



**European Committee
of the Regions**

**Commission for
Natural Resources**

NAT

The role of local and regional authorities in making food systems more sustainable



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List of acronyms

CoR	European Committee of the Regions
EC	European Commission
EMFF	European Maritime and Fisheries Fund
ERDF	European Regional Development Fund
EU	European Union
F2F	Farm to Fork
FLAG	Fisheries Local Action Group
HACCP	Hazard Analysis and Critical Control Points
LAG	Local Action Group
LEADER	<i>Liaison Entre Actions de Développement de l'Économie Rurale</i>
LRA s	Local and Regional Authorities
MUFPP	Milan Urban Food Policy Pact
PDO	Protected Designation of Origin
PGI	Protected Geographical Indication
RIS3	Research and Innovation for Smart Specialisation Strategy
S3	Smart Specialisation Strategy
SFS	Sustainable Food System
SMEs	Small and Medium-sized Enterprises
SPP	Sustainable Public Procurement
SWOT	Strengths, Weaknesses, Opportunities, Threats
TSG	Traditional Speciality Guaranteed
UIA	Urban Innovation Action

Introduction

This study investigates food policy governance structures and approaches at the local and regional levels which are used to make territorial food systems more sustainable. The aim is twofold: 1) to understand the role of European local and regional authorities (LRAs) in territorial food system governance and 2) to outline LRAs' contribution to the European Commission's Farm to Fork strategy (COM(2020) 381 final).

In 2017, the European Committee of the Regions (CoR) adopted the opinion 'Towards a sustainable EU food policy that creates jobs and growth in Europe's Regions and Cities'. The opinion expresses the need for a comprehensive EU food policy '*promoting more sustainable production and consumption patterns, establishing a link across different policy areas, including, among others, food production, agriculture, environment, health, consumer policy, employment and rural development, and creating jobs and growth*' (CoR, 2017). It also underlines the need to support the shift to more sustainable patterns through governance structures such as local food councils and local development partnerships as well as through new bottom-up initiatives such as the Milan Urban Food Policy Pact (MUFPP).

On 20 May 2020, the European Commission (EC) published 'A Farm to Fork Strategy for a fair, healthy and environmentally-friendly food system' (EC, 2020). The strategy is a first step to fill the gap of an overarching EU food policy framework. By 2023, a legislative proposal will follow in order to set a framework for sustainable food systems while ensuring policy coherence at all levels. The legislative framework will require the adoption of common definitions, the mainstreaming of sustainability in all food-related policies and the identification of responsibilities of the actors concerned with food systems (EC, 2020).

The Farm to Fork (F2F) Strategy sets the basis for the transformation of food chains across the EU according to sustainability criteria. From a territorial perspective, it acknowledges that the transition to sustainable food systems '*requires a collective approach involving public authorities at all levels of governance (including cities, rural and coastal communities) private-sector actors across the food value chain, non-governmental organisations, social partners, academics and citizens*' (EC, 2020). It also underlines that '*a transition to sustainability of the food system will change the economic fabric of many EU regions and their patterns of interactions*' (EC, 2020).

This study provides evidence that local and regional public authorities in some cities, rural and coastal/island areas have already initiated efforts for the transition

of their food systems to more sustainable patterns. They have envisioned the necessary changes in their territories' economic fabric, have mobilised necessary actors and resources for implementation, and have used a range of diverse approaches to govern these changes.

The concept of 'sustainable food system' implies transforming the system model from a linear to a circular one. In terms of outcomes, a sustainable food system (SFS) provides safe, nutritious and healthy food for the current and the future generations of a given territory; provides food security without harming the environment; is robust and resilient with respect to a wider context which may not be sustainable; and is '*sustainable in social and economic terms, resilient to price shocks and other crises, and responsive to social inequalities and other forms of injustice*' (SAPEA, 2020).

Therefore, we consider territorial food governance approaches that improve, or plan to improve, the sustainability of food systems in one or more of the components of the traditional linear model 'produce-process-consume-waste'. These approaches have, or plan to have, a positive impact on the environment and/or the economy and/or the society (including health). In addition, we consider only those approaches that are led, or importantly contributed to, by public local and/or regional authorities. Finally, we classify these approaches against a governance typology in order to emphasise the role of a local or regional government as a regulator, an implementer, a partner and/or a facilitator.

It is observed that these approaches are not confined to rural areas or to a rural-urban cooperation dimension. They are also commonly found in cities with the aim of '*exploiting urban challenges and opportunities for sustainable food production and biodiversity in urban and peri-urban areas*' (Donkers, 2013). Likewise, it is found that citizens are increasingly part of the transition process of food systems to more sustainable patterns, and there is an evident trend to include citizens' representatives in food systems' governance structures.

Part 1 of this study presents 20 examples of territorial food policy governance structures/approaches from nine EU Member States. Part 2 concludes on the role of LRAs in making food systems more sustainable and on their current contribution to the implementation of the F2F Strategy. Part 2 also includes comments on the functioning and suitability of the governance structures/approaches reviewed in Part 1 and formulates recommendations accordingly.

