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## COST Action Urban Agriculture Europe Training School «From farming near the city to farming with the city»

Toulouse, France 25-28/11/2013



# COST Action Urban Agriculture Europe Documentation of 2nd Training School

Toulouse, November 25-28th 2013

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Thanks to the Master Students from the AREM (Agro-Resources and Environmental Management) specialization of Ecole d'Ingénieurs de Purpan- INP Toulouse, who helped with translations:

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Trainees and Trainers on last day of the event. Photo : E. Borianne-Arnal.

# 1. Presentation of the Training School

## 1.1. Aim of the school

The training school aimed to enlarge the urban agriculture issues to a wider scale and focus on the integration of agriculture into territorial planning and public policies.

The general goal of this training school is to give the participants a better understanding of the links between the productive activities nearby and within the city and the urban realm. The location of the production in itself says little on the functions or services it fulfils for the city or for the urbanites. This supposes the construction of links between activities, between places, between public policies at the urban realm level.

The construction of these links can be bottom-up (for instance a Community supported agriculture network), top-down (for instance a new dogma in urban planning legislation for the maintenance of farm lands) or a mix between both. In any cases, it supposes the coordination of different actors in order to develop a shared vision of the presence and the sense of productive activities in and near the city, and to develop collective actions.



Salma Loudiyi with a trainee.

## 1.2. Theoretical frameworks

The Training School gave a short experience of a participative method to facilitate actors' coordination: the «Territory game»\* approach, built to facilitate the collective design of a shared territorial project and identifying actions to foster it. It was applied to the goal of enhancing the city/agriculture relationships at the metropolitan scale.

The case study was the central metropolitan area of Toulouse, the 4th city in France.

The training school gave some background about the land planning process in France, and the increasing importance of farm lands. Governance and participation processes around farming issues in Toulouse were also presented. The trainees were encouraged to identify the main territorial issues about the relationship between the city and the different types of local agriculture, to draw different scenarios and to suggest related action plans. This leaflet presents their propositions.



Sylvie Lardon.

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\*. See Lardon S., 2013. Developing a territorial project. The "territory game", a coordination tool for local stakeholders. *Façade, Research Results*, n°38, 4 p



Marie-José Fortin.



Isabelle Duvernoy & Giulia Giacché.



Marie-Odile Bisch, Associate Dean of International Relations of El Purpan & Sylvie Paradis.  
p.3



## 2. Program of the TS

### 2.1. Monday, November 25th

Presentation of the TS, the approaches and the case study.

Coffee break / Registration

10:00 - 10:30

#### Kick off

Opening and welcoming, by Marie-Odile BISCH, EI Purpan's Associated Dean of International relationships.

10:30 - 12:30

#### Presentation of the TS:

Presentation of Trainers, Trainees and other participants, organisation and program, presentation of the question addressed to trainees (for the territorial game), by Sylvie Paradis.

#### Theoretical elements of Urban Agriculture

Linkage between city and the periurban areas, by Isabelle Duvernoy.

Lunch in EI Purpan

12:00 - 13:30

#### Lectures

"The institutional context around of periurban agriculture in France: scales and domains of public action for urban design and farming development" by Salma Loudiyi.

13:30 - 15:30

"Partnerships for farming near Toulouse: from farm to land protection toward more inclusive projects? Actors and coalitions supporting new visions of urban life and periurban farming", by Isabelle Duvernoy.

Coffee Break

15:30 - 16:00

#### Round Table

Introduction to the round table, by Isabelle Duvernoy.

16:00 - 18:30



Geneviève Bretagne, Caroline Quinio, Christine Lobry and Laurent Berthelot (from left to right).

The institutional positions and skills for maintaining farming near Toulouse:

"Testimonies and discussion", with :

- Caroline Quinio (Regional service for food policy from the Regional Board for Agriculture and Forestry),
  - Laurent Berthelot (Toulouse Metropole),
  - Christine Lobry (Board of Agriculture of Haute-Garonne),
  - Geneviève Bretagne (Agency of urban planning of the urban area of Toulouse),
- Animation by: Giulia Giacché & Sylvie Paradis.

#### Workshop

Re-formulation of the question (after the lectures and round-table).  
Announcement of the composition of sub-groups for the visits and territorial game.  
Preparation of field-work (maps, interview sheet...) and discussion about the main research question

18:30 - 19:30

Common dinner

20h30...

## 2.2. Tuesday, November 26th Visit of Toulouse urban area (Field Trip).



Visit of a farm in Balma.



At Pin Balma's Municipality.



Lunch time at the «Red Hen».



**8:00-8:30**

### **Contrasting views and interviews on productive green spaces**

The objectives of the day are:

- to see a diversity of interface between urbanisation and productive green spaces in Toulouse,
- to interview several actors currently involved in using and designing productive spaces.

The participants will make the visit together but, by turn, sub-groups (4) will be in charge of collecting information at each stop (interview sheets to realize with major information collected)

(Supervisors : Isabelle DUVERNOY et Sylvie PARADIS)

**9:30-10:30**

### **El Purpan Toulouse**

Gathering point. Departure.

**10:45- 11:45**

### **RDV Monsieur Sicard, Balma.**

Farmer (crops grower) and farming contractor, member of the Board of Agriculture, in charge of the commission "periurban farming".

**12:30-14h30**

### **RDV Monsieur Diffis, Pin-Balma – Agricultural Park project**

Mayor of Pin-Balma municipality (part of Toulouse-Metropole). Visit of the agri-parc project area planned by the Toulouse Metropole.

**15:00- 16:00**

### **RDV Madame Marie-Paule Sirgan-Feuillerat, Longages.**

Lunch & Visit of "La ferme-auberge La Poule Rouge" (Farm Inn of the Red Hen)

**16:30-18:00/15**

### **RDV Monsieur Thierry Bertrand, Saint Lys.**

Farmer (poultry and berries), direct seller. President of the association that is managing a collective butcher's shop. Former employee of the Board of Agriculture.

