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## NORTH AND SOUTH FACING CRISIS

### NEW METROPOLITAN MARKET GARDENING NETWORKS: TOWARDS SUSTAINABLE TERRITORIES? A COMPARISON BETWEEN BUENOS AIRES AND STOCKHOLM

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**Abstract** — Several economical, political and social crises affected both Argentina and Sweden more or less recently. Those times of intense disturbances implied several changes in their production system, especially in their farming system. These break points are the bearer of some important evolutions of metropolitan territories pattern on a regional scale, especially in the Buenos Aires and Stockholm metropolitan areas. We propose a comparison between two ways to react to the farming system crisis in Northern or in Southern countries in focusing on changing supplying networks of fresh products (organic and quality products in Stockholm and conventional ones in Buenos Aires). In Buenos Aires or in Stockholm, agricultural systems are changed by players coming from the outside of agricultural systems where they settle in, and organized into community networks. They have introduced a more small-scale, familial and intensive agriculture and created shorter supplying networks to connect production and marketing activities (wholesale market in Buenos Aires, farmers' markets in Stockholm). These agricultural and social innovations are the fruits of initiatives from the bottom taken up by the State and the political authorities, which have some legislative tools to ratify territorial resettings vis-a-vis land stakes. Both political attitudes are meeting the same need for socio-territorial sustainability, as much as an environmental sustainability.

**Key words** : networks, innovation, sustainability, Buenos Aires, Stockholm

**Résumé** — L'Argentine comme la Suède ont été touchées plus ou moins récemment par diverses crises multiformes qui ont entraîné l'évolution de leur appareil productif, notamment agricole. Ces moments de rupture et de perturbation intenses sont porteurs de recompositions territoriales importantes à l'échelle de leurs métropoles, dans l'Aire métropolitaine de Buenos Aires et dans la région de Stockholm. Par l'étude des mutations de leurs réseaux d'approvisionnement en produits frais (légumes, biologiques et de qualité à Stockholm, conventionnels à Buenos Aires), ce travail propose une comparaison Nord / Sud des réponses à la crise des systèmes agricoles. A Buenos Aires et Stockholm, l'innovation provient d'acteurs extérieurs au système agricole où ils s'installent (Boliviens à Buenos Aires, néo-ruraux à Stockholm), et organisés en réseau (communautaires et associatifs). Ils mettent en place des agricultures périurbaines plus petites, plus intensives, et familiales, et s'appuient sur des nouvelles structures de commercialisation en réseau, plus directes (marchés de gros à Buenos Aires, marchés urbains de producteurs à Stockholm). Issues d'en bas, ces innovations agricoles et sociales sont reprises dans un second temps par l'Etat et les institutions politiques, disposant d'outils législatifs pour entériner les recompositions territoriales face aux enjeux fonciers. Ces attitudes politiques récentes répondent à un même besoin de durabilité qui est autant socio-territoriale qu'environnementale.

**Mots-clés** : réseaux, innovation, durabilité, Buenos Aires, Stockholm

## **INTRODUCTION**

Several economical, political and social crises affected both Argentina and Sweden more or less recently. Those times of intense disturbances implied several changes in their production system, especially in their farming system. These break points are the bearer of some important evolutions of metropolitan territories' pattern on a regional scale, especially in the metropolitan area of Buenos Aires and in the Stockholm area. Neither Sweden nor Argentina were part of the global food crisis that occurred 2007-2008. As far as food is concerned, neither Sweden nor Argentina are worrying, both on a structural and economic point of view. However, the way those countries got out of previous crisis could be taken as an example by the scientific community that began to think about the 2007-2008 food crisis. Although the 2008 food crisis disappeared of the media scene, it involved reflections that stand for proposals to innovations in the food field as well as to reduce social inequalities in the food access in a sustainable way. Scientific analysis agree that not only agricultural production has to be taken in account to explain food crisis. In that way, we propose a comparison between two ways to react to the farming system crisis in Northern or in Southern countries in focusing on changing supplying networks of fresh products (organic and quality products in Stockholm and conventional ones in Buenos Aires).

