

## **SUSTAIN-EDIBLE CITY: CHALLENGES IN DESIGNING AGRI-URBAN LANDSCAPE FOR THE 'PROXIMITY' CITY. THE CASE OF PRATO, TUSCANY<sup>1</sup>**

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*Abstract: 'Intermediate domains' represented by farmland in strong contact with urban environment result pivotal in pursuing interwoven and integrated goals, where basic functionings -as food production or land taking containment- merge with aims for a general improvement of the quality and attractiveness of built and social urban environment. Such intermediate urban-rural spaces allow also to address and reflect, in terms of process development, on some new requirements and guidelines to be introduced in physical planning tools in order to better interact with the manifold urban policies and stakeholders. These requirements, starting from urban design codes and principles, encompass the management of environmental resources and use of agri-urban area as well as citizens, institutions and private parties involvement and further regulatory and incentives tools for land owners commitment as well as the matter of food production as a social matter. The paper accounts for two bottom-up ongoing joint experiences carried on in Prato municipal area (Tuscany) where two agri-urban close and semi-enclosed area are concerned respectively, by a project for the creation of an agri-urban public park and by a participative neighbourhood laboratory aimed to share integrated and community design goals between citizens, associations, public subjects and ongoing urban farming initiatives. In these two connected contexts two different actions, 'socially produced', try to cross and relate with urban policies and planning tools accordingly with an innovative approach.*

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### **1. Foreword**

Remaining farmland allotments in the city proximity, or semi-secluded in urban areas, although usually neglected in public policies and vision, represent a strong opportunity for built environment improvement and regeneration and in triggering a new and integrated urban design and planning approach. Moreover this matter could be placed in the frame a new bioregional approach on planning and urban design in which new local and place-based (bio)economies construction processes fit and co-evolve (Norgaard 1997) with a wider set of community self-reliance, 'transition' and resilience design goals (Thayer, 2013, Magnaghi 2014). In such a prospect food production recovery or enhancement practices often represent the 'generative' factor in triggering and supporting bottom-up processes of agri-urban spaces protection, stewardship and improvement. Although experiences of local food chains and system productions are widespread adopted (Viljoen, Bhom 2014), policies and design guidelines for local food systems are issued (ERC 2011, Redwood 2009, Donovan et. Al 2011, Morgan. Sonnino 2010,)), this 'movement' encounters many difficulties and obstacles in integrating and framing with ordinary planning and urban design tools

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<sup>1</sup> Although the shared and unitary conceiving of the paper, the paragraphs 1, 2, 3.1. and 4 are to be attributed to David Fanfani, the 3.2.1 to Massimo Tofanelli, the 3.2.2. to Sara Iacopini and the 3.2.3. to Michela Pasquali.

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characterized by 'routinary' practices sector based approach where mainly prevails a sectoral and top-down approach..

According with that, it appears helpful, in some cases, to adopt and foster some 'bottom up' processes, sometimes in form of "deliberative design local laboratory", where -thanks to a pro-active' approach- inhabitants, stakeholders, representatives of public bodies and municipality, could meet and share new visions, actions and innovative coordination practice in order to achieve as new 'urban wellbeing services" (UWS) and 'public goods' delivering (Vanni 2011 ).

## 2. Introduction to the action context

The growth and development of the settlements and urban form in Prato –underpinned by a historical polycentric asset- generated a peculiar patterns of interwoven agriculture exploited parcels and urban neighbourhoods. In such a patterns wedges and corridors of inner secluded and semi-secluded areas – mainly still cultivated with forms of 'intensive' farming practices- merge with a quite well defined periurban 'green-belt' that is, notwithstanding, strongly affected by urban influence and fragmented urban tissues and functions (see fig. 1).



Figure 1. Aerial view of rural areas, wedges and urban nodes concerned by the activities in the east sector of Prato

In this framework farming activities, as just recalled, are mainly carried on accordingly with intensive and mechanised assets with not negligible impacts on the environment (e.g. soil fertility loss and erosion, groundwater pollution), where the weak economic profitability of farming activities is partially compensate by the CAP payments.

The growing awareness –either on behalf of farmers and of consumers and citizens- about the unsustainability of such a model of exploitation and farming, and of the recovery of a green proximity environment as opportunity for pursue -alongside with the quality of life and urban environment- new forms of rentable and fair periurban agriculture, calls for a new focus on the importance of the agricultural spaces mentioned above.

