

HEALTHY URBAN FOOD. THE NEXUS BETWEEN PUBLIC HEALTH, FOOD SYSTEMS, AND CITY-REGION GOVERNANCE

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Abstract

Food is a territorial system that is closely linked to public health, social equity, and land policies. Eating habits are at the root of both incidence of cardiovascular disease and the phenomenon of malnutrition. Food often entails social inequity and is acquiring, directly and indirectly, ever greater relevance in the tools of territorial governance. The Cities2030 project is being developed and financed by the European Horizon 2020 programme. The methodology agreed upon by the partners envisages the involvement of all interest groups and actors within the food system arena through the installation of urban Policy and Living Labs. The University Iuav of Venice is involved in the development of two labs in the Veneto region: one in the city of Vicenza, the other in the Venice lagoon. Working in these two labs will make it possible to reflect on two food systems which are very different even though they are geographically close.

Keywords

city-region food systems, local development, public policies, Venice lagoon, living lab

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1. Introduction

Food is a complex territorial system, the result of socio-economic practices and territorial policies that are aimed at different sectors and stages of supply chains. In addition to investing in a social and environmental dimension, the food system unfolds in places, spaces and landscapes. Through so doing it adapts to existing contexts whilst also building and transforming territories (Manganelli, De Marchi, 2019). Food forces us, using multi-level approaches, to think about pressing urban issues, such as public health, social equity, and ongoing transition processes in territories. Food habits are at the root of opposing effects, from incidences of cardiovascular disease (especially frequent in Western contexts, and more generally within social spheres characterised by economic well-being) to the phenomenon of malnutrition (which still persist in the world's most fragile social groups). The food system also has indirect impacts on people's health along entire supply chains: air, water, and soil pollution, as well as being directly responsible for the production of considerable amounts of waste which can be difficult to dispose of. In addition, food and its value chains often lead to social inequalities. This manifests itself in terms of food injustices which may result from difficult issues pertaining to accessibility to healthy and fresh food, and often goes hand in hand with inadequate or limited education about nutrition and associated aspects. Inequality also occurs with regards to the power disparities that exist between actors who interface within the different stages of supply chains such as the power that large-scale distribution actors can exert on producers, with the latter crushed by a market that offers end consumers prices that cannot, and do not, cover production costs at origin. Food can also be seen to intersect with the processes of transition that affect territories. This is why it is acquiring, directly and indirectly, ever-increasing relevance in the tools of territorial governance: programmes for reorienting agricultural production models, urban food policies, as well as objectives relating to land consumption and waste management are growing in importance in the urban agendas of cities.

The food system is made up of a set of practices and processes that are capable of revealing unprecedented geographies of places and flows. These, in turn, are useful for deciphering the nature of territory, whose logics we are increasingly struggling to understand. Food is therefore a possible lens through which to look at the processes of transition presently underway, a transcalar tool that may manage to hold together everyday practices with global processes, as well as local micro-geographies and international macro-geographies. Observing territories through the lens of food allows us to detect the multiple intersections of flows and uses that characterise each specific space and, by forcing us to observe human and non-human, brings us closer to understand the numerous contradictions that the juxtaposition of these two dimensions – human and non-human – implies.

2. Cities2030. Co-creating resilient and sustainable food systems towards FOOD2030.

The considerations above explain why the European Union (EU) has recognised food-related issues as urgent urban matters and, in addition to the Common Agricultural Policy (CAP), has in recent years promoted further programmes to make food systems more compatible with the environment, more resilient to climate change, and more equitable in terms of the relationships that exist between actors and between territories.

The new CAP 2023-2027 supports, even more strongly than the previous seven-year period, a sustainable future for Europe's primary producers. Rural areas and agriculture are central not only in this, but also in other important European policies. As part of the European Green Deal, the Farm to Fork strategy aims to accelerate the continent's transition to a sustainable food system that should have a neutral or positive environmental impact, and that will adapt to and mitigate climate change, as well as counteracting loss of biodiversity, whilst ensuring safe, healthy and accessible food for all, and guaranteeing justice for all workers in related economic sectors.

