

# Urban agriculture in Geneva

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## 1. General Context of urban agriculture (UA) in Geneva

Geneva is a very dense city surrounded by a relatively well preserved green belt. 43 % of the area of the Great Geneva is dedicated to agriculture (46 % of the area of the Canton of Geneva).

The main problem for UA is land pressure: How to urbanize the region with the smallest impact on agriculture (agricultural land, viability of the existing farms, enclosing of allotments)? How to manage the limits / borders between agricultural land and urbanized land? Agriculture has been protected until recent years, both as part of the Federal policy (subsidies, protection of agricultural land) and in the context of the Geneva urban region (protection of the green belt). This protection is significantly challenged due to the development needs of the city of Geneva. The farmlands on the edges of town are virtually the only ones available for the development of compact urbanization.

Agriculture begins to be strongly integrated in planning through the agglomeration project at different levels: urban planning, landscape management, biodiversity management, supply chain management etc.

Long experience in projects that facilitate the cohabitation of nature / landscape / leisure time interests and practices with farming.

## 2. Methodology

This section presents the working process we used to compile our informations on policies affecting UA in Geneva.

### 2.1. Reconceptualising the continuum of UA

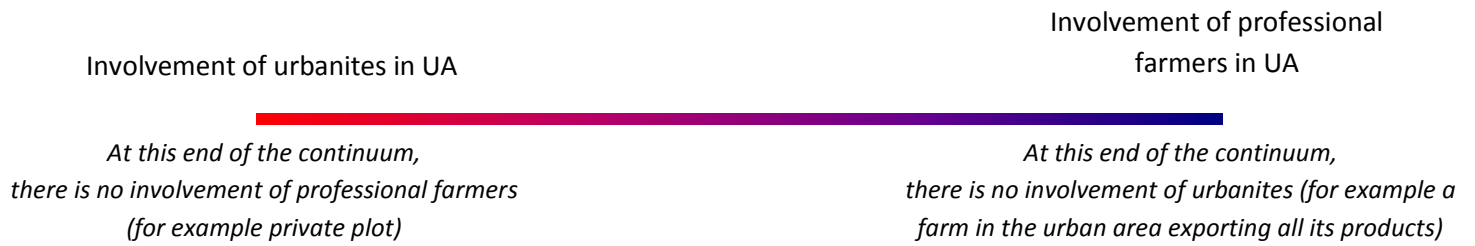
While strongly endorsing the idea of a continuum in order to grasp the diverse reality of urban agriculture in Europe, we found the terminology used to characterize each end problematic. In our view, the expression “agriculture by urbanites<sup>1</sup>” implies a focus on a category of actors, while the expression “agriculture in urbania” implies a focus on a spatial dimension of urban agriculture. We consider that by formulating the continuum in these terms we somehow lose sense of one central aspect of UA when moving in one way or the other on the continuum.

We thus decided to reconceptualise the continuum by focusing on the actors involved in urban agriculture. From a policy point of view, it seems that a relevant distinction can be made between the “urbanites involved in UA” and “professional farmers involved in UA”, as both categories might be targeted by different type of policies. For the urbanites, involvement in UA can range from farming for self-consumption (strong involvement) to deliberately choosing to buy local products (weaker involvement in UA). For professional farmers involvement can range from running a farm in an urban or periurban area to advising gardeners who run a community garden (fig. 1).