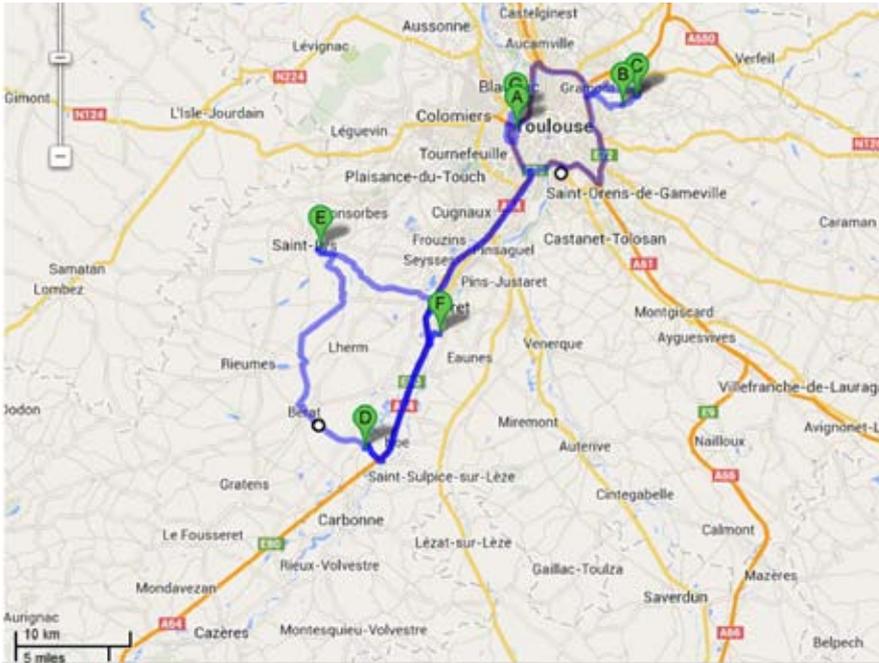
**18:00/18:15**

### **RDV Monsieur Laurent Clavié & Monsieur Thomas Faure, Muret.**

Visit of the "Biovercité" Farm (cereals, flour-mill, earthworms production, pedagogical farm), and meeting with an organic market-gardner in direct selling - AMAP "les Prés-verts" (CSA the green meadows). Both farmers (M. Clavié et M. Faure) are members of an organic network ("Erables31").

**18:45/19:00**

### **Return to El Purpan Toulouse**



Itinerary of the filed trip (Google map extract).



Dicussion with a farmer in St-Lys.



Visit of Biovercité's farm, Muret.

### 2.3 Wednesday, November 27th, Territorial game: building scenarios, proposing actions.

#### 1st step : Diagnosis

##### Lecture

The Territory Game to enhance the participation : principles of the Game',  
by Sylvie LARDON

8:30-9:30

##### Workshop

Work on elements for the diagnosis collected (4 sub-groups) to structure by main  
thematic

9:30-10:30

##### Coffee Break

10:30-11:00

##### Workshop

Mapping the diagnosis & listing the stakes (4 sub-groups)

11:00-12:30

##### Lunch in El Purpan

12:30- 14:00

#### 2d step : Building scenarios

14:00-14:45

##### Workshop

Farming with the city: trends and new imaginations (3 re-mixed sub-groups)

#### 3d step, actions proposals

##### Workshop

Actions. How to facilitate some scenarios, how to prevent others (3 same sub-groups  
of the 2nd step)

14:45-15:30

##### Coffee Break

15:30-16:00

**16:00-17:00 Workshop**  
Presentation and sharing the three scenarios within the whole group (by sub-groups)

**17:00-18:00. Workshop**  
Preparation of the final product (for the presentations to the local stakeholders) by sub-groups

**18:00-19:30 Presentation**  
Presentations and discussion with local stakeholders.  
- Intro/ Presentation of participants, of workshop method, by Isabelle Duvernoy  
- Synthesis of the diagnosis realized, by Marie-José FORTIN  
- Reaction of the stakeholders on diagnosis  
- Presentation of the scenarios & the actions proposed by subgroups  
- Debate with stakeholders.

**Stakeholders invited :**

- Denis Béziat (farmer, Municipal Counciler of Venerque)
- Sandrine Dauphin (project leader for agriculture, SICOVAL)
- Catherine Hollard (DREAL Midi-Pyrénées) - excused
- Philippe Labaume (URCAUE Midi-Pyrénées),
- Antoine Maurice (Vice-President of Toulouse Metropole) - excused

**19:30-20:30 Pre-dinner**  
Discussion with stakeholders and all participants will continue...



Sandrine Dauphin, Philippe Labaume and Denis Béziat during the presentation.

#### **2.4. Thursday, November 28th Leaflet and Conclusion of the TS.**

**9 :00-10 :00 Workshop**  
Preparing the leaflet, organizing the collected and produced materials

**10:00-10:30 Coffee Break – Lounge 3**

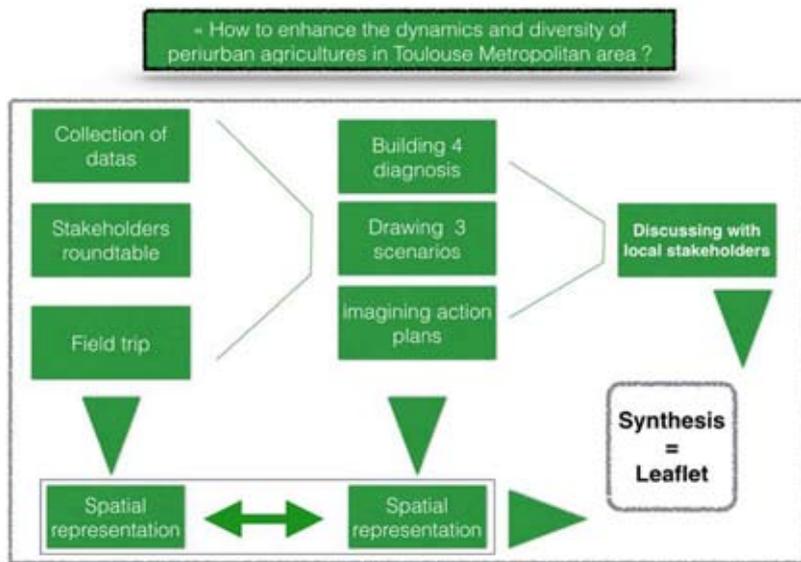
**10:30-12:30 Workshop**  
Realizing the leaflet

**12:30- 14:00 Lunch in El Purpan – cafeteria & Lounge 3**

**14:00-15:00 Debriefing of the TS**  
Reflexive approach of the workshop & Conclusion of the TS.

**15:00 End of the event.**

### 3. Methodological Itinerary



The will of this Training School was to suggest experimenting, by learning by doing, a participative exercise applied to a territorial diagnosis. To achieve this, a «Territory game» (Jeu de territoire) was specially designed for the participants. The territory game is a tool of coordination of the local actors, within the framework of a sustainable territorial development project. 'The ambition of the exercise is triple: facilitate the participation of the various actors, allow them to appropriate the dynamics and the stakes in the territory and favor their implication in collective actions' (See: <http://inra.dam.front.pad.brainsonic.com/ressources/afile/234997-47680-re-source-le-jeu-de-territoire.html>).

As a territorial diagnosis, it contains a phase of analysis (territorial datas, but also datas collected by interview of local actors) which allows to identify the main stakes of the territory studied, and a forward-looking phase where are proposed various scenarios of evolution as well as proposals of actions. The Training School was thus concieved in this sense.

