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ABSTRACT
European agricultural landscapes are important for their capacity to preserve both biodiversity and historical and traditional values in rural and peri-urban spaces. Some studies have highlighted the influence that different production methods have in shaping landscapes and the role of policy in promoting their protection at different scales. This paper underlines the potential of the integration of food production into planning tools and regulations by looking at two rural regional parks in Italy and Spain through the role played by Alternative Food Networks in generating mutual benefits for farmers and for the organizations in charge of the parks. Insights from an analysis of farms’ websites and interviews are used to show how these parks represent good practices for preserving rural landscapes. The paper shows how ecological, social and spatial values in farmers’ behaviours represent driving forces that can contribute to a more effective preservation of landscapes.

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AGRO-FOOD LANDSCAPES: GOODS TO PRESERVE

There is growing attention to European agricultural landscapes due to the importance of food production to which about 40% of the European Union area is dedicated (Eurostat, 2010). Landscape and environmental protection have been included within food systems policies, transforming them into multi-objective policies; the Common Agriculture Policy (CAP) is one example of this shift. The importance of agriculture sustainability increases the need to research policy’s role in boosting effective links in many contexts (e.g., geographical, social and economic) influencing landscape changes (Brunori & Di Iacovo, 2014; Simoncini, 2015). However, landscape and its scale of governance remain a complex topic; Lefebvre et al. (2015) argue that the CAP targets the farm scale only, neglecting the influence of broader agricultural practices on landscape shaping. Without going into possible CAP adjustments, this paper shows how Alternative Food Networks
(AFN) practices and objectives are integrated into landscape governance at the regional scale within two rural parks and their respective internal quality labels, which have been created to give added value to products for farms within the parks. Although agriculture/landscape interaction is found in conventional farming (landscape is ‘the system where farmers interact with both natural and social resources through the management of their fields’; Benoît et al., 2012, p. 1386) the paper focuses on AFNs because of their multifunctionality (Fielke, 2015): they are not strictly production oriented but also concern environmental protection and social benefits (Migliore, Schifani, Romeo, Hashem, & Cembalo, 2015).

This integration could be effective for both agricultural landscape protection and allowing farmers to promote activity at the regional level, thereby overcoming the limitations in integrating food production into spatial planning, until now relegated within the urban context (Morgan, 2014). The paper highlights how ecological, geohistorical and social contexts of AFNs are projected towards regional landscape improvement and local agro-biodiversity recovery by analysing in parallel two regional realities that differ in terms of age, size and management style.

**AFNs: FROM NEW FOOD CHAINS STYLES TO ENVIRONMENTAL TOOLS?**

AFNs are ‘newly emerging networks of producers, consumers, and other actors that embody alternatives to the more standardised industrial mode of food supply’ (Renting, Marsden, & Banks, 2003, p. 394). They shift away ‘from the industrialized and conventional food sector, towards a re-localized food and farming regime’ (Sonnino & Marsden, 2006, p. 181). The AFN literature has focused more on contrasting the productivist system from socio-economic and cultural points of view (Tregear, 2011) than on agro-ecological impacts and agro-biodiversity conservation (Simoncini, 2015). One main approach uses the socio-economic concept of embeddedness (Polanyi, 1944). Penker (2006) describes three overlapping embeddedness contexts: (1) social (ethics, food quality, producer–consumer relationships within AFN processes at local and regional levels); (2) spatial (rooted territorial identity of food – so-called re-localization); and (3) ecological. Morris and Kirwan (2010, 2011) refined the ecological context, explaining ecological influence throughout the production–consumption chain, and how ecology is reflected in promotional material.

This paper draws on the three contexts to shed a light on a previously overlooked dimension: using AFNs to promote landscape and agro-biodiversity conservation – how framing the driving forces shaping AFNs as spatial planning actions is effective to achieve regional environmental goals. Studies of AFN ecological impact have been restricted to sustainability of farming practices and animal welfare (Simoncini, 2015). Only a few studies (e.g., Lovell et al., 2010; Simoncini, 2015) focus on landscape and biodiversity aspects, while the role of public administrations in making AFN values and actions more effective is absent in the literature. This paper addresses this research lacuna, presenting two interesting projects that try to generate mutual benefits between agro–food economy and agro-biodiversity and landscape protection beyond the farm scale.

**INTEGRATING FOOD PRODUCTION INTO SPATIAL PLANNING: TWO LESSONS**

The Parco Agricolo Sud Milano (Italy) and the Soto del Grillo (Spain) are important regional projects that for the first time have integrated food production into regional territory governance and spatial planning (the former is a European pioneer). In both countries, spatial planning and land use are regulated at the regional level. Furthermore, both parks are located within metropolitan areas characterized by industrial agriculture, considerable urbanization and fast food
consumption (Rodríguez & Lamas, 2011), and where food production represents an important percentage of Gross Domestic Product (GDP). Moreover, the parks’ objectives align with the two Rural Development Programmes (RDPs) which promote sustainable food production and ecosystem biodiversity enhancement. Thus, the study contributes to understanding improvement strategies of local initiatives within industrial food spaces (O’Neill, 2014).

