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COST Action Urban Agriculture Europe:

STSM Developing a methodology to analyse and compare governance of Urban Agriculture

Clermont-Ferrand 23/11-04/12/2015



COST Action Urban Agriculture Europe STSM Developing a methodology to analyse governance of urban agriculture in Switzerland

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Aknoedgments

I would like to sincerely thank Salma Loudiyi and AgroParisTech for having hosted me and given me the opportunity to accomplish the STSM. I also would like to thank all COST organisers and coordinators who gave me the opportunity to realise this STSM. My thanks are also to all people who helped me during the elaboration of my analytical framework and accorded me interviews: Laurence Amblard, Mehdi Arrignon, Olivier Aznar, Virginie Bariteaux, Marie Houdart, Sylvie Lardon, Salma Loudiyi, Françoise Jarrige, Serge Bonnefoy and Joëlle Salomon Cavin.

To all I address my special thanks and wish to share future collaboration and personal exchanges.

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This publication is supported by COST



ESF provides the COST Office through an EC contract



COST is supported by the EU RTD Framework programme

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Purpose of the STSM

This STSM aimed to share and develop knowledge about analysis of urban agriculture governance processes in Europe, especially an analytical framework adapted to Switzerland. Indeed, the purpose was to propose an analytical framework of urban agriculture governance in Switzerland based on the work done during the COST UAE action Working Group 2, especially the article from Prové et al. (2015) and the work in progress of my PhD on urban agriculture in Switzerland. During this STSM, I developed a new analytical framework based on the one of Prové et al. and on the article of Lauger (2010).

The focus was on governance processes that impact on urban farming as defined in the COST UAE WG1 and the public policies influencing urban farming, especially agricultural policy and urban planning. Governance processes and public policies are so different between urban gardening and urban farming that it was decided to focus specifically on the second category.

The objectives of this STSM were to:

- Learn about territorial governance analysis methodologies and apply them to urban agriculture governance analysis;
- Elaborate an analytical framework of urban agriculture territorial governance;
- Adapt this analytical framework to Switzerland case studies and discuss it with the collaboration of specialists of governance analysis in Clermont-Ferrand (UMR Métafort).

Description of the work carried out during the STSM

Before the STSM, I draw a literature review on governance and territorial governance. Indeed, the main work before STSM was to sketch an analytical grid on urban agriculture governance based mainly on French literature (Faure, Vodoz and Thévoz, 2013. Loudiyi, 2008. Lardon et al., 2014) but also on Anglo-Saxon literature on governance (Pahl-Wostl, 2009. Tollefson et al., 2012).

Before STSM, the objectives were to:

- Explore bibliographical resources about territorial governance;
- Elaborate a first analytical grid based on the existing literature (including work developed in WG2 by Prové et al., 2015).

During the STSM, the main objective was to share knowledge with researchers of UMR Métafort (Specialised in mutation activities of spaces and forms of organisation in the rural territories), especially with researchers from the VetAgro Sup institute and from the centre AgroParisTech of Clermont-Ferrand (which is specialised in Research on sustainable planning and development of territories).

The first week, a workshop was organised to present the pre-established analytical framework and the selected case-studies from Geneva. The objective was to present and adapt the analytical framework of UA governance in regards to the returns of the different specialist. Specialists present at this seminar were:

- Laurence Amblard, IRSTEA, economist;
- Mehdi Arrignon, AgroParisTech, politist ;
- Olivier Aznar, VetAgro Sup, economist ;
- Virginie Bariteaux, VetAgro Sup, economist.
- Marie Houdart, IRSTEA, geographer;
- Sylvie Lardon, AgroParisTech, geographer;
- Salma Loudiyi, VetAgro Sup, geographer;

After this workshop, I worked to adapt and enrich this analytical framework according to the results of the workshop and a series of interviews with specialists of governance analysis. I presented a new version at the end of my stay in Clermont-Ferrand to Joëlle Salomon Cavin (Unil), Serge Bonnefoy (Terres en Villes), Salma Loudiyi (VetAgro Sup) and Françoise Jarrige (Montpellier SupAgro). A shortened version of this work is presented in the following document.

Developing a methodology to analyse governance of urban agriculture in Switzerland

Introduction

Urban agriculture is a concept and an emerging field in Switzerland, whether in academia, in public policies and in civil society. The definition of urban agriculture can vary greatly depending on the people and places where it is mobilised. In France, the first authors to mobilise the term urban agriculture are André Fleury and Pierre Donadieu. They define urban agriculture as agriculture that has reciprocal functional relations with the city (Donadieu and Fleury, 1997, p. 1). In other words, to use a more recent article on the subject, "*it is the agriculture functionality towards the city that could define its urban character. Among the various types of agriculture that make up the city, we can imagine that some would be 'more' or 'less' urban on the basis of their features, their spatial position or even of these two dimensions of urbanity.*" (Translated from: Nahmias and Caro, 2012, p. 5).

Thus, in a broad definition, urban agriculture encompasses urban and periurban agriculture, even rural, and includes both locations and functionalities of agriculture: from community gardens to traditional farms, passing by vertical farming projects or urban farms or agro-urban parks. This definition allows researchers to include all the typologies of this (these) new(s) form(s) of agriculture (from amateur gardening to professional agriculture).

In Europe, and more locally in Switzerland, public policies and planners are accorded more and more importance to agriculture in the development of cities and agglomerations. The term "governance" is increasingly used by researchers and public policies, especially when it comes to addressing some territorial issues such as cities and agglomerations. Moreover, it is becoming increasingly common to integrate and involve the agricultural world in the planning steps and urban projects.

