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Food revolution and agro-urban public space in the European bioregional city

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ABSTRACT

In the "urban bioregion," intermediate territories get new identities through a physical and relational redesign of ecosystem services, beginning with polyvalent ecological networks, dealing with food and its short supply chain. Such networks may become the backbone of a "rururban public space" defined for flood risk prevention, easy mobility, preservation of historical buildings, proximity to farming, and presence of agroforestry. Starting from a bioregional perspective, the paper reflects on the need to re-territorialize food systems and describes as a case study an experience recently completed: the project for the Riverside agricultural park on the left side of Arno, involving three municipalities on the Florence Plain through the support of Regione Toscana based on participatory processes. Its aim was to lay the foundation for a "river contract" for the functioning of an agricultural park which, in the foreseeable future, could be managed through a number of social contracts involving local communities.

KEYWORDS

Agricultural park; bioregional perspective; food planning; multifunctionality; periurban areas

A food revolution for an urban bioregion

In both old and new urbanized areas, a social uprising is taking place with the intention of overturning the globalized food system, and starting over from a new way of producing, selling, and conceiving food, and reconnecting the broken relationships between town and countryside.

A new interest for having agriculture in urban areas has emerged in Western cities in the wake of so-called "food movements", born in the United States in a context which is grounded in a food insecure system that had become dependent on agro-industry, with a high incidence of health problems related to poor nutritional value and the massive presence of additives in food (Feagan 2007; Paddeu 2012; Pollan 2006). Food movements have forced the definition of public policies such as those promoted by the International Food Policy Council, first established in Knoxville in 1982 in response to the problem of the "food deserts" arising in the cities (Stierand 2012, 71).

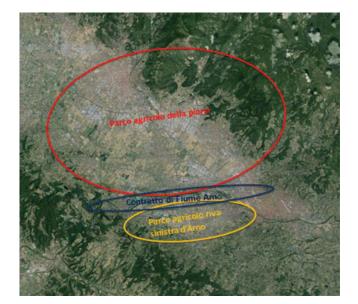


Figure 1 Location of the project (yellow) with respect to other projects currently in progress for the revitalization of agro-urban territories.



Figure 2 The project area.

Also, due to the recent economic crisis, in Western cities a demand for food safety and even self-government of food policies has continued to spread, and communities claim a key role in the organization of production/consumption chains in their territories with an appeal for food sovereignty.² In the United States, territories are being redesigned according to "Community food security", understood as "a process of re-spatialization of food systems orientated around the spatial delimitations of community" (Feagan 2007, 27). Even though not in great numbers, an



Figure 3 Structure of the participatory process.



Figure 4 The bioregional strategic design scenario.

increasing awareness has developed that regards the role of small-scale agriculture that is able to reweave relationships, produce healthy food, and sell it through formal and informal fairly traded networks directly involving citizens in urban communities.

In recent decades, marked by a dramatic decrease of the industrial sector, cities have been generated which have become increasingly rural, both in morphologic and socioeconomic terms. In many big Western cities, centers of agriculture have been created producing a phenomenon called by some authors "Agropolia" or "Agropolis" (Donadieu 2011; Mougeot 2005; Schröder 2011). It is a manifold dynamic that has sometimes developed hi-tech and energetic responses that remove agriculture from the soil and push it onto buildings (roofs, skyscrapers, balconies, etc.), cement roads, or town squares, thus lowering the attention on the loss of soil and ecological infrastructures in urban areas. In some cases the opposite has happened, from the earliest pioneering experiences of political action such as "guerrilla gardening", urban soil has been reclaimed for farm land. The most striking case is perhaps the American one related to the "shrinking" of Detroit, a city that went bankrupt because of the automobile crisis from 2008 to 2014, and now is in full transition to a new hybrid city form. Once the fourth largest city in America, Detroit has seen its population shrink dramatically, from about 1.8 million in 1950 to around 700,000 in the early 2000s, with an unemployment rate more than twice the national average. Today, notwithstanding the ongoing innovative activities for economic recovery between empty lots and abandoned buildings, the former Motor City is home to many cultivated areas, with family gardens and urban agriculture. The Detroit Garden Resource Program records more than a thousand community gardens, with crops, areas reoccupied by nature, and new job opportunities. Many abandoned or neglected areas become opportunities for community farming for people in difficult economic condition or for those looking for a direct relationship with the earth. As a further example, Elleniko, the Athens airport abandoned since 2001, has quickly become an area for social and ecological experimentation with self-managed gardens, a dispensary, a fair trade spice shop, and a "participatory" olive grove. The phenomenon also affects inland areas with forms of interstitial farming: This is the case with the jardins partagés in Paris, present also in central boroughs, or with Rome, where scores of social or community gardens make the city one of the most important rural contexts in Italy.

