A Comparison of Urban Agriculture and Short Food Chains in Paris and Tunis

In general, the distance between producers and consumers is relatively short in urban agriculture. A comparative analysis between Paris and Tunis revealed significant differences in the economic, social and environmental impacts of these short value chains. The agro-climatic context, the social and spatial organisation of the city, and the nature of the distribution chains all influence the sustainability of urban agricultural projects and should be taken into account in their development.

Short distances
The concept of “food-miles” was introduced by British researchers in the early 1990s, as an indicator to measure the environmental impact of different distribution chains. The idea is simple: the more miles food travels between its place of production and consumption, the more it contributes to exhausting fossil fuels and polluting the planet. However, this simple idea has started to be questioned in a number of studies (e.g. Perez-Zapico, 2008), which have found that “the logistical organization of distributing produce in bulk/larger volumes appears to be an important element in reducing energy cost”. This means that marketing products through large-scale distribution channels, even when imported, may be more energy efficient than promoting short food chains.

Moreover, several studies conducted in the United States and Europe show that the energy cost of food depends much more on the way it is produced than on its transport, especially when transport is organised in an efficient way. (These studies do however question the subsidised (energy) costs of transport). Another example is given by DEFRA (2008), which showed that tomatoes produced in the London area have much higher environmental costs than those produced in Spain and transported to London — because of the energy requirements of producing this crop in the London climate. Minimising the environmental impact of agricultural production thus also means choosing the crops best suited to the agro-climatic conditions in the place of production. In the words of the German researcher Elmar Schlich (2006), “the ecology of scale joins the economy of scale”.

So, local food is not always a (more) sustainable solution. This is especially so for Northern cities, where climatic and soil conditions are less suitable for growing fruit and vegetables — the products that are in principle best suited for short food chains. For these cities, the notion of local production must be extended to several hundreds of kilometres if it is to better respond to achieving the optimal environmental impact desired.

But what is true for Northern Europe is not true for all regions of the world. The notion of “locavores” (people who prefer to eat local food) is becoming more and more fashionable in Paris, where local vegetable production and fruit cultivation is almost entirely maintained with support of the community (Community-Supported Agriculture). On the other hand, in Tunis, urban agriculture is increasingly threatened by urban expansion, while its real utility is not fully understood by its citizens and local governments. This form of agriculture, dominated by vegetable and fruit production (and unlike production around Paris), does not need any community support to be economically viable. Furthermore, its environmental balance, on first analysis, seems to be significantly more positive in respect of its ecological footprint than that of urban agriculture in periurban Paris.

To use the typology of André Torre (2009), we could thus say that in the case of Paris, the expressed desire of its city-dwellers for short food chains can be met by what we could call “organised proximity”, where direct producer-consumer relations are relatively more important than actual distances between places of food production and consumption. In the case of Tunis however, “geographical proximity” (where food is indeed produced close to the consumers) is more likely be functional.
Agro-climatic context

Short food chains, as we saw, mostly involve fruit and vegetables. However, these are not the most optimal products for growing in Ile-de-France, where the land is actually best suited for growing grain. That is why the development of the railroad in the 19th century, which enabled food to be transported over greater distances, resulted in the disappearance of the food growing area surrounding Paris. Vegetable production was relocated to the Loire valley and Brittany, and fruit cultivation towards the sunnier regions of the South. The agricultural lands in the valleys surrounding Paris were gradually urbanised and hardly any are left today. Therefore, re-introducing local horticultural and fruit production in the Paris area cannot be done without significant economic and ecological costs.

Tunis, on the contrary, is located in the heart of a plain that is still dominated by fruit and vegetable production and is one of the most productive vegetable producing regions in the country. Despite rapid urban expansion, which has accelerated since independence, agriculture in Tunis still contributes to supplying the city with fresh products. Urban agriculture in the centre and immediate outskirts of Tunis produces much of the supply for local markets and small stores (e.g. fruit and vegetable vendors, street merchants). But this agriculture is constantly threatened by urban growth, which is causing fragmentation of farm/land holdings. This fragmentation mostly affects fruit cultivation, which is barely profitable on farms of less than three hectares. Vegetable production, in contrast to the Paris situation, is still being widely developed.

In a more general way, we can thus state that, for these reasons, short food chains based on local vegetable production are hardly viable in Ile-de-France, and in France as a whole, where vegetable production is steadily declining (see diagram). On the other hand, they do have a place in Tunisia, and their development would be strengthened if they were taken into account more in urban planning. This is not to say, however, that local/urban vegetable production should not be supported in Paris. It has a role to play, for example in the context of the need to maintain green, productive spaces in and around the city, and the need to promote more multi-functional land use (e.g. combining agriculture with water storage and recreation), but this should take more strongly into account the need to promote the use of land in accordance with its agronomic suitability.

Proximity between consumers and producers: short food chains, at what price?

Comparative studies conducted for several years by the Centre Technique Interprofessionnel des Fruits et Légumes (CTIFL) show that, in France, prices for fresh produce are higher in local markets than in supermarkets. This is not reflected, however, in the many surveys and reports on food habits, which fail to show that consumer preferences may be inconsistent with purchasing practices. Instead, respondents often declare that they prefer local agricultural produce, bought in the market or on the farm, but ultimately price remains their main concern. This is why they end up buying produce in super/hypermarkets, and especially discount shops, even if this means they lose out on quality.