D. Douzant-Rosenfeld and P. Grandjean (1996) define the concept of supplying as "the conveyance process of products to the city as well as their distribution inside the urban space". Supplying is a "crossroads-concept" because "it factors in economic sides (production, prices, circulations), social sides (inequalities of food access), cultural sides (consumption habits), as well as spatial sides (incomes distribution, marketing places, flows)". Supplying is an interesting phenomenon to study not for itself, but because it shows the development situation of a country or a region. In a post-crisis context, the role that agriculture plays goes beyond food production: it plays a part in food diet improvement, in the maintenance of employment and incomes as well as in social peace (BRICAS and DAVIRON, 2008).

When as for the first time 2008 the share of global urban population exceeded the rural's one (FAO, 2009), urban and peri-urban farming returned at the heart of the debates. Facing food crisis of big extent, new problems stress the need to preserve and to develop local farming, first in Northern countries because of the raising of oil prices and of the dying out of the farming social fabric that both make those countries dependent on other production areas of the world; then in Southern countries because food crisis affect as a priority poor urban people living in big cities, who are able to destabilize a government because of their large number and of their ability to react quickly (HOUTARD, 2009). If the topic of urban agriculture is not new, the stakes has changed.

In Buenos Aires as well as in Stockholm, the preservation of a local farming has been possible thanks to deep changes. Two questions emerge against the dialectic social equity / crisis and innovations. First, how can the preservation of an urban farming guarantee both a better food access for everyone (both on a quantity and on a quality point of view) and a balance between several uses (production, housing, leisure activities, environmental issues) of the lands lying in the belt of metropolis ? Then, how can innovations into gardening systems lead to some spatial changes that can create more sustainable metropolitan territories?

### **1. MULTIPLE AND MANY-SIDED CRISES**

Swedish and Argentinian farming systems have been affected by several crises that led to their changes but to their preservation in the same time.

#### **1.1 Crisis and geographical space: territorial resetting**

In the dictionary of geography by R. Brunet (BRUNET, FERRAS and THÉRY, 1993), the only french dictionary of geography proposing a definition of the word "crisis", the crisis is defined

as “a point of extreme tension, of height, of conflict, of change”. A crisis generally refers to a critical time and necessarily implies the change of a system. Several economists who theorized about crisis, like N. Kondratiev and J. Schumpeter, stressed that innovation is the moment that leads from slow growth to high growth and that temporarily allows to go out of the crisis. In geography, crisis and innovation concepts are related to resilience and sustainable development ones (ASCHAN-LEYGONIE, 2000). Those two last ones help to study the long-term maintenance of a system as well as to think about continuities and changes of a geographical system. Resilience can be defined as the capacity for a system to integrate a disturbance without changing its qualitative structure. A system is resilient when adapting its structure to change while keeping the same trajectory (HOLLING, 1973). In the field of geography, the concept of resilience can be considered through the concept of territorial resetting. We define it as bottom-up or top-down (territorial policies) spatial changes that come in answer to short shocks or long processes, both brutal, and that deeply and on a long-term basis alter interaction between space and society, and consequently alter the spatial pattern (LE GALL, GARCÍA and BARSKY, 2009).

### **1.2 In Buenos Aires, three integration decades of Bolivian migrants**

As many big cities in Southern countries, the green belt producing vegetables around Buenos Aires has remained; this area is intended to supply fresh products to the Argentinian capital. There, gardening areas close to the capital stand for between 60% and 90% (following the seasons) of the demand of fresh product in the metropolitan area (BENENCIA, 2004). In this case, a special feature has to be underlined: market gardening is in the Bolivian migrants hands, as well as in their descendants ones. During three decades, they became inevitable players of the Buenos Aires vegetable supply, when as this activity traditionally was in the Italian, Japanese and Portuguese migrants hands. Nowadays the Bolivian migrants hold the whole of gardening spaces for farming, marketing, wholesaler and retailing. They stand for 25% of the gardening producers of the metropolitan area and dominate family farming (MINISTERIO DE ASUNTOS AGRARIOS, MINISTERIO DE ECONOMÍA and GOBIERNO DE LA PROVINCIA DE BUENOS AIRES, 2006, PIZARRO, 2009). They stand for 75 up to 90% of the wholesaler businessmen on the many wholesales for vegetables (LE GALL, 2007).