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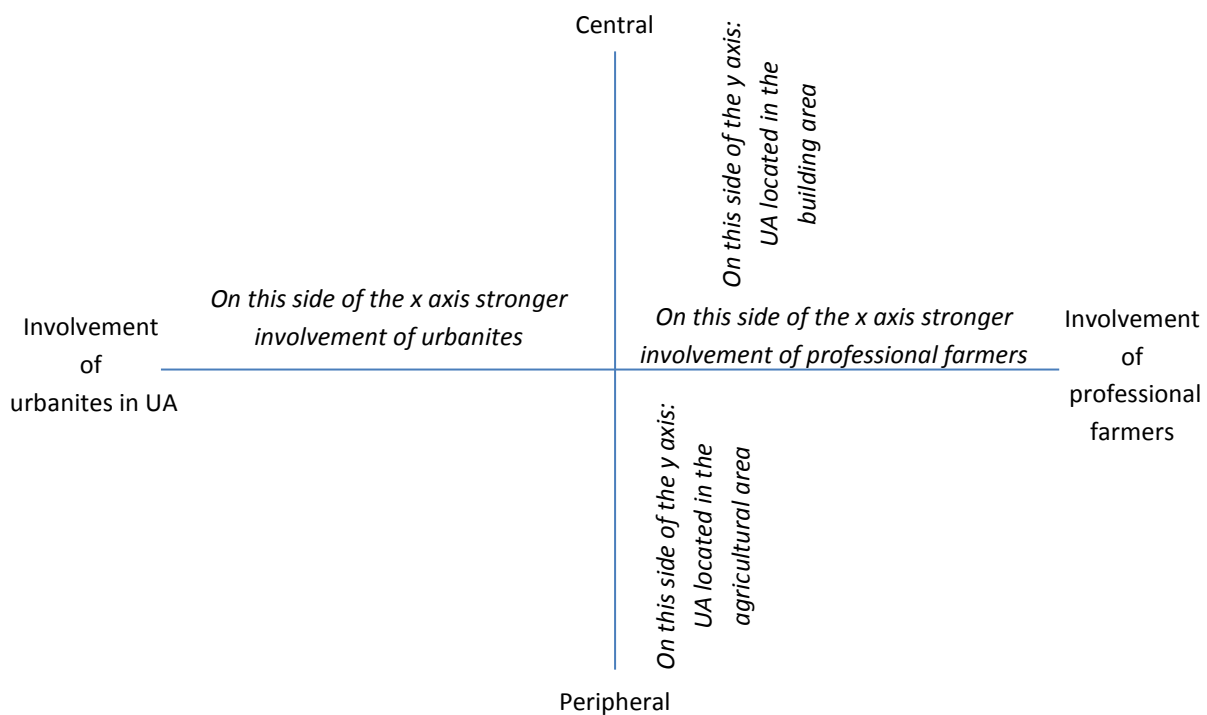
<sup>1</sup> We are not totally satisfied by this term, but are not sure at this point whether formulating the distinction as non-professional farmers/professional farmers or simply non-professional/professional is more suitable. One problem such a distinction would raise is where to situate the involvement of other professionals in UA (such as professional gardeners or landscape architects).

Figure 1: The continuum to UA types



The different types of UA experiences can be situated along this continuum. However, this representation somehow misses the spatial dimension of UA and mainly its locational aspect (in- or outside the city...). However we decided to represent this dimension by taking the definitional continuum as an x axis and adding a y axis that would characterize the centrality of UA with regard to the city center (see fig. 2).

Figure 2: UA characterized by type of actors and location in the urban agglomeration



For our case study, we decided the the middle of our y axis is defined by the distinction between “building area (zone à bâtir)” and “agricultural area (zone agricole)” that are two categories defined by the Federal planning law.

## 2.2. Overview of our interpretation grid

In order to conduct our survey of forms of UA in the canton of Geneva, we have made a table mentioning the items to survey. In this table, forms of UA are defined according to our revised continuum focusing on the involvement of urbanites and professional farmers. We filled one table for each municipality (see appendix for an example on the municipality of Meinier).

	Involvement of urbanites				Involvement of professional farmers		
Form of UA	Family gardening	Community gardening	Agro-parc	Community supported agriculture	« Vertical » gardening <sup>2</sup>	“Standard” agriculture oriented towards the local market	“Standard” agriculture oriented towards external markets
Concrete projects							
Legal norms/ guidelines/ policies							
Institutional level							
Public policy domain							
Type of actors involved							
Main issues							

## 3. Case studies

We have selected three types of municipalities in the Greater Geneva region in order to make our survey. We selected our three municipalities with an aim to obtain maximal variation within the forms of UA that can be observed. The municipalities are located on a theoretical transect from the densest center of the canton with very few agricultural areas (the city of Geneva) to the more peripheral and agricultural areas.