Governance takes many definitions, more or less distant, applied to a variety of contexts (Stocker, 1998. Faure, Vodoz, Thévoz, 2013, p. 6.). Two major theoretical interpretations developed by two disciples exist: the economic perspective of governance and the political sciences perspective. A consensus, however, is the fact that governance "*refers to the development of governing styles in which boundaries between and within public and private sectors have been blurred.*" (Stocker, 1998, p. 17). From an analytical point of view: "*The value of governance perspective rests in its capacity to provide a framework for understanding changing processes of governing.*" (Stocker, 1998, p. 18). It is in this perspective that I will mobilise an analysis of territorial governance of urban agriculture in order to understand the agricultural integration processes in the urban fabric.

Governance (see Box governance), as understood in this work and in most analyses of governance, is not limited to the sphere of government and public policies, but also includes private actors, civil society, market stakeholders and their interactions (cf. Rhodes triangle). Thus, new modes of governance arise and blur public/private boundaries, state/market boundaries (Tollefson et al., 2012). Many authors noted that the State can no longer govern alone in areas such as the environment or resource management (Tollefson et al., 2012) and that "*It has also become evident that many problems are not primarily associated with the resource base but have to be attributed to governance failure.*" (Pahl-Wostl, 2009, p. 354). It is easy to hypothesise that the situation is the same in terms of integration problems of agriculture in the development and territorial planning of cities and towns.

Indeed, the notion of governance presents a special interest for the analysis of territorial issues, for example the integration of agriculture into urban planning. In recent years, cities and agglomerations gained power in territorial dynamics in Switzerland (Boisseaux and Leresche, 2013, p. 51). These are increasingly important interlocutors of the Confederation. In other contexts, several studies have identified links between urbanisation and redefinition of functions associated with rural areas (Houdart et al., 2012): "*They are not simply productive and agricultural areas, they are the support of both residential, recreational and environmental functions*" (Translated from: Houdart et al., 2012, p. 36). This change follows the logic of the multifunctionality of agriculture began in the 90s in Europe and now seems increasingly integrated

within spatial planning through the recognition of new forms of agriculture. Indeed, agriculture is increasingly integrated into planning procedures for multiple functions it performs (Translated from: Houdart et al., 2012. Loudiyi, 2008). In addition, the role of the state in the agricultural sector has changed dramatically in recent years and this change seems to follow the logic of a transfer from government to governance.

In France, new instruments have been put in place to allow this integration of agriculture in territorial planning (SCOT, PAEN, ZAP, agri-urban projects). The objectives of limiting urban sprawl and densification are coupled with objectives of valorisation of open spaces (Houdart et al., 2012) and integration of agricultural economy. *"At the confluence of a generalised speech on the economic management of spaces and the plurality of functions assigned to agriculture, the role assigned to agriculture raises a set of questions about the modalities of governance of city-agriculture links."* (Translated from Houdart et al., 2012, p. 36). However, the limits of this integration have been repeatedly raised, including *"a more or less representative of agricultural stakeholders and their interests"* (Translated from Houdart et al., 2012, p. 36). The situation is the same in Switzerland, but the governance arrangements are much more local and specific, particularly in the Canton of Geneva or in the city of Zurich.

The analysis of governance dynamics that are taking place in cities in urban agriculture present a certain interest in this work. As noted by Loudiyi et al. (Translated from: Loudiyi et al., 2011, p. 2): *"The dissemination of principles of action related to the integration of a set of sectors (housing, urban planning, transport, agriculture, environment, etc.) and a group of actors from different backgrounds (politicians, state, professional representatives, associations, etc.) questions the governance arrangements around the construction of an urban project (Loudiyi, 2008) and particularly, the integration of agriculture (spaces, actors and activities) in these processes."* Furthermore, *"the recognition of the multifunctionality of agriculture and its integration into urban projects changes de facto the modalities of its governance"* (Translated from Loudiyi, Maury, Lardon, 2011, p. 3). Agriculture becoming a public good, new players are legitimate for its governance. In other words, agriculture is no longer the sole responsibility of agricultural policy, but is influenced by planning policies, public education, health, etc.

Urban agriculture involves very different actors, from different fields and levels (Prové et al., 2015) and having highly variable relationships. Planning issues and issues related to the practice of urban agriculture are more and more numerous and important. *"The multiplicity of actors and institutions involved, the diversity of their interests and their capabilities, as well as scales and perimeters of their actions create situations more and more complex."* (Translated from Vodoz et al., 2013, p. 5). The discrepancies between the functional territories and institutional territories are also increasingly problematic, hence the creation of new entities such as agglomerations to address broader issues.

Thus, from the perspective of analysing the territorial development issues of urban agriculture initiatives in Switzerland, it seems sensible to focus on territorial governance. Territorial governance *"fits quite clearly in a double parentage work on local and urban governance on one side, and the multi-level governance on the other."* (Translated from: Boisseaux and Leresche, 2013, p. 47).

For this analysis of the governance of urban agriculture in Switzerland, I decided to use the definition of Pasquier, Simoulin and Weisbein (2007):

- *"Territorial governance covers all situations of cooperation between public authorities, private operators, associations, project leaders and citizens who are not totally ordered by the hierarchy and which correspond to the construction, management or representation territories with those who live there and to the external environment."* (Translated from: Pasquier, Simoulin and Weisbein [dir.]. 2007. La gouvernance territoriale. Pratiques, discours et théories.)

Thus, as Lardon et al. precise: *"The study of this process is therefore related to the construction of arbitration and coordination between the different actors involved in the territorial debate, rather they are institutional, political, economic or social."* (Translated from: Lardon et al., 2014).

Governance

The term governance arrived in Europe and Switzerland in the 90s or early 2000s (Faure, Vodoz, Thévoz, 2013) in response to a hierarchical state functioning. It is becoming increasingly used both by scientists and public policies, but this term can refer to very different models. Governance can be formal or informal, top-down or bottom-up, territorial or sectorial, etc. It then declines in multiple entries: adaptive governance, urban governance, local governance, territorial governance, mono-centric governance, multilevel governance, etc.

