTIONAL TRIP VISITS

- D. TORRE CODINA URBAN ALLOTMENT GARDENS
- E. ALTA ALELLA
- F. CAN JORNET XIC
(Gallecs R C Information & Management Center)

Agriculture as a Visible System along the Mediterranean Corridor at the Metropolitan Area IV_5_F2A2_20120007

IV.5 - F2A2

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Photo Report

12th



14th





13th



15th







Barcelona Declaration on Urban Agriculture and the Common Agricultural Policy

The COST Action TD 1106 Urban Agriculture Europe has started in 2012. It gathers researchers and practitioners from more than 20 European countries.

The objective is to elaborate a European perspective on Urban Agriculture and its potentials for a sustainable development according to the Europe 2020 Strategy. To this end the Action will prepare recommendations for improving European policies. A special emphasize is to be placed on the Common Agricultural Policy (CAP).

The CAP is currently repositioned. Thus, the Action has elaborated this short term declaration on Urban Agriculture and the Common Agricultural Policy.

We define Urban Agriculture as spanning all actors, communities, activities, places and economies that focus on biological based production, in a spatial context that, according to regional and local opinions and standards, is perceived as "urban". Urban Agriculture takes place in intra-urban and peri-urban areas.

Because agricultural production in the urban realm tends to be strongly context related (to local markets, citizens, urban spaces, historical traditions, cultural heritage and so on) Europe's Urban Agriculture is characterized by a broad variety of types. These types offer a lot of values for a smart, sustainable and inclusive growth and for job creation as well.

Based on a long tradition of direct custom orientation Urban Agriculture provides a high knowledge and innovation potential. Its products aim at quality, specialization and services and therefore are trend setting / impulse giving for the whole agricultural sector (smart growth). Urban agriculture can contribute to resource efficiency and food security. It is an excellent tool for building up, designing and maintaining the cities green and climate active infrastructure (sustainable growth). It can offer opportunities of regeneration of sites (buildings and open spaces) and qualification of landscape with the preservation of tangible and intangible cultural heritage. Urban Agriculture is actually on the agenda of most European cities because it offers opportunities for social inclusion and job creation on a low threshold (inclusive growth). The presence of agriculture within and in the perimeter of cities provide the urban dwellers with high quality recreational experiences and raise standards of living.

Despite its high potentials Urban Agriculture is largely neglected in Europe's policies and especially in the CAP. Urban Agriculture is neither institutionalized on the EU administration level, nor in the member states. As the Directorate's General name puts out "Agriculture" is automatically combined with "Rural Development". Thus, UA is double marginalized by CAP: Due to its small size it does not really benefit from the direct payments pillar. Due to its location it is not covered by most of the rural development programs. The CAP has a long tradition for recognizing the multifunctional character of farms and agriculture

in Europe. The multifunctional character of farms is excessively well developed in the Urban Agriculture of Europe, hence it makes sense to integrate this job and growth promoting branch of agriculture in the CAP thinking.

Therefore we ask for a stronger consideration of Urban Agriculture in order to create valuable development impulses in urban and suburban areas and this is where most of Europe's citizens live - in the world's most urbanized continent.

We recommend to Eu Commission and Council of Europe to

- recognize Urban Agriculture as a driving force for innovation in the whole agricultural sector
- recognize Urban Agriculture as a cultural resource for quality of urban life and wellbeing
- raise awareness for Urban Agriculture and its special conditions, potentials and demands
- promote research on Urban Agriculture

We recommend specifically to the EU Commission to

- define specific objectives on UA related to the characteristics of different forms of UA
- include Urban Agriculture issues in the mission statement of Directorate-General for Agriculture and Rural Development (DG Agri)
- install an advisory group on Urban Agriculture at the DG Agri
- institutionalize Urban Agriculture within one of the DG's Agri units

Concerning the CAP reform we recommend to both, the EU Commission and the member states

- to rearrange direct payments for the benefit of small-size, labor-intensive and innovative forms of agriculture
- not to limit the Regional Policy and Rural Development Programs and the Communitarian Initiatives as LEADER or PRODER automatically to rural areas, but to widen up the scope of at least some programs to urban areas
- to create development programs that stimulate smart, sustainable and inclusive growth by Urban Agriculture

The COST action UAE will carry forward its work until 2016 and differentiate its policy recommendations. We hope for a fruitful exchange of views with the European Commission and member states' administrations in order to address the potentials of Urban Agriculture as a multi-capable tool for smart, sustainable and inclusive growth all over Europe.

COST action TD 1106, WG 1, 22.3.13





COST- the acronym for European **CO**operation in the field of **Sc**ientific and **T**echnical **R**esearch- 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.