As a complement to community policies, the EU has always promoted scientific research in all disciplinary fields and, with regard to issues related to food systems, the Food 2030 programme is currently active - a specific European policy to guide research in all fields of knowledge that deal in various ways with food systems.

It is against this background that the Cities2030² project is being developed, financed by the European Horizon 2020 programme for the period 2021-2024. It brings together 40 European partners involved in various ways in the food system: research bodies, local and regional administrations, companies in the sector, and professional and civic associations. The main objective of the project is to develop, in the eight cities and two regions that serve as case studies, new food policies which are capable of reorienting existing systems towards more sustainable, resilient, and equitable models. The methodology agreed upon by the partners envisages the involvement of all interest groups and actors involved in the food system arena (Figure 1), through the creation of an urban Policy Lab (PL) and a Living Lab (LL) (Almirall et al., 2012; Bergvall-Kåreborn, 2009).

FOOD JOURNEY STAKEHOLDERS' MAP						
	PRODUCTION	PROCESSING	LOGISTIC	DISTRIBUTION	CONSUMPTION	WASTE/REUSE
Policy Lab (PL)	(State, Ministry of Agriculture), Region, City, City-Region, Metropolitan City, Municipalities, water reclamation consortia, CAP funds management national and local agencies, professional sector associations	(State), Region, City, City-Region, Metropolitan City, Municipalities, professional sector associations, chambers of commerce	(State, Ministry of Transports), Region, City, City-Region, Metropolitan City, Municipalities, professional sector associations, chambers of commerce	Region, City, City-Region, Metropolitan City, Municipalities, professional sector associations, chambers of commerce	(State), Region, City, City-Region, Metropolitan City, Municipalities, consumer protection associations	(State), Region, City, City-Region, Metropolitan City, Municipalities, professional sector associations,
Living Lab (LL)	PL + producers, farmers, fishermen, agri-tourism sector workers, agronomy experts, scholars and researchers	PL + producers, transformation SME, agro-food enterprises, local and niche brands, big national brands, packaging sector workers, manufacture experts, scholars and researchers	PL + transport SME, transporters, local logistic enterprises, national and international big players, logistic platform and inter-hub management, logistic experts, scholars and researchers	PL + farmers/fisherman, large-scale retail trade players, distribution sector associations, Alternative Food Networks actors, direct sellers, farmer's market, neighborhood shops, fair trade purchasing groups, distribution experts, scholars and researchers	PL + consumers, ho. re.ca. workers and enterprises, schools, hospitals, care services, charitable associations, fair trade purchasing groups, consumption experts, scholars and researchers	PL + waste management enterprises, producers, consumers, ho.re.ca. workers and enterprises, schools, hospitals, care services, charitable associations, fair trade purchasing groups, energy producers, packaging producers, waste management experts, scholars and researchers

Figure 1. The possible composition of the Policy and Living Labs and stakeholders for each stage of food supply chains. Starting from the composition of the Policy Lab, which is mainly made up of institutions, public authorities, local government bodies and trade associations, the Living Lab includes a wider range of social and professional groups that are involved in various ways in food systems. Source: De Marchi for Cities2030, 2021.

The territorial context that partners will take into account is the city-region (Blay-Palmer et al., 2018), and it is envisaged that they will take into account all of the dynamics related to food supply chains; from places of production to ones of consumption. With these premises, partners will develop local City Region Food System Labs (CRFS Labs, Figure 2) and, during the funding period, will work on the construction of new urban policies and pilot projects that are capable of activating innovation processes in relevant food systems.

² More information is available from the project website at <https://cities2030.eu/>