Among them, as defined, the ones represented by agricultural wedges, and corridors penetrating in the urban structure represent the main 'fields' where is possible to define and test new forms of

urban agriculture that, although not tailored by the prevalence of social goals and practices, follows very different principles by the 'intensive' model. In these spaces it seems to be room to create and innovate in the domain of consumption-production schemes and in spatial planning tools as well. That in designing a new pivotal role for these areas, no more conceived as 'urban waste' but as key elements for the recovery a new urban form and relation/articulation between urban and rural domains.

### 3. The study cases

The two following study cases presented account for a bottom-up design process referred just to two close context encompassing the pointed out features and where 'social shared visions' call for integrated projects where environmental, economic, social, design, policies innovative issues merge, as well as, for strong innovation in urban design practices.

#### 3.1. Capezzana social farm: from an urban 'green park' to an agriurban public park

The area interested by the first ongoing process is placed in the west fringe side of the municipal area (see. Fig.2) and is a farmland area inherited –with many other farmland and rural goods- by the Prato municipality including an old farm building badly preserved dating from the fifteenth century.



Figure 2. Aerial view of the Capezzana agricultural area and of the old farm to recover (red circle)

The farm as the fields, until few years ago, were occupied by the family of the last renting farmer that exploited the property leading jointly a little breeding activity and cultivation of arable. Such activities allowed to the farm, thanks to the renters attitude, to perform the function of a didactic



centre of environmental education, open to the primary and elementary schools of the quarter as well as to the neighbourhood citizens. It is worth noting that the exploitation of the farm was 'nature based', mainly dedicated to the breeding of a native local cow race called "calvana" and to organic cultivations of traditional wheat cultivars for 'food mile' bread production.

Six years ago the municipality, according with a peculiar conception of public goods economic enhancement of a certain success in Italy, decided to sell the farm building and to change the urban plan, envisioning a residential estate development for a part of the area and the role of public urban park for remaining 10 hectares. The crisis that stroke the real estate sector after 2009 hampered the realization of such provisions and created the conditions for the proposition of quite different project idea on behalf of some social actors, including the last farmers family that carried on the activities.

Starting from the position of the previous and present administrations, not available to rent again the farm, the last family that occupied the building participated to a public call for the building purchase and won the public call itself<sup>2</sup>. That, anyway, with the aim to had the opportunity to develop again the multifunctional agricultural activity leaded in past, featured by some important social functions. In such a prospect the destination of the arable land as urban park needs to be overcome or 're-interpreted' in such a way to maintain and coalesce the public access and benefits with the development of entrepreneurial farming activities although in a 'nature based' way. With this aim of public interest and periurban agriculture promotion the Agricultural Park of Prato Association<sup>3</sup> supported and fostered the project of farming activity recovery in defining, jointly with the farmer family, a strategic project for an periurban public agricultural park that innovated the ordinary and routinary idea of 'public urban green'. The idea underpinning the project –submitted to the administration with the aim to start a procedure of public call for the agri-park management- is based on the conception of private farming activity conducted according with goals of public interest and producing 'public goods' and activity that develop synergies with farming exploitation itself. That means that 'public goods' and functionings of public utility are delivered not only as by-products or positive externalities of private activity –as in the economic ordinary conception- but are, alongside with market goals, constitutive of the farming plan. In such a vision the private role is conceived as collaborative with public action in achieving results of public utility and community fairness accordingly an intentional scheme.

Coherently with this framework the project submitted to the public administration foresee the protection, maintainment and enhancement of periurban public green spaces in an active way. That with the development of agricultural activities mainly carried on accordingly with the principle of 'agroecology' and organic agriculture, allowing to visitors and citizens, thanks to rural paths, access to the fields and services and utilities delivered by the farm itself. It is evident that such a farming setting allows either the production of 'public' and 'non market' goods (e.g. ecosystem services, landscape regeneration and amenities, environmental education and awareness, etc.) and the delivering and development of proximity services and economies more market oriented, although in a fair way (e.g. selling of fresh food locally produced, rural hospitality and leisure services, didactic programs for agriculture and crafts).

The project for the agricultural public park in the area of the neighbourhood –more properly called "village"- of Capezzana, is at the moment under the assessment of new public administration elected

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<sup>2</sup> The purchasing procedure definition, at the moment this paper is wrote, is still ongoing.

<sup>3</sup> The non for profit association 'Prato Agricultural Park' constituted in 2010, is a voluntary partnership that includes associations of environmental and cultural promotion, of professional farmers, and of social promotion. The statutory goals of the association are aimed to promote, through cultural initiatives and operative projects, the protection and values of periurban rural areas through a sustainable agriculture form there developed in such a way to foster forms of local endogenous development.

in 2014- especially for the matters that relate to a new vision and conception of the urban public green spaces management.