#### 3.1. The case study: Grande agglomeration of Toulouse

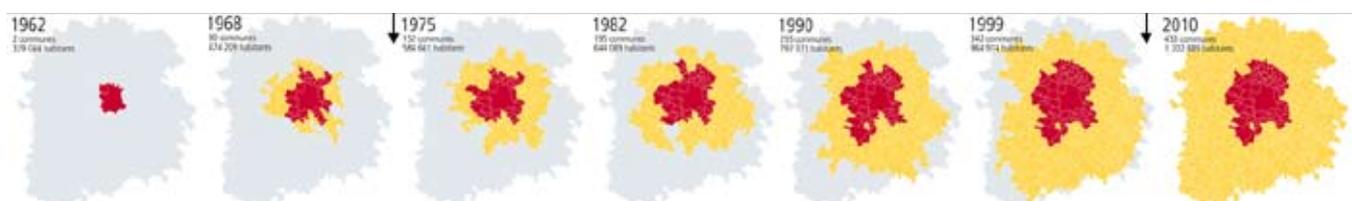
The exercise have been applied to the metropolitan area of Toulouse (e.g. 'Grande agglomération toulousaine'). By using participatory tools, the trainees were encouraged to answer a main question by identifying the main territorial issues about the relationship between the city and the different types of local agriculture, to draw different scenarios, and to suggest related action plans.

#### 3.2. Main issue

The question the trainees had to work on was: **How to enhance the dynamics and the diversity of agricultures in the Toulouse territory? Which collective implementation?**



Map extracted from : [http://www.toulouse2015.org/spip/ecrire/upload/carte\\_interscot.jpg](http://www.toulouse2015.org/spip/ecrire/upload/carte_interscot.jpg)





## 4. Main results

### 4.1. Step 1 : Diagnosis

To realize the diagnosis, the trainees worked in 4 different subgroups.

#### Subgroup 1: «Diffused and centralized agrarian landscapes»

##### Description of agrarian landscape

Different kinds of agricultural productions are in presence, for example traditional production or the current way of production, as well as the physiographical conditions of the area defined the landscape construction.

The agrarian landscape of Toulouse is influenced by the orography and the water availability. The East side is dominated by large farms with extensive production of crops, cereals, sunflowers and rapeseeds, these goods are for world market. The West side is flatter and with better water conditions for agricultural purposes. There is a mixture of different crops and animal breeding activities (cattle, poultry). They traditionally produce for the Toulouse market and for world market, but there are new and varied initiatives (flour production, vegetables and poultry) for local markets. In the North of the city there are still small areas with horticulture production.

##### Potentialities and risks for Urban Agriculture

The city of Toulouse has much to offer to citizens and tourists. The Garonne river can be defined as the place of leisure activity sprawl, and the mountainous East side of the Garonne river, which is the agrarian area, can be also seen as a place of recreational activity of the inhabitants. The aim of the project of creating the agrarian park in Pin Balma will change the model of agriculture from conventional to strict related to citizens' demands. However the physiographical conditions are not suitable for the intensive vegetable production. Pin Balma municipality answers to the request of the citizens' for the good quality of landscape and life.

Along the biggest motorways in the city have developed new residential areas. This phenomenon is very dangerous for the future condition of the city, because it has created the possibility of very strong urban sprawl. In this way we can lose in the future many valuable lands for agriculture.

Another problem was related to the possible introduction of urban agriculture is the social boundary connected with farmers' mentality, as well as unwillingly of the inhabitants to have this kind of activity around their housing estate.

##### Sub-group 1 was composed of:

Alice Archer, Paola Branduini,  
Katarzyna Bruszezwska,  
& Xavier Recasens



Schematic representation of subgroup 1's diagnosis.

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Should the transition from conventional to urban agriculture be more accompanied within these initiatives?

Should Pin Balma Park be the intermediate to understand the present agricultural system and the landscape it produces?

Should fresh production come from neighbor territories more suitable for this production in agronomical terms, like in the North Garonne?

## Subgroup 2 : «Urban sprawling on agricultural land»

Sub-group 2 was composed of:  
Denise Kemper, Lisa Mühlnickel, Cyril Mumenthaler, & Attila Toth.

### Findings on regional level «EXPLOSION»:

There is a massive land pressure on agricultural land from expanding urban settlements, especially from Toulouse centre along the main roads, and into the valley. Speculation on agricultural land (even on PLU protected land) causes additional pressure on farmers and their lands. Within the urban area 80% is non-built-up and open land. Three quarters of this land are in agricultural use and one is defined as natural space. Two main zones can be identified. A mountainous area is located in the eastern part of Toulouse agglomeration, while the western part is rather flat. Depending on the different physical and territorial conditions of the two zones, the agricultural production and system of cultivation differ.

### Findings on local level «IMPLOSION»:

The land pressure on agricultural farms within the villages in the closer surrounding of Toulouse could lead to the development of isolated agricultural islands in the peri-urban area.

### Territorial issues:

For the Toulouse metropolitan area, different planning tools are in use. Examples are the 4 SCoT and 1 InterSCoT (Masterplans), on regional level as well as PLU and ZAP on local level. The agency of urban planning proposes a strategy of a green crown («couronne verte») as part of the InterSCoT to limit the urban spreading and protect open land. Next to the planning level, the realisation of projects accomplish this strategy to be more feasible.

According to the farmer's opinion, a protection by the planning tool ZAP is more efficient as the PLU on local level. While the PLU still allows speculation on protected farmland, the ZAP offers a protection for 30 years and makes the speculation on land unefficient. Further on, the farmer mentioned a lack in application of existing planning tools by politicians and decision-makers.

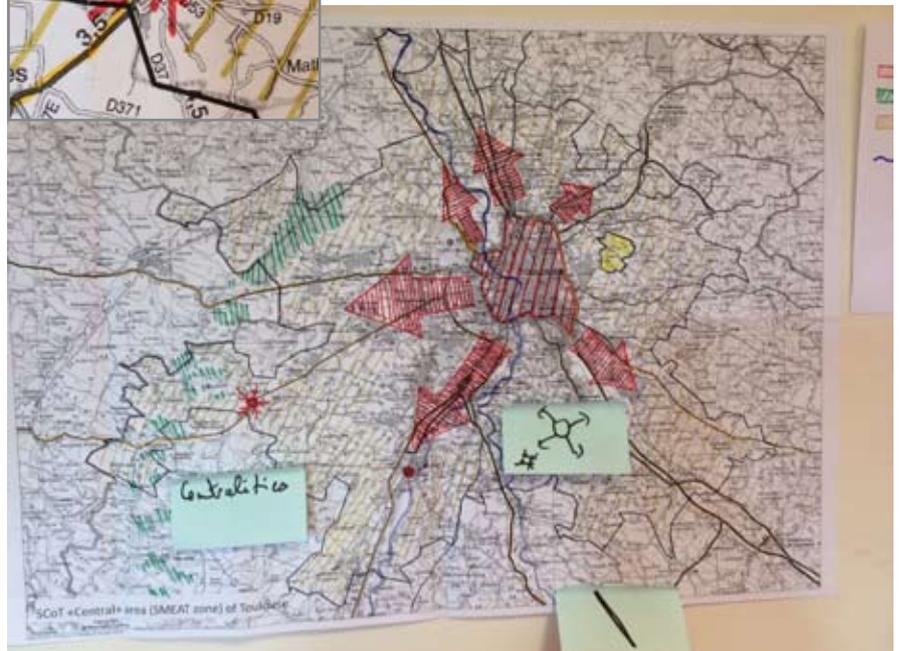
Pression of urban change into the territory:

Dimension  
Directions (E-W)

Awareness and effects depending on the scale of analysis:

From Toulouse-centre  
From small rural communities

Q. From sectors to collectives?  
Q. Vision and reality?



Schematic representation of subgroup 2's diagnosis.

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### Subgroup 3: «The buffer»

#### Elements of the diagnosis

Toulouse is a growing city, there is a constant tendency for the expansion and the use of the land around the city. The urban pressure has an influence on the agricultural land around the city, especially along the principal roads.

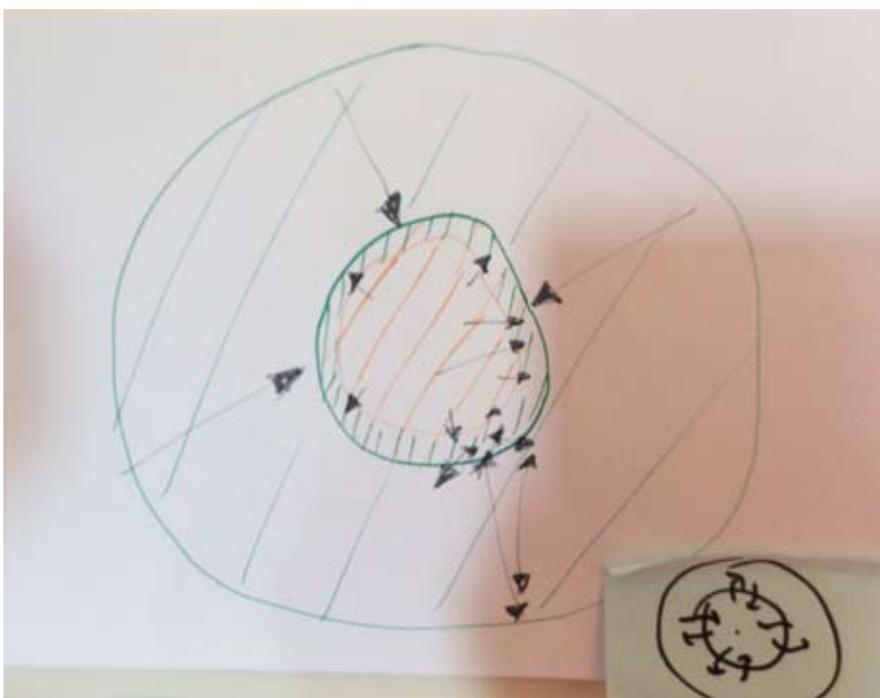
The flux of commuters passes the periurban area every day in order to reach the city and come back. It also has an impact on the management of periurban areas, influencing also the existing agricultural activities.

There are protected natural areas around the central urbanized area, the biggest one is the "Forêt Domaniale de Bouconne" in the west of the city. These defined zones restrict a further development.

There are several connections of the rural and urban area that are mostly concentrated in the periurban area. This area is one hand used for recreational activities and on the other hand for agricultural production and selling. It is endangered by unregulated urbanisation and land use. The local institution already have all the planning tools and laws in order to manage the territorial development properly; still the political implementation does not work correctly.

There is a communication problem between institutions and actors of the local area. The institutional bodies are not concerned enough about farmers needs and daily problems, but some of them try to get a more comprehensive understanding of this topic.

Sub-group 3 was composed of:  
Rosalia Filippini, Carolin Vorwerk,  
Chiara Briatico, & Martin Dumont



Flows:

People / goods

Distances :

Short / long

Constraint / opportunity

Focus on fringe of Toulouse

Q. Towards new practices?

Transition management?

Q. Keen knowledge (diversity) ?

Schematic representation of subgroup 3's diagnosis.

## Subgroup 4: «The Gap»

Sub-group 4 was composed of:  
Nathalie Gozdziaik,  
Luis Maldonado, Karin Sunde,  
Axel Timpe, & Xin Wang.

### The GAP" on the organisational and spatial level

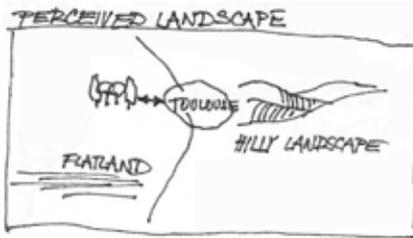
In the stakeholder positions different gaps concerning the role of agriculture in the peri-urban can be perceived.

Organisational gaps exist between farmers land owners and real-estate developers. Speculation on land is a main issue. Agriculture as well as urbanisation processes are referring to the center of Toulouse in a classic center-periphery model. The peri-urban zones are serving the urban center instead of urban/peri-urban exchanges on an equal level. Other organisational gaps concern the collaboration of individual actors like documented in the interview with the farm-inn holder. Her partnership with other producers transformers and sellers of agricultural products were not developed at all. This lack of partnership was confirmed by the representative of the Board of agriculture for the whole peri-urban region of Toulouse.

Spatial gaps are cultivated by the main planning ideas discussed among the stakeholders in the Toulouse region. The idea of a green belt as a strong figure containing and limiting the urban expansion seems not adequate to the importance of the periurban territory. With urban sprawl and the development of the urban fringe the "greenbelt" keeps on being moved outwards and taken over by urban development. The transposal of the figure to more detailed scales shows the difficulties of its realization. At the location of the small farm the spatial reality of agriculture closely interwoven with settlement activities became apparent. A strong potential for positive development resulting from synergy effects by a good connection between periurban agriculture, local inhabitants and administration, and the spaces these stakeholders manage could be developed and has not been taken care of until today.

### Diagnosis of gaps on several layers

We diagnosed a system with many gaps both in terms of geography and organisational relationships.