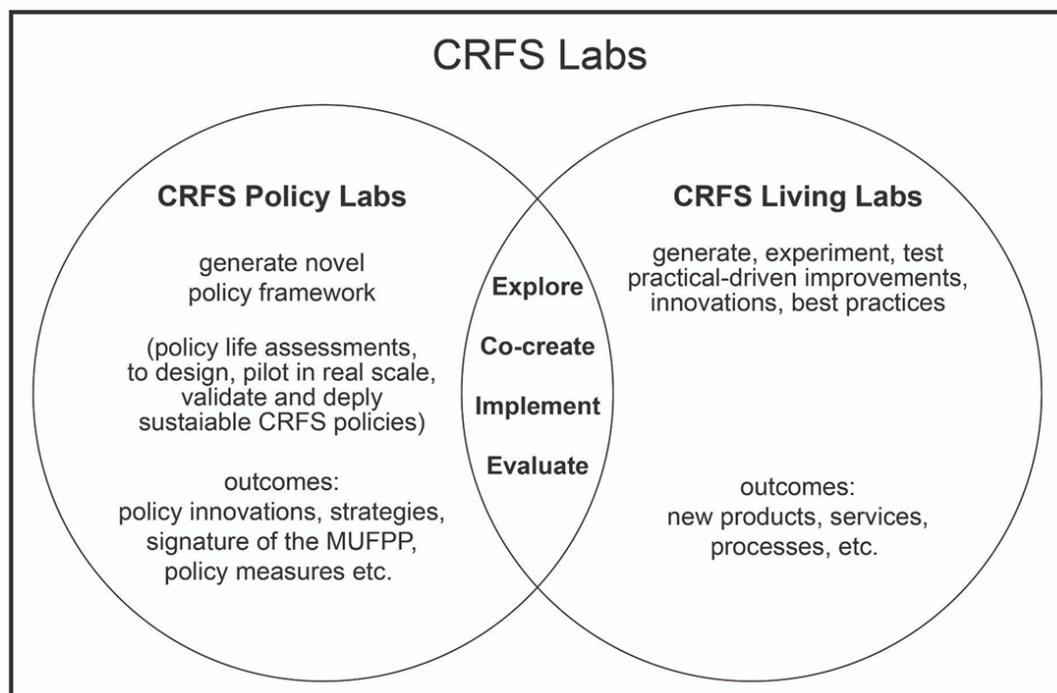


Figure 2. The aims of the City Region Food System (CRFS) Labs, as defined by the Cities2030 project partners. The CRFS Labs may consist of Policy and/or Living labs in the different case studies. They will have different compositions and objectives but will develop their work through the same methodology which will be undertaken in four phases: exploration, co-creation, implementation, and evaluation.

Source: Cities2030, 2021.

Cities2030 proposes that consumers should be at the centre of thinking about how to deal with imminent challenges: population growth, rapid urbanisation, large-scale migration, climate change, and resource scarcity. The project assumes that without action to transition to a sustainable CRFS, the environment will continue to be degraded and the world's capacity to produce quality food for all will diminish. The scale of CRFS is, therefore, a challenge that Cities2030 tries to address at both a local and regional level, to generate incremental, systemic and actionable solutions that are transferable and sustainable. To this end, Cities2030 partners aim to work towards transforming and restructuring the ways in which systems produce, transport, deliver, recycle and reuse food.

3. The Veneto case studies: Vicenza and Venice

The Italian universities, Ca' Foscari University and Università luav di Venezia, both based in Venice, are involved in the development of two CRFS Labs in the Veneto region: one in the city of Vicenza, the other in the Venice lagoon. Working in these two case study labs makes it possible to reflect on two food systems that are very different despite their geographical proximity: Vicenza is a city traditionally devoted to the production of fodder and meat, that also possesses a significant food processing manufacturing sector. In contrast, Venice, a city on the water, is characterised by significant consumption and production of seafood and lagoon fish, with small agricultural producers on the islands and large land reclamation plots devoted to cereal cultivation upon the immediate mainland. In Veneto there are 382 food quality labels and the revenues from agri-food products amount to €390 million per year. In Veneto, more than 25,000 hectares are dedicated to organic crops. In addition, 15 of the 40 organic aquaculture companies that exist in Italy operate in the area, while 64% of agri-food exports are made up of products that, according to a methodology that has been consolidated for several years, incorporate a high level of quality (De Marchi, 2019; Veneto Agricoltura, 2021).

3.1 The CRFS Lab in the city-region of Vicenza

In recent years, the city of Vicenza has launched numerous initiatives to promote healthy eating and a socially, economically, and environmentally sustainable food supply chain. This commitment is further strengthened by the contribution of civil society organisations, trade associations, and individual businesses and entrepreneurs that all promote various actions at a local level.