In economic terms, moreover, cities are becoming powerful rural development agents binding together city and countryside (OECD 2013), supporting also new and sometimes insurgent styles of life and consumption focused on a value system which is fairer for society and the environment (Potito and Borghesi 2015). In many Western cities, therefore, a bottom-up turnaround has begun, focused on reducing intermediaries in food supply chains in order to reconnect production and consumption as strongly as possible. What until a few years ago was usually treated by the public in pietistic terms (such as hunger) has become an element able to catalyze a demand for more fair and



sustainable food policies with important effects on urban food planning (Pothukuchi and Kaufman 1999).

Under this pressure, peri-urban areas become lively social workshops experimenting with a spatial re-embedding of food chains (Feagan 2007) organized at two different scales: the "proximity" and the "bioregional" ones. The city of proximity is the everyday one, a city increasingly edible, where through minimal trips, using public transport or soft mobility, one can go and buy directly from the farm, in the many farmers' markets in the city, or joining ethical purchasing groups,³ grow vegetables in gardens, have a walk through fields, or take children to school to plant fruit in the school orchard. Increasingly, food is an opportunity for meeting and socialization that asks for a redevelopment of living spaces. On the other side, the bioregional scale —the largest one—is the basin of social food, of the foodshed described as "a socio-geographic space [with] human activity embedded in the natural integument of a particular place" (Kloppenburg, Hendrickson, and Stevenson 1996, 37), a metaphor which helps outline the contours of this decisive placeaware spatial redesign. The "Copernican revolution of food" is something impossible to achieve individually, since it relies on self-recognized communities which share moments of purchase, co-production, exchange, and dissemination of knowledge. The connection between food and the large demand for social justice can open new doors to imagination, exceeding the traditional domain of the social and the economic (Soja 2009) toward food justice (Gottlieb and Joshi 2010). Such a Copernican revolution, then, implies a general reconfiguration of the peri-urban context, elevating it to the status of "bioregional public space" (Poli 2014) to live and produce in, maintaining environment and landscape and allowing its users to regain the pleasure of sharing with the other (Parham 2015).

Such intermediate territories, placed "in between the cities" (Sieverts 2000), with shifting borders and fragile textures, until now have been built without a project, without any reference to long-lasting territorial rules, in fact, ignoring them to embrace a settlement model which is expressly hostile to local traditions, that restricts sociability (Delbaere 2010) and which, most of all, keeps marginalizing rural areas. Such territories, typically at severe risk from several points of view (food security, hydro-geomorphological safety, loss of cultural identity, loss of landscape values, etc.), offer now a great regeneration potential due to their important endowment of agro-forestry areas.

In Italy, about 10% of the population (about 6 million people) live in 29,500 km² that is considered at higher geological risk, while 1.2 million buildings are in danger from potential landslides and floods (CNG 2010). This situation, almost uncontrollable, is caused by an urban-centered development model, polarized in large metropolitan areas and which, in parallel, has caused the mechanization and industrialization of plains and valleys (the

so-called "green revolution") and the abandonment of rural contexts that are more marginal and more difficult for modern large-scale cultivation practices. A drop in the maintenance of the hydraulic landscape lattice completes the picture of the abandonment of rural areas, and leads to increasingly frequent and devastating floods in many Italian regions, where an area of 24,358 km² (8.1% of the national territory) is at high danger of flood and is home to about 2 million residents (ISPRA 2014), with the greatest risks obviously concentrated in urban and suburban areas due to the number of buildings and people they contain.

Such weaknesses cannot be overcome with just technical sector-based actions; they require a wider bioregional approach aimed at reopening the structural relationships between territorial systems and on strengthening emotional and identity relationships with places (Calthorpe and Fulton 2001; Iacoponi 2001; Thayer 2003), while at the same time rediscovering the centrality of food.

The urban bioregion is then the conceptual reference for an integrated territorial project enhancing all the different components—economic (related to the territorial local system), political (self-government of life- and workplaces), agro-environmental (territorial ecosystem), and related to living (functional life-places of a set of cities, towns, and villages)—of a socioterritorial system pointing to a balanced coevolution between human settlements and the environment and to territorial equity (Magnaghi 2014). A sustainable planning of local food production has the potential to reweave structural links between the different systems and to provide criteria for the spatial redevelopment of people's life places, mainly urban areas. To manage a project having the social component as the main reference point, planning contracts between public administrations and private individuals may be useful, as they seem to be best placed to define a strategic framework of shared rules between associations, citizens, and stakeholders, with the objective of giving value to the manifold features of territorial heritage, and the founding nucleus of the identity code of a place-aware living.

The multifunctional role of "bioregional public space" in the urban bioregion

Focusing attention on the "local" dimension of agricultural networks has led to the reconnection of the large issues of environmental sustainability, social justice, and food security (Paddeu 2012). To re-territorialize food systems for contemporary societies, it is a priority objective that an integrated project simultaneously affect several aspects:

- settlement resilience to enable adaptation to climate change;
- environmental sustainability to ensure quality of life and of production;



- circular economy to minimize waste and maximize the value chain of production;
- strengthening social projects toward self-governance of the food community;
- co-production of food and co-governance of the urban-rural policies as outputs of agreements among governments, farmers, and citizens;
- food justice including the most vulnerable populations and identifying the right price for short-chain food;
- quality of landscape to ensure its aware use by citizens and tourists.