Bolivian migrants came within by taking advantage of three major reversals that directly or indirectly affected gardening spaces of farming and marketing:

- in the 1980s, internal crisis into the horticultural sector: overproduction, ageing of the former producers and sellers without being taken over by their children;
- in the 1990s, deep upheavals related to globalization, metropolisation and neo-liberalization of economy and policies. That means dollarization, agricultural intensification through easier access to inputs and greenhouses, improvement of access to the capital outskirts and property pressure on agricultural lands through the development of gated communities and private investments, development of supermarkets, opening of the Mercosur;
- Many-sided crisis 2001, that desorientated the whole country, then economical recovery since 2003: consequently, a lot of former farmers abandoned their farm, new property pressure appeared, soya crops increased, and overproduction led to a price drop.

At every step a niche is freed both in the farming and in the marketing space. The Bolivian migrants and their descendants can move into those spaces. It involves a deep restructuring of both production and marketing areas. We can see the redeployment of production areas towards the fourth belt as well as the concentration of the production into two “productive islands”, that are the Northern area around Pilar and Escobar counties and the southern area around La Plata. This new pattern disrupts the former pattern of green belt. The southern area tends to specialize in greenhouse farming, whereas the northern area remains as an open-field crops area even restructuring. On a marketing area point of view, we can observe both the multiplication of vegetable marketing structures such as new wholesales,

supermarkets, greengroceries, sale in the street, and more dense marketing spaces (multiplication of stands).

### **1.3 In Stockholm: the development of an organic family farming**

In Stockholm, organic farmers supplying Stockholm with fresh products progressively gained ground. In Sweden, organic lands grew from 50000 ha 1995 to 215970 ha 2007 (JORDBRUKSVERKET, 2009). In shares of the total cultivated area, organic farming is more developed in counties of Central Sweden, especially in the counties surrounding Stockholm. Organic lands developed following a series of crises in the agricultural system since the middle of the 19<sup>th</sup> century that lead to put up subsidies, policies and rules favouring this kind of farming both on an European and on a national scale:

- from the 1880s to the 1950s: underproduction crisis related to overpopulation, followed by an overproduction in the 1930s related to the competition of the New World agriculture. Those crises involved reorganization and rationalization in the farming production system such as big producers cooperatives. It put up a modern industrial farming pattern on large-scale farms that developed mostly in Southern and in Central Sweden;
- from the 1980s: ecological crisis related to productivist farming, reinforced by a series of global food crises in the 1990s such as mad cow disease, bird flu or GMO. A reform of the Swedish agricultural policy came into effect 1990 to face this crisis by an internal deregulation, a strong fall of price support, introduction of new subsidies for common goods such as landscape or for regional development. Following those crises, consumers became more and more mistrustful towards the global food system and it increased their need for traceability, local and quality products. Organic sector began to get organized;
- in the 1990s, crisis of the European model of agriculture. Sweden is subjected to this crisis when it entered the European Union 1995. This overproduction crisis involved many reforms of the CAP and the redefinition of the European model towards a quality and multi-functional agriculture. It encourages small-scale farms for living countryside.

Despite the growth of organic farming in Sweden, short food supply of organic products are not very common. Large-scale food retailing dominates the shares of organic sales. Organic products count only for 2 % of the market shares, and only 7% of those organic shares are direct sales (JORDBRUKSDEPARTEMENTENT, 2006). But several short food supply networks are structuring around the Swedish capital since the 2000s (HOCHEDÉZ, 2008). We studied several cases such *Roslagslådan* and *Ekolådan* (two organic food box schemes located northern and southern Stockholm), and farmers' markets as *Bondens Egen Marknad* and *Street* in Stockholm where mostly organic producers sell themselves their harvest during spring and fall.

In Buenos Aires as well as in Stockholm, crises are due to factors that are both internal and external of the gardening farming, and are also due to a complex set of scales between gardening lands, metropolitan areas, states and the world. Crises proceed according to different temporalities: sudden reversals of the situation and rapid recoveries in the short term since the past 30 years in Argentina, slow and deep changes in Sweden. As a consequence, agricultural crises involved more complex farming and food systems on a national scale. It highlighted a small-scale farming close to the metropolis, organic or not, that is the bearer of innovations.