The Municipality of Vicenza aims to establish a new Food Policy Office, and to sign the Milan Urban Food Policy Pact (MUFPP)³. However, this public and formal moment has not been followed by processes of building integrated urban food policies, nor real medium, or long-term, visions. To date, some city councils launch initiatives and activities in an autonomous and uncoordinated manner, mainly orientated towards supporting the most fragile members of society.

Against this backdrop, the objectives of the Vicenza CRFS Lab are twofold: to systematise and valorise what is already in place in order to bring isolated public initiatives together in a unified and coordinated vision, and to promote political, socio-cultural and economic experimentation and innovation and empower the local community with new knowledge, experiences, and opportunities. The ambitions, which will be further implemented through an open participatory process, can be summed up in the desire for the laboratory to become a laboratory for the food of the future; the main objective of which is to ensure better food for all. In light of this, Vicenza has decided to prioritise a number of themes of particular relevance:

- food, sustainability and health, with a particular attention to the female perspective
- 'growing healthy', guaranteeing permanent food education
- sustainable food supply chain in urban areas
- food and sustainability, between ethics, legality and transparency

As of 2023, the Municipality of Vicenza has already set up an organisational model based on three bodies with different but integrated functions that work together in the construction and implementation of food policy. This new organisational model is constituted by three bodies, the:

- Food Policy Office, which involves the municipal councillors and provides political direction and coordination
- Technical Working Group, which involves the experts/practitioners of the Municipality's territorial services and provides support and coordination for the activities to be implemented at a local level
- Stakeholder Working Group, which involves local stakeholders

The topics to be addressed by the Vicenza Policy Labs are aligned with the MUFPP and have been adapted to the urban context and its potential. The topics include governance, sustainable diets, social and economic justice, food production, food distribution; and food waste.

The Living Lab set up at the La Vigna International Library and called OrtoBook, is a place where stakeholders cooperate to improve knowledge of the CRFS and the food ecosystem, and share thoughts and ideas in order to co-define a path towards innovation. It is also a place where initiatives take place which aim to raise consumer awareness towards more sustainable choices. It is also somewhere where experts meet and promote training events for food industry stakeholders and the general public.

The proposed areas of intervention for the OrtoBook LL, as identified during the first meetings of the operational team are: raising awareness and educating consumers, developing research and knowledge sharing, stimulating creativity and innovation, and promoting CRFS initiatives. The intent of the Lab is to give life to a network of stakeholders engaged in the implementation of sustainable food policies and practices, and to enable the exchange of ideas and suggestions on how to concretely face current global sustainability challenges.

³ Details on this project can be found on the following web page -<https://www.milanurbanfoodpolicypact.org/>

3.2 The CRFS Lab of the Venice Lagoon

The City of Venice signed the MUFPP in 2015, but the formal act was not followed by a real programmatic agenda of activities for the food system. However, some sectoral initiatives and programmes have been launched since then, especially in terms of supporting young people and fragile social groups.

Until the 19th century, the Venice lagoon was an almost self-sufficient territory in terms of its food supply, except for cereals, which were produced inland (Pitteri, 2015; Keates, 2022). Today, the high demand for products from restaurants and hotels mean that many foodstuffs have to be imported. These can often be bought in bulk with considerable reductions in cost which may result in local producers struggling to stay in the market. They can offer high quality products from a unique environment; however, high production costs and the limited size of their production sites reduce their competitiveness. Moreover, lagoon production is strictly dependent on environmental conditions which are characterised by a delicate ecological balance which is presently under considerable strain because of the impacts of climate change and some particularly impactful anthropic uses (Vianello, 2021), such as mass tourism.

luav University proposed Venice as a case study in the project for several reasons: it is an MUFPP signatory, it is an area of unique production, it possesses high demand for fresh produce, it presents risky environmental conditions, it has potential in terms of food transition, and it is a UNESCO World Heritage site. Such territorial and urban complexity requires innovative approaches to drive change. It follows, that a deep understanding of how the food system works is needed. A first objective of the CRFS Labs is to develop a Food Atlas of the Venice Lagoon. This will be an open and interactive tool that is not only capable of collecting data on the food system, but also of highlighting innovative bottom-up experiences and promoting new local food policies; in other words, it will be a fundamental tool to collect information and promote innovation.