Indeed, a relatively consensual conception is the recent distinction between government and governance. In the 60s, the traditional use of the term government was synonymous with government (Stocker, 1998). The sliding from government to governance is illustrated by a rise in importance of civil society, whereas previously regulation was assured by the pair State-Market: *"This is not only to add civil society to the pair State-Market but to redefine their roles in a world where their respective spheres of intervention become porous while governance focuses more on horizontality than verticality."* (Lévesque, 2004).

Thus, the term governance is developed in opposition to the notion of government, which refers to the formal institutions of the state, *"and their monopoly of legitimate coercive power."* (Stocker, 1998, p. 17). This term also questions the role of the State in public action. The outputs of governance are not different from those of the government, but it is the process that differs (Stocker, 1998). *"Public action is based on a frame of reference drawn from the new governance models (Ferguson, 2008) which are in a paradigmatic rupture in the conduct of public policies."* (Translated from: Loudiyi, 2008, p. 38). Thus, new actors appear in the design of public policies and territories. These can then be integrated through different forms of consultation, ranging from simply gathering information to active involvement in the process of decision-making. (Loudiyi, 2008).

In the work led by Faure Vodoz Thévoz (2013), several definitions of governance and territorial governance are proposed, referring to the political meaning of governance:

Governance refers to *"the development of new modes of management or regulation, more flexible, going beyond the government framework and involving, in co-construction (of processes, values, norms) and in the decision making, several types of actors and stakeholders at various scales."*

Governance therefore refers to the political-institutional arrangements going beyond the traditional state structures (≠ traditional government) involves at least one public player (≠ corporate governance), and assumed real negotiations/cooperation (≠ management)." (Translated from: Faure, Vodoz and Thévoz, 2013, p. 6).

Research Questions

The method developed during the STSM aims to explore some central research questions of the analysis of urban agriculture's governance. In this paper, I will discuss an analytical framework of territorial governance of urban agriculture and thus to the power relations and interactions between public policies and stakeholders systems involved in the integration of agriculture in the territorial planning.

The main questions that guide my analysis of urban agriculture's governance in Switzerland are the following:

1. What (s) place (s) does urban agriculture have in public policies, especially in agricultural policy and land use planning?
2. What governance processes are being established to integrate these new types of agriculture?

The challenge will be to identify and study the governance structures and processes that are being established to integrate professional agriculture in territorial planning. It will then be to focus on the integration of agriculture in territorial planning and public policies that affect urban agriculture.

Towards a governance analytical framework...

To explore these research questions, I will use different analytical frameworks that allow me to specify the initiatives, to identify the actors and to characterise governance structures and processes of urban agriculture.

In this paper, I briefly introduce the main analytical frameworks mobilised. Finally, I will present an analytical framework for the governance of urban agriculture in Switzerland. The analysis frameworks used are the following, they will be presented in detail below:

- Continuum (Ejderian and Salomon Cavin, 2013) and typology of urban agriculture (COST UAE);
- A conceptual framework to analyse Urban Agriculture Governance Processes (Prové et al., 2015)
- Emerging change and Transactional Analysis (Laugeri, 2010).

For further analysis, I will also mobilise a specific analysis tool:

- The device chronicle (Chronique de dispositifs) (Paoli and Soulard, 2003).

Continuum and typology of urban agriculture

The first analytical framework mobilised is the continuum of urban agriculture (Ejderian and Salomon Cavin, 2013). It represents the diversity of urban farming initiatives and actors involved (urbanites and professional farmers), but also provides a first look into public policies involved in these initiatives. This continuum, as developed during the COST Urban Agriculture Europe action (Ejderian and Salomon Cavin, 2013. Giacché et al. 2015), may also have a second axis relative to the location of urban agriculture initiatives, according to a spatial gradient, from intra-urban to periurban. This second axis can be understood in two ways: in terms of zoning (in building area or agricultural zone), or in terms of distance from the centre (in the continuity of the dense build area or in periurban).

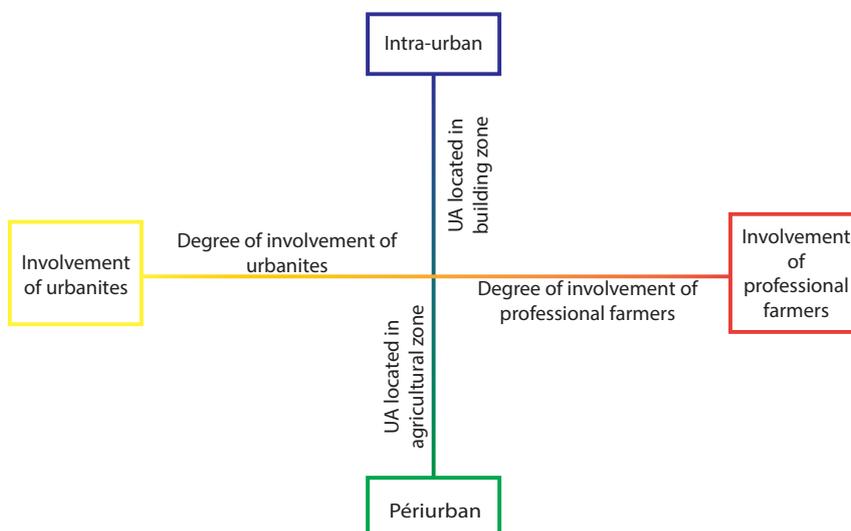


Figure 1: Continuum of urban agriculture initiatives

This second axis is very interesting in the context of an analysis by the spectre of territorial governance and public policies. In Switzerland, agricultural policy is concerned by agricultural zone and planning policy by building areas. Public policies impacting urban agriculture initiatives then depend on their location. Thus, initiatives located in the building zones are not governed by the same rules and does not concern the same actors and public policies than those located in the agricultural zone.

This continuum gave me tools to build a typology of urban agriculture initiatives based on the results developed by the COST action Urban Agriculture Europe.

This typology is based on the degree of involvement of urban and professional farmers and is divided into two main categories:

- Urban gardening that mobilises mostly urbanites and
- Urban agriculture that primarily mobilises professional farmers.