### 3.1. Municipality of Geneva

Geneva is the capital city of the Geneva canton. There is no agricultural areas in the city area. Thus UA is located in the built area on Brownfield lands that are made available by local authorities to community gardeners and on public spaces.

*Urban Farm* : “La ferme de Budé » There is only one farm in the city which is located on the public space. There is only ½ hectares that are cultivated. The activity of the farm is essentially a market selling bio products.

<sup>2</sup> This makes reference to all forms of UA developed in height: rooftop gardening, gardening on walls, vertical greenhouses, etc.

*Urban Gardenings* : “Les Plantages” known also under the name of “Potagers urbains” are a shape of leisure activities of proximity supervised by a municipal authority. In an initiative of collective reappropriation in urban zones abandoned or unused public places, shared gardens aim at improving the quality of life of the city-dwellers and at revitalizing the life of districts through the gardening. They carry common values of sharing, creativity, well-being and relaxation, in the respect for the land and for the environment.

*Family gardening*: The family gardens are defined as lots of plots of land given to gardeners so that they enjoy it for their leisure activities and cultivate them for the needs of their family, with the exception of any commercial use. The great majority of the family gardens are framed Genevan Federation of the Family Gardens, a non-profit organization.

### **3.2. Municipality of Plan-Les-Ouates and surroundings**

Plan-les-Ouates – Bernex – Confignon are municipalities situated on the direct outskirts of the city of Geneva. The built areas in these municipality are a direct continuation of the city of Geneva. Therefore, there are important urban development projects on these municipalities that threaten existing farms.

*Rooftop gardening* : the clock firm Rolex has implemented a garden on the roof of its building. Vegetables crops, herbs and fruits (grapes) are directly used in the menus of the cafeterias. The garden is also used for water management.

*Community supported agriculture*: les Jardins de Charroton is a truck-farming cooperative that delivers vegetable baskets to approximately 140 households a week. The customers are bound through an annual contract and pay in advance for the vegetables. Customers have to work for four ½ days a year on the farm.

*Family gardening* : les communaux de Perly-Certoux

*Local market agriculture* : Farm of Philippe Magnin. Truck farmer. Member of the Panier bernésien.

*Productive agriculture* : Jacquenoud Farm. This farm produces tomatoes in greenhouses. The Genevan agricultural area has an area specifically devoted for greenhouse farming. The tomatoes of this farm are sent all over Switzerland.

### **3.3. Municipality of Meinier**

Meinier is a municipality located in the so called green-belt of the Great Geneva Region. Its surface is 6.96 km<sup>2</sup> and it has about 1900 inhabitants. Because of its rural character, the presence of several significant wetlands and its proximity to the city center, some areas of Meinier are popular leisure areas for central urban inhabitants. In the Planning Master Plan of the Canton of Geneva, except the village of Meinier and a small industrial area, almost the whole surface of the municipality is located in non-building area. 80% of the municipality's surface is effectively devoted to agriculture.

