

Use of Computational Fluid Dynamics for improving freeze-dryers design and understanding. Part 1:  
Modelling the lyophilisation chamber

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## **Planning for local food systems: a study on potentials and limitations in Italy and England**

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### **Abstract**

This contribution examines the role of planning in improving the sustainability of local food systems. Specifically, by focusing on two domestic contexts of the Global North –Italy and England–, it investigates how planning policies and plans contribute to shape the relationships among food production and consumption across the urban/rural continuum. Research findings underline that the prevailing approach by planners and policy makers in dealing with the food system is regulative and prescriptive. Emphasis is on protecting existing agro-ecological resources and visual amenities of the countryside, rather than exploring the ways in which agricultural production and multifunctionality can guide a transition towards more sustainable food systems. Reasons of this limitation lie in planning’s disjointed focus on distinct policy regimes, which is mainly due to sectoral and regulative designations and to structural conditions. Conversely, a positive contribution in exploring the potentials of food for shaping better urban/rural relationships comes from a number of alternative, non-statutory, collaborative spaces among farmers and civil society. These have emerged in opposition with the standards and regulations typically underlying the planning process. Their potential lies in the reflexive approach and in the process of inclusive negotiation they share in addressing the vulnerabilities of the food system.

### **Introduction**

Having significant relationships with issues of poverty and health, food has become one of the major challenges for contemporary urbanisation processes, both in the Global North and South. Its importance relates to the impacts on a host of other sectors —such as public health, social justice, energy and transport— (Morgan, 2009) together with the direct contribution on citizens’ quality of life.

In many cities, food-related health and sustainability concerns have prompted into the scientific, political and planning agenda. These discourses are grounded in the awareness that the construction of planning policies oriented to reinforce the linkages among hinterland’s productive factors and the city’s demand for good food can be an effective way to guide the transition towards more sustainable food systems (Renting & Florin, 2015). Among the many advantages that can be obtained by stronger relations of proximity among food producers and consumers the reduction of distance (literally and metaphorically), often related to a better consumer knowledge of place, methods and products and to higher levels of food security and transparency, is the more significant (Broekhof and van der Valk, 2012).

Indeed, as also recalled by Dubbeling (2013), spatial planning provides a relevant contribution in supporting sustainable food systems due to its crucial role in regulating the use, guiding the productivity of the most versatile agricultural land and in shaping the functional relations among urban and rural areas.

An important aspect to consider is the fragmentation that often characterizes land-use policies which manage and plan agricultural areas. As part of the rural hinterland which surrounds a number of urban cores, food growing areas are often subdivided among a number of municipal jurisdictions. For this

reason, the consideration of agriculture in spatial planning presupposes a reflection on the administrative dimension of territories, on what Calafati (2009) interprets as the relationship among territorial and institutional facts. Thus, investigating how to improve the role of food growing spaces in a perspective of urban/rural relationships means to increase the understanding on why and how local governments cooperate in planning for sustaining more sustainable and localised food systems.

The goal of this contribution is to improve the understanding on the planning approaches by which local governments can build more localised and sustainable food systems across the urban/rural continuum. The research has explored this topic by looking at the planning actions and interactions, connection and disconnections among local governments (Marsden & Franklin, 2015) in two domestic contexts of the Global North, Italy and England, and in three cases of contrasting size and configuration: the metropolitan area of Milan, the Aso Valley and the City Region of Bristol.

The choice of the case-studies is based upon two main criteria. Firstly, the case-studies are indicative of different spatial configurations of urban/rural relationships (Jacuniak-Suda *et al.*, 2018; Bengs & Schmidt-Thomé, 2006), with reference to the territorial dimension of agriculture within urban and metropolitan regions. OECD (2013) provides an interpretation of urban/rural relationships according to which the concept is not attached to a certain spatial extent but it applies both for metropolitan regions and for small and medium sized towns. Accordingly, the case of Milan is indicative of a metropolitan region in which rural areas mainly have the role of servicing the urban region and where the countryside has a relation of strong dependence to the city (among the many: Ferraresi, 2009). In Bristol city region a number of few small-medium sized cities is strictly interconnected to a cluster of rural areas and the hotspots of local urban economy are spatially diffused in the whole region (Carey, 2011). Instead, the Aso Valley is an example of a sparsely populated context with market towns in which urban areas do not play a role as engines of growth and where the regional economy depends on resources and activities mainly located in rural areas (GAL del Piceno, 2014).