Of course, public policies that influence these two categories are very different. For example, urban gardening is not affected by agricultural policy. Thus, the analysis of governance in this work will focus on urban agriculture initiatives with a strong involvement of professional farmers and public policies that influence these initiatives, mainly agricultural policy and planning. The focus will be on the integration of agriculture and agricultural actors in the development of cities and especially in the territorial planning.

Involvement of urbanites \longleftrightarrow (Degree of connection) \longleftrightarrow Involvement of professional farmers 													
Urban gardening					Urban farming (agriculture adapted to urban proximity)					Non urban oriented farming			
Private garden	Allotment garden	Community garden	Social or educational garden	Vertical gardening / farming	Urban farms or agro-urban parc	ACP (cooperative) = CSA	Educational or leisure farms	Social farms	Local food farms			Conventional farming without adaptation to the urban environment (traditional sectors)	
									ACP = CSA	Direct selling	City market		Boxes
Mainly in building zone and affected by planning					Hybrid		Mainly in agricultural zone and affected by agricultural policy						

Figure 2: Typology of urban agriculture initiatives, adapted from COST UAE

A conceptual framework to analyse Urban Agriculture Governance Processes

Prové et al. (2015) identify a number of characteristics that influence the processes of governance of urban agriculture initiatives. Governance of urban agriculture initiatives is thus characterised by internal and external characteristics. The three levels of this framework (cf. fig 3), which include the main features of the governance of urban agriculture are:

1. **Urban context**, including the local geographic situation, economic and political situation, the agricultural context, the status of urban-rural relations, etc. ;
2. **External governance characteristics**, which include public policies that affect urban agriculture initiatives, partnerships, legitimization processes;
3. **Internal governance characteristics**, which include the project objectives, spatial scale, temporality, actors, resources (land, finance and knowledge mobilized in the project).

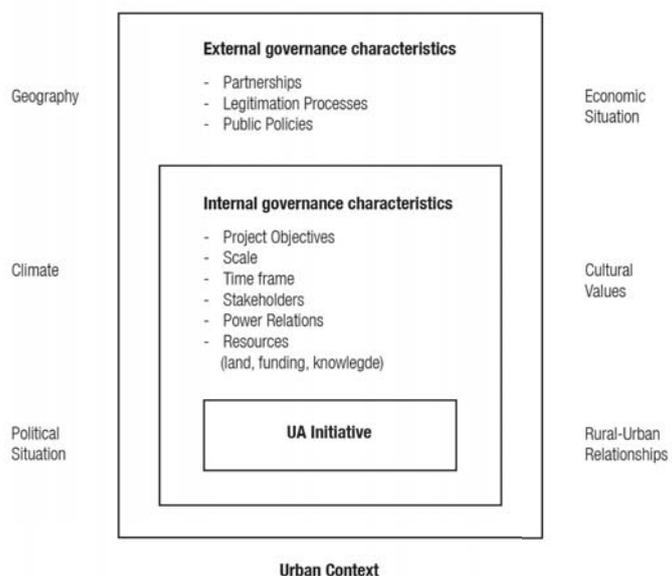


Figure 3: A conceptual framework for Urban Agriculture governance processes (Prové et al., 2015)

The authors insist that the elements of this model are interrelated and influence each other. These features would need to be considered simultaneously to fully capture the governance processes. However, the relationships between the external and internal features are not illustrated in this diagram. To do this, the emerging change theory and transactional analysis provide a tool for further analysis of governance dynamics.



Figure 4: Continuum of actors involved in the dynamic of UA initiatives.

This article also provides a typology of urban agriculture projects. Prové et al. identify four types of dynamics of urban agriculture projects:

1. Top-down planning initiatives, implemented and coordinated by the local or regional government;
2. Top-down initiatives including the market and civil society;
3. Bottom-up initiatives relied on public actors;
4. Bottom-up initiatives disconnected from public actors.

This typology of the dynamics of urban agriculture projects is very interesting and brings an extra dimension to the typology based on the continuum of involvement of urbanites and professional farmers. It includes public authorities stakeholders and their relationships with market and civil society stakeholders.

Emerging Change and Transactional Analysis

To complete this analytical framework and to fully integrate the dynamics and governance processes, particularly to illustrate the relationship between public policies and urban agriculture initiatives, it seems useful to adapt the article from Laugeri (2010) called "Emerging change and transactional analysis". This article is a synthesis of two complementary models: the social constructivist theory of Emerging Change (Gelinias and Fortin, 1983) and the organisational theory of Berne (2005). This framework is derived from psychology and "used in the Organisational field to help the actors understand the human process and structure the hierarchical dialogue." (Laugeri, 2010, p. 2). Three different levels of energy active in the organisation are distinguished:

- Planned change;
- Emerging change;
- Constructivism (in the case of the analysis of territorial governance, understood as governance processes).

The transposition of this model to UA can be a tool to identify and make the link between various partnerships that are taking place and to categorise relationships between internal and external governance characteristics previously identified (see Fig. 3, Prové et al., 2015). "Gelinias & Fortin emphasise a polarisation between two active energies in the organisational complex world. The first one, relating to the management of the Environment, is the planned energy and the other one, relating to the management of the Activity, is the emerging energy. A third energy: the Constructivism can be defined in the here and now, as the dynamic result of the dialogue between the first two energies and other elements in presence." (Laugeri, 2006, p. 3.). The stakeholders of emerging change are not fixed and may vary depending on the moment of the process studied. Emerging change components are often integrated, or even appropriated, by emerging change and become new regulatory frameworks.