In this spirit, a variety of institutional and self-organized projects work today for the creation of agricultural parks which trigger a rich social debate and are useful for the definition of a new generation of urban-rural planning, systemic, integrated, multi-level, and multi-sector, where the plural role of agriculture can actively dialog with the complexity of territorial dynamics, settled communities, local markets (Bocchi 2015) and, not least, with the regional planning instruments.

Activating a new pact between town and countryside (Magnaghi and Fanfani 2010) means returning a clear meaning both to the city and the countryside, triggering a process aimed at a "re-peasantization" (Van Der Ploeg 2009) of peri-urban countrysides and at a "re-citization" of the urban edge territories (Poli 2014). Such a pact does not take into account opposite stereotypes of city and countryside, but aims at returning a particular value to both terms, too often hybridized to the exclusive benefit of an urbanization that consumes agricultural land without building a new peri-urban rurality. Alongside fast roads that tear the agricultural mosaic apart and break biotic connections, city contours are over-occupied by low-density urbanization, large-scale functions (hypermarkets, airports, stadiums, etc.), often polluting and harmful (factories, junkyards, purifiers, etc.), together with a mono-functional agriculture disconnected from the city and linked to global networks. In other words, the city has turned its back on its countryside, invading it through its expansion and looking for food from distant territories. On the other hand, the fragmented periurban agricultural areas within the built-up matrix are affected by land revenue issues related to the dominant hypothesis of further expansion. The city advances with low-density fringed areas lacking quality public spaces or meeting places. The pact between city and countryside intends to restore in new forms the dialogue between the rural and urban worlds, beginning with the recognition of the need to identify a limit on urbanization and the strengthening of logistical and productive rural activities in the peri-urban area. A margin area is not just the separation line between internal and external, which can be identified by the term "urban edge", but regards a more extensive range consisting both of the urbanized and

the rural areas (Ministry of Agriculture and Lands 2009). The fruition and economic proximity relationships are exactly what defines this amplitude, placed on the two sides of the edge. This is the everyday territory, identified by the time spent to walk or cycle a certain route. The line marking the border is often jagged, irregular, consisting of mixed fabrics of poor quality, often with no public space (Maciocco and Pittaluga 2001; Palazzo and Treu 2006; Socco et al. 2005). The margin is the potential diaphragm where exchanges concentrate.

To "re-citicize" the margin means limiting urbanization, re-qualifying the new fronts by locating there functions and features peculiar to the urbanrural interface (peasant markets, agri-centers, farm dwellings, areas for phyto-purification, roof water recovery areas, etc.), with building centralities, meeting and rest areas (Tachieva 2010) in close interaction with the new agro-environmental infrastructures that bridge the fronts and connect urban interiors with rural exteriors (e.g., urban gardens, river corridors, tree areas, parks, etc.).

To "re-peasantize" the peri-urban countryside means encouraging the transition to a "new peri-urban rurality" (Mora 2008), strengthening the activities the rural fabric can offer in terms of multifunctionality of agriculture and the provision of ecosystem services for the urban population (landscape and environment care, teaching, supply of public canteens, etc.) and defining a new logistics for agriculture (short-chain markets, collective processing centers, storage areas for food and biomass, biomass power plants, interconnection and supply systems for small farmers, organization of a subfund for greenhouses, etc.). In the wake of similar cases (e.g., Portland, USA), Regione Toscana made a first step in this direction with the Regional Law on Land Government no. 65/2014, which established a boundary between urbanized and rural territory, protecting peri-urban areas against the unremitting expansion pressures. The Law also strengthened the peri-urban agricultural identity by recognizing the "rural peri-urban" sphere, which has led to periurban territories, defined by much literature as hybrid, neither urban nor rural, back into the rural context with peculiar features deriving from the proximity to the city.4

The powerful relationship between these two worlds lets us rethink the peri-urban as a public space at the territorial scale, where it becomes possible to design new views for revitalized urban edges.

The switch from a peri-urban intended as a mere surface for urban expansion to a living intermediate territory requires giving value to the ecosystem services (Costanza et al. 1997; MEA 2005)⁵ open territories may offer to the public; this paves the way to new multidimensional standards for territorial government, possibly following the direction of the "proximity farming green" scheme proposed by the regional Master plan of Ile de



France, providing for 10 square meters of neighborhood green areas per capita right in the heart of the agglomerations (SDRIF 2008).

In this view, agro-urban intermediate territories achieve a "public" role through several aspects:

- the various activities related to the category of ecosystem services: risk reduction (landslides and floods); supply of food and biomass; biodiversity and landscape; cultural, sports, and leisure functions;
- the presence of agricultures already multifunctional or in transition toward multifunctionality (Deelstra, Boyd, and Van Den Biggelaar 2001) producing public goods and services;
- the definition of fair proximity and network economies pointed toward common goods;
- the care for territorial heritage and active citizenship actions.