Secondly, the case-studies are representative of different governance and planning arrangements which match with the configurations of urban/rural relationships above mentioned. The location of the three cases in two distinctive institutional contexts and planning frameworks provides the chance to reflect upon the cultural assumptions and technical procedures that produce a different tension among spatial development and territorial governance (Janin Rivolin, 2008; Teles, 2016; Teles & Swianiewicz, 2018). Accordingly, while in Milan the agricultural park is an inter-municipal governance body with a planning policy established for protecting and governing a vast portion of agriculturally-specialised territory in the South of the metropolitan area, the Aso Valley is a context in which a statutory local governments' association and a number of soft and strategic-oriented spaces of cooperation are acting for reinforcing the economic burden of agriculture, and its related social and environmental benefits to the local context. Last but not least, Bristol City Region provides the chance for investigating upon the performance of a consolidated planning policy, the Green Belt, which has been recently transformed by local and city-region planning policies (mostly by the newly established inter-municipal public-private body, the West of England Local Enterprise Partnership).

The case-study strategy adopted by the research had the purpose to understand how contextual conditions have influenced and determined the investigated phenomenon (Yin, 2003). Data collection mainly relied on a series of semi-structured interviews addressed to local institutional actors directly involved in constructing planning policies (mainly mayors, local councillors and planning officers), and to civil society representatives with an interest towards the content of the policies or the related planning processes. Other data collection methods have been a literature review, especially in planning and food system fields, and a documentary analysis on reports and official spatial planning documents.

***Discussion: from binding regulation to inclusive negotiation***

Despite their embeddedness in different planning systems, the research has shown that local governments both in Italy and England build policies tackling agricultural areas by adopting a regulative and prescriptive planning approach (Mount, 2012). Policies and plans are mainly oriented to protect the countryside from inappropriate developments and to preserve landscape and agro-ecological qualities. Accordingly, they do not significantly contribute to the differentiated and multifunctional nature of agricultural areas and to their potential in strengthening the relationships among food producers and consumers across the interface (Lazzarini, 2019).

In Italy, the cases of Milan and Aso Valley binding local and inter-municipal plans tackle the vulnerabilities of agricultural areas mostly by creating a land-use designation which is complex in terms of the coexistence and overlapping among different layers of regulation, and enduring because of the difficulty to modify its scope and contents [fig. 1] (Lazzarini, *forthcoming*).

In England, the focus of local plans on food growing areas in Bristol City Region is mainly on protecting the visual amenity of the countryside and on clarifying the circumstances for the protection and/or release of Green Belt land for housing developments [fig. 2]. Just in the municipality of Bristol, the local plan has shown a more sophisticated approach to the food system, mostly due to the positive contribution of the Bristol Food Policy Council to the plan-making (Raffle & Carey, 2018). Among the policies dealing with the food system included in the local plan, the more significant require new residential developments to be designed and located for facilitating opportunities for local food growing. Others set out a statutory provision of allotment plots in new developments and expects them to maintain the role of civic centers as providers of groceries and fresh food in contributing to day-to-day shopping needs (BCC, 2014). In the other neighboring local authorities in Bristol City Region, the only local plan dealing with multifunctional farming is the South Gloucestershire local plan. In this case, a planning guidance is set for improving farm diversification by, for instance, establishing criteria for farms to introduce farm shops, plant nurseries, farm-based food processing and packaging and farm workshops (South Gloucestershire Council, 2006). At City Region level, the research has investigated the newly-adopted Joint Spatial Plan (JSP), a plan implemented by the West of England Local Enterprise Partnership (WoE LEP) —a non-statutory and inter-municipal body with no legal powers introduced in 2010 as part of the Localism Agenda (HM Government, 2010). Although the JSP has not taken a sectoral approach, the focus of the Plan is limited to urban growth and infrastructure planning. It leaves out any consideration of countryside's strengths and weaknesses. Plan's only way to tackle agricultural areas lies in the criteria for the release of Green Belt land for locating new housing developments.