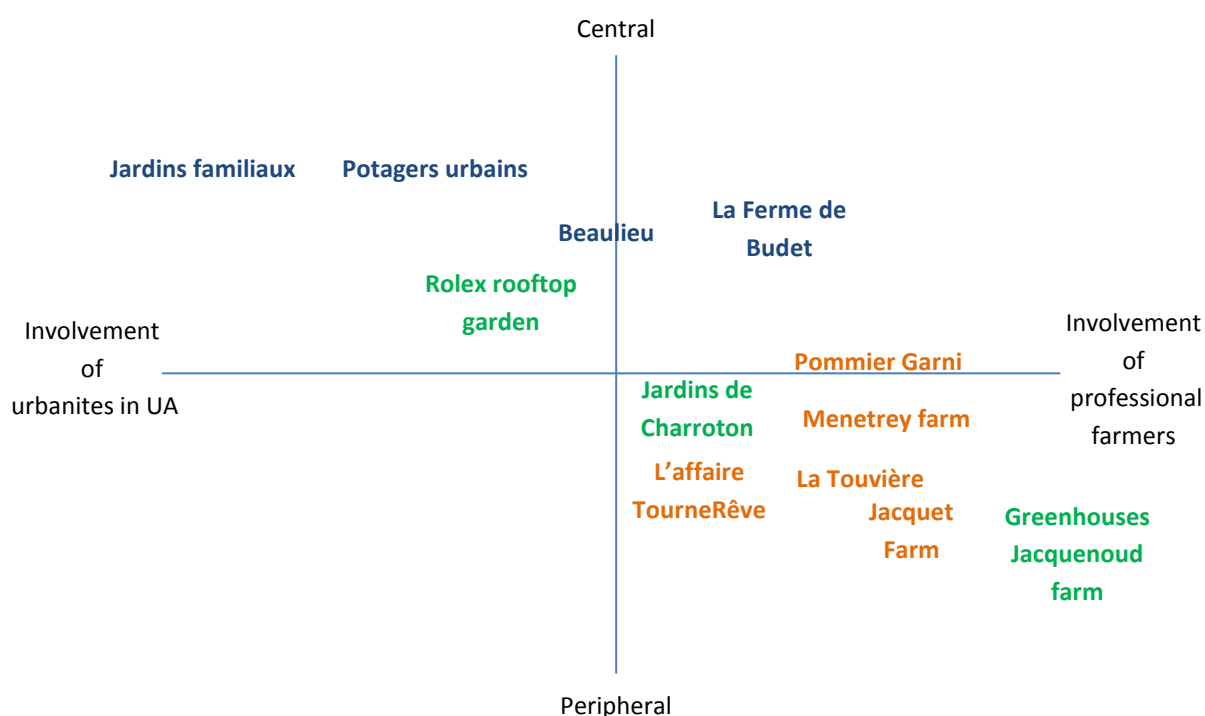
Like most other parts of the Canton, Meinier's population has been growing quickly in the past decades and there have been more demand for building housing in and around the village. Several hectares of agricultural land have been rezoned from agricultural area towards industrial area or

dedicated to environmental conservation and restoration projects. This has created some resentment among local farmers.

*Community supported agriculture:* There is a project called l’Affaire TourneRêve run by an association (NGO) composed of 13 producers and 8 representatives of consumers. It delivers long keeping agricultural products (produits de garde) such as beans, dry meat, cider, jams, flour, seeds, oil, etc. twice a year. Subscribers pay in advance for the year to come. The association delivers 1500 households. The main goals of the association are to recreate producer-consumers links, to support an agriculture that is not exclusively submitted to the laws of the market and to promote food sovereignty.

*Agriculture oriented towards the local market:* Generally it is difficult to evaluate the degree of orientation towards the external or internal market of the farms in the canton of Geneva, as most farms deliver their production to a cantonal cooperative that then sells it on external or internal market. However, several farmers, while still delivering a large part of their production to the cantonal cooperative, have developed parallel distribution circuits oriented to the local market, either by selling their products directly on the farm, or by selling to local restaurants or kindergardens. The spouse of a local farmer has also opened a store called *Le Pommier Garni* that sells mainly products of farmers located in or around Meinier.

Fig. 3: Localisation of the surveyed projects in the two dimensional graph



#### UA projects in Geneva

#### UA projects in Plan-les-Ouates and surroundings

#### UA projects in Meinier

Our sample of 3 municipalities, while having no pretention to exhaustively or statistical representativity nevertheless shows that there is a wide spectrum of forms of UA in the Canton of

Geneva. Most of the categories of UA mentioned in our continuum based definition of UA can be found in Geneva. Our survey of forms of UA shows that, within these three municipalities, the continuum of UA experiences ranked according to the degree of implication of urbanites in UA to the degree of implication of professional farmers, clearly goes along a continuum from the central municipality to the most distant one from the center (see fig. 3).