The multifunctional project "Farming with the Arno. Riverside agricultural park"

The project "Farming with the Arno. Riverside agricultural park" is sponsored by the Metropolitan City of Florence (lead institution) together with the municipalities of Florence, Scandicci, and Lastra a Signa and the Department of Architecture of the University of Florence (Research Unit "Project Urban Bioregion").6 Operations started in 2009 with a Memorandum of Understanding (Butelli 2015) and currently rely on the support of the Authority for the guarantee and promotion of participation of the Regional Council of Tuscany (Regional Law 46/2013) co-funded by the institutions involved.⁷ The duration of the project covered a period of nine months from April 2015 to January 2016; its final event, where its goals and outcomes were presented to the whole population in the presence of the local authorities involved, took place on September 30, 2016. The area affected by the project falls within the peri-urban territory of Florence on the left bank of the Arno, a crucial area for the Metropolitan City. The project is aimed at designing in participatory form a strategic plan for local action, a pilot project of integrated and multi-sector enhancement of the rural environment, from peri-urban fringes to waterways, pointed toward regenerating territories in accordance with the European Convention on Landscape and the recently approved Regional Landscape Plan (from geology to ecology, food production, and fruition).

The project tried to experiment with a combination between the agreement dimension of the river contract and the integrated planning of the multifunctional agricultural park through the development of a River Contract that included the function of the Riverside agricultural park. The actions related to river contracts (Bastiani 2011), at present appreciably widespread in Italy thanks also to the recent acknowledgment by the Ministry of Environment,⁸ show the effectiveness of an agreement design put into practice through a dense participatory and negotiating path involving the different actors, able to achieve an agreement with public administrations producing public utility by integrating social value, environmental sustainability, and economic viability.⁹

During the participatory process, the project has laid the foundations to build a form of public-private governance both horizontal (among local actors) and vertical (among local actors, administrations, and associations) with a wide range of funding institutions (municipalities, land reclamation consortia, basin authorities, etc.).

Two main goals have been identified:

- imagining and designing through a participatory and shared approach, in a crucial area for the Metropolitan City, a strategic plan (on the example of a Local Action Plan for the River Contract) aimed at the promotion of a key role for the various stakeholders involved (local associations, active citizenship, citizens, schools, farmers, convicts, etc.);
- building the conditions to make such system of governance, proposed for the Action Plan of the River Contract with the function of Riverside agricultural park, effective as an integrated tool for strategic planning and territorial programming in order to define procedures, rules, actors, actions, tools, the multi-sector projects, and the related forms of financing to be taken within the range of the ordinary territorial planning instruments.

Organized in these two levels of governance of the process, activities were developed in an extensive series of meetings and design workshops that employed preparatory tools such as questionnaires, interviews, and thematic seminars:

- first level: Area Table with institutions and associations representatives, attending from the three municipalities;
- second level: Local Tables and Workshops with residents, farmers, and schools.

The second level of the process was conducted without the presence of local administrations to allow the participants to express themselves, if necessary, even against current public policies, thus being better able to autonomously develop their own ideas of the project. Participatory proposals were discussed in the Area Tables in search of ways to make them operational.

As well as by institutional representatives of the project, Area Tables were attended by many other actors deploying a potential network of supporters of the first action plan of the River Contract with the function of the agricultural park. The specificity of the project lies therefore in facilitating local planning with residents and farmers, but also in being able to avoid the widespread distrust of active citizens and associations toward the "rhetoric of participation", where they have been unable to produce binding decisions for the public operator. The contract, once signed between associations and institutions, will aim at overcoming this frequent deadlock through an agreement committing to transpose all the decisions taken by the ordinary instruments of government of each public body, and will require the adjustment also of the governmental acts in force (Structural Plan, Town Planning Regulations, Sector Plans, etc.).

Once defined, the projects were submitted to the public administrations for approval, but at this stage have not yet included them in their territorial governance instruments. As soon as the regional support for the participatory process is finished, the proposing subjects together with the Consortium of Reclamation and an agricultural trade association, Coldiretti Tuscany, will have a signed Consortium Agreement, "Farming with the Arno. Riverside agricultural park" (September 23, 2016), in order to continue their activities toward the implementation of the River Contract with function of an agricultural park.

A strategic and negotiation project for the agro-urban redevelopment of territories

The participatory project aims at encouraging and supporting (through the measures of the new CAP)¹⁰ multifunctionality for the agricultural areas of plains and hills, granting the residents and farmers an active role in feeding the city, reducing the ecological footprint, taking care of the river banks, promoting the development of biodiversity, and the production of goods and services to respond to an increasingly visible public demand for nature, leisure, health, and sociability. The outcome of the participatory project consists of two parts:

- a strategic scenario for the multifunctional agricultural park as a "bioregional public space";
- the proposition of 12 social agreements among public, private, and social actors.

Strategic scenario

The strategic scenario identified aims at reconnecting Arno and hills, crossing the areas of conurbation through agro-environmental green wedges which penetrate places as lifeblood, rebuild margins and link together the different ecosystems.