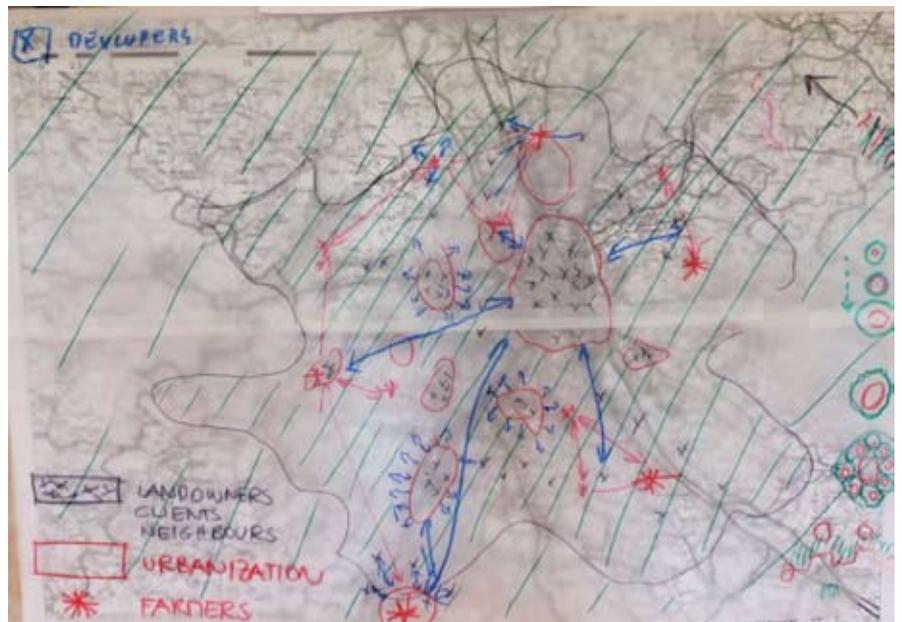


Drawn by A. Toth, 2013.

Local farmers in the peri-urban area could be envisioned as actors with potential to network Neighbours, Urban dwellers, Clients and other agricultural producers in new cooperation constellations. On the spatial level local centralities which we would call metaphorically 'stars' could be an alternative development model instead of having one 'superstar' represented by Toulouse city center. This would allow a more direct relationship between farmer and client and between the spaces of living and of agricultural production. Networking on both, local and regional scale should be developed to fill these problematic gaps.

Actual representation of territory:  
Center-periphery model.

From a single center to several small centers with their specificities (not everything converges to Toulouse ...), e.g. from THE superstar to a constellation of stars



Schematic representation of subgroup 4's diagnosis.

## 4.2. Step 2 : Scenarios

### Subgroup A: «Biopole. The self-sufficient future»

The chosen scenario confronts **two possible futures** under the condition of a breakdown of the existing energy system based on fossil fuels and nuclear energy.

The **negative version** of the scenario is based on the assumption that society is not able to develop a new management system for the scarce energy resources. Toulouse, today envisioned as a Metropole turned towards the outside (France, Europe and the world) will be cut off of the distribution systems of energy and food ; This would result in energy poverty with strong repercussions on the distribution of wealth and a loss of the public services in transport, health and mobility.

The **agricultural system** existing today could not be carried on as mechanical labour, the production of fertilizers and pesticides are all based on a massive input of fossil fuels. The lowered production and the problems of distribution of products by long distance transport would lead to food insecurity. Productive land becomes the most critical resource reinforcing the inequalities among the population. Agriculture is a source of relative wealth, but the production has to be protected against violent ways of procuring food.

As an **alternative future** under the condition of energy poverty it can be assumed that society develops new models of community action on a regional basis. Instead of a metropolitan orientation turned outwards Toulouse develops as a Biopole communicating on an equal basis with its agro-urban region.

The **production and distribution of food** is reterritorialized to the specific places of production and their landscape potential. The regional society organizes itself in smaller communities who put a considerable part of their work activities into agricultural food and energy production. The spatial organisation is based on proximity of production and dwelling. The center of Toulouse diminishes in size and population and potentials to integrate agricultural production in buildings are developed. To allow the regional exchange of goods and people the existing water transportation system play an important role and is enhanced.

Adapted green technologies such as biomimics and the ability to share them are crucial for development. For the transfer of knowledge in the local communities and among them is organized in community schools and peoples universities.

Agriculture undergoes a profound change from market oriented mass production in monocultures to a self-subsistent polyculture. Animals are introduced to most farming models to use their labor force and as an important component of the local nutrient cycle. On the regional level a nutrient cycle between the agricultural communities and the central city of Toulouse would be established. The city population fed by products from the region contributes urban waste transformed by compost technologies.

**Sub-group A was composed of:**  
Alice Archer, Chiara Briatico,  
Lisa Mühlnickel, Xavier Recasens, Axel  
Timpe, Karin Sunde & Carolin Vorwerk.



Schematic representations of subgroup A's positive scenario.

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Subgroup A during workshop.



Sub-group A's negative version.

## Subgroup B: «The scenario of two layers»

Sub-group B was composed of:  
Katarzyna Bruszezwska,  
Rosalia Filippini, Nathalie Gozdziaik,  
Denise Kemper, Luis Maldonado,  
& Attila Tóth

### Expected urban development

City will keep on growing along transport and energy infrastructures in a star-like way dividing, cutting and isolating the open agricultural land. Ones built-up open lands will never get back to agricultural land use.

### Looking for a shift

The traditional urban growing model aims at filling the gaps between the existing urbanised areas along infrastructures that results in a «star-like shape». Based on the fact that urban agriculture stands for rural areas with urban relationships, let's start to think in a different way, in a more sustainable and resilient one.