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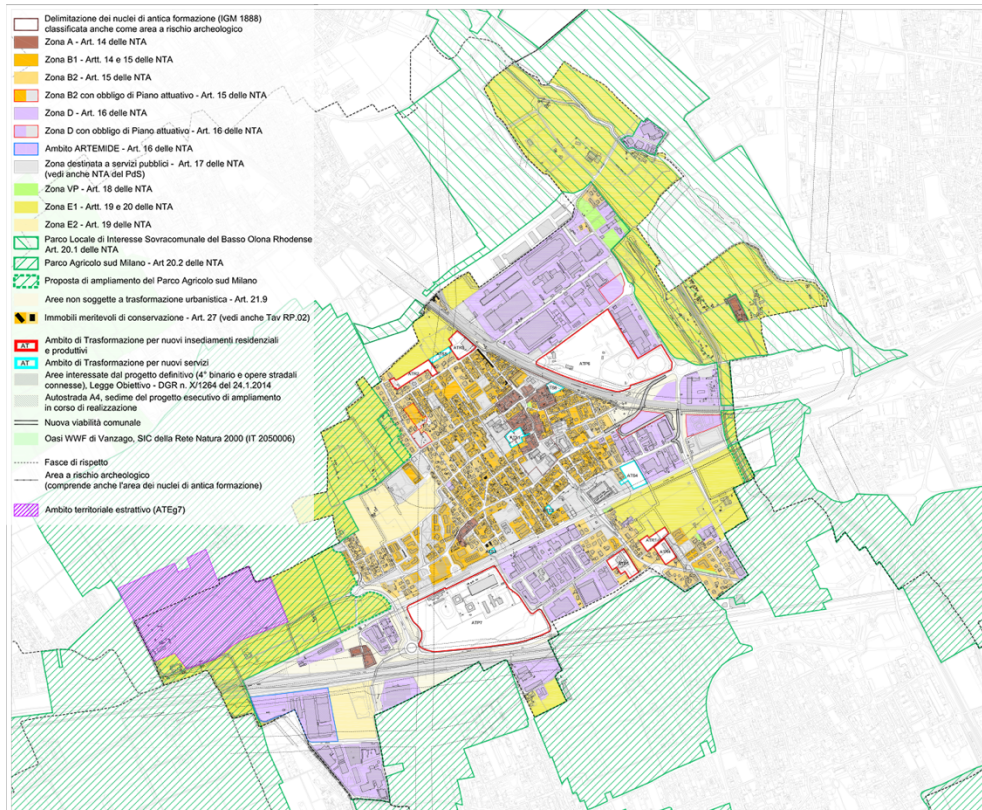


Figure 2. Land-use designations map of Pregnana Milanese (Italy). Source: Comune di Pregnana Milanese, 2016.

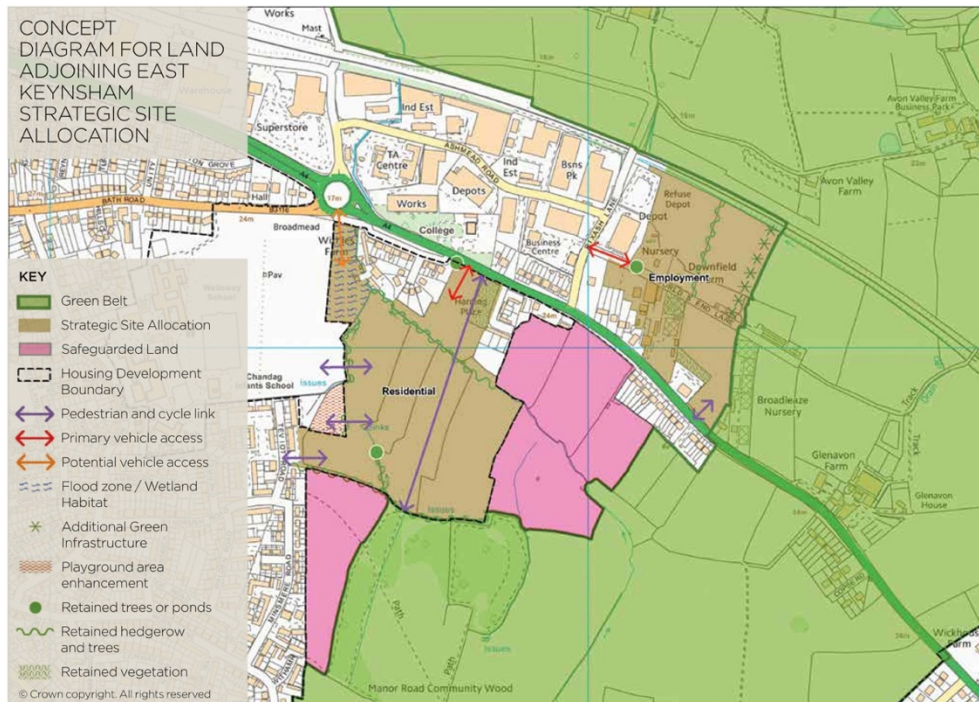


Figure 1. Concept diagram for East Keynsham Strategic Site Allocation in Bath and North-East Somerset (UK). Source: BathNES Local Council, 2014.