This project returns a central value to the Arno and its tributaries, which should regain their key role of multifunctional ecological corridors connected to the fabric of historic settlements and the local soft mobility network. The Arno, in particular, should return to play its role of regional ecological backbone, recovering as much as possible of its space for natural dynamics, according to an approach—now spreading throughout the world—pointing at returning rivers and streams as spaces where water can ramble with more degrees of freedom through enlargement of riverbeds, definition of riverside areas and lamination areas. The waterways will be sided by walking and cycling paths not affecting the ecological function of the river, as well as rest and refreshment areas with gravel "beaches" formed by the natural river erosion. Among the soft mobility paths, relevant are those related to light navigability of the Arno, with the main purpose of reducing road traffic and reopening the relationships between residents and river. This hypothesis provides for several boat stops in correspondence with the river crossings, so that they can become nodes of sociability, with small beaches and resting places managed by waterfront farmers. Among the circular economy projects related to water, it should be mentioned the reuse for agricultural purposes of the waters from San Colombano water treatment facility, currently directly returned to the river.

Territories reclaimed through a new agriculture invite residents, tourists, and visitors to enter the countryside for shopping, recreation, and passing through the fields (Poli 2013). The agricultural park will then be well innervated by soft mobility routes that can penetrate even into rural service tracks thanks to the enhancement of the historic trails. The scenario provides for pedestrian and bicycle crossings from the plains to the hills, as well as the realization of "woonerf" crossing the riverside town centers. 11 Locally, woonerf represent a privileged and safe path linking the small villages along the Arno, from which it will be possible to reach the river and cross to the other side.

A bike path is also being built along the river, from its beginning near Arezzo to its mouth near Pisa via the Florence area, which could introduce to the metropolitan area a significant amount of cycle tourists careful about landscape and environment. Local territories will have to gear up to accommodate these visitors, who may find nice accommodations in the rural hospitality the park could offer. The main focus is then to reconcile general goals at the regional scale (ecological corridor) with local targets concerning production and fruition, through the definition of multipurpose ecological networks (Malcevschi 2010), in order to:

• build a true and powerful ecological corridor at the regional scale, connected to the local ecological network through the network of tributaries, which is also a local reference for landscape and fruition,



possibly preferring crops consistent with the effectiveness of the ecological network (food-forestry, etc.);

- make the Arno the ecological backbone of its territory, with perpendicular ecological networks crossing the plains and rejoining the Arno with the hills on the left and right banks, creating ecological gaps in the continuum of buildings;
- define cycle and pedestrian paths consistent with the ecological functions of the river;
- foster an active role of agriculture in supporting the fruition of territories through sports, culture, tourism; making the farm a service center for users (stables, restaurants, bicycle and canoe rental, management of river access, small wharfs, crossings, etc.);
- manage the functionality of the embankments in line with the riverside gardens, the beaches that can be created on the natural bars, the boat quays, etc.;
- establish the category of the "farmers custodians of the river", assigning them the monitoring and maintenance of riparian vegetation, canals, the management of boats on the river, of bicycles, crossings, and places of rest.

A negotiated and participatory project

The bioregional design of peri-urban territories is based on the reactivation of sociality and forms of local self-government. Peri-urban territories are thought of as a large public space at the territorial scale, organized in activity nodes and connecting ecological networks with regenerated urban overlooks.

Among the aims of the participatory process is the implementation of the scenario for the construction of the agricultural park through several "social contracts".

Today, several cases of cooperation have been developed among communities intended as network aggregation of different interests, aimed at achieving policy objectives or at fostering territorial transformation, that highlight civic initiatives and local empowerment in social innovation and self-organization practices (Bailey 2012; Cremaschi 2008; Moulaert et al. 2010). Communities are identified, in this view, as the headquarters for social capital accumulation (Rydin and Holman 2004), which can play a key role in defining territorial development policies (Dale and Newman 2010).

The "social contracts" we refer to are voluntary agreements between public bodies (municipal administrations, local, or regional authorities, such as the Basin Authority, the Reclamation Consortium, schools, hospitals, and penitentiaries), private, and social private actors (associations, social groups, etc.) who meet together in order to formulate the covenant. In a pact with equal dignity, all subjects, starting from the recognition of territorial heritage, the local deposition of values and the recognition of critical issues, define the project that should provide for shared forms of funding, management, and monitoring. A new role then emerges for the public actor in territorial management, which includes new competencies attentive to the community instances and to the territory they arise from. Various forms of self-organized contractual communities are currently developing and spreading, engaged in the management of territories recognized as common goods. In Italy, "contracts" providing for a gradual transfer of power from municipalities to associations are increasingly widespread, like those aimed at the management of common goods (e.g., Siena, Rome, Naples, and Bologna), the creation of local energy system through community cooperatives (such as in the municipality of Melpignano in Puglia, see Tricarico 2016), or the revitalization of an entire village, like in the municipality of Castel del Giudice in Molise with the community management of diffused hospitality, tourism, retirement homes for the elderly, and even of an organic apple orchard. 12

This paradigm shift, of course, alludes to a renewed social context where:

- the institutions are committed to facilitating and supporting the collective action of local communities, transferring control and management powers toward them through the activation of contractual forms of selfgovernment;
- local communities accept interaction with institutions by adopting cooperative behaviors to define community-based rules for the use of contexts and resources;
- institutions and local communities manage the conflicts that may arise in a transparent and collaborative way.