Part 1 Analysis of existing food policy governance structures with examples

This part is based on desk review of published information, documents and literature¹. It presents 20 examples of territorial food policy governance structures/approaches which are used to make food systems at the local and regional level more sustainable. Cases are from nine Member States: France, Germany, Italy, Netherlands, Poland, Romania, Slovenia, Spain, and Sweden.

This selection of cases aims to provide a range of structures and approaches relating to different aspects of the food chain. These aspects are kept equivalent to the ones outlined in the F2F Strategy (see Part 2). We chose not to look for cases related to public procurement of organic food. In fact, extensive evidence of the role of LRAs in this area has been already collected in the CoR study ‘Sustainable public procurement of food’ (Soldi, 2018).

Governance approaches are classified according to a typology which highlights the prevailing role of the public authority as regulator, implementer, partner and facilitator (Figure 1). The **regulator** role (bottom left) focuses on **legality and diligence** and therefore on setting the right conditions to obtain results. The successive step of government as an **implementer** (top left) moves the **emphasis to the actual achievement of public management results** while still ensuring legality and diligence. Moving to the right of the scheme (top right and bottom right), the **governing process is populated by parties outside the government**. To better meet the scopes of this study, the ‘institutional lead’ and the ‘networking’ types are further divided into sub-types.

Under the public management approach (i.e. implementer role), governance remains at the institutional level. LRAs may govern the food system internally, through one or more departments. Governance of food policy may also be pursued by associative structures and alliances with other LRAs, or by setting up public companies/entities to pursue specific missions. In this latter case, the scope of public policies is reflected in the mandate of these companies/entities to which in practice, the governance of the food system, or parts of it, is delegated.

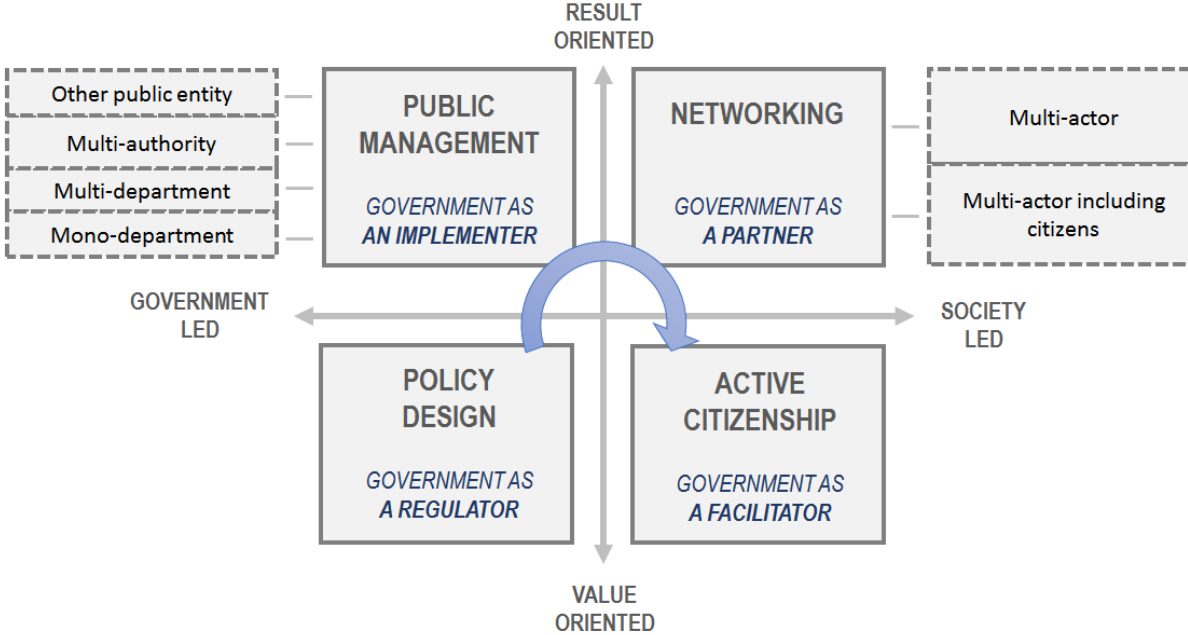
Under the networking approach, LRAs open up the governance structure to other stakeholders. These stakeholders include, for example, the business community, the education and research community, associations and/or civil society.

¹ All websites indicated in the text were accessed over the period May-June 2020.

Involvement of these stakeholders is, for example, through partnerships and networks.

The arrow in Figure 1 indicates a trend of governance approaches which is observed on the basis of the small sample of cases analysed in this study. More sustainable patterns in the food system require interaction with more actors and, at the territorial level, public authorities are gradually moving to inclusive food policy governance approaches.