It is particularly interesting to note that in the municipality of Meinier, there is no UA experience in which the implication of urbanites is greater than the one of farmers. While this result is by no mean surprising, it raises the question of whether such a trend is specific to our sample or to the region of Geneva? And how then should such a trend be interpreted in policy terms: should urbanites also practice UA further away from the center, should there be more professional farming in the center? While this first step of our survey allows us to visualize this trend it provides us with very little clues for interpretation at this point.

#### **4. Most relevant laws and policies for UA**

This section lists the most important policies and norms that affect urban agriculture in the Canton of Geneva. There are no laws, policies or guidelines that are specifically mentioning urban agriculture at any institutional level. However several policies and norms affect urban agriculture in the canton of Geneva. These are all enacted by Federal and Cantonal laws and guidelines. There are no policies, laws or guidelines on U at the municipal level in the Canton of Geneva. The most often involved policy sectors are: agricultural policy, planning policy and environmental policy. This explains why although some other policy sectors are mentioned in the survey, there are not listed here as they are only anecdotally linked to UA in the case of Geneva<sup>3</sup>.

##### **4.1. Agricultural sector**

In Switzerland the agricultural policy is elaborated at the Federal level. The government develops goals and instruments that are approved by the parliament<sup>4</sup>. The Cantons are then in charge of implementing the Federal agricultural policy. In some Cantons this task might be delegated to the municipalities or conducted jointly by the municipalities and the Cantonal administration. In Geneva the implementation of the agricultural policy is exclusively the task of the Canton. There are therefore no agricultural policies or laws at municipal level. Some Cantons might have further agricultural policy goals than the Federal state's and develop instruments that go beyond the Federal goals as it is the case in Geneva.

At the Cantonal level, Geneva's agricultural policy is developed beyond the Federal requirements. The Canton has introduced additional subsidies for ecological services provided by agricultural

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<sup>3</sup> For instance, there is a classical music festival organized every second year on the Domaine de la Touvière farm in Meinier that receives subsidies from the Cantonal department of culture.

<sup>4</sup> It is important to note that the Federal agricultural policy is currently undergoing major revision. The changes are currently debated in the Parliament and the law enacting the new policy for the period 2014-2017 should be voted very soon. Several changes in this policy might have consequences for urban agriculture, especially a new tool subsidizing the contribution of productive agricultural land to landscape quality. Agricultural areas in and around urban agglomeration are one of the target areas of this tool. Another relevant change might be the reference to food sovereignty in the Federal law for agriculture.

activities. Another Genevan specific law, is the law to promote local agriculture. In addition, the Canton has created the label Genève Terre Avenir which certifies local food products. The state of Geneva owns and manages the label. The Canton of Geneva is trying to develop a specific policy on UA. However it might be labeled “agriculture d’agglomération” rather than “agriculture urbain”, as according to Cantonal officers, the label UA seems less accepted by local farmers. The Cantonal department of agriculture is currently developing a glossary of “agriculture d’agglomération” and looking for solutions allowing young farmers to acquire land in or nearby the urban area. The cantonal government also supports initiatives, such as community supported agriculture, that improve the relationship between local farmers and urban dwellers.

	<b>Agricultural laws and policies</b>
<b>Federal laws and policies</b>	<ul style="list-style-type: none"> <li>- Federal agricultural law</li> <li>- Federal agricultural policy 2007-2013</li> <li>- Law on agricultural properties</li> <li>- Federal act on agricultural leases</li> <li>- Federal Act on Foodstuffs and Utility Articles</li> <li>- Direct Subsidies Ordinance</li> <li>- Environmental Quality Ordinance</li> <li>- Ordinance on the Evaluation of Sustainability in Agriculture</li> </ul>
<b>Cantonal laws and policy</b>	<ul style="list-style-type: none"> <li>- All Cantonal implementation laws and guidelines of the above mentioned Federal legal norms</li> <li>- Cantonal law to further the implementation, the protection and maintenance of ecological compensation areas (<i>Loi cantonale visant à encourager l’implantation, la sauvegarde et l’entretien des surfaces de compensations écologiques</i>)</li> <li>- Cantonal law on the promotion of agriculture (<i>Loi cantonale sur la promotion de l’agriculture</i>)</li> <li>- Label Genève Terre Avenir</li> </ul>