This leaves local producers to sell their crops to a wealthier clientele that is more likely to be interested in other criteria than price alone. This clientele is found in the centre of Paris, and participates in various forms of short food chains, such as vegetable baskets or community supported agriculture (Association pour le maintien d’une agriculture paysanne, or AMAP in French). They may do so because they are interested in the preservation of old or rare varieties of fruits and vegetables, or because they want to support and preserve local agriculture. Rare examples of cross-subsiding produce for the less well-off population can be found in Chicago for example, where local produce is sold for higher prices to the better-off, and for lower prices to poorer consumers, but this kind of cross-subsiding is very rare in Paris.
The consequence of this state of affairs is, however, that the desire for proximity is in fact translated into a disconnection between the places of production, with production inevitably taking place in distant suburbs, and consumption in the city centre. The distances travelled by small trucks – which return empty – result in higher energy costs than those incurred by a producer in the Loire valley supplying Les Halles de Rungis or by hypermarkets buying large volumes of various food products that are transported in big trucks. The difference in energy costs becomes even greater when it is the customers themselves who travel in their own vehicle to the farm to buy their food.

The reverse is true in Tunisia, where the distribution via short food chains is an ancient practice, and still in place and widely practised today. According to the data we collected in Greater Tunis, the prices of fruit and vegetables are much lower in local markets and in neighbourhood stalls, largely supplied by periurban producers, than in the supermarkets. The most disadvantaged reside mainly in the suburban neighbourhoods, so the people interested in buying food for the lowest prices live close to the places of production. This results in a natural and geographical proximity between producers and consumers, and in a more positive environmental balance than in France.

Conclusions

The demand for local agriculture in European urban regions comes mainly from urban citizens who are (often) unfamiliar with the economic realities of farming (Vidal and Fleury, 2009). Short food and distribution chains are defended from the point of view of management of periurban areas, although – in the authors’ view – they meet neither the requirements of a sustainable food policy, nor those of optimising the environmental impact of agriculture. At the same time, the short food chains in Tunis represent a form of distribution that is anchored in the local economy and in the habits of the city-dwellers. Tunis nevertheless is gradually losing its local agriculture as uncontrolled urbanisation continues.

In the cases presented here, we have two completely different types of short food chains. In the case of France, we are talking about local food production that the community claims to support, but in reality is only supported by an affluent and very small minority. This form of production and marketing of fruit and vegetables covers only a small portion of the agricultural land and only supplies a small fraction of the population (overall, this market represents just 3% of fruit and vegetables consumed in France).

On the other hand, in Tunisia, we are talking about an existing form of distribution, which is managing to retain its...
place in the market and reach a large part of the population. The viability of short food chains, in both cases, depends on the agro-economic and climatic conditions in which they operate.

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References

Innovative Forms of Value Chain Development for (Peri)Urban Agriculture in Central Italy

Historically, agriculture in the Umbrian Valley in central Italy was based on sharecropping. Large estates were divided into small farms corresponding to the working capacity of a peasant family, while the proceeds of the farm were divided between the family and the owner of the domain. The agricultural system mostly consisted of woody crops (vines and olive trees), grains and livestock (oxen). This type of agriculture has changed dramatically since the 1950s, affecting both family life (young people leaving for the city) and the organisation of farming operations (in terms of production and marketing systems). In addition, most farmers in the Umbrian Valley are aging, while few of them have the expertise required to make the changes needed to diversify their farms. Those that have been able to diversify have mostly looked for activities outside the sphere of (urban) agriculture.

However, recently farmers have started to add value to agricultural products by focusing on specific market niches – in this case local products (produits du terroir) – and establishing direct relations with consumers. Some farmers have inherited vineyards and/or olive trees, and have developed their business by exporting, particularly to North America. Faced with fierce competition from other producers, especially those in Latin America, they seek to upgrade their products by emphasising the origins of their agrarian landscape. They have understood that the countryside can be conceived of as a relationship between a social group (visitors and buyers) and a crop (olives and grapes). For example, the Lungarotti family, who own a vast estate in Torgiano, created a Wine Museum and a Museum of Olive Oil with the explicit intention of establishing an attractive image for the region of Umbria. Similar examples are found all over the world.

Another form of value chain development concerns internal financing between producers and consumers. Networks between city and countryside still exist, and these include traditional exchange practices (in oil and wine). For example a farmer, who owns an olive grove located on the hill under the Basilica of Saint Francis in Assisi, offers consumers the possibility to adopt an olive tree, pay in advance, and get paid in return in the form of the product (the olives or the oil). Furthermore they are offered the exclusive right to have a picnic under ‘their’ tree, which is not only about adding value to the product, but offering new services such as agro-tourism. Today, the rapid development of tourism and the recognition of the city and its agrarian landscape as a UNESCO world heritage site offer new possibilities to Assisi. The strategic objectives of UNESCO include agriculture as a vital link in the design of cultural and tourism development.

These new approaches, developed by farmers, can shape a type of local agriculture that is based on new and real economic prospects. Local public policies to enhance these are moving in this direction too, but are flawed because they are based on an outdated understanding of the specific identity of Assisi. The institutions involved focus more on the role of agriculture in preserving the landscape rather than the production aspect. However, it no longer makes sense to merely protect the countryside without considering the relationships that it creates. To preserve the landscape we must begin to think about its socio-economic aspects.

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