### **3.2. The project. "Trame di Quartiere"<sup>4</sup>: an urban agricultural park for a new sense of place stewardship and belonging**

The Capezzana project is strongly related and substantially in physical continuity with the bottom up process that concerns the 'green corridor' that originates from the area described, overcomes the west urban freeway and flanks the dense residential neighbourhood of S.Paolo, reaching out the urban historical centre (see again fig. 1, right side ).

#### *3.2.1. The context and the goals of the laboratory*

The action-research project "Neighbourhood Plots", developed together with the residents of San Paolo, Borgonuovo and Casarsa (recently renamed Macrolotto 0), introduces the study and practice of diversity management into these neighbourhoods of Prato through a series of workshops, urban walks, interviews and narrations.

The goal, on the one hand, is to collect and reconstruct the historical memory of the two neighbourhoods, whether that of collecting large or small stories that happened in these places or those that strengthen residents' awareness of neighbourhood events and characteristics. The project also intends to stimulate critical attention of professionals about the pitfalls of processes of participation and urban planning as well as the opportunities that are typical to an approach oriented to diversity management at a neighbourhood level.

The change in recent decades has had a significant effect on the social and economic structure of the city of Prato. Recent research has documented a widespread feeling among residents of disorientation and helplessness in the face of urban transformation, driven by global forces beyond local control, yet with concrete effects on the lives of citizens. Notable changes have occurred in both the physical transformation of the neighbourhood, in its daily functions, in the network of services and public goods distributed, as well as in the social attributes of residents.

The increasing concentration of the presence of citizens of Chinese nationality intermingles with a local context whose signs of past development are tangible: San Paolo and Macrolotto 0 are markedly isolated as a result of being encircled by the railway and a major thoroughfare, which renders them difficult to access. In addition, both neighbourhoods are full of dead-end roads that although they bear the label cul-de-sacs have virtually nothing in common with their suburban American counterparts. Pointing to this urban reality engages a theme very much neglected by urban planning processes—that of diversity management, which is not only characterized by the presence of a mixité of residential and commercial zones, society and economy, subcontracting and industry, Southern Italian migrants, rural Tuscan transplants, and long-time *Pratesi*, but that is shot through with global flows of migration and international trade.

The central theme/challenge for Prato is not so much how to design neighbourhoods that are different, but rather how to intervene in neighbourhoods in which diversity and separation coexist.

San Paolo and Macrolotto 0, which are icons of the factory city, are located to the west of the ancient wall, between the railway to the north and the beltway. Within these districts exists a wide range of forms, functions, and populations.

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<sup>4</sup> Neighbourhood plots

Needless to say, especially from a social point of view, the two districts have distinct characteristics. The "Macrolotto 0" can be seen as a *zone of transition*—the historic port of entry into the city for many families of Italian heritage and more recently of non-European immigrants, with a particularly high concentration of residents of Chinese nationality.

Within these linear barriers, the city includes a wide area of concentration of manufacturing activities and a vibrant commercial activity along Via Pistoiese and up to the historic centre.

On the far side of the centre, to the west, is the compact core residential neighbourhood of San Paolo, from Via Donizetti until the beltway and south to Via Galcianese through areas with remnants of rural-turned-urban green spaces. San Paolo maintains a greater residential presence, with a good network of services and a lively social environment, most related to the components of the original Italian population, with roots as Tuscan sharecroppers and Southern transplants.

### 3.2.2. Activities and methodological matters of the project

More specifically, the project structure consists of two series of activities:

- 1) *research*, which refers to the study of characteristics of the local society and the neighbourhood in response to changes in its physical, social, and cultural features;
- 2) *action*, embodied in the creation of public seminars and workshops with the involvement of experts who bring specific skills, among which the documentation and collection of narratives, whether photographic, video, audio or text, in the management of public space, particularly in the reuse of industrial spaces, abandoned factories and warehouses, as well as remaining rural and urban green spaces.

The latter goal stems from the residents' perception of a lack of strategic plans and integrated urban planning models at the local administrative level. Conversely, they were proposing a forward-looking bottom-up approach based on the innovative reuse of abandoned industrial buildings, the recognition of the biological food production and important social functions played by this "green corridor" (e.g. promoting sociality and civic engagement out of the encounter between people of diverse backgrounds, ethnicity and social status; educational, cultural and outdoor activities).