Thus, the contract between public authorities and local actors increases sharing and social responsibility toward territories, and fosters forms of self-government that alleviate the public administration of many control and management activities and strengthen the social fabric by acknowledging its function of territorial care through a direct intervention of local skills.

The 12 social contracts emerging from the participatory process

The participatory process has therefore nurtured a community spirit among the stakeholders and built a dense activity of vertical and horizontal meetings among several subjects such as Region, Superintendent for fine arts, Local governments, Reclamation Consortium, Societies, Basin Authority, Correctional institutions, Biodynamic agriculture association, and Trade associations. Various meetings have already woven new networks among participants, fostering confidence and strengthening the local project skills. The actors involved defined together each project and committed to signing the related contracts as



soon as they will be operational. The process outlined 12 social contracts, some of which will make up the first action plan of the River Contract, that can be grouped into a few major action lines: regulatory simplification, support for multifunctionality, and social agriculture's opportunities.

Regulatory simplification

(1) The contract "Shared rules for the territorial park" provides a vertical governance between local (Regione Toscana, metropolitan city, and municipalities) and national (superintendency for cultural heritage) institutions and agricultural trade associations to bring building procedures from an enabling to a regulative logic providing for clear and shared rules between the various actors. This can allow the different operations farmers have to perform (sheds, greenhouses, poultry houses, outbuildings, extensions, etc.) through the use of manuals and pictorial rules referring to the settlement morpho-typologies within clear times of implementation instead of lengthy, uncertain, and discretionary authorization processes.

Support for multifunctionality

Several contracts are pointed at supporting and strengthening farming activities through the construction of funding lines most apt to enhance multifunctionality.

- (2) The project "Farmers as custodians of territories" is aimed at supporting the environmental and presidium role of local agriculture, providing additional sources of income through the subsidy granted for the management of minor water networks and path networks, the support to rural tourism and education, and encourages as well the employment of disadvantaged people, the participation in local marketing networks through ethical purchasing groups, and in the public canteens network.
- (3) The contract "Waterfront farms as Custodians of Arno" adds to the territorial custody functions of farms most related to the main waterways and particularly the Arno, in order to make the rivers usable and safe through maintenance of riparian vegetation, river monitoring, management of the docks for boats which from the port of Signa could reach up to Florence, surveillance of the crossings (footbridges, lights, etc.) and the beaches along the river, and the management of a cycle rental service. The custody contracts require agreements with various organizations and trade associations. Moreover, a key opportunity to support peri-urban agriculture comes from the chance to rely on a guaranteed aggregate demand like the one coming from the public school canteens.
- (4) The contract "Adopt the Arno" originates from the social projects of local groups and associations integrated with the activities of the waterfront



farms, and is aimed at the maintenance/animation of a section of the Arno river marked by peripheral features that increase where degraded areas and "uncomfortable" functions moved away from the city center are located, such as the Gypsy camp. The project consists of a series of "low-cost initiatives" (events, enjoyment, small repairs, etc.) achievable with the active involvement of local residents and the third sector.

- (5) The contract "The rural land feeds public canteens" aims at promoting the use of local production of olive oil and vegetables in public canteens, with the establishment of an incremental network of farmers who can supply them. To achieve this goal it is necessary to: sensitize families and authorities about the problem of safety and nutritional value of local food; define participatory specifications shared among all the stakeholders; and find a structure to manage the network of producers for foodservice. Besides municipalities, then, the parents' committees of schools and the companies managing the procurement of public canteens are also required.
- (6) The contract "Networking: permanent animation" is intended to give continuity to the project. For a new generation agricultural park, light in bureaucratic terms, which does not require a formal park board but just a participatory management committee, it is vital to have the presence of a constant territorial animation, aimed at consolidating the network and at the permanent activation of social projects putting the various actors (Gas, canteens, etc.) into a system.
- (7) In the renewed suburban context, identifying a new logistical support for the various activities will be crucial. A central element of such logistics has been identified in the "Common house of food", which meets the need of many small farmers to give someone else their products, since being single operators they cannot work the land and sell the products through direct sales at the same time. This project provides for the conversion of an abandoned area in the municipality of Lastra a Signa (a former slaughterhouse) into a structure with various functions related to the multifunctionality of the park agriculture. Besides the commercial functions related to sales and catering with the park products, the house should be characterized as being the urban-rural heart of a new sociability closely connected to the concept of critical consumption and forms of exchange and barter of tangible objects, time (the bank farmers' time bank) or farming skills and knowledge between citizens and farmers. The park has already activated a sort of peasant school, a self-education class in organic horticulture managed by park farmers and local associations.