## 4.2. Planning sector

Planning is also a policy sector for which goals and requirements are formulated at the Federal level. The planning policy strongly influences urban agriculture in Geneva in that it sets “building areas” and “agricultural areas” that are relatively stable. It is for instance forbidden to construct buildings for housing in agricultural areas. Changing the affection of an area requires usually a long negotiation process. This explains the relatively big proportion of agricultural land in the Canton of Geneva and the preservation of its green belt despite the very strong demand for more housing. These areas are fixed in the Cantonal master plan.

One of the main goals of the cantonal planning policy in Geneva is to develop an agglomeration program allowing to take planning measures that extend beyond the cantonal border in neighboring France and in the Canton Vaud. Agriculture is one of the strategic objectives of this program in Geneva. In other similar projects in Switzerland, agriculture is never addressed directly. It is integrated into the category of nature and landscape but not considered in its economic dimension. As part of the « projet d’agglomération » two main objectives are related to agriculture. The first is to enhance and promote the products of local agriculture and the second to preserve and enhance agricultural areas.

	<b>Planning laws and policies</b>
<b>Federal laws and policies</b>	<ul style="list-style-type: none"> <li>- Federal law on regional planning (LAT)</li> <li>- Federal policy for the metropolitan areas</li> </ul>
<b>Cantonal laws and policy</b>	<ul style="list-style-type: none"> <li>- Cantonal law on regional planning (Implementation law of the LAT)</li> <li>- Cantonal master plan</li> <li>- Agglomeration programme (Projet d'agglomération franco-valdo-genevois)</li> </ul>

#### 4.3. Environmental sector

Environmental laws and policies also affect UA in the Canton of Geneva. The main reason is that in an urban setting, the ecological, environmental and landscape services provided by agriculture are all the more valued.

There are no environmental policies targeted specifically at UA or agriculture in general. However, the departments in charge of environmental issues shape some of the policies and norms in the agricultural sectors. Especially environmental criterias in the Federal Direct Subsidies Ordinance and in the Cantonal law to further the implementation, the protection and maintenance of ecological compensation areas are established by respectively the Federal and Cantonal Departments in charge of environmental policies. Beside this intervening in agricultural policy, some environmental legislation at the Federal and Cantonal level also mention the need for specific actions in agricultural areas.

	<b>Environmental laws and policies</b>
<b>Federal laws and policies</b>	<ul style="list-style-type: none"> <li>- Ordinance on the Protection of Nature and Cultural Heritage</li> </ul>
<b>Cantonal laws and policy</b>	<ul style="list-style-type: none"> <li>- Law on biodiversity</li> </ul>



## Appendixes

### 5.1. Municipality of Geneva

Types d'agriculture	Family gardening	Community gardening	Agro parc in the city	ACP	local market agriculture (circuit court ou consommation locale ?).	Productive agriculture	Roof top gardening (others)
Cas concrets	Jardins familiaux	Potagers urbains	-	-	Ferme de Budé		
Acteurs	privés	Concepteurs : commune (équipement, gestion) Mandataires : Associations (Equiterre), Utilisateurs : Familles	-	-	Agriculteurs	-	-
Domaine de politique publique	Aménagement,	Service techniques de la commune	-	-	agriculture	-	-
Niveau institutionnel		commune					