To bring together the ideas emerged during the first phase of the project, two workshops, supported even by experts<sup>5</sup> were organized. Together with the inhabitants, local-based associations and stakeholders, existing valuable resources and opportunities (e.g. disused or historical buildings, undeveloped land, schools, strategic structures, etc.) were discussed and eventually identified. During the design process, the outcomes of the didactic laboratory led by an environmental teacher<sup>6</sup> with the pupils of the primary school "V. Frosini" located in the San Paolo neighbourhood, were also taken into consideration. Working with the children enabled us to grasp their perspectives and wishes on the city as well as to include local actors that are too often neglected in the urban planning processes. During these outdoor activities, the pupils interviewed residents of different ethnic backgrounds, learnt how to recognize plants, flowers and insects, developed a more ecological worldview and sensitivity to human-environment interrelationships.

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<sup>5</sup> The workshops were coordinated by Michela Pasquali, landscape architect and director of the non profit association Linaria, and David Fanfani, Associate Professor in Urban and Regional Planning at the University of Florence.

<sup>6</sup> Serena Maccelli, Legambiente.

The ongoing idea arose from these laboratories is to design an urban agricultural park inspired by similar worldwide experiences (Barcelona, Nordhavnen, Los Angeles), whose main functions are:

1. Increasing food supply and city resilience to climate changes;
2. Creating public spaces enhancing social interactions;
3. Providing public services for the residents;
4. Connecting the neighbourhood with the farmland area, to the west, and the urban historical centre, to the east, - thanks to pedestrian and bicycle paths;
5. Improving the quality of urban life.

A third workshop, which will be held in autumn, aims at designing a strategic plan constituting the starting point for a discussion on the future of the area between residents, local stakeholders and the present administration.

### 3.2.3. Design practice and principles

Accordingly with the context feature and project goals the design activity starts from the awareness that open spaces are considered necessary as open-air amenities of great value for the future of Prato, whose extremely varied forms and statuses are the basis for the quality of life and the daily landscape. *TramediQuartiere* with the help of a multidisciplinary team that combines expertise in landscape design, architecture and urban planning, has taken a comprehensive approach to an urban planning and development project in the area, considering the site's geographical and physical setting, the project's satisfaction of users' needs and expectations, its appropriation by users, and its ability to evolve.

Considering the city as a real living organism that is constantly changing, spatially and socially, *TramediQuartiere* public workshops has oriented urban design towards other horizons than just functional and spatial composition, considering urban planning as a process in which dialogue with the site, with time and with the partners involved become fundamentals of the project. The workshops aim to design a major urban development centre which is a place of work and leisure at the same time; aimed at innovation, a diversity of urban forms, and social mix objectives devised through a very active, creative consultation process.

This kind of multiplicity space would play a role in social cohesion, education, and cultural activities, becoming a community hubs that celebrate and raise awareness about and thanks local food production, sport and cultural activities. Events such as festivals, harvest dinners, cooking, or growing demonstrations, and educational programs can inspire DIY activities involving schools, local associations, including ethnic communities, low income families, seniors, and children. The benefits extend to many facets of the health and wealth of a city.

*TramediQuartiere* proposes an ecological and biological based city-planning model that would focus on community, health and ecosystem. Through the workshops has emerged an integrative process focusing on solutions based on the interconnectedness of the systems as a whole unit, rather than separate parts where the design strategy would integrate social, economic, estetic, ecological, and economic values to achieve the best results. The interest of the proposal in the area is rather like a restoration, a reappropriation of a green space and by being part of projects that are more rooted in the local fabric.

*TramediQuartiere* aims to create a new regenerative landscape that promote biodiversity and social sustainability to organize the area in a hierarchy which ranges from large extensive pieces of



landscape to the intimacy of the gardens, orchards, vegetable plots, squares and sport amenities and infrastructures with recreation -sports and cultural activities. (see figg. 3,4)