## **2. A NEW TYPE OF FARMERS FOR A NEW TYPE OF FARMING**

There is no common definition of urban or peri-urban agriculture in geography, but FAO had defined it such as "farming activities in or around cities, that use resources (land, water, energies, manpower) which can be used for other activities to satisfy the needs of the urban people" (FAO, 2009).

In Buenos Aires or in Stockholm, agricultural systems are changed from the inside by players and ways of farming.

### **2.1. Players coming from the outside of agricultural systems where they settle in**

“New” farmers settled in in the gardening outskirts of out two case studies, who are foreigners in Argentina, and strangers in the agricultural world in Sweden.

All the Bolivian people, coming from the mountains, go into raptures over a vast expanse of plains easily irrigated in the Pampa, even if their point of view about how to farm in Buenos Aires diverges according to the province they come from. They go away from the status they occupied previously in Bolivia through their way of farming and through the metropolitan way to qualify their work, that is different from the Andean word of “campesinos” (peasant). Their new more neutral status of “producer” is yet not obvious: Bolivian farmers have to climb the social ladder that goes from farmworker to producer hiring lands, through sharecropper.

In Stockholm, producers selling on organic markets often are urban people or neo-country people, without any agricultural background. Half of the studied organic farmers have no relative working in the agricultural field. 83% of the investigated farmers had one or several previous jobs before to set up as farmer, what reinforces their rooting in the urban world. Only 17% of them set up directly as farmers. Thus organic farmers in Stockholm can be described as “novices in agriculture” whereas Bolivian market gardeners can be described as “novices in a certain type of agriculture”. Personal trajectories that we studied show the role that migrations can play to launch an entrepreneurial movement, from the city to the countryside in Sweden, from Bolivia to Argentina. Those people newly settled in the peri-urban countryside bring new cultures (urban and ecological cultures in the Swedish case, Bolivian cultures in the Argentinean one) that tend to differentiate them from the agricultural pattern where they settle. In both cases, this new recent settlement coming from an other area and an other activity inspires peri-urban gardening areas with an innovative dynamic trend.

### **2.2. More small-scale, familial and intensive agricultures**

The new food supply networks around our two capitals lean on a agricultural system that is different from the dominant agriculture.

The small size of farms is a first difference in the supplying systems studied. In Buenos Aires, the average size of a gardening farm both in northern and in southern areas of the metropolis is close to 5,5 ha (even close to 20ha if traditional Italian and Portuguese market gardeners are considered). Or, Bolivian farms that we investigated are half this average in the northern areas, and down to fifth or tenth in size in the southern areas of Buenos Aires. In Stockholm, farms that we investigated are sometimes below the statistical definition of agriculture (which involves at least 2 ha for a farm). Sometimes, organic producers selling on markets practice a leisure agriculture (they are called “moonlight farmers”). The size of their farm is on average 34,9 ha (that is to say the same average than for the Swedish conventional ones), but if we calculate the median of the size of the investigated farms, thus half of those farms have a size less than 1,4 ha.

The second characteristic of those farm is their trend towards intensification. In Buenos Aires, those farms are more productive and need more manpower because of the growth of greenhouse crops (GARCÍA and KEBAT, 2008). In Stockholm, this agriculture is not very productive but quite labor-intensive. Indeed, investigated farms employ on average two people, including the farm manager, plus at least one seasonal worker during the summer. On the other hand, organic production systems involves lesser productivity and lesser yields, because organic farming doesn't use any chemical fertilizer and uses crop rotation method. Another characteristic of the organic system is the reintroduction of mixed farming and of crops/ breeding association.

This intensification leans on a familial manpower. In Buenos Aires, every single member of the family is working on the gardening farm, from the 2 years old kid to the farm manager. As for marketing spaces, it is invested by women. This familial system and the new incomes it involves can explain why Bolivian farmers are able to quickly mobilize a capital to climb the

social grades. Nowadays, it is also a way to face the lack of seasonal- and farm-workers<sup>1</sup>. In the Swedish case, organic market gardening selling on markets is familial and pluriactive. It means that the farm manager get help from their spouse or even from their children (unpaid for their work) for the tasks of production but more often of marketing. Farming seldom is the main source of the household incomes. It is practiced as a supplement to an other job.