A particularly interesting element of this analysis concerns the dysfunctions that come precisely from an imbalance in the dialogue between the planned change and emerging change. Two types of dysfunctions are revealed (Laugeri, 2010, p. 10):

- **Losing script 1** (chaotic emergence) in which "decisions and strategies are made without taking into account the demands, opportunities and constraints in the Environment" (Laugeri, 2010, p. 10)
- **Losing script 2** (tyrannical leadership), in which "decisions and strategies are

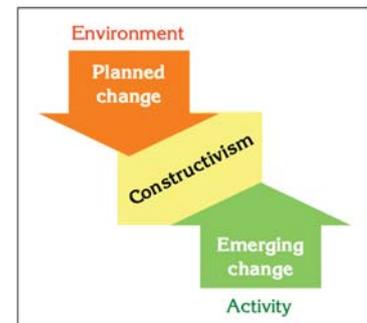


Figure 5: Types of organisational forces (Laugeri, 2010)

made without taking into account the demands, opportunities and constraints in the Activity" (Laugeri, 2010, p. 10).

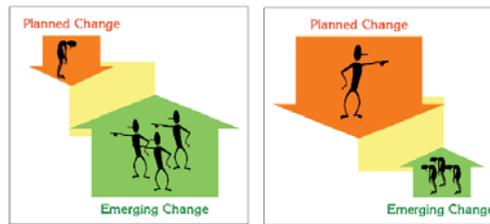


Figure 6: Losing script 1 and 2

It is possible to consider adapting and using this analytical framework to analyse governance processes of urban agriculture. Laugeri's model is used to represent and analyse certain situations and specific partnerships. It can also illustrate the processes of governance resulting from the confrontation of planned change and emerging change. In other words, it can be a tool to analyse relations between external and internal governance characteristics or the dynamic aspects of governance. A key issue in the analysis of governance is how planned change is adapting to emerging change, or how it appropriates these speeches.

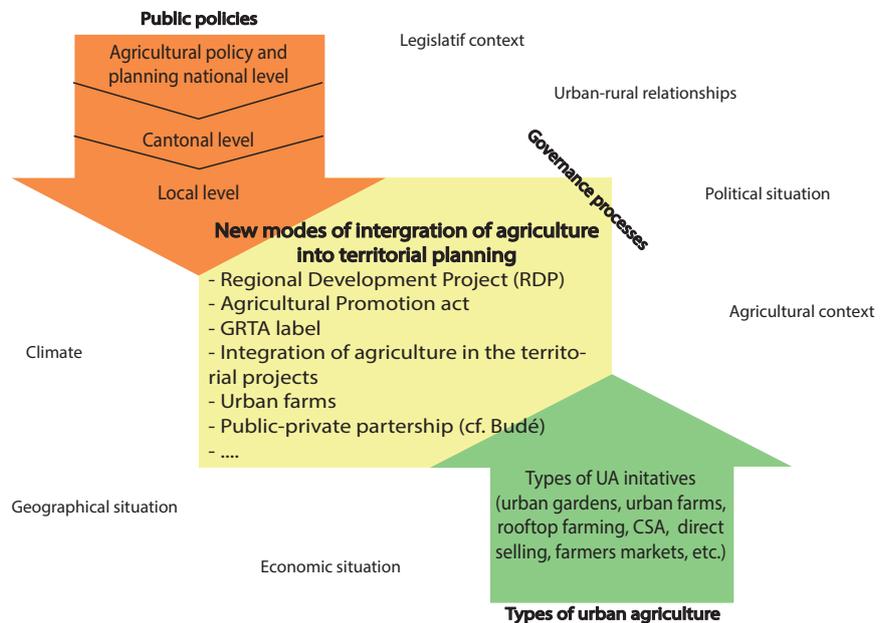


Figure 7: Analytical framework for governance processes of UA

As part of a transposition to the analysis of territorial governance (See Fig. 7), the planned change can be seen as the planning tools or strategies of public policies influenced by the environment, understood as the urban context. The emergent change could be seen as the different forms of adaptation of agriculture in urban areas. In other words, the vision contract or planned change can be seen as the sum of the goals of legislation and strategic documents, it represents the potential (positive or negative) that can represent the public policies for urban agriculture initiatives. In this context, three main types of partnerships can be distinguished:

- Unused potential (Losing script 1), which corresponds to a situation where tools are set up by public policies, but are not appropriate for those involved in urban agriculture;
- Glass ceiling (Losing script 2) or situations where initiatives are limited or illegal because of regulatory frames imposed by public authorities;
- Win-win, that represents a balance between the potential offered by the framework of public policies and the needs of urban agriculture initiatives' stakeholders.

The device chronicle (chronique de dispositif)

In line with this analytical framework, the device chronicle methodology will be a specific tool to deepen the study of certain urban agriculture initiatives and governance processes. It would be a tool to analyse governance processes that result from interactions between planned change initiated by public policies and new forms of agriculture that take place nearby cities. It will allow me to analyse the partnerships that are formed between these two energies.

Indeed, device chronicle is another very interesting tool to deepen the analysis of specific projects of governance process and governance processes. It was formalised by Paoli and Soulard (2003).

The method of device chronicle involves identifying and ordering a serie of elements to understand the event, actors, actions and controversies that came into the project design. The next step is to draw a sequence of events that will highlight the key moments of the project design. This method will help to deepen the genesis of certain initiatives and to identify the main elements of context, actors, actions and controversies that have participated in the creation or not of a project. These elements are formalised through a synoptic table with four sections:

- **Context** or external events that affect the device.
- **Actors** (individual and/or collective) present in the device. It is, of course, essential to specify when the actors are present in the device, but also those absent from the device.
- **Actions** engendered by the device (e.g. Letters, meetings, projects, contracts, etc.). This is to identify actions and to discriminate different types of actions generated by the device.
- **Controversies** or what is the problem and what is mobilised by the stakeholders.