To achieve these goals, luav has involved other researchers and scholars active in the lagoon on food-related topics, and has set up a multidisciplinary group capable of offering experience and knowledge. In particular, luav has entered into an agreement with the Centre of Environmental Humanities of the Ca' Foscari University of Venice and with the doctoral programme in Historical, Geographical and Anthropological Studies at the University of Padua. In collaboration with these scholars, luav is defining a knowledge document which will be shared with local administrations to inform them about the Cities2030 project, its objectives, and its methodologies. Starting from bilateral meetings with local authorities, the multidisciplinary group intends to start working on the setting up of the CRFS Lab in Venice.

The luav working group is also, in collaboration with the Museo del Novecento M9 in Mestre, organising a workshop for students on the theme of food in the lagoon and an exhibition entitled 'Gusto' is going to be held. The workshop intends to investigate the complex food system of the Venice Lagoon and seeks to define places, spaces, actors and circularity of flows. The workshop foresees the active participation of actors from the food arena in two moments of discussion and confrontation that will also provide foundations of the two CRFS labs; the Policy Lab and the Living Lab. The results of the workshop will contribute to launching the work of the CRFS Labs and provide indications for the development of the Food Atlas mentioned above as an operational tool for knowledge and innovation.

The luav working group can count on the expertise it has gained from working on the Venice Lagoon over recent years, through a range of research and teaching projects that have explored many socio-economic and environmental issues within this complex and fragile territory. These previous experiences include:

- The EU Interreg Italy-Croatia funded project "CREW-Coordinated wetland management in Italy-Croatia cross border region" (2018-2020). This work enabled a deeper understanding of the highly articulated ways in which territory has become a support for productive and resource-generating practices and processes for society, rather than being just a place for consumption and value extraction (Cantaluppi et al., 2023).
- The "FoodSpace" Urban Design course which was held in the third year of the Master's Degree Course in Architecture (2021). During this, students undertook a critical spatial reading of a fragment of

the Veneto plain, and developed a future scenario for the food system, capable of supporting the transition of the lagoon communities towards more sustainable and resilient food systems.

- The “Circular City Studio” Design course which was held in the first year of the Master’s degree course in Planning for Transition (2021), in which multidisciplinary groups of students debated the issues of circularity in the Venice lagoon, with particular attention to the food-water nexus.

The wealth of data, reports, information, and readings that this plural set of experiences has enabled us to collect will form the basis for the development of the Food Atlas of the Venice lagoon, which aspires to integrate different knowledge and experiences. This rich set of prior knowledge includes: quantitative data on the flows of people and resources in the lagoon; qualitative data linked to social innovation and institutional and non-institutional initiatives; and micro-stories of people, products and places that have to do with the food system. The experiences described above offered the opportunity to spatialise all this information, and resulted in the production of maps capable of describing unprecedented geography of the ways in which the territory, in different ways, is involved in the system of food production, marketing, consumption, waste and recycling.

4. Working perspectives

The two contexts, united by government instruments and regional regulations, will be explored in the funded period with similar methodologies, but with different objectives.

The Living Labs, constitute the platform within which to experiment innovation for the supply chain and will certainly differ in the phases and aspects to be explored: they are more concentrated on training, education and awareness-raising of the citizenship in Vicenza; and more focused on the relationship between local producers and consumers and the impact of strong tourist flows in the Venice lagoon.

The Policy Labs are intended as spaces and instruments for the construction of urban food policies and the two territories will benefit from the mutual exchange and comparison of experiments with the same aim. The common ambition is that of an ongoing collaboration to explore innovative forms of tools for integrating food as a system within local urban agendas with the overall goal being to pioneer experiences in Veneto - a region which, despite the economic importance of food-related sectors (in particular production, processing, export and tourism) has never equipped itself with specific governance tools for the agrifood system. A further outcome of the Cities2030 project, therefore, could be to identify some guidelines for a regional-scale coordination of new urban food policies.

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