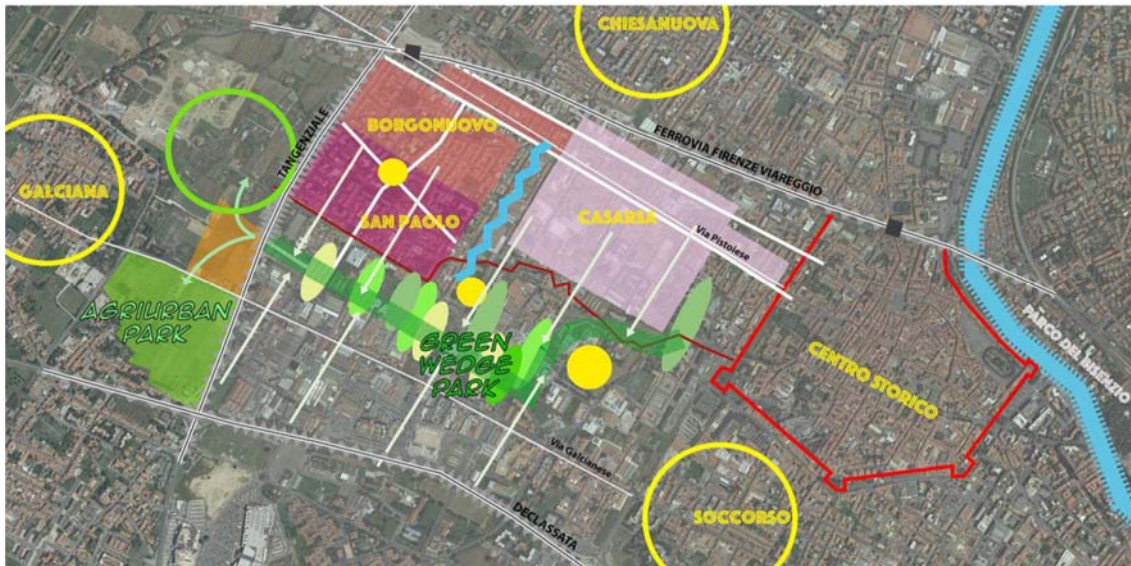


Figure 3. The project concept of the whole areas



Figure 4. vision sketch of integrated landscape and use in the agricultural wedge of TramediQuartiere

The proposal is based on the development of the agricultural potential and the activities related to it, like production, processing, treatment, and local shop and farm markets. The idea is based on a rationale use that ensures harmony between future uses and long-term respect for the existing agricultural identity: diversity could be maintained with local crops that identifies the regional area, but also with the inclusion of multicultural fruit and vegetable already cultivated in the vegetable garden of the Chinese community, and open to other communities.

The design will be based on a search for contemporary expression of nature in the city; on the natural dynamic of existing ecological systems and the application of differentiated maintenance. An experimental playground and laboratory shape all the park space to take landscape architecture and urbanism in new directions and for a new type of productive open-space system (see Viljoen 2006,*cit.* 2014). In this way *TramediQuartiere* explores an alternative to the urban traditional park



and garden that integrated design with nature and agriculture with aesthetic, in a long term and a sustainable development.

#### 4. Conclusions

Although at their very early stage and their differences, the two laboratories we accounted for allows to underscore some relevant matter in dealing with planning and design of in-between spaces (Sievert, 2003) accordingly with sustainability and food production goals. First of all the multidimensionality of the issues at stake calls for the overcoming of the traditional 'functional', 'zoning oriented' and sectorial approach in physical planning. Planner and urban design skills have to be integrate and collaborate with other competences, especially concerning agri-environmental, landscape and socio-economic approaches. Furthermore this entails the necessity, in order to achieve planning results effectiveness, to involve, in a participative and 'bottom-up' process, stakeholders, inhabitants, associations in order to reframing the context problems framework and better address the more relevant issues for the area regeneration. The process of integration between urban and agriurban domains that stems form this kind of approach, especially considering the enhancement of short food supply chains and CSA schemes, seems to fit with the fostering of new local economies, social integration and well-being, place awareness on behalf of citizens and stakeholders. That also allowing for the enhancing and appreciation of the not negligible market and not market values generated from periurban open spaces agricultural use (Brinkley 2102).

On behalf of public bodies and policies the multidimensionality of this kind of design processes calls for the overcoming of a 'command and control' attitude and for the better integration and coordination between the different sectors and administrative levels concerned, that in such a way to better unfold a real governance process. In this framework the regulatory role of public seems to be pivotal in addressing land revenue expectations on behalf of land owners that usually hinder the possibility of a common goods oriented use of urban and periurban open spaces. Public owned land also turn out to be a key success factor as the contexts examined reveals an alternative strategy opportunity at the mainly recently practiced by public administrations in Italy that conceive and identify the 'public goods' and properties value enhancement with their selling to private operators. In that contrasting and misconceiving the nature of goods itself (Maddalena 2014).

Finally is worth noting as this kind of contexts allows to better sound and deal with the calls for innovative planning and design methods and solutions in order to recovery a fair and sustainable relationship between urban domain and its surrounding region for the sustainable 'relocalization' (Thayer 2013) of the city itself.

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