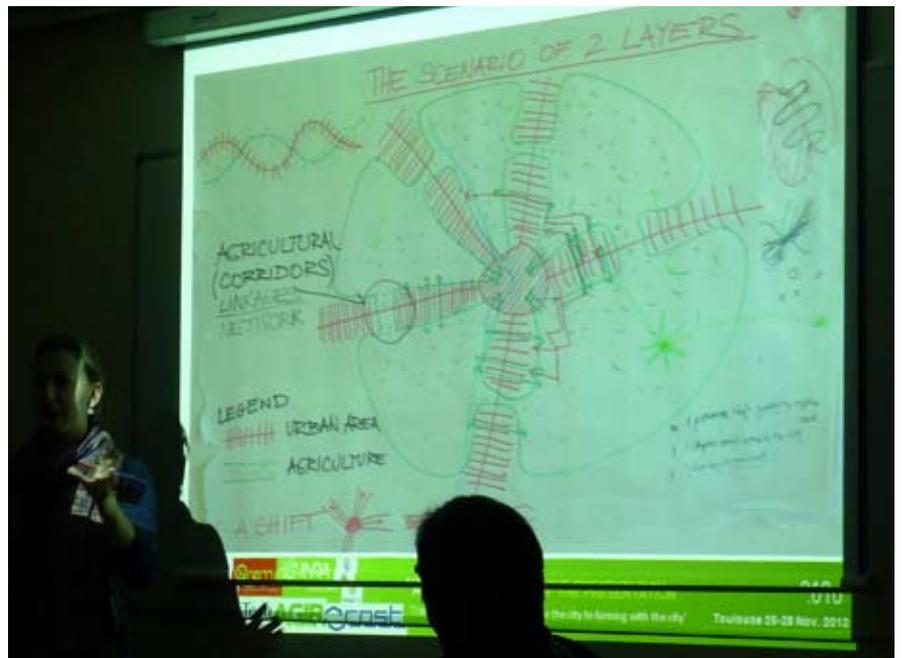
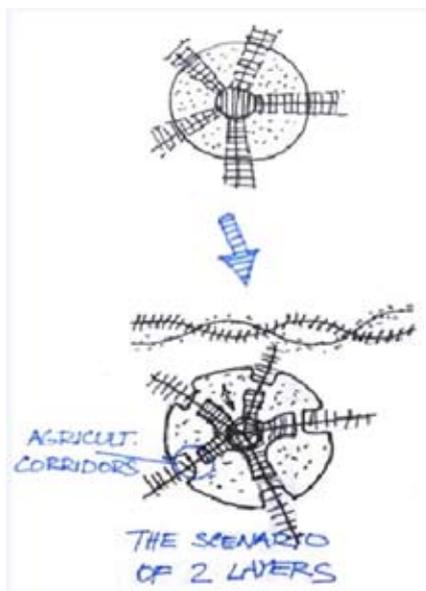
Instead of understanding the territorial development around urban centres through the dialectic between the centre and the periphery, we should look at the agrarian space around the city through its own values, qualities, diversity and potentials. We could achieve this by developing a scenario, in which both layers urban - agriculture coexist in parallel, overlap and interact at certain points.

### The scenario of two layers

In our scenario, we imagine and perceive agriculture as a basic infrastructure of future cities like it was in all European settlements for centuries. The scenario proposes to keep the relationships and linkages between agricultural land structures open and free.

This should enhance and support the continuity of agrarian space and linkages around the city and at the same time, it allows the further urban development in a more sustainable development

The model preserves the local identity of particular urban nodes within the metropolitan realm and the spatial, functional and social connections. As the model understands agriculture not just as the background but as an integral part of the city, it allows the agriculture to enter the city and to renew the relationship between citizens and farming.



Schematic representations of subgroup B's scenario.

## Subgroup C: «Agriculture Connects and Feeds the City»

Agriculture provides food and services to the city through two main objectives:

- **Self feeding** (concerning the energy, production, reducing CO2 emission, recycling waste of city)
- **Achieve good life quality** (landscape quality, place identity, local tradition, and green open space)

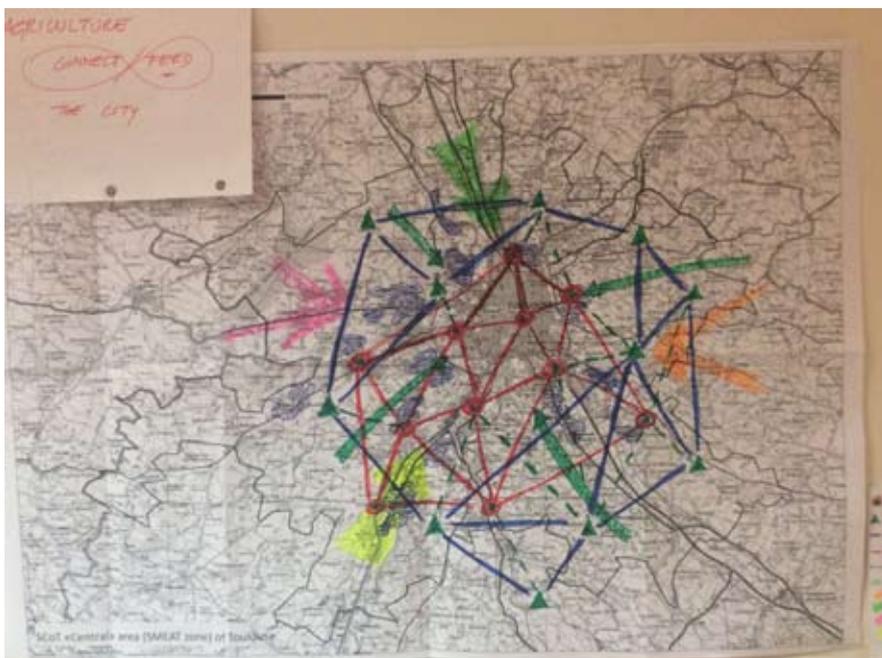
These objectives are achieved by **improving CONNECTIONS** of knowledge and productions:

- **between farmers and farmers:** Exchange of production & waste, knowledge, shared materials or transformation tools, etc.
- **between farmers and citizens:** From farmers to citizens: Sale their products, communication on agricultural concerns and issues but also on local traditions, re-discover the agricultural landscape, possibility of walking along the rural path, etc.
- **From citizens to farmers:** better understanding of practices and mutual respect, contribute to valorized agricultural identities, support local agriculture and pay the "good" price to farmers

Urbanization should be restricted to "urban pocket" in order to:

- **Densify the existing urbanized areas**
- **Concentrate new constructions and buildings** along the transport infrastructures and on the low quality agricultural lands

**Sub-group C was composed of:**  
Paola Branduini, Martin Dumont,  
Cyril Mumenthaler, Carolin Vorwerk  
& Xin Wang.



Schematic representations of subgroup C's scenario.

COST Action UAE: 2nd Training School Toulouse / Nov 25-28th 2013



Sub-group C during workshop.

### 4.3. Step 3 : Action proposals

#### Subgroup A: «Biopole. The self-sufficient future»

##### ACTION 1 . Land distribution

On this action all the cultivable land will be redistributed by the small communities calculating the amount of production needs to sustain each inhabitant. The objective of this action is to reach self sufficiency and to efficiently use the land . The most innovative aspect is that permaculture and others sustainable farming models will be adopted, closing the bio cycle by reusing the waste. The interstitial lands between each agriculture unit will be dedicated to agro-forestry and or nature preservation, allow communications between communities and human leisure , if this not conflicts with animal species use of the vegetation as a recovery.

##### ACTION 2. "Growing School"

The aim of this project is to share and distribute knowledge by providing free access to each inhabitant of the community, by their personal needs. All the informations, about agriculture mostly, will be recovered in strategical locations close to inter-communal meeting points, where each person will be invited to learn and to teach their knowledge by self contribution. The innovative aspect of this action so, will be the personal contribution at the development of the project.