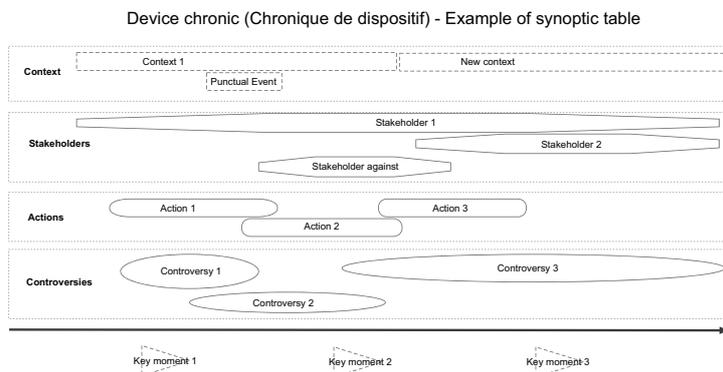


Figure 8: Device chronic, example of summary table

The synoptic table (cf. Figure 8), developed on the basis of these four elements, identifies key moments that have a structuring effect on the future of the device. " *It is necessary to understand how are articulated a 'before' and 'after', what are the breaks, what are the stabilising elements involved, what resources are mobilised to maintain or reorient the device.*" (Translated from: Paoli and Soulard, 2003, p. 5).

This method could be used to analyse and compare either similar or different projects. For example, conception and emergence of specific types of urban agriculture (e.g. the development of CSA initiatives between case-studies or the conception of urban farms in Geneva and Zurich), the development of tools or governance processes.

This method was used to analyse several concrete cases. For example, for the analysis of allotments and community gardens in the context of Lisbon and Montpellier (Mousselin and Scheromm, 2015), or through the implementation of an agenda 21 for the analysis of publicising periurban agricultural spaces (Clément, 2012), or the PhD theses of Chloé Vitry (2014) or Brigitte Nougarets (2013), or more generally as a tool for the analysis of modes governance at work in suburban or rural areas (Soulard, 2014. Rey-Valette et al., 2011).

Case-studies and perspectives

I intend to use this framework to study types of initiatives identified previously, but also on specific modes of integration of agriculture in territorial planning. This chapter describes the case-studies to which I intend to apply this analytical framework. I will focus on forms of agriculture adapted to urban proximity (urban farming) and not on urban gardening because of the very broad implications that constitute this category in terms of territorial planning. Indeed, I am going to concentrate my analysis on certain types of urban farming present in Switzerland and specific governance processes that integrate agriculture into urban planning, which represent a special interest for analysis of governance:

- Urban farms or agro-urban parks;
- CSA initiatives;
- Local food farms;
- GRTA label;
- regional development project (RDP);
- Or the service Grün Stadt Zürich.

Urban farms or agro-urban parks

The term “urban farm” or “agro-urban parks”, as defined in this work, refers to intra-urban farms incorporated into public policies, particularly in public spaces management policy. These farms are managed by professionals, located in the dense built-up areas, where the land is a public property and considered, even affected (building zone), as a public space (park) with public access. In other words, this is a public space (park) which becomes agricultural. But, an urban farm may also, in the definition used for this work, be an agricultural area that becomes public, as it is the case of urban farms in Zurich or some agglomeration parks in Lausanne.

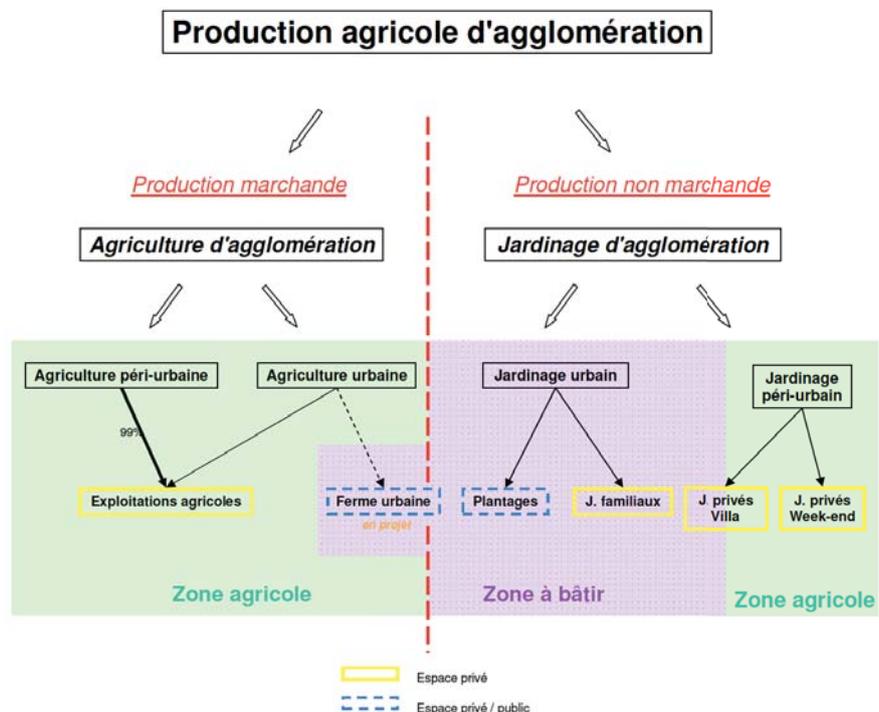


Figure 9: Geneva's lexicon, agricultural production from agglomeration (Ansaldi and Wegmuller, 2013)

In Switzerland, this term and these derivatives (“agro-urban park”, “park agricultural, recreational and cultural”, “Städtische Bauernhof”), is increasingly mobilised in the political agenda of policymakers and appears as a new management tool of public spaces, less costly for public authorities. This concept is associated with a wide range of agricultural forms, ranging from a few acres of crops in a public park (e.g. Budé farm or agro-urban park project Bernex) to large agricultural areas within settlements, open to the public (e.g. Juchhof or Döltschihof in Zurich or Rovéréaz in Lausanne).

This form corresponds to the strict definition of urban agriculture proposed by the service of agriculture of Geneva. The diagram below (cf. figure 9) illustrates this definition.

In Geneva, an urban farm is defined as *"an area of food production and green space partly accessible to public. It is managed by one or more farmers who derive income from the development of this area through the sale of agricultural products and providing services to residents."* (Translated from : Direction générale de l'agriculture, 2012, p.1).