The municipal agro-ecological park Soto del Grillo in Rivas-Vaciamadrid (Figure 1) was established in 2013. It aims to support agrarian activities in a viable and competitive way, compatible with natural resource and landscape conservation, and promote access to fresh, seasonal, local and organic food (Ayuntamiento de Rivas Vaciamadrid, 2015). Though mainly dedicated to agrarian production, an area was reserved for environmental protection (Romea Rodriguez, 2013). By assessing farmers’ project proposals (cultivation experience, production methods, marketing strategies, economic suitability and social outputs), municipal authorities assigned 17 parcels of land to farmers, who were obliged to achieve organic certification. Most participate in a bi-weekly farmers’ market. Local food consumption is promoted by the label ‘Fresh produce from the Park’. Land-use management is subject to the South-East Regional Park zoning; Soto del Grillo is a D2 zone: ‘land whose soils have a greater capacity for agricultural use’ (Parque Regional del Sureste, n.d.). These regulations are incorporated into the General Municipal Management Plan of Rivas-Vaciamadrid. Internal rules define prohibitions about water and soil, fauna and flora, agricultural practices, vehicle and pedestrian traffic, fire prevention, noise, and free camping.

Established in 1990, Milan’s Parco Agricolo Sud (Figure 1) associates environmental conservation and agriculture, which ‘has historically characterized the economic development of the area’ (Parco Agricolo Sud Milano, n.d.). Park management comes under both the standard plan for strategic areas defined by the regional law for territory governance (the Spatial Coordination Plan, ‘Piano Territoriale di Coordinamento’ – PTC) and an internal planning document regulating rural activities (the Agricultural Sector Plan, ‘Piano di Settore Agricolo’ – PSA). The PSA, implemented by the Park administration (Milan Metropolitan Area), aims to support sustainable agricultural production, ecosystems and agrarian landscape preservation, and promote tourism and recreation within the park. Twenty-seven producers have the park’s ‘Environmental quality producer’ label relating to measures regarding environmental balance between city and countryside, sustainable production, rural biodiversity and landscape promotion (including restoration of traditional buildings): the label is thus not a guarantee of produce quality, but a form of park promotion.

Since the aim is not to compare the parks but to analyse in parallel how the integration of food production into landscape and environmental protection is achieved, the use of two different methodologies is justifiable.

For Spain, seven in-depth interviews with farmers were carried out in June–July 2014, aiming to describe influences on farmers’ decisions on new activities. The relevant ideas were grouped into spatial, ecological and social embeddedness (Penker, 2006) and sorted using a theoretical model on how embeddedness ‘shapes the development of AFNs from production through to consumption’ (Morris & Kirwan, 2011, p. 326).

For Italy, information on seven websites (accessed in September 2015) of rice producers and cattle breeders (considered representative of the park) was classified into three types of ‘knowledges’ used by farmers in ‘story-telling in an effort to individualise and qualitatively distinguish the product from the norm’ (Morris & Kirwan, 2010, p. 134): (1) geohistorical; (2) ‘naturalistic’; and (3) socio-economic benefits. This shows which forms of farm management were effective strategies for promoting farms and the park.

Both categorizations are based on concepts of space (including place history), ecology and society (Figure 2) facilitating comparisons of different contexts, and how these shape AFN practices. Moreover, since Parco Agricolo Sud is longer established than Soto del Grillo, the results could suggest strategic improvements to the latter.
Data were coded and assigned to the three contexts: (1) spatial – references to place of production, using historic and geographic points of view: stories, family dimension, heritage, sense of territory, tourism, historical landscapes, architecture and climate; (2) ecological – production methods, water and soil pollution, health, energy, biodiversity, and landscape; and (3)
social – official and non-official labels, didactic initiatives, production diversity, consumers, socio-economic benefits, and cooperation.

Landscape has two foci – regional historical characteristics and natural and aesthetic aspects – to gauge the extent to which the parks’ aims (i.e., the label measures) are put into practice by farmers.