##### ACTION 3. Water network

The transportation system will reuse the existing channels for freight, food and materials transshipment . There will be used some "planter"ships, that does not requires a large amount of energy, as reusing the kinetic force of water. A constant work of channel maintenance will be required, using traditional manual techniques, to avoid the flux interruption because of natural river process.

##### ACTION 4. Alternative wood related technologies

The inhabitants needs of heating, cooking, and houses furnitures will be provided by a smart management of forest resources. The use of low-tech solutions, with alternative and efficient systems will be an innovative aspect to provide inhabitants needs from surrounding not cultivated spaces.

#### Subgroup B: «The scenario of two layers»



| Subject / Challenge  |   |  |
|--|---|--|
| - to preserve high-quality agricultural land   | - knowledge transfer for agricultural issues in the city                                | - social and commercial relationships<br>- continuity of agrarian spaces provided by linkages  |
| Action   |   |  |
| - to develop agricultural "corridors" and linkages   | - to preserve agricultural services and training farms within the city                  | - to link rural spaces with the urban fabric   |
| Objectives   |   |  |
| - linkages between agricultural spaces and services<br>- promotion of other agricultural relations<br>- coexistence of urban development + agriculture | - education<br>- food production<br>- creation of linkages between citizens and farmers | - valorisation of agricultural products, activities, territorial constraints<br>- selling products<br>- building networks with common interest |
| Innovative aspects   |   |  |
| - support of agricultural and urban development in an equal way  | - linkage between citizens and farmers  | - connection between neighbourhoods and rural farmers  |
| How?   |   |  |
| - agricultural (physical) infrastructure and linkages<br>- planning in participatory approach<br>- discussion about the model                          | - farm shops<br>- example farms<br>- educational training                               | - cooperative resorts<br>- networks and organisations  |
| Where?   |   |  |
| - small scale<br>- regional scale  | - small scale to be identified  | - peri-urban areas   |
| Partnerships?  |   |  |
| - farmers and farmer unions<br>- municipalities<br>- citizens as consumers<br>- administrative decision makers at regional level                       | - chamber of agriculture<br>- city department<br>- farmers and farmer unions            | - rural actors<br>- consumers  |

## Subgroup C: «Agriculture Connects and Feeds the City»

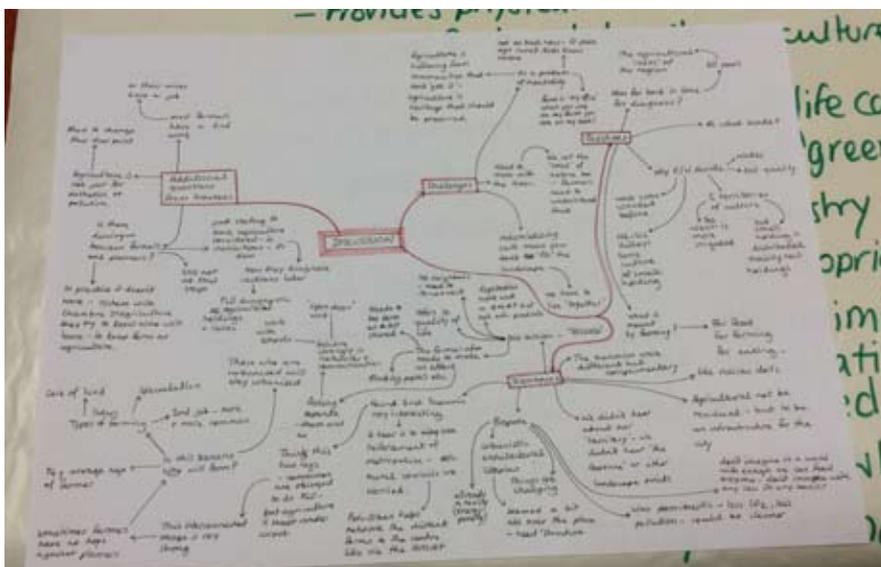
| Name of the action              | Objectives   | How?   | Where?  | Partners  |
|---------------------------------|--|--|---|---|
| Connection points               | Exchange knowledge between farmers and farmers, between farmers and citizens             | Platform of website, Training school for farmers<br>Visit of farms   | Farms, farmers' markets in the city and along the transport infrastructures | Farmers, citizens, municipalities, board of agriculture       |
| Relocalize the transformation   | Transform locally agricultural production  | Create transformation infrastructures (building like mills, etc.)  | Near to the farm between peri-urban cities and farms                        | Farmers, citizens, municipalities, board of agriculture, CAUE |
| Reinforce the cultural identity | Understanding the rural culture, local tradition and agricultural knowledge              | Create agricultural pathway, reuse the agriculture path<br>Explaining agricultural works, realities, products and processes. | Farms, connection points, landscape   | Farmers, citizens, municipalities, board of agriculture, CAUE |
| Market                          | Reinforce and improve market chains and create new market places                         | Financial support of the construction of markets, create transformation infrastructure (building like mills, etc.)           | In the cities and along the transport infrastructures, in Toulouse          | Local government, board of agriculture                        |
| Urban pockets                   | Densify the existing urbanized areas and concentrate the new constructions and buildings | Top-down planning  | along the infrastructure on low quality agricultural land                   | Government, CAUE  |



Trainees during workshop.



Working ambiance...



Mind map drawn by Alice-Marie Archer during discussion / conclusion of TS.



## 5. Discussion / Conclusion

### 5.1. Stakeholders' comments after the presentation of the diagnosis

After the presentation some questions were raised by the stakeholders: How far back in time is appropriate for diagnosis? At what scale?

Regarding our assumption of the East-West divide, the stakeholders confirmed that such a divide exists but that it is perhaps more complex than we depict. The crux of the divide stems from issues of availability of water and soil types and qualities. This has led to the establishment of various territories of culture divided by the Garonne – the South-West which had previously been wooded, is more irrigated; smallholding – mainly new holdings – is in small pockets all around particularly following the NE to SW valleys. The East, though hosting a prevalence of cereals production also has other forms of agriculture taking place. They also mention the 'attic' role of the sector with good quality soils.

The stakeholders also questioned what we mean by farming: do we refer to agriculture for food, for agriculture's sake, for landscape and aesthetics, for leisure? They pointed out that we cannot feed Toulouse with production in the SCOT area because 'there are just too many people'.

### 5.2. Stakeholders' reactions to presentation of scenarios

Firstly the stakeholders commented that the scenarios were different but complementary. They also suggested that we didn't talk more about the region, the Garonne and the landscapes, and that this suggested the scenarios were somehow detached from the reality of the territory.