Figure 1. Governance approaches typology

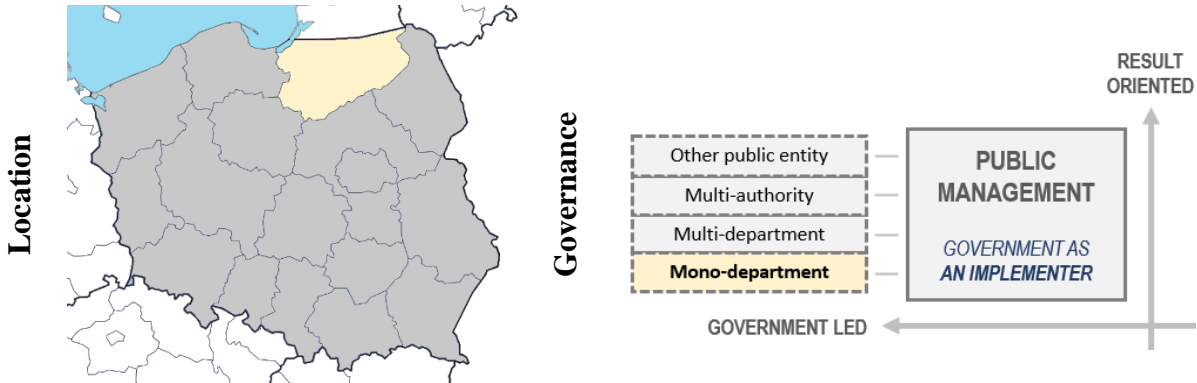


Note: modified by the authors after Van der Steen (2015) and Evers (2018)

1.1 Examples of food systems’ institutional governance by LRAs

Case 1 Department-led governance of the high-quality food regional specialisation in Warminsko-Mazurska, Poland

The Warmia and Masuria region (Warminsko-Mazurska Voivodeship - WMV) is located in the north-eastern part of Poland. The region has a long tradition related to the production of food and ‘High-Quality Food’ is one of its smart specialisation domains (the other two being ‘Water economy’ and ‘Wood and Furniture’). Agricultural land represents 54% of the total region’s area. The number of farms is relatively low (42,434 farms in 2018, or 3% of the national total) but the average farm size is high (almost 31 ha per farm). There are 2,719 organic certified farms in the region which, in 2018, represented 18% of the national total (Główny Urząd Statystyczny, 2020).



The process leading to LRAs’ involvement in food governance

Contrary to the previous 1999 strategy, the regional socio-economic development strategy adopted in 2013 included specific references to the regional smart specialisation strategy (S3), considering the development of specific sectors a way to increase regional competitiveness. These sectors were defined on the basis of wide public consultations and in cooperation with the Regional Steering Committee for the Regional Innovation Strategy (S3 platform [website](#)). In order to address the high-quality food specialisation, WMV commissioned a study to investigate the development potential of the sector. In 2015, the study, among other results, recommended the preparation of a plan of coordinated actions aimed at strengthening cooperation and building knowledge within the sector. In 2016, the 2016-2020 programme for the development of regional, traditional and natural

high-quality food was published. The programme focuses on the development of the food economic sector and in particular on the creation of the conditions for its entrepreneurial growth. It is financed through the ERDF, the EAFRD, the ESF, Erasmus+, as well as national, regional and local government budgets.

Governance structure's description and functioning

The programme is **coordinated by the Department of Rural Development and Agriculture** of the Marshal's Office of WMV. It details objectives, actions and implementing stakeholders. Among the implementing stakeholders are 27 regional partners including local governments (involved through the Department of Rural Development and Agriculture), cities (Olsztyn, Elbląg and Ełk), the Chamber of Commerce, the Chamber of Agriculture, education institutions, technology parks, entrepreneurs, research centres, farmers, Local Action Groups, and non-governmental organisations. Such a comprehensive involvement was intended to overcome one of the weaknesses identified by the 2015 study, namely the lack of cooperation of stakeholders within the high-quality food sector (WMV, 2016).

Making the food system more sustainable

The high-quality food specialisation addresses the agri-food industry as well as the development of local agriculture, of traditional food processing based on regional raw materials, and of short food supply chains. It responds to the call by consumers for healthier lifestyles. The smart specialisation's implementation programme covers two main areas: education and economic growth. The education area targets students, operators of the food sector and civil society. It is aimed at supporting formal and, in particular, non-formal education (including vocational training and lifelong learning) within the industry in order to create competencies that match the demand of the sector; to educate consumers on healthy diets and food; and to raise public awareness of regional, traditional, and high-quality natural food. Economic growth is tackled through increased competitiveness that is expected to be driven by improved professionalism within the sector; market development of regional, traditional and natural high-quality food products; and interlinkages with other policy areas like tourism and interregional cooperation (WMV, 2016).

Barriers

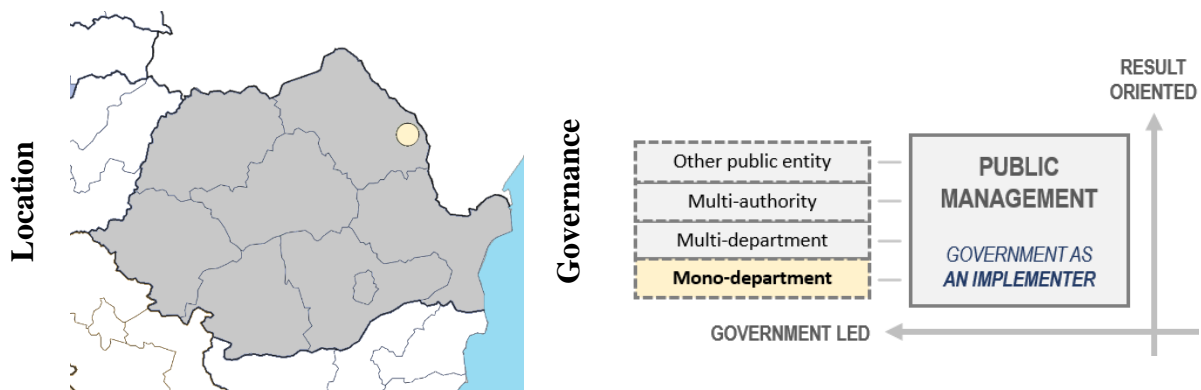
- Low level of use of European funds due, among other reasons, to insufficient cooperative relations among stakeholders for implementation.
- Top-down preparation and coordination of the programme.
- The governance of the programme is apparently disentangled from the governance of S3.

Opportunities

- S3 drives the focus of policymaking on the food sector and on high-quality food in particular which points to sustainability objectives.
- Understanding of the need to strengthen cooperation between institutions working for the development of agriculture and sectorial stakeholders.

Case 2 Project-based food governance in Vaslui municipality, Romania

Vaslui is a middle-size city of about 70,000 inhabitants in the North-East Romania region, 70 km from the border with the Republic of Moldova. The municipality became the capital of Vaslui County in the 60s and in two decades tripled its population while agriculture lost its importance in favour of industrial development. At the end of the 80s, structural political changes in the country and the consequent economic crisis again put the emphasis on agriculture and favoured the development of small-sized farms. Self-production covers most of the households' need for fresh food and 70% of the households in urban areas that do not have a garden get fresh products from relatives living in rural areas (URBACT II, 2015b).



The process leading to LRAs' involvement in food governance

In 2012, the municipality took an active role in favouring the commercialisation of local food produced by small-scale farmers in the city, where distribution was dominated by supermarkets belonging to multinationals. Vaslui City decided to invest €3.5 million from its local budget to develop a marketplace, the Central Market, dedicated to the sale of local agri-food products and set special rent conditions for small producers. The Central Market is directly managed by Vaslui City Hall. It opened in 2014 and is organised into four areas (i.e. fruit and vegetables, fish, meat and dairy products). It also hosts quality control laboratories whose scope is to guarantee food safety and security for consumers' trust (URBACT II, 2015a). In 2013, Vaslui became a member of the URBACT network 'Sustainable Food in Urban Communities – Developing low-carbon and resource-efficient urban food systems' (2013-2015). A Local Group composed of the city's food system stakeholders co-developed a Local Action Plan for food sustainability at the urban level whose aim was to shorten food supply chains and

to improve food quality for Vaslui's citizens. As partner of the project 'Urban agriculture for changing cities: governance models for better institutional capacities and social inclusion' (2017-2019) ([AgriGo4Cities](#)), co-funded by the Interreg Danube Transnational Programme, Vaslui focused on the implementation of a pilot 'Gardening for everyone' aimed to produce and sell food for vulnerable groups (Szalók *et al.* 2019). The Municipality of Vaslui is currently involved in the [URBACT BioCanteens Transfer Network](#) (2018-2020) through which it plans to introduce organic meals in social centres' and nurseries' canteens which are directly managed by the municipality (e.g. elderly day care centres) and to identify adequate procedural tools to facilitate green procurement.

Governance structure's description and functioning

Vaslui implements a **project-based approach** for developing an urban sustainable food system. The municipality acts as project partner/network member in international consortia. The Sustainable Food in Urban Communities network, the BioCanteens network and [AgriGo4Cities](#) were managed **through the 'Project Management Service'** of the city which reports directly to the Mayor. This service also holds a number of tasks and responsibilities related to local economic and social development, including funding needs of other municipal services and departments (Vaslui City Hall [website](#)).

Making the food system more sustainable

The city's most comprehensive policy document on food is the Vaslui Local Action Plan, published in 2015 at the end of the URBACT initiative. The plan outlines 16 objectives arising from the specific needs of the territory. Each objective has specified actions and the expected impact on the food system. Objectives relate to a wide range of interventions, including: infrastructure development for the distribution of local agricultural products; aggregation of local food producers; preservation of traditional products/food; advisory services on market dynamics; promotion of short food supply chains; enhancement of professional competences in the agriculture sector; modernisation of the food processing sector; attraction of young people to the sector; and improvement of services and infrastructures in rural areas (Municipality of Vaslui, 2015). As a result of its participation in the BioCanteens network, the Municipality also set the target to introduce 25% organic food in its nurseries' canteens by 2021 ([URBACT website](#)).

Barriers

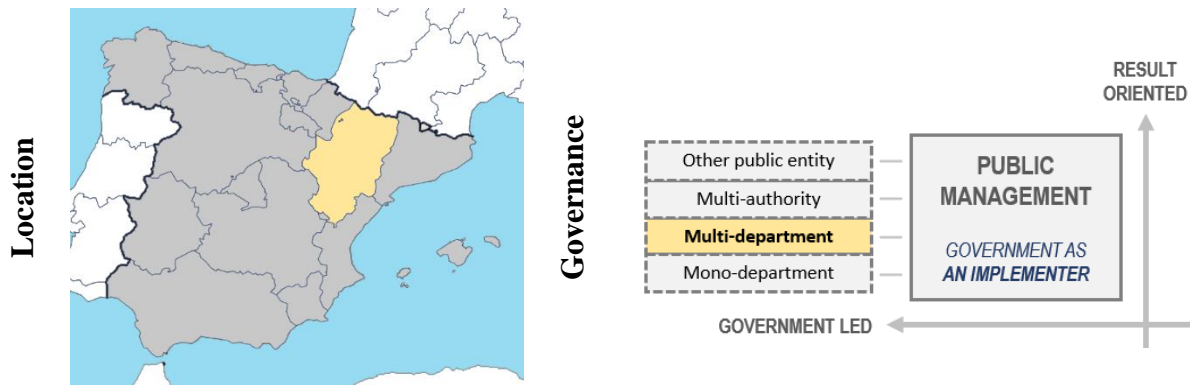
- A project-based approach does not ensure continuity of funding.
- Food policy objectives are project-based and there is no long-term strategy focussed solely on food.
- Lack of monitoring of achieved results throughout ongoing and completed projects affects the credibility of the municipal approach.

Opportunities

- Political commitment of the municipality to improve the sustainability of its food system as reflected by the important infrastructural investments made and the target on organic food set.
- A dedicated Project Management Service within the municipality increases networking and funding opportunities, including at the European level.

Case 3 Commissions for the coordination of the inter-departmental plan for food control in the region of Aragón, Spain

The Aragón Region is very active in food policymaking. The programme Put Aragón on your table, co-funded by the Region, is one of the sectorial initiatives supporting the production and marketing of quality food since 2009. In addition, its capital city Zaragoza has recently developed a ‘Sustainable and Healthy Food Strategy’ which is meant to give food policy its own fully-fledged identity in the policy agenda of the municipality. On top of their own initiatives, Spanish regions are required to elaborate plans for the control of their regional food chains. These plans are aligned to the national plan in force (2016-2020) and to European laws. In Aragon, the plan concerns the 20,000 food establishments of the region.



The process leading to LRAs’ involvement in food governance

On 28 February 2018, the Region of Aragón approved its 2017-2020 plan for the control of the regional food chain, from primary production to food processing and commercialisation. The control of foods, slaughterhouses, fairs, and markets as well as the protection of public health fall under the competence of local authorities. However, as these authorities do not have enough resources, control tasks have been delegated to the Regional Authority (Gobierno de Aragón, 2018a).

The plan of Aragón sets the modalities for competent authorities to verify that food business operators, feed companies and farms comply with EU, national and regional legislation at all stages of the food chain. The plan foresees the **coordinated work of three different departments** within the Regional Authority, namely the departments responsible for agriculture and livestock, appellation of origin and other indications of quality, consumption and public

health. The joint preparation of the plan among the three departments took place through the **Interdepartmental Commission** which included the relevant General Directorates of each Department (Gobierno de Aragón, 2018a).

Governance structure's description and functioning

The three concerned departments are the Department of Health, the Department of Rural Development and Sustainability, and the Department of Citizenship and Social Rights. Within these departments, responsible entities for food control are the General Directorate of Public Health for Health; the General Directorate of Food and Agri-Food Promotion for Rural Development and Sustainability; and the General Directorate of Consumption for Citizenship and Social Rights. Under each of these General Directorates there are several 'services' at the central level. Each of the three concerned Departments decentralises its activities through Provincial Services located in the cities of Huesca, Teruel and Zaragoza. These Provincial Services are further articulated at the local level into other units that are ultimately in charge of carrying out control functions. The plan details the competences of each level as well as the coordination mechanisms. It includes common programmes to be implemented in a coordinated manner by the Departments and individual programmes for each of the three involved Departments. Common programmes are approved and overseen through a commission composed of six members, two for each Department, appointed by the respective Directors General. The Commission is required to meet at least three times a year (Gobierno de Aragón, 2018a).

The Department of Rural Development and Sustainability is in charge of planning, coordinating and executing the 14 official control programs related to primary production and food quality. The Department of Health follows the post-production phases and undertakes controls on both food and food establishments. Specifically, its four control programmes relate to animal welfare in the slaughterhouse; animal by-products not intended for human consumption; residues of certain substances in products of animal origin; and hygienic conditions of places where animal meat is prepared. Finally, the Department of Citizenship and Social Rights is in charge of controlling the commercialization stage, when food reaches the consumer. This implies controlling how the information on food is passed on to consumers, labelling, advertising and conditions of sale, as well as the occurrence of unfair commercial practices (Gobierno de Aragón, 2018b).

Making the food system more sustainable

The plan has seven strategic objectives to be achieved in the long term which outline the expected contribution to sustainability: i) improve quality of the control plan, especially by means of cooperation and coordination among competent authorities; ii) promote the implementation of self-control systems and/or a HACCP (hazard analysis and critical control points) system among the operators involved in the system; iii) improve animal health; iv) improve the conditions of the livestock sector; v) improve plant protection and ensure the sustainability of agricultural activity and food production; vi) promote food fraud quality control programs, including for quality schemes such as organic farming, PDO, PGI and TSG; and vii) strengthen animal feed quality control programs (Gobierno de Aragón, 2018a).

Barriers

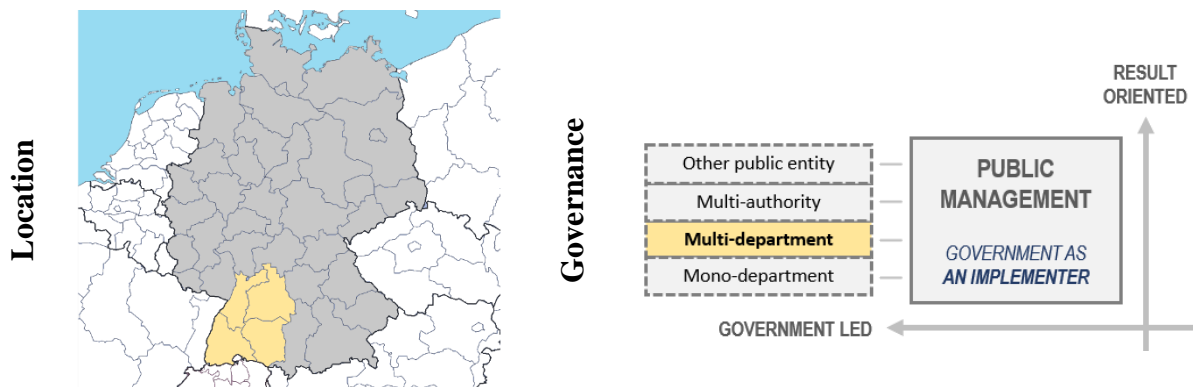
- The system is highly structured. This implies that coordination is necessary at all levels, not only among central departments but also among ‘services’ at the territorial level. Therefore, the Plan needs to explain comprehensively and in detail the type of relationship and coordination among entities, levels and sub-levels.

Opportunities

- The coordinated Plan and the corresponding coordinated governance structure is the Region’s response to the need for coping with an increasing complexity of the food chain.

Case 4 The cross-departmental sustainable bioeconomy strategy of Baden-Württemberg, Germany

Baden-Württemberg is a highly industrialised and innovative region where the sectors representing the main sources of primary biomass (agriculture, forestry and aquaculture) contribute only 0.4% to the regional GDP. Its agricultural land covers 1.4 million hectares. Forest land has a similar extension. Agricultural production is diversified, with organic farming representing 8% of total farming activities (AlpLinkBioEco project, 2018). Since 2007, regional policies and initiatives have been significantly focussed on sustainability which appeared to be challenged mainly by the availability of raw materials and by how these materials were used. Beginning in 2012, the Region of Baden-Württemberg saw a great potential in the bioeconomy for facing these challenges. A research strategy looking at bioeconomy in terms of individual value chains and as a holistic system was prepared in 2013. This research paved the way for the preparation of the regional bioeconomy strategy (Baden-Württemberg State, 2019).



The process leading to LRAs' involvement in food governance

The strategy is the result of a definition process started in 2013 which involved a wide range of stakeholders through a participatory approach. Actors were from the primary production, trade and manufacturing sectors; from academia, social partners, and non-governmental organisations; and from the financial and banking sectors. The dialogue was structured into eight thematic working groups and two main lines of discussion: bioeconomy in rural areas and bioeconomy in urban and industrial areas. The first dialogue line was steered by the Ministry of Rural Affairs and Consumer Protection; the second, by the Ministry of the Environment, Climate Protection and the Energy Sector. A board including representatives of the working groups and of the steering ministries supervised the work. The whole dialogue process was managed by BIOPRO Baden-Württemberg, a wholly owned subsidiary of the Baden-Württemberg government, and was financially supported

by the region (BIOPRO [website](#)). Over the period 2017-2018, it involved over 100 experts and determined the need for studies to better investigate some aspects. In June 2019, Baden-Württemberg launched its sustainable bioeconomy strategy. The strategy builds on all the knowledge gained since 2012 and is considered by the Region to be a driver of innovation and a way to provide long-term opportunities (Baden-Württemberg State, 2019).

Governance structure's description and functioning

The strategy is not meant to replace single policies and strategies. It will be the basis for promoting **cross-departmental cooperation** within the Region. It will involve networking among actors, clusters and areas. It also foresees the establishment of a regional **Sustainable Bioeconomy Council with advisory tasks** (Baden-Württemberg State, 2019). Its implementation over the period 2020-2024 will be funded with a regional budget of €50 million (Baden-Württemberg State [portal](#)).

Making the food system more sustainable

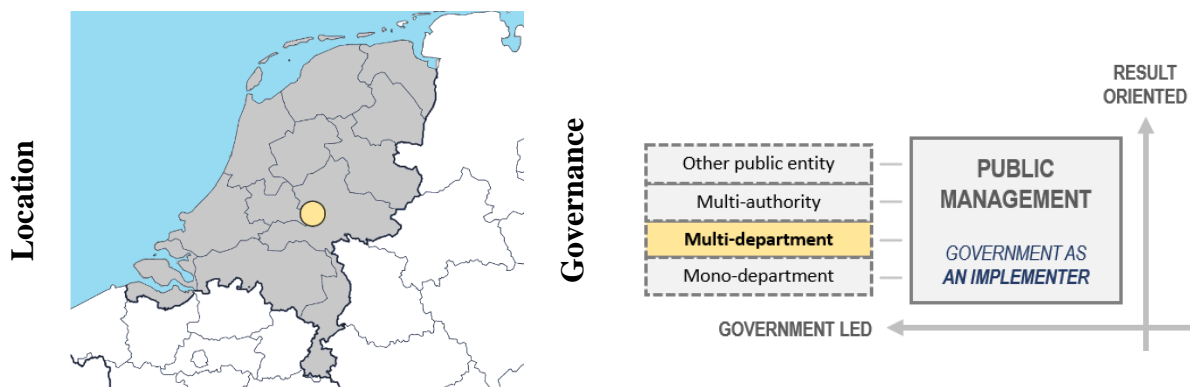
The strategy has four main objectives, and one of them is the strengthening of rural areas. This objective will be tackled by increasing regional value creation through innovative bioeconomic solutions and by creating attractive and sustainable jobs in rural areas. Bioeconomy in rural areas will generate and supply biomass while ensuring sustainability, the preservation of biodiversity and climate change mitigation. Food production will be prioritised for land use. The food system will contribute to the food and nutrition sector in an innovative (e.g. innovative solutions and products), quality-oriented (healthy regional foods) and environmentally-friendly way (less waste and pollution at all stages). Measure 10 of the strategy is fully dedicated to 'food systems and food of the future'. It reads '*Baden-Württemberg is specifically promoting applied research and development on consumer-oriented product and process innovations along the value-creation chain for food. The focus of these efforts includes technical and digital innovations in the area of traceability systems for the origin, hygiene, safety and shelf life of food as well as the process-related improvement of food processing*' (Baden-Württemberg State, 2019).

Opportunities

- Bioeconomies emphasise the sustainable role of food systems.
- Innovation potential is necessary to transform food systems.

Case 5 Integrated food policy across programmes and departments in the city of Ede, the Netherlands

Ede is a middle-size city of around 100,000 inhabitants in the Province of Gelderland. It is one of the four municipalities located in the so-called ‘Food Valley’, an area which was populated by a consolidated agri-food cluster of research centres and private companies even before the cluster was formally established in 2004 (Crombach *et al.*, 2008). The municipality includes urban and rural areas within its administrative boundaries and is familiar with the challenges faced by the agri-food system of both environments (EC, 2018). Ede was one of the signatories’ cities to the Milan Urban Food Policy Pact in 2015 and was awarded a Milan Pact Award for Governance in 2017.



The process leading to LRAs’ involvement in food governance

The city decided to make its food system more sustainable and to facilitate access to healthy food by all its citizens under the motto ‘van boer tot aan uw bord’ (‘from a farmer to your plate’) (Ede Municipality [website](#)). In addition, the city considered food as a way to strengthen its social and economic development, including through the consolidation of its attractiveness as a place to invest, work, live and visit. In 2015, as the result of a consultation process, the Municipality set its food strategy and vision ‘The question is not what Ede can do with food, but what food does for Ede’ (‘Visie Food!’ – 2015-2020). Consultation was within the municipality, among civil servants, and outside the municipality, among the food system’s stakeholders (Van de Griend *et al.*, 2019). The food strategy was adopted by the City Council and was allocated a budget of €1.7 million for its implementation over the period 2015-2018. Funding for the successive two years was decided to be subject to the assessment of the food strategy’s performance (Ede Gemeente, 2015).

Governance structure's description and functioning

The municipality designed its food governance structure in such a way to have food as a self-standing policy integrating with other policies such as economy, employment, education and health. At the decision-making level, a **municipal councillor prioritising food in its portfolio** was nominated (the first in The Netherlands). At the operational level, a **municipal food team** composed of five full-time staff was created. From the very beginning, this approach guaranteed political and administrative commitment by the municipality as *'the implementation of the food vision was embedded in the policies of other programmes and departments, each with their own food actions, budget, and monitoring tasks'* (UNEP, 2019).

Continuous involvement of all the actors related to the food system is foreseen through a number of actions such as awareness raising about food issues in order to facilitate the contribution of territorial institutions to the food strategy; promotion of the municipal food strategy through ambassadors such as environmentalists, communication officials, funding advisors; and exchanges among municipal departments in order to increase ownership of the food policy (FAO, 2018a). Performance monitoring is also part of Ede's food governance approach. SMART indicators have been set and made accessible to citizens through an online public dashboard (UNEP, 2019). Finally, the approach envisages a robust communication strategy based on a dedicated on-line newsletter reporting on activities carried out annually (EdeFoodStad) and a strong social media presence.

Making the food system more sustainable

Ede's food policy has five core themes: healthy people, healthy environment, sustainable consumption, short food chains and the development of a robust agri-food sector (EC, 2018). With its food policy, the city aims to address the challenges faced by the food system as a whole, including sustainability aspects, and to take into account the need to have a healthy living environment for residents and to create an attractive business climate for entrepreneurs and knowledge institutions (Ede Municipality [website](#)). Therefore, the city uses food as a way to improve its territorial cohesion and social inclusion with initiatives spanning from food education to public health, food waste, short food supply chains and sustainable food production. Citizens are involved and targeted in a variety of ways. For example 'FoodFloor' is an initiative developed by Ede's citizens that allows stakeholders who have projects/ideas for healthy/sustainable food in the city to apply for a grant which is provided by the municipality (FoodFloor [website](#)). In order to raise citizens' awareness about healthy and

sustainable food, the municipality is collaborating with the Wageningen University and the Gelderse Vallei Hospital in the initiative ‘Alliantie Voeding’ (i.e. Food Alliance) (Ede Municipality [website](#)). Also, the Municipality financially supports the Food Council established by civil society representatives in 2019 and participates with one representative at its meetings when the agenda requires an institutional presence (Voedselraad Ede [structure](#)). Finally, cooperation at different institutional levels is at the basis of the mission to make Ede’s strategy integrated at regional and national level. Ede was one of the 12 Dutch cities which signed the ‘[Dutch City deal: Food on the Urban Agenda](#)’ in 2017. As part of this deal, the Province of Gelderland and ministries of national government also expressed their commitment to strengthen the entire Dutch food system (FAO, 2018a).

Barriers

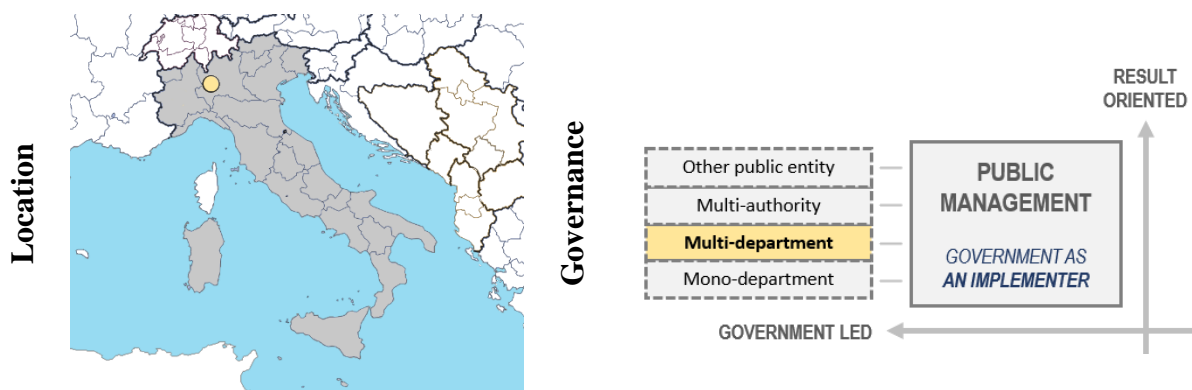
- A strong institutional approach may limit civil society’s spontaneous movements on food.

Opportunities

- Commitment by the municipality to food policy is justified by the expected social and economic side effects on city’s development.
- A dedicated team at the municipal level for food policy’s implementation is a crucial investment.
- Visibility of the strategy and dissemination of its outcomes increase the shared ownership of the food policy among stakeholders.

Case 6 Interdepartmental coordination for Milan Food Policy, Italy

The city of Milan is the second largest Italian municipality with 1.4 million inhabitants (more than 3 million people when considering the province) (ISTAT website, 2019 data). It is located in the Lombardia region, the most important economic area in Italy in terms of GDP (i.e. 21.8% of the national GDP in 2017) (Regione Lombardia website). In 2015, the Municipality hosted the Universal Exposition ‘Feeding the Planet, Energy for Life’. The Exposition lasted six months and required a 10-year joint effort of the Municipality of Milan, the Province of Milan and the Lombardia Region to make it the largest ever organised event on food in the world.



The process leading to LRAs’ involvement in food governance

The year before, in February 2014, the Mayor of Milan announced at the C40 Mayors Summit in Johannesburg the proposal of a Pact, the Milan Urban Food Policy Pact (MUFPP)₂, to be signed by cities during the forthcoming Exposition. A few months later, in July 2014, the Municipality signed a Memorandum of Understanding (MoU) with Fondazione Cariplo to define a food strategy for the city and to follow up the proposal of the MUFPP at the international level. The definition of the Milan Food Policy took around 12 months and was structured into two main phases. The first analytical phase aimed at investigating the main features of Milan’s food system, including the urban cycle of food (i.e. production, processing, logistics, distribution, consumption, and waste); the socio-economic domains affected by food system’s dynamics (e.g. demography, biodiversity, energy and water supply, health, culture, education); the on-going municipal policies and projects concerning aspects related to food; and the existing socio-economic actors in the food domain (Comune di Milano *et al.*, 2015). The second phase implied a public consultation and aimed at identifying the priorities of the future food policy starting from the ten key areas of governance of awareness, waste, access, wellness, environment, agricultural system, production, funding, and distribution. Started in February 2015, the public

consultation included a series of meetings, held in each of the nine districts of Milan, which targeted specific groups of stakeholders: public officers and city counsