# WILL URBAN AGRICULTURE RESCUE THE CURRENT CITIES?



Photo: Paola Branduini

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Urban Agriculture (UA) is the new dimension of work opportunities in XXI century cities, selected by citizens frustrated by stressed and indoor jobs, searching for health and close food as well as for affordable and close wellbeing in contact with nature. But what exactly is Urban Agriculture that everybody is talking about? One of the reference definition of UA was done by the COST action Urban Agriculture Europe 2012-2016: "UA spans all actors, communities, activities, places and economies that focus on biological production (crops, animal products, biomass for energy), in a spatial context that, according to local opinions and standards, is categorized as 'urban'". From this definition, UA is characterized by both, producing agricultural goods (products, mostly food) and/or making use of agricultural techniques and procedures (tilling, grazing, harvesting, recycling). This is a wide definition that includes urban farming and urban food gardening (Lohrberg et al. 2015): for example, nature conservation farms or horse

farms are included in UA, but leisure gardens without food production are excluded. Moreover, UA takes place from intra-urban to peri-urban locations, no matter about the distance from the city center. Thus, it does not only refer to activities within the city but on the city's fringe and in the metropolitan area as well. In that sense the definition follows the fundamental meaning given by Donadieu and Fleury (Donadieu/Fleury 1997) and underlines the current and historical relationship between city and countryside: UA is intra and peri-urban, it doesn't' mind about its location because it is based on the economic, social and cultural relationships established between the city and the countryside. The mutual relationship has a long date and it evolved during the time: in that sense UA can be considered as a result of ongoing interaction between the urban and the agricultural sphere. Thus, the process of adapting to the needs of the urban society is crucial to understand UA, its potentials and types.

## The place and chances of Urban Agriculture

UA is the result of the evolution of the relationship between farmers and citizens, when the farmers orient their production towards the citizens, providing them food, leisure and wellbeing. It is a contemporary way to interpret an historical relationship of mutual benefit and dependency among city and countryside (Branduini et al. 2016; Scazzosi 2020). It takes place in and out of the city, for instance in the farmsteads that had the chance to resist to the urban expansion and where a farmer or a group of citizens enable solutions to respond to the food market globalisation and develop new markets and services strategies related to agriculture.

It can be a new activity that revitalizes neglected places inside the present dense fabric; places that used to be farmed in the past but then they have been turned into constructible areas and left beside. Group of citizens decide to take care of it, under a legal recognition or informally, and turn an abandoned field into a food garden. These are two of the most common circumstances of UA emplacement, but is the social tissue as well as the municipal and regional policies that create a great variety of different local solutions. UA is an opportunity to revitalise neglected or underestimated rural

heritage. It is suitable everywhere there is a local movement of people taking care of a neglected place (with or without a farmer). Agriculture is the chance citizens have in order to reconnect with their rural heritage and to improve their wellbeing. Compared to an urban park or garden, the added value is the practice you gain in gardening, modelling the land, planting vegetable and flowers, watering plants, waiting for your harvest, accepting the risk of season and weather and then enjoy the final results. The value increases when you share your experience with your garden neighbour, exchange your knowledge and skills and then share productions and skills. This is an active role in enjoying nature's benefit. It is also a way of sharing familiar knowledge, acquired in the childhood and transfer by the grandparents, belonging to origin places, with different customs and traditions. This is the opportunity to share the intangible heritage. Similarly, urban farmers, descending from a farmer's generation, can transmit trough workshops their familiar knowledge in maintaining traditional agricultural techniques to modelling land, watering and managing wood and hedgerows in order to take care of agrarian landscape (Branduini 2016; Bell et al. 2016).

## Milan's example

# The process of acknowledgement by local authorities

Although the evident social benefits of UA, the process of UA recognition by local administrations took a long time. For this reason, the example of the city of Milan is quite significant. Milan recently gained a lot of fame as one the most advanced cities in food policy promotion: it encouraged and opened to signature the world Urban Food Policy Pact in 2015 and gained the Guangzhou International Award in 2018 for best urban policy. Nevertheless, the recognition of UA values by the Municipality of Milan and regional institutions took a long way.

Concerning urban farming, institutions have supported environmental sustainability, landscape protection and territorial quality found with Regional Law 12/2005 and the definition of Strategic Agricultural Areas by the Province, together with the project of the regional ecological network (DGR n. 10962 del 30 December 2009) and the Regional Landscape

Plan. A concrete result of these policies are the numerous Local Parks of Intercommunal Interest (PLIS) promoted by groups of municipalities, by means of the delimitation of the protected area, the opening to the public, the enhancement of the agricultural, environmental or cultural character that their identity represents. Moreover, the Milan Urban Plan (2015, then integrated in 2017, now in revision) has declared as no-buildable those agricultural areas previously planned for transformation: these are the buffer areas between the dense urbanization of Milan and the agricultural areas of the Southern Agricultural Park, which are now confirmed for agricultural and leisure use.