#### Scenario A – Biopole

The stakeholders recognise this scenario as an interesting depiction, of an architectural utopia, of the city in the countryside. However they picked up on the lack of structure ('you can't just build anywhere'). They also saw the scenario as overly pessimistic – reductions in CO<sub>2</sub>, less pollution – there are positive aspects to reducing energy demand too. They consider that energy poverty is already happening and make the reference ('don't imagine in a world with enough where we struggle to feed everyone; it will be any easier in a world with less').

#### Scenario B – The 2 layers

The stakeholders saw this scenario as very interesting, and considered it could be an useful scenario for planning, because it reverses the vision and put the agriculture at the middle of the planning process.

At the moment communities are obliged to do a PLU, but agriculture is usually swept under the carpet. There is a fear in rural communes that the drive for further centralisation and urbanisation reduces the voice of the smaller communes. It is essential to think of transformation and this interconnected image appeared very strong. The stakeholders liked the idea that the peri-urban area can interconnect outer farms with the region.



Discussion with stakeholders after presentation of the results.



A sub-group of trainees discussing.

It was discussed how farmers have very little hope against planners, and that the insecurity of land tenure in the peri-urban area makes it very difficult to invest oneself in farming. They questioned who in these conditions is going to farm in the future? The age of farmers is increasing – now 56. Younger farmers struggle to access land and for those farms that undergo urbanisation – this is irreversible. They pointed that there are three forms of farming: 1: professional, 2: speculation, 3: part-time farmers and pluri active. A fourth form was also pointed out: farmers becoming workers in agricultural contractor's firms...

### Scenario C – Agriculture connects and feeds the city

This scenario inspired the stakeholders to discuss the need for farmers to accept responsibility for improving the image and valorisation of agriculture. It was suggested that farmers are fiercely protective of their space and don't encourage urban dwellers to take place in their landscape. There were cases discussed where farmers were deliberately closing public footpath and blocking rights of way. The stakeholders recognised a sense of separation, of them and us between farmers and urban dwellers.

This scenario suggests a pathway of greater interconnection, communication and networks. The stakeholders believed this is a strong approach and ideas like 'open-doors' and working with schools can reduce the urban-rural dichotomy. The landscape as a means to access quality of life was an aspect that resonated with the stakeholders. There was also the suggestion that using the 'AMAP' (CSA) concept in this model might not work, as not all products are well suited to 'AMAP', and that a focus on transformation is important.

They generally pointed some challenges: industrializing can't mean you don't 'fit' the landscape, agriculture and city have to live together. Urban agriculture is a problem of mentality. Agriculture is suffering from communities that don't 'get it' – agriculture heritage should be preserved. One of them said an interesting expression which inspired the discussion: 'My farm is my office... when you are on my farm you are on my desk'.

Another aspect that came was: 'if there is there dialogue between farmers and planners'? It was answered that 'it is starting, but in practice it doesn't work'. The system with the board of agriculture that tries to know who are going to leave their farms and to keep farm as agriculture is unsuccessful.

### 5.3. Point of view of trainers

The main objectives of the 2nd Training School of COST UAE program were:

- Working at a large spatial scale, of an urban area (rather than on a community garden for example , or a single farm)
- Contribute to WG2 and WG4 in which the organizers are involved
- Propose a workshop formula with a strong participatory dimension, in a spirit of «learning by doing» in order to develop coordination skills and to explore a «reproducible» experience for trainees.

In this sense, the results are relevant, although they remain somewhat general (with «basics» scenarios) . This is due mainly by a lack of time for trainees to better understand all the details and the local reality. Thanks to the rich interventions of local actors who were willing to participate and for which we are very grateful.

Also , despite the difficulty of such an exercise realized in a very short time, it all went fine, with an excellent involvement of participants who met the challenge of performing all the steps on time ! Indeed, considering the diversity of profiles of the trainees, we could have given a better emphasize upstream on the method of territorial diagnosis which not all were familiar, and a better presentation of the characteristics of the case study. The booklet «Maps and Datas» especially has not been sufficiently commented so that participants can capture as much information in so little time ... Allow an extra half day could be a simple solution to implement.

## 5.4. Point of view of trainees

Participants found that making a foresight exercise with an 2030' horizon was difficult compared to their work habits at a shorter term or done «step- by-step». They would have appreciated a little more time to achieve the exercise and sometimes be less «stressed» («It takes time to coordinate and find an agreement, in particular on operating rules»). The difficulty could also be due to the scale of work (large scale v/s small scale of project) .

Despite this, the Training School was appreciated, as rich in lessons (by comparing point of views of people with different professional backgrounds, in trying to compare different elements at the same level including actors' discourses). It seems that this was a rare experience, new and popular (in «full immersion»), dynamic and energizing !

Some were impressed by the participation of local actors and by the students of Purpan during the Training School. That have more than widely appreciated («we would have liked more time with the players in the field!», «it was fantastic for a young researcher to talk with farmers, to be in touch with different realities»).

Also, the example of the urban area of Toulouse, that most did not know before coming, seems to have been one of the key success factors of this research workshop by its characteristics and diversity of situations («Thanks to organizers !»).

## Glossary

### 'Agence d'urbanisme' (Urbanism agency)

A local agency for council and studies in urbanism. It is a resource center for its members in the issues involved in the urban development. These agencies are commonly associations whose members are the communes, the intercommunal entities and local representant of the State. There are more than 50 Urbanism Agencies in France. The 'Agence d'Urbanisme de l'Aire Urbaine de Toulouse' (AUAT) is 40 years old.

### 'Aire urbaine' (Urban area)

An official French denomination created by the French Statistic ('INSEE') in order to describe periurbanisation and follow its dynamic. It is composed of an 'urban pole', the agglomerated urbanization which is also a concentration of jobs offer (more than 10,000 in the last definition of 'big urban areas') and its 'periurban belt', the comuting area surrounding the urban pole. The urban area of Toulouse, in 2010, is composed of 453 communes: an urban pole of 73 communes and a growing periurban crown of 380 communes.

### 'AMAP'

'Association pour le Maintien d'une Agriculture Paysanne' means 'Community Supported Agriculture' (CSA).

### 'CAUE'

'Conseil d'Architecture, d'Urbanisme et de l'Environnement' means 'Council for architecture, urbanism and environment'. It is a departmental structure with a public mission.

### 'InterSCoT'

'Groupement d'Intérêt Public d'aménagement et de développement du territoire de l'aire urbaine toulousaine' is an entity that coordinates the 4 different SCoT in the urban area of Toulouse according to a common charter.

### 'PLU'

A 'Plan Local d'Urbanisme' is a Communal plan.

### 'SCoT'

'Schéma de Cohérence Territoriale' means 'Master plan'.

### 'ZAP'

A 'Zone Agricole Protégée' is a specific planning tool to protect an agricultural area.



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

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

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

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