As a brief conclusion, we can say that innovation facing crisis comes from the coming of new players who take a new look at the long-standing farming. This coming has a knock-on effect on the whole supply network.

### **3. NETWORKING TO INNOVATE**

In Buenos Aires as well as in Stockholm, the diffusion of innovation in the gardening sector takes the form of network. We define a network as the whole material, intangible as well as social connections which translate into multilateral exchanges in a given area and which result in the creation of lines, knots and activities of players on different scales.

Social networks made the connection easier between farming spaces and marketing networks.

#### **3.1. New structures to connect production and marketing activities**

Besides by its farming system, peri-urban agriculture that we study is also innovative by its way to market food through networking.

In Argentina, Bolivian farmers created their own wholesale markets in the mid-90s, located directly into the farming area (northern metropolitan area). They also took over the former wholesale markets where they divided empty emplacements and where they set up new ones within empty spaces (alleys) of the market. In town, other Bolivian migrants specialized into retail trade open their own vegetable store, or sell their production directly on the streets. Selling on markets usually constitutes an innovation in itself in Sweden and especially in Stockholm, where there is one daily market left for fruits and vegetables. Yet market is a new commercialization method which is appropriate to the small production volume and above all to the need for the producers to get premium wages at the time of the sales, by removing middlemen.

On those markets, the farmer-peasant is replaced at the core of trade activity because he is the trader as well. In Stockholm, farmers' markets lean on strict rules : the seller has to be the producer of what he sells as well, and on several markets the farm has to be located within a radius of 250 km from the market place. There is no such settled rules in Buenos Aires' wholesale markets, but the Bolivian wholesalers of green vegetables are either farmers themselves, or retailers who get their supplies from those wholesalers. Moreover, some private individuals living in the neighborhood of the wholesale market do their food shopping here. A new phenomenon of "retailization" of the wholesale markets begins to spread. In both Swedish and Argentinean cases, markets are the major places for contacts between the farmers-traders and the city dwellers (CHALÉARD, 2005). It satisfies the need for traceability and the consumers new expectations about food, in Northern as well as in Southern countries. Moreover, in Stockholm, markets mix idealized image of nature smelling good traditions and rustic past, with ecological values built on sustainable development and the future (GUIU, 2007). Farmers markets use the rural idyll to add a symbolic value to products and to put a new value on farm work in the city dwellers' eyes living in the respectively well-off and gentrified areas of Östermalm and Södermalm. In Buenos Aires we can't yet note the same level of increased status of both farm work and farmers. Bolivian farmers are still widely discriminated even though their role begins to be recognized.

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<sup>1</sup> It has become less profitable for Bolivian migrants to work or to settle in Buenos Aires, because of the improvement of the development level in Bolivia during the presidency of Evo Morales, and because of the economic issues in Argentina since 2001. The Bolivian migrants still working or living in Buenos Aires chose to work in the textile industry or in the building sector, less physically hard than agricultural work.

### **3.2. Two kinds of community networks**

In our two case studies, networks of innovation lean on social networks that already exist. Those social networks are based on the connections inside the Bolivian community in Buenos Aires, or on the professional and vicinity relationships in Stockholm.

In Buenos Aires, network innovation rest on two kinds of social networks. Family on a broad meaning is a first kind of social network. The second kind consists of associations whose wholesale markets come from, that are similar to cooperatives, but that are also places to gather the community (during parties or sport tournaments). Thus social networks made easier the connection between farming areas and marketing networks, as well as the growing movements of Bolivian migrants inside the Metropolitan area of Buenos Aires. Indeed, in most of the cases, Bolivian farmers get an emplacement on a wholesale market because a relative informed them of a free emplacement. Moreover, they easily get a clientele among the other Bolivian farmers, even they are producers, retailers or wholesalers, sometimes among Bolivian migrants coming from the same county.

In Sweden, alternative food supply networks include farmers, transformers, restaurant owners and retail stores. As those farmers come from diverse geographical horizons, alternative food networks provide them with a market access and good opportunities to sell off their production thanks to other members commercial contacts. Those networks offer to their members activities such as training courses or study trips that strengthen the internal sociability. Then those networks grow by integrating new members who are often neighbours or personal acquaintances.