Two examples exist in Geneva: Budé farm and agro-urban park Bernex.

Budé Farm is a little farm situated in the centre of Geneva's agglomeration. This farm has been transformed by the thrust of the city over the countryside. The farm originally belonged to the family De Budé, who yielded it to the canton of Geneva and a promoter in 1952. Since then, the principal activities have been selling agricultural products and food production. It is both a public space and a productive space with crops and a marketplace. A high school and other buildings surround the farm. This situation at the centre of the city makes this project very particular and gives it the specific function of linking the city and countryside. It is a good example of cohabitation between residential neighbourhoods and farming. The land belongs to the canton of Geneva and is situated on a public park. The cultivated surface is only about 0.5 hectares, so the major part of the farm's income, about 90 per cent, comes from the direct sale of agricultural products from the Geneva area. Farmers organise a market, open three days a week, in an old barn on the Budé farm. Products (mainly vegetables, but also meat, fish, cheese, bread, etc.) from the Geneva region, the Lake Geneva area, and organic farming are preferred, but foreign products are also sold. The canton of Geneva is currently involved in a strategy to transform the public space around the farm in order to diversify and enhance its agricultural production. It is an example of a bottom-up initiative that is now supported by local and regional authorities.



Figure 10: Budé farm



Figure 11: Budé farm, source: <http://www.ferme-de-bude.ch>

Bernex agro-urban park is a project developed by the State of Geneva. It is situated in the middle of a new and important urban development on the outskirts of Geneva. Here, 150 hectares of agricultural areas will be used for urbanisation. Out of the three planned public spaces, one has been dedicated to agriculture. This urban agro-park project is conceived as a public space, assigned as a green area in the same way as traditional parks but with an agricultural vocation. This park is intended to be a “demonstration” farm with a few hectares of crops, a shop selling local agricultural products, and recreational areas for the public. The agro-park is the result of an urban planning competition organised by the canton of Geneva. It is an example of a top-down initiative initiated by the canton. The award-winning project, by Verzone Woods Architects, is called Fertile Park. The implementation of Geneva’s first agro-park is not yet certain; on the one hand, the whole Bernex development project is challenged by the federal government because of its impact on the agricultural zone; on the other hand, with the legal planning framework not being conceived to allow professional farming in constructible areas, very specific solutions for this type of Urban Agriculture project are still in discussion.



Figure 12: Agro-urban park Bernex, source: www.SITG.ch



Figure 13: Agro-urban park Bernex, source: www.SITG.ch

In Zurich, the service Grün Stadt Zürich (GSZ) manages and regulates urban farms (Städtische Bauernhof), understood as the farms property of the city of Zurich. Agricultural properties of the city of Zurich are a vast agricultural area in which the municipality promotes access to the population. The problem is therefore very different from one canton to another. In this case, it is the agricultural space that becomes public.

Analysis of urban farms will address a new form of management of public spaces or publicising agricultural areas (Clement, 2012) that is taking place in the Swiss cities. Two types of projects as presented by Prové et al. exist: top-down initiatives including civil society and bottom-up initiatives supported by public authorities. They then allow me to discuss these two types of dynamic and very different types of partnerships.

CSA Initiatives

CSA initiatives are emblematic examples of a reterritorialization of agriculture by contracting the relationship between farmers and consumers. They are defined in the charter of the Romande Federation CSA as follows: “*Contract farming proximity links, by a contract, consumers and one or more producer(s) from a defined region in order to supply food products. This contract defines the quality, quantity, mode of production, prices and delivery terms of the products.*” (Translated from: FRACP,

2007). The funding is supposed to be done in terms of production costs and not based on a predefined amount, then the quantities delivered vary from year to year depending on the production.

In Switzerland, these initiatives were born at first in western Switzerland, mainly in Geneva, before rapidly developing in recent years in western Switzerland, but also in eastern Switzerland. Many actors are involved in this process: initiatives associations (Romande Federation CSA, Regional Vertrag Landwirtschaft – RVL), farmers’ union (Uniterre), universities (hepia), Chamber of Agriculture (Agrigenève), certain political parties. I will focus part my analysis on this “new” form of agriculture and distribution, entrenched in western Switzerland, which is an important aspect of agriculture connected to the city. What is the place of these initiatives in the regional context? To what extent and how are they integrated into territorial governance?

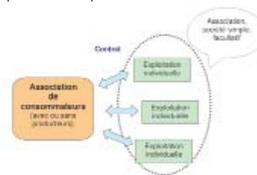
Three main types of CSA exist in Switzerland:

- Cooperatives;
- Associations;
- Individual initiatives.

In a cooperative, consumers are producers and producers are employees of the cooperative. Cooperators undertake to pay annual contributions, often through boxes of fruits and vegetables, to cover the cooperative operating costs. Thus, “Cooperators are involved in decision-making and different work of production and management.” (Porcher, 2010, p. 36). The cooperatives, by their status, cannot buy agricultural land or benefit from the support of the agricultural policy as direct payments. This is the reason why I consider this form as a hybrid one.

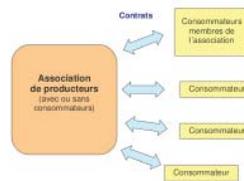


Operation of a cooperative CSA, source: <http://www.acpch.ch>



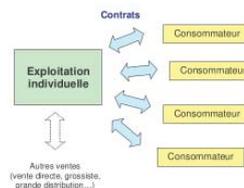
Operation of an association CSA, source: <http://www.acpch.ch>

The associations gather consumers and/or producers. The association organise the production and distribution of products from one or more farms. It can be an association of producers which contractualize the selling of their products to consumers, without consumer decision. Or it can be an association of consumers looking to bring together a panel of products from different farms of the region. Producers are often farmers benefiting from support of the agricultural policy and the turnover related to the CPA represents a small part of their turnover (Porcher, 2010, p. 37).