Social agriculture's opportunities

A central issue directly concerning the dimension of social justice is that of the many opportunities for rehabilitation and redemption offered by social



agriculture, thanks also to the recent National Law (Decree Law no. 141/2015). The project includes four contracts on this topic:

- (8) Following the example of successful European and local experiences, such as those managed by the Health Society of Valdera (Di Iacovo and Scarpellini 2012), the contract "Networked social agriculture" works at shaping an open local partnership, realized through an institutional platform, that shares and promotes social agriculture as a tool for the fair socioeconomic development of the park area, through an interdependent system and a network governance apt to connect farms, services and institutions, third sector, consumers, and disadvantaged people. The project aims at creating an operational structure which the system of actors involved can identify with, and in which supply and demand of social agriculture available in the park area can meet.
- (9) The contract "The prison takes root" will promote the transformation of the prison facilities in the area (Prison "Mario Gozzini", Sollicciano Penitentiary) from places of punishment and segregation into places of relationship and opportunities, both for prisoners and the urban communities outside. The former because they can benefit from the therapeutic value of agricultural work, the latter because they can take advantage of the labor prisoners can provide on farm, and for the experiences they can promote in prison such as dinners, shows, mixed classes for prisoners and school children, horticulture, and work in community gardens. Moreover, the prison's canteens could be supplied by the local producers network, where prisoners could work.
- (10) The contract "Passporticulture" promotes social integration through the creation of intercultural farms, cooperatives or shared gardens mixed between natives and immigrants, expatriates, refugees, etc., developing the production of ethnic crops to ensure the right to food culture of every people (Paddeu 2012). Their products may also supply ethnic food stores and restaurants.
- (11) Accommodation is a relevant issue for those who want to enter the world of agricultural work without owning a family business, especially in areas where zoning regulations on the one hand allow de-ruralization, and on the other prevent the construction of new farm buildings. Therefore the project "Fair peasant living", located in the peri-urban area of Florence, includes several lines of action, the first of which promotes an urban-rural social housing allowing young farmers to settle in urban fringe areas, redeveloping them and at the same time allowing to plant in many

uncultivated areas throughout the plain, in consonance with some French policies (Nougarès et al. 2014). Another line points at supporting elder farmers or families who cannot take care of farmland (but still living on site) and disadvantaged people willing to take care of such land in exchange for hospitality on the landowners' property. The project aims at transforming the "housing problem", today affecting increasingly large segments of the population, into opportunities for some people and, in general, at creating a more cohesive community promoting a new model of elders' assistance and care of farming spaces through cohabitations based on the principles of mutual aid and solidarity.

(12) The last contract, "Villa La Guerrina community agriculture", in order to overcome prejudice against the community project under development, provides for the dissemination of knowledge and the strengthening of the social, recreational and agricultural activities already undergoing in Villa La Guerrina, a property that became public through a legacy constraining its possible use, for the municipality of Lastra a Signa, to specific functions for the elderly. With the approval of the municipality, the self-management committee of public lands in Lastra a Signa is permanently managing through community forms the horticultural lands and olive groves surrounding the villa, while occasionally groups of seniors are accompanied in the dedicated building and garden. The project intends to integrate the committee project with other activities of the elderly to promote intergenerational transmission of skills and knowledge (new and old agricultural practices) and the co-design and co-management of the production and processing chain of local products (jams, bread, etc.), apt to implement self-help networks, solidarity, and sociability in the local community. Villa La Guerrina holds then as a generational, economic, and multicultural "bridge", a meeting place devoted to the production and dissemination of all kinds of knowledge revolving around community agriculture.

Discussion

The big global contradictions relating to disparities in access and quality of food (food security, food safety) have in peri-urban areas a privileged context for discussion and innovation. In Western cities, the specific problems have quite different features with respect to Southern areas of the world, and are frequently marked by projects of "great transformation" leading to the reorganization of an entire settlement system on its shift away from industrialization and agro-industry; whose conjunction has so far produced "social deserts", where interpersonal relations are minimized, and peripheral areas as single-purpose aggregates, devoid



of meeting places, crossed by big blind infrastructure that cut the finer historical fabric.

Starting from movements maybe elitist at first, in search of organic and local food, Western cities have been affected by a "food revolution" not simply asking for safety or quality, but demanding food sovereignty and claiming to control and govern all the machinery of production, marketing, and distribution. Communities of food, large and manifold, attract different actors—retirees, students, young intellectuals, unemployed people—experimenting with new styles of life and consumption. Peri-urban areas have then become workshops for the innovation of forms of social regrouping and rehabilitation whose shared objective is re-territorialization of food, holding together the quest for environmental sustainability, food security, and social justice.

The participatory process "Farming with the Arno. Riverside agricultural park", recently concluded, has thus highlighted how introducing a bioregional perspective into public debate may allow the approach toward the transition of the peri urban from a mere surface for the allocation of housing, services, and metropolitan functions, to a territorial public space, redeveloped and dense in life, revolving around food. Of course, the participatory process is still too short to put into practice positive territorial policies, but many clues have hope in the chance to generate some authentic innovation in peri-urban territories. The River Contract, which requires a precise will of the regional authority, is not yet on the horizon, but, along the whole process, no one has ever doubted about the perspective of creating an agricultural park, promoted by the three municipalities involved, focused on strengthening the local community through the implementation of social contracts.