In both cases, leaders constitute the knots of social networks because they have an enterprising mind and because they are able to seize the opportunity to move into economical niches. They transform their referential spaces: the market, the production area become the knots of the supply network and, above all, can highlight innovations coming from their social belonging group in the forefront of the public sphere.

## **4. DIFFERENTIATED LOCAL POLITICAL ATTITUDES MEETING THE SAME NEED FOR SUSTAINABILITY**

The studied networks, carrying agricultural and social innovations, are the fruits of initiatives from the bottom. But afterwards these innovations are taken up by the State and the political institutions, which have some legislative tools to ratify territorial resettings vis-a-vis land stakes.

### **4.1 Land problems: which scale of intervention?**

The local authorities intervene according to different logics in the studied countries. In a decentralized country like Sweden, land problems are managed above all on the communal scale. The Swedish municipality has the monopoly of planning and zoning within its territory. The main and obligatory tool of this planning policy is the general plan (*Översiktsplan*), supplemented by detailed plans for certain zones of the communal territory. These documents determine one type of use for each zone of the communal territory. The other sizeable tool that municipalities have is the farmlands they hold in property, whose total cultivated area is variable according to the communes. They then rent these farmlands in tenant farming to farmers and can influence the agricultural practices on these farms by means of the tenant farming's contract. The last tool of the municipalities helping to support the preservation of farmlands is made up of the environmental documents (Local agenda 21, environmental communal programs, environmental assessments published each year), which are umbrella documents for the elaboration of all the planning documents. The local development plans are strongly influenced by the counties laws (for example for the regulation of golf courses) but also by the national laws which must be respected by the municipalities when making their general plan (for example the law of Environment, the law on the management of farmland, law on the protected natural areas, etc). The State also intervenes through the plan for the development of organic farming and through the publication of national targets concerning the organic cultivated area, the purchases of



organic products by the canteens, or through a program for the development of gastronomy (*Matlandet*).

The situation is much more chaotic in Argentina. Two problems arise: on the one hand, the market gardening farming and the safeguard of the rural areas were not, hitherto, the priority of the agricultural policies. On the other hand, planning policies for the metropolitan areas inherit the neoliberal policies of the 90's, which had supported the private sector investments to the detriment of the state players. Property developers and companies thus largely invested in (and continue to do so) agricultural spaces of the third belt. However, the majority of Bolivian market gardeners are only tenants of their lands: the owners have the right not to renew their lease if a real-estate opportunity occurs. The municipalities would be in the best position to arbitrate these potential land use conflicts and to stick to a zoning map. But the cases differ from one municipality to another. In Southern areas of Buenos Aires, a municipal order limits the building of private urbanization's complexes in order to preserve the market-gardening productive spaces; in northern areas, management seems to depend on the steward in place, who sometimes encourages the Bolivian community by supporting the creation of a market, or sometimes goes on signing building permits on market-gardening lands. In other cases only land pressure decides on the land use: renting prices constantly raise and lead to the departure of Bolivian farmers and their descendants to the fourth belt.

The comparison of the farmland dynamics in the metropolitan areas of Buenos Aires and Stockholm makes it possible to say that the preservation of market gardening spaces proceeds of individually cases. The political commitments in favour of farmland and the support to new food supply networks are the essential conditions of its continued existence.

#### **4.2 Territorialization of the innovations**

Institutional actions multiply in favour of the innovations but according to distinct temporalities.

In Buenos Aires, the awareness of the existence of a peri-urban space with its specific multiuse logics is only two years old. The very term is new in the institutional and academic vocabulary. April 2008 the Presidency of the Nation granted subsidies to the family farmers located in the peri-urban areas. At the beginning of 2009, the INTA (National institute of agrarian technology) created three peri-urban agencies (northern, western, southern) to supervise a peri-urban communal policy on a metropolitan scale; there is a project of farming park for the Northern zone of the fourth peri-urban belt. Vis-a-vis wild growth of the 90s, all is at stake as if the Bolivian farmers had shown their key function in organizing the metropolitan outskirts when no public authorities. Nowadays the political authorities realized they could not miss the Bolivian market-gardeners to set up some peri-urban policies. Workshops, seminars and trainings exempted by the INTA give an idea of the new dialogue setting between the Bolivian market-gardeners and the local authorities for the preservation of a peri-urban farming in Buenos Aires.