Operation of an association CSA, source: <http://www.acpch.ch>

The individual experiences appeared in continuity and in the inspiration of those previous forms. This is a farm that contractualizes the sale of these products in unorganized consumers. Along with associations, most of these farms benefit from support of agricultural policy and turnover related to the CSA represents a small part of their turnover. Most of these farms also sell directly.



Operation of an individual initiative CSA, source: <http://www.acpch.ch>

In the context of the metropolitan area of Geneva, both bottom-up and top down Urban Agriculture initiatives have emerged. The first and most famous bottom-up initiative is the cooperative “Les Jardins Cologne”, a Community Supported Agriculture (CSA) project created in 1978. Today, there are more than forty farms in the canton of Geneva involved in CSA initiatives.

This new form of agriculture has led to specific stakeholder networks, federated in Romandy through Romande Federation of CSA and in the German-speaking part of Switzerland by “regionale Vertragslandwirtschaft” (RVL). In Geneva, the members of these initiatives have managed to impulse new considerations in public policy. For example, these initiatives have led to the creation of the Law on the Promotion of the Geneva Agriculture (LPromAgr) and the label “Genève Region Terre Avenir” (GRTA). Hence the interest of an analysis by device chronicle of this label.

Local Food Farms

Local food farms, or conventional or traditional agriculture commercially adapted to urban proximity, is very present in Switzerland, partly because of the strong geographical proximity between cities and country. This form refers to farms, which have transformed their practices to meet urban demands especially in terms of distribution of products (direct sales, markets in town, farmers' markets, etc.). Some CSA also fit into this category. The stakeholders mainly involved in this kind of initiative are professional farmers, although consumers or urbanites are integrated in these projects.

This is the most common form of UA in Switzerland. In Switzerland, agglomerations identify 28% of farms, 30% of agricultural employment and 23% of agricultural land. Many of these farms are adapting to urban proximity and thus meet the demands of local produce in urban. These percentages demonstrate the challenge posed by this category for the sustainable development of cities and reterritorialization of agriculture.



Figure 14: "Chez mon fermier" mobile app, source: <http://www.grand-geneve.org>

In the canton of Geneva, half of the farms of the canton are involved in diversification processes such as direct selling, agritourism, etc. The mobile app "Chez mon fermier", which gather more than 500 farms practising direct selling or offering touristic services, is a good example. More than 200 farms, about half of the farms of the canton of Geneva, are involved in this network.

A Local Label

In the early 2000s, under the influence of CSA initiatives networks and with the support of a peasant syndicate (Uniterre), the canton of Geneva created a working group on "food sovereignty" that brought together various stakeholders, including farmers, consumers, syndicate, state officials, and chambers of agriculture. Following this working group, specific tools for agriculture in Geneva have been created, starting with the Law for the Promotion of Agriculture 2004. This law intends to promote healthy, diversified and quality production to safeguard the viability of rural areas, and to ensure food sovereignty. It also aims to develop links between the city and countryside in a perspective of greater proximity.

This law also allowed the creation of the regional label "Genève Région-Terre Avenir" (GRTA) in 2004 by the canton of Geneva. This label guarantees the quality of agricultural products, proximity, traceability, and fair working conditions.



Figure 15: GRTA label

These first two tools helped legitimise the agricultural integration approach in the urban strategies. Many top-down strategies, policies, and initiatives regarding Urban Agriculture – and especially urban farming – have been developed in the last ten years by the canton of Geneva. The cantonal Service for Agriculture, which is responsible for the implementation of agricultural policy at the cantonal level, is a major stakeholder in the defence and promotion of agriculture and urban farming in Geneva and the agglomeration. The objectives related to agriculture in planning are mainly contained in the "Agricultural Agglomeration Project". It has notably initiated the creation of urban farms and urban agricultural parks, which are conceived as a new kind of farming situated inside the urban area and, more specifically, in public parks.

Conclusion

This STSM was a very enriching experience, which helped me to develop an analytical framework of urban agriculture governance. Further investigations need to be carried out in order to apply this framework to the case-studies presented in this paper, and others, to better understand how new governance processes of urban agriculture are taking place in Switzerland. To do so, I will interview more farmers and start interviewing public policies stakeholders in Geneva and Zurich. This framework could also be tested in other countries than Switzerland in further studies. Anyway, I hope that the exploration of governance analysis presented in this paper will be useful for other studies.

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Confirmation by the host institution



Pascal Eynard
Directeur du centre de Clermont-Ferrand

à

Cyril Mumenthaler,
Doctorant à l'université de Lausanne,

Clermont-Ferrand, le 29 mai 2015

Monsieur,

Nous avons le plaisir de vous confirmer, par la présente, la possibilité de vous accueillir dans notre établissement, AgroParisTech, en son centre de Clermont-Ferrand, pour une mission STSM du COST Urban agriculture, du 19 au 30 octobre 2015.

Vous serez accueilli au sein de l'équipe Cfort (Construction des formes d'organisation territoriale) de l'UMR Métafort (AgroParisTech, Inra, Irstea, VetAgro Sup), qui a pour ambition de comprendre et d'accompagner les formes d'organisation territoriale dans les territoires ruraux et péri-urbains, dans une perspective de développement durable des territoires. Vos travaux sur les liens entre ville et agricultures durables font fortement écho à nos préoccupations de formaliser l'agriculture comme une ressource pour les territoires péri-urbains et de modéliser les configurations socio-spatiales des projets de territoire (intercommunalités, pays, PNR) pour accompagner les acteurs du changement. Nous serons très heureux d'échanger avec vous sur la gouvernance de l'agriculture urbaine.

Vous disposerez de l'infrastructure nécessaire pour travailler (bureau, ordinateur, documentation) au centre AgroParisTech de Clermont-Ferrand. Vous pourrez partager les réunions scientifiques et pédagogiques de l'UMR Métafort.

Dans l'attente de la confirmation de votre venue, recevez, Monsieur, nos salutations distinguées.





COST – the acronym for European **CO**operation 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.