FROM VALUES AND MARKETING STRATEGIES TO TERRITORIAL VISION

Both case studies refer to the three contexts, with some important differences: in Milan, the spatial context strongly refers to historical rural conservation, representing the continuity of rural life:

Since the twelfth century, Cascina3 Battivacco belonged to Cesano Boscone parish and it was known as ‘monasterium de Bativachia cum S. Salvatore’; the structure was expanded in 1700 by building the salaried people’s houses. (website 4)

In Rivas-Vaciamadrid, by contrast, historical references are scarce, generally addressed to cultivation methods and food culture:

[Organic farming] is maintaining agriculture as traditional work that has been undertaken by humans since prehistory. (interview 4)

[Organic farming] is valuing products no longer cultivated. We value recovering this lost cultural richness. (interview 7)

Landscape is also conceived differently; Rivas-Vaciamadrid growers associate it with biodiversity improvements from polycultures:

We are within the Regional Park, so diversity of products can be part of diversity of landscape. (interview 6)
Farming is ecological only if there is diversity within the garden; […] we like diversifying. (interview 7)

In Milan, history is again important in describing the surrounding landscapes:

The farm is located in a water-rich area; originally, the property included a mill, and is still crossed by five karst springs. (website 6)
Natural beauty, though, is an attractive factor for leisure:

We propose a cocktail in our garden, while in the background the tranquillity of paddies and bird tweets accompany the sounds of the river. (website 2)

Ecological values also have different foci: artisanal and sustainable cultivation and processing methods are highlighted by websites:

The flour is stone-ground in an old watermill. (website 6)

Our activity is characterised by an ecological conscience and investment in renewable energies. (website 3)

Ecological insights are more related to biodiversity in interviews, serving the dual function of food culture and local agro-biodiversity recovery:

We try to introduce diversity; that’s what organic farming people are interested in: remembering old flavours. (interview 7)

We cultivate fifty tomato varieties; the majority of them are indigenous species. (interview 4)

In the socio-economic category, educational goals (school involvement, diet changes and people participation) are intended to encourage a more environmentally oriented attitude and greater knowledge of the parks. Also the choice of selling methods is linked to the latter aspect:

We chose to open a sale point within the Cascina, because it is important to advertise and enhance the agricultural production of our territory. (website 4)

Tourism within Rivas-Vaciamadrid Park allowed farmers not only to implement new forms of selling, such as ‘pick-your-own’, but also to intensify farm visits, both to establish consumer trust and teach the importance of alternative cultivation methods, allowing people to focus on aspects different than just price. Milan farms also promote thematic footpaths, related to regional landscape, a specific product or activities with animals.

**DISCUSSION**

Farmers’ behaviours and marketing reflect the parks’ different structures. In Milan, the PSA as a planning framework and the quality label push farmers’ visions towards enhancing historical characterizations, building the region’s image through food production. The aim of park and farm promotion is evident in the description of spaces to enjoy landscapes and experience regional food, and make people aware of traditions and cultural heritage.

Perhaps due to its very recent establishment and smaller size, Rivas-Vaciamadrid puts more effort into creating a base for a regional cycle of production–distribution–consumption. ‘Local food’ refers to spatial rather than historical characteristics, including indigenous varieties and organoleptic characteristics for healthier food consumption. However, the park is limited by the lack of its own plan: it uses the South-East Regional Park regulations. The Italian project could thus be a model for a strategy for Soto del Grillo including heretofore unconsidered aspects (e.g., historical heritage of surrounding territories). Such measures could further enhance re-localization of regional food and boost rural tourism within the park. This would also strengthen the existing relationship with the farmers’ market and better promote the quality label.

Nevertheless, sometimes personal insights and experience seem uncorrelated with planning tools; biodiversity recovery was mentioned more by Rivas-Vaciamadrid than Milan producers, even though the Italian label’s environmental measures include biodiversity restoration. The analysis highlights the importance of the spatial and ecological context in achieving landscape and
environmental goals, while the social aspects are tied up with tourism promotion. Park administrations should pay attention to this for future revisions to regulation: quality labels cannot be one-sided obligations only, but must also enhance the promotion of the park.

CONCLUSIONS

Food production is strictly connected to ‘place-specific interpretations’ (O’Neill, 2014) of the territorial context; this flexibility of the concept of ‘local’ represents the new challenge spatial planning has to deal with, especially within rural parks. By looking at two regional projects, this paper has studied how planning tools and internal regulations, taking different forms depending on the regional contexts, contribute towards integrated environmental protection. This encompasses both human factors responsible for landscape shaping (e.g., the restoration of cascine and karst springs in Milan) and agro-biodiversity improvement (e.g., supporting the recovering of lost varieties; Simoncini, 2015). This has shown not only how goals are supported by ecological insights but also the importance of spatial and socio-economic contexts. These values are naturally promoted within AFNs and can be boosted and regulated to apply beyond the farm level, overcoming the limitations highlighted by Lefebvre et al. (2015). Indeed, by taking advantage of values typical of multifunctional agriculture, spatial planning tools which are tailored to local characteristics can regulate future regional developments. This can compensate for the lack of spatial dimension in the CAP, and promote landscape and environmental protection at the regional level, rather than only at the farm level.

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NOTES

1. Cereal represents 84% of cultivation; while 364 of over 1400 farms produce livestock (Parco Agricolo Sud Milano, n.d.).
2. ‘[A] distinctive form of realist knowledge […] which refers to the naturally-embedded origins of these food products’ (Morris & Kirwan, 2010, p. 136).
3. A cascina (plural cascine) is the Po Valley’s traditional rural building.

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