Having set up the participatory process on a double level of governance, both operational (consultation) and creative (participation), has allowed a genuine commitment of all actors and made them more responsible. In the meantime, the process has already had a few beneficial effects on the affected territories:

- a greater awareness in the administrations, citizens, and farmers about the agricultural potential of the peri-urban territory in producing food for the city;
- the dissemination of food and urban agriculture issues in the local
- the commitment of administrations to continue investing in the implementation of the multifunctional agricultural park, certified through the stipulation of an agreement including the 12 projects;
- the establishment of substantial partnerships among administrations, farmers, and associations participating in regional, national, and international calls for agro-environmental and productive territorial regeneration;

- the identification of an abandoned building (a former slaughterhouse) as the seat for the "Common house of food" in the municipality of Lastra a Signa;
- the mutual trust which led the municipality of Lastra a Signa to grant to the urban horticulture group the use of the agricultural land of Villa La Guerrina, where several community projects are being experimented;
- the strengthening of the product marketing network within the park area;
- the identification and availability of a network of public agricultural land, in the three municipalities, connected through a unifying project, where it is possible to develop an inclusive, multifunctional agriculture, open to disadvantaged people and local population;
- the spreading among farmers of multifunctional practices for their farms, open to the participation of citizens;
- the effectiveness of the Area Table in obtaining from the Reclamation Consortium a consent to involve farmers in the maintenance of the relevant water network, which positively supports peri-urban farming;
- the self-organization of a local committee formed by farmers, associations, and citizens to urge the administrations in the implementation of the agricultural park.

The participatory process "Farming with the Arno. Riverside agricultural park" has shown how difficult it can be to put into practice multi-sector and multi-purpose policies when they are not supported by a definite food planning framework. However, the project, considered also the positive response both of administrations and local actors, has clearly highlighted the need to build a project able to respond simultaneously to multiple objectives, such as environmental regeneration, social inclusion for vulnerable groups, but also for those who have not yet joined the world of agriculture, like so many young people currently unable to access the land. In peri-urban areas, multifunctional agriculture represents a significant opportunity to build innovative and steady relationships between town and countryside, as shown by the rural services expressly conceived for the city (e.g., fair peasant living or the supply of public canteens).

Notes

- 1. Large urban areas completely devoid of food marketing places, frequent in the United States.
- 2. The principle of food sovereignty—first stated in 1996, at the NGO Forum held in Rome in parallel with the FAO World Summit on Food Security—rests on four pillars: right to food; access, management, and control of natural resources; a sustainable and



- short chain agricultural model; and fairer and more equitable international trade. See the 2007 "Declaration of Nyéléni," http://www.nyeleni.org/IMG/pdf/DeclNyeleni-en.pdf.
- 3. Created in the wake of American GPOs (Group purchasing organizations), the Italian GAS (*Gruppi d'Acquisto Solidale*) have added an ethical nuance to their activity, inscribing it strongly in the ambit of fair trade.
- 4. See Art. 4, paragraph 2, of the Tuscan Regional Law 65/2014: "Transformations involving commitment of underdeveloped land for settlement or infrastructure purposes are permitted only within the urbanized area".
- 5. The United Nations program "Millennium Ecosystem Assessment" has systematically declined the roles ecosystems play for mankind, listing the goods and services they provide, and then provided a classification dividing eco-systemic functions into four main categories: *supporting*, *regulating*, *provisioning*, and *cultural* services; see MEA (2005).
- See http://www.dida.unifi.it/vp-323-probiur.html. The writer is the head scientist of the research.
- 7. Regione Toscana has a specific Authority to ensure the participation of citizens for the strengthening of social projects. This Authority acts in the framework of a specific Law, revised in 2013 (Regional Law no. 46/2013) from 2007 (R.L. no. 69/2007), which allows to support and fund social aggregations and/or institutions that promote a participatory process. This case study describes the outcome of a participatory process just concluded and promoted by a combination of local authorities (the Metropolitan City and the Municipalities of Florence, Scandicci, and Lastra a Signa) together with the University of Florence. The author is the scientific manager of the project.
- 8. See Art. 24 bis of the Environmental Code (d.lgs 152/2006).
- 9. Referring to the European Convention on Landscape, river restoration is here understood in a very broad sense and provides for a multi-sector approach interrelating several aspects (hydro-geo-morphological, ecological, settlement, rural, fruition, participatory, aesthetic, etc.) in order to design durable development scenarios.
- 10. "Common Agricultural Policy" of the EU countries.
- 11. Designed in the Netherlands and now spread throughout Europe, *woonerf* are roads where pedestrians have priority, where you can stop and play due to the reconfiguration of the roadway expressly designed for this purpose.
- 12. See the case of Castel del Giudice in http://www.societadeiterritorialisti.it/category/osservatorio/schede-gia-elaborate/.

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