### 5.2. Municipalities of Bernex-Confignon- Plan les ouates

Types d'agriculture	Family gardening	Community gardening	Agro parc in the city	ACP	local market agriculture (circuit court)	Productive agriculture (circuit long)	Roof top gardening (others)
Cas concrets	Les communaux de Perly Certoux		-	Jardins de Charrotons Confignon.	Philippe Magnin	Jacquenoud	Rolex (vignes, plantes aromatiques, lavande) Gestion des eaux.
Acteurs	Fédération genevoises des jardins familiaux + association		-	agriculteur	Agriculteur	agriculteur	Privés

	particulière Propriétaire ?						
Domaine de politique publique	Compétence : Aménagement du territoire (zonage spécifique : zone des jardins familiaux)		-	Agriculture /aménagement du territoire /environnement	agriculture	Agriculture	Droit de la construction (LCI : loi sur les constructions )
Niveau institutionnel	Canton			Confédération Pour subvention et crldi/constr uctions /pour le foncier (LDFR) Et toutes les applicati ons cantonales.	Confédération Canton vient en appui (credits d'investisse ment)	Confédération Canton vient en appui (credits d'investisse ment).	canton

### 5.3. Municipality of Meinier

	Implication of « local urban population »				Implication of « professional farmers »		
Types d'UA	Family gardening (potagers familiaux)	Community gardening	Vertical gardening	Agro-parc	Community supported Agriculture	Local market	Agriculture principally oriented towards external market
Cas concrets	?	X	X	X	Affaire TourneRêve	- Domaine de la Touvière. Exploitation de 30Ha, récemment reconvertie en Bio. Produit des céréales (blé, épautre, orge, millet), Colza, tournesol, fruits. Les vergers et les vignes sont en biodynamie.	Tous les producteurs (via la coopérative)

						<p>Une partie des parcelles sont mises à disposition de la nature (surface de compensations, espace cours d'eau...). LE domaine organise 2 fois par an le festival de musique classique de la Touvière (Festival Amadeus)</p> <p>La part importante de la production est envoyée à la coopérative. Une autre est distribuée via l'Affaire TourneRêve.</p> <p>L'exploitation livre des crèches magasins bio et restaurants à Genève.</p> <p>Un peu de vente directe sur la ferme.</p> <p>- Ferme Jaquet</p> <p>Exploitation produisant essentiellement du maïs et de l'élevage bovin,</p> <p>Le maïs est écoulé via la coopérative, transformé sur place (bovins) et distribué par l'affaire tournerêve (maïs pour</p>	
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						<p>pop-porn). La viande est écoulee principalement par vente directe, l'affaire TourneRêve et auprès de restaurateurs locaux.</p> <p>- Ferme Menetrey/Le Pommier Garni Production de fruits, vergers. Production de cidre. Pommier Garni : magasin tenu par l'épouse. Vente de produits de la région (étendue).</p>	
<b>Texte/norme</b>					<ul style="list-style-type: none"> <li>- Loi sur les associations</li> <li>- Loi sur l'agriculture</li> <li>- Loi sur le droit foncier rural</li> <li>-Loi sur le bail à ferme, - Loi fédérale sur les denrées alimentaires</li> <li>- Ordonnance sur les paiements directs (encadrant les prestations écologiques requises) ;</li> <li>- Lois et règlements cantonaux d'application</li> </ul>	<ul style="list-style-type: none"> <li>- Loi sur l'agriculture</li> <li>- Loi sur le droit foncier rural</li> <li>-Loi sur le bail à ferme, - Loi fédérale sur les denrées alimentaires</li> <li>- Ordonnance sur les paiements directs (encadrant les prestations écologiques requises) ;</li> <li>- Lois et règlements cantonaux d'application des textes fédéraux</li> </ul>	

					des textes fédéraux - Loi cantonale visant à encourager l'implantation, la sauvegarde et l'entretien des surfaces de compensation s écologiques ; - Loi cantonale sur la promotion de l'agriculture, - Norme BioSuisse (pour certains producteurs)	- Loi cantonale visant à encourager l'implantation, la sauvegarde et l'entretien des surfaces de compensation s écologiques ; - Loi cantonale sur la promotion de l'agriculture, - Norme BioSuisse (pour certains producteurs) Label Genève Terre Avenir.	
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