Around Stockholm, the study of planning policies in three municipalities that lie more or less far away from the capital (Huddinge- southern inner suburban municipality, Södertälje- distant southern suburban municipality, and Enköping – peri-urban commune located western of the capital) makes it possible to say that the more close one lies the capital, the more important safeguarding steps of farmland and organic farming supports are, because of direct perception of the "urban threat". In most of the cases, agriculture is encouraged for protection of the natural heritage and open landscapes' reasons. Huddinge has very early had an ambitious policy of farmlands conservation, by using all the tools a commune can do : owner of the whole cultivated area of the commune, it can direct its agriculture towards an organic farming according to the Local Agenda 21 objectives and to the organic food policy in the schools. Conversely, the Municipality of Enköping, located 70 km far from Stockholm, is a very agricultural commune with an important cultivated area, but where most of the farms practise conventional farming. 98% of the cultivated area is in private property. This commune has no Local Agenda 21, none objective concerning organic food purchases in schools because the political weight of the conventional farmers of the commune is so important that a step to support the organic farmers would be very badly received. Nothing is

done to support the preservation of a sustainable farming on a communal scale. Between the two of those communes, Södertälje has an important biodynamic agriculture, but which was born from a private initiative. The commune helps only very slightly the organic farmers to settle on its territory. The cultivated lands that the commune owns are more considered as a land reserve for future real estate projects or for the transportation infrastructure building, than as lands dedicated to the preservation of agriculture. To highlight the role of these policies for the certified organic cultivated area in these three communes, then we can conclude the same about the connection between farmlands safeguard and geographical location more or less far away from the capital: Huddinge, Södertälje and Enköping (from the nearest commune nearest to the most distant from Stockholm) had in 2006 a share of organic cultivated area in the total communal cultivated area respectively of 18%, 12% and 11% (KRAV, 2008).

The different situations for settlement of new farmers also depend partly on municipal policies which are more or less favourable to this kind of agriculture and of networking innovation.

Much more than farmlands, much more than buildings or outdoor stalls, metropolitan market-gardening spaces are socio-spatial constructions. It is not only a passive reservoir of resources but places of creation. In this way, we can talk about territories of innovation (TULET, ALBALADEJO and BUSTOS CARA, 2002). Personal involvement of the producers, of the tradesmen and, from now on, of the political arena change the prospect for the food supply networks in Buenos Aires and in Stockholm.

## **CONCLUSION: NETWORKING INNOVATION BUILDING MORE SUSTAINABLE TERRITORIES ?**

As a conclusion, we would like to show how the innovations we studied in local systems of urban market-gardening products supply are carrying sustainability for the territories. The comparison of the market-gardening systems around Stockholm and Buenos Aires showed that, in both cases, sustainability of the studied agricultural systems is above all socio-territorial sustainability. It is translated into the preservation of market-gardening production spaces in spite of the metropolitan land pressure, into the integration of marginal groups and into the permanence of the existing social networks. The numerous interactions between the farmers and the city dwellers as well as farmers personal and professional mobilities confuse the traditional statistical categories between rural and urban spaces, between farmers and other professions. Those dynamics take part in the permanent resetting of these networks. However, some well-known differences concern the environmental part of sustainability of the studied systems. Indeed, in the Swedish case, the innovating supply systems are quite sustainable on an environmental point of view because it is local food systems which result in reduced transport. These systems also sell the products of a mainly organic or sustainable agriculture, supporting a seasonal consumption. However, the geographical definition of what local means is variable and the farmers come sometimes from more than 250 km away to sell their products on the markets of Stockholm. Environmental sustainability of market-gardening supply system is less obvious in the Argentinean capital. It is very far from an organic farming and from an environmental education. However, considering this only aspect to declare that sustainable development doesn't exist in Buenos Aires would be wrong. Our Northern-Southern comparison claims to remind that sustainable development considered on a global scale must be assessed through its three fundamental pillars of equal value.

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