Social cohesion has been strengthened by Regional Law LR 23 January 2007 "Tools for the competitiveness of enterprises in the Lombardy Region". Through this, the Lombardy Region has promoted the creation of agricultural districts, networks of agricultural enterprises that support high quality production and preserve the identity of the Lombard



Photo: Paola Branduini

Sant'Ambrogio farmstead

landscape as a food quality mark and a cultural resource. The agricultural districts in Lombardy are now twenty-two, four of which are closely related to the metropolitan area of Milan: the "neo-rural district of the three waters" (DINAMO), the "Milan agricultural district" (DAM), the "district of rice and frogs", the "agricultural district from the Olona river" (DAVO). In particular, the DAM, formed in 2011, consists of more than thirty farms located in the territory of Milan, which manage about 40 % of the agricultural land in the municipality of Milan (cultivated area of 1,155 ha). The consortium guarantees farmers representation in political and market-oriented contexts.

Starting from the DAM constitution and based on the Regional Strategic Plan, in 2013 the Lombardy Region started the promotion of a framework agreement for territorial development (AQUST) called "Milan Rural Metropolis": officially signed in May 2012 by the Region, the Province, the Municipality of Milan and the DAM, it is a model of governance that pursues the integration of urban and rural development strategy through the exploitation of agricultural heritage. The action plan is divided into seven macro actions:

- The development and improvement of the irrigation system
- The requalification of the environment
- The innovation of agricultural products
- The production process
- Short supply chain enhancement
- The implementation of multifunctionality
- The promotion of rural culture

Farmers are the leading players in this process as an object of the policy and as participants at round table discussions. Concerning food gardening, the Milan Municipality fostered the educational value of gardening through the promotion of vegetable gardens in schools (Micoltivo project); they recognized the value of social inclusion through underwriting an agreement for temporary use of abandoned land with associations that had informally previously occupied the areas ("shared gardens" policy and "ColtivaMI").

The 2015 World Expo, which took place in Milan with the topic "Feed the planet", had, from its candidacy in 2007, produced an acceleration of policies and instruments targeted at agriculture and the agrarian landscape: it reinforced the role of farmers in the construction of new scenarios. As mentioned before, the Food Policy Pact, open to signature on that occasion in Milan and now having reached 184 signatures, engaged Milan as a role model in terms of food and

agriculture sustainability and led to the gain of the Guangzhou International Award 2018 for best urban policy.

#### **Current Milan UA**

According to the COST definition we can divide Milan UA in urban farming and urban food gardening. Urban food gardening concerns "gardening activities with mostly low economic dependence on material outputs but making use of agricultural procedures for achieving other, mostly social goals" (Lorhberg et al, 2016). We can observe family gardens, allotment gardens, educational gardens, therapeutic gardens, community gardens, squatter gardens.

Urban farming is an "intentionally materialized business models taking advantage of the proximity to the city by offering local/regional agricultural products or services" (Lorhberg et al, 2016). It includes local food farms, leisure farms, educational farms experimental farms, social farms, therapeutic farms, cultural heritage farms, agri-environmental farms. They orient their production and services to the local market, via square's market (Mercato della Terra-Slowfood, Campagna Amica, and others), direct sell in the farmstead or providing product to the local GAS (Italian way of CSA community supported agriculture). We do not consider urban farmers who supply to a mass distribution and wholesale market as their main activity.

#### Milan farmland and farmers

In Milan, the utilised agricultural area is 66,461 ha, on a total metropolitan area of 157,500 ha with 3.2 million of inhabitants. Animal production sector represents the 60 % of the gross sealable production (GSP), and cereals (21 %) dominate the vegetal production (40 %) (corn, rice), followed by forage rotations and permanent meadows (irrigated meadows). The farms are 592; the average surface is 48 ha and the surface of the rural buildings can vary between 1,000 and 5,000 m². In Lombardy 65 % of farmland is rented. The Metropolitan area of Milan is characterized by the presence of big landowners as Municipality of Milan and assistance institutions like Ospedale Maggiore (major hospital), ASP Golgi Redaelli (hospital devoted mainly to old people), Pio Albergo Trivulzio, Stelline and Martinitt (institutions in charge of hosting old people and orphans) (Branduini et al. 2020).

Families that have been lining and working in the same rural buildings for generations compose the farm enterprises. They feel a strong sense of belonging to their land and



Photo: Paola Branduini

The Milan community garden Lea Garofalo

buildings and, faced to the risk of losing their heritage due to urban projects, like residential development plan (Branduini and Sangiorgi 2004), or inability to afford higher cost of contracts renovation (Branduini et al. 2020), they tackle municipality and landowners to remain on their land. Over the last 30 years, we assisted to consecutives battles, victories and defeats, between farmers and municipality regarding the farmer's role in the urban society and the right to stay and cultivate the land around and inside the city and to transmit rural culture to urban dwellers.

In fact, beside to traditional agricultural activities, farmers have developed complementary activities to respond to urban needs: there are profit activities (e. g. agro-tourism, direct selling, horse boarding, petting zoo, renting spaces for ceremonies) and non-profit activities (e. g. cultural events in collaboration with public institutions or associations, local fairs, community gardens, open-days).

The entrepreneurial capacity is also related to UA farmer's education, generally higher than in the rural areas: they achieve all high school education and a 10 % complete uni-

versity studies (data from two interviews collected by the author in 2003 and 2017; Branduini et al. 2020). The proximity of the city allows to take advantage of the education services as well as of the multiple initiatives about knowledge sharing like conferences and events, with a local and national interest.

# Opportunities and obstacles in UA enhancement

Definitely, UA can increase labour market by creating new jobs in a wide range of interrelated sectors. Urban farmers, providing new services to the citizens, can offers jobs positions related to the restaurant and accommodation services (agro-tourism, b&b) that encourage them to use their own products and reuse partially abandoned buildings or spaces in their farmsteads; they employ workers for the vegetable production (growing and harvest) and for direct trading of their own production or the production collected from other close farmsteads; they employ experts and labourers for the rural heritage restauration (historical farmstead) in order to enlarge the offers of spaces for restaurant and accommo-

dation; they required pedagogical experts for enhancing knowledge transmission, like school workshops (Branduini 2016).

Milan municipality encouraged youth entrepreneurship in agriculture through the support and enhancement of start-ups based on the link between social and solidarity agriculture and new technologies: an example is the Open Agri project, an urban innovation project within EU framework research, founded on a farmstead on the outskirts of Milan, Cascina Nosedo, which aims to "develop innovative processes, contribute to food availability, particularly of fresh products, increase food security and improve eating and regenerating in peri-urban zone of the city by making it a model of social inclusion and innovation".

Despite the multiple benefits for citizens and the increasing attention of the municipalities toward the recognition and development of UA, some obstacles are still present. From the citizen side, successful initiatives happened when a group of citizens is strongly motivated, well organised and resilient toward problems, notably risk of land loss. Many times, very inspired and dedicated initiatives at the beginning, especially community gardens, became weak and dissolved due to a lack of self-organisation, incapacity to include new members without creating fractures and renewing original motivation (Branduini 2020). Exchange and

networking among others local experiences and with other cities can help to overcome these weaknesses.

From the municipality side, economical interest and previous development plans threaten temporary community gardens, even legally occupied (for instance in Milan community garden Lea Garofalo, 5 years old, with a temporary contract with municipality, is threatened by the Porta Volta regeneration and development plan). Policies are not perennials and elected people can drive their attention and money from an interest to another, from an area to another, conserving the general interest but changing the object (Milan Major announced his interest in converting former railway deposits into UA hub, lowering his interest from the historical farmsteads).

In conclusion, UA could rescue cities because it is a great opportunity for the cities to intercept current problematic urban sectors and create new jobs: it can offer assistance and solidarity to disadvantages and immigrant people, as well as provide them knowledge for agricultural activities; to do so, it could reuse neglected place and buildings and save endangered agricultural heritage; it could help the waste and water management and contribute to climate change solution. It can take advantage from ICT technologies and provide innovative solutions with a look to historical agricultural techniques.

## Literature

Bell, S.; Fox-Kämper, R.; Keshavarz, N.; Benson, M.; Caputo, S.; Noori, S.; Voigt, A. (eds.), 2016: Urban allotment gardens in Europe, Routledge.

Branduini, P., 2020: Engagement, participation and governance of urban agricultural heritage. In: Scazzosi, L.; Branduini, P., (eds): AgriCultura. Urban agriculture and the heritage potential of agrarian landscape, Urban Agriculture series, Springer, in press.

**Branduini**, P., 2016: Il patrimonio rurale nutre la città. Economia e società regionale, 34(2), 44–54.

**Branduini**, P.; Colli, E.; Perrin, C.; Nougarèdes, B., 2020: Cultural heritage preservation and resilience in urban agriculture through the lenses of social justice: The Milan experience. In: Urban Food Democracy and Governance in North and South, Palgrave.

Branduini, P.; Laviscio, R.; Scazzosi, L.; Supuka, J.; Toth, A., 2015: Urban agriculture and cultural heritage: an historical and spatial relationship. In: Lohrberg, F.; Licka, L.; Scazzosi, L.; Timpe, A. (eds.): Urban Agriculture Europe. Jovis Berlin.

Branduini, P.; Sangiorgi, F., 2004: Verso la progettazione integrata delle aree agricole periurbane, Atti del Convegno Internazionale "Il sistema rurale. Una sfida per la progettazione tra salvaguardia, sostenibilità e governo delle trasformazioni", Clup Milano: 568–576.

**Donadieu,** P.; Fleury, A., 1997: De l'agriculture péri-urbaine à l'agriculture urbaine, Le Courier de l'environnement: 31.

Lohrberg, L. Licka, L. Scazzosi, A. Timpe, 2015 (eds.): Urban Agriculture Europe. Jovis Berlin: 92–100.

Scazzosi, L., 2020: Urban agriculture as heritage: methodological issues and perspectives. In: Scazzosi, L.; Branduini, P. (eds): AgriCultura. Urban agriculture and the heritage potential of agrarian landscape, Urban Agriculture series, Springer, in press.