Alongside the regulative approach taken by local governments, the research has shown the emergence of non-statutory and soft planning spaces based upon open and collaborative platforms which gather farmers, civil society members and activists. Their logic is to put together a number of actors which have a common interest in building more localised food systems and in shaping stronger urban/rural relationships. An example of this approach is the case of the Milanese Rural Districts. These are forms of cooperation among farmers based on innovative business models that have been able to share and network energy and resources for jointly promoting products and services and improving the communication of farms with local institutions and consumers (Cinà e Lazzarini, 2019). A second example is the case of the Food Policy Council in Bristol which can be considered a meeting place for civil society, agri-food companies and local government for developing a food governance system in Bristol. One of the concrete results of the holistic “good food” vision implemented by the BFPC is the Good Food Plan for Bristol, a policy which promotes a cross-sectoral and integrated approach to Bristol’s food system based on a vision that keeps together producers, processors, distributors, retailers and consumers (BFPC, 2013).

The common goal of these experiences is to explore the contribution of food growing spaces in achieving more localised and sustainable food systems and in framing an innovative and alternative vision of urban/rural interdependency. More importantly, these experiences have emerged as open, reflexive and collaborative platforms of exchange among local governments and civil society actors, where the farmers and food activists have played a crucial role in shaping goals and contents of these spaces. Thus, one of their innovative aspects is the creation of a permanent relationship of co-production between the civil society groups and the municipality in what has been already defined as a reciprocal game of alignment for civil activists with local council’s strategy (Morgan & Moragues-Faus, 2015). The reference here is made to Albrechts’ interpretation of co-production as a political strategy, as a way to challenge “the fundamental political issues through its implication for the distribution of power between citizens and state” (Albrechts, 2012: 53).

By taking as reference the interpretation of neoliberal governmentality by Haughton *et al.* (2013), findings indicate that also in the food system a dualism among hard spaces of government and soft spaces of governance is emerging. This dualism is given by the different approach these spaces take on the governance discourse. Statutory spaces like the WoE LEP are acting on the basis of the need to establish boundaries and criteria which must be maintained and consolidated over time. Conversely, a more reflexive approach is taken by the soft spaces according to which identity is continuously strengthened by a process of inclusive negotiation. In this case, central “is the understanding that collective decision-making will reflect a diversity of interests, interpretations and priorities” (Mount, 2012: 23). This suggests that disconnecting with standards and regulatory approaches to planning can become a necessary dimension for civil society to reach some goals that governmental actors would not be able to achieve by themselves.

### **Conclusion**

What the research has elicited is that the prevailing attitude by planners and policy makers towards the potentials of agricultural areas in shaping more sustainable food systems is still limited to the protection of existing agro-ecological resources and visual amenities of the countryside, rather than fully exploring their contribution to the overall sustainability of cities and territories. This is partly due to what Gallent *et al.* (2017) defined as the “planning’s disjointedly focus on distinct policy regimes”, an attitude that is mainly conveying sectoral and regulative designations. When they tackle food issues, policies and plans

deal with a separate section of the food system, rather than putting in place integrated, enabling, qualitative and performative policies that look at planning as a place-shaper of the functional relationships among city and countryside. Nevertheless, the spatial plans investigated by the research still do contribute little to the agro-ecological transition and provide scarce implications for the climate change mitigation in contemporary cities and territories.

These limitations are complemented by the active role that farmers and civil society often had in co-producing strategies and actions for the transition towards sustainable food systems. The interesting point is that this innovation often happened in connection with local governments, rather than separated from it (Marsden & Franklin, 2015). This suggests the relevance for community and farmers initiatives to connecting and building alliances with institutional actors which can provide knowledge resources, financial support and visibility. Still concerns regards the way in which these strategies can better inform and orient spatial plans towards addressing the vulnerabilities of the food system and in reinforcing the cross-boundary cooperation and the functional production-consumption interaction happening across the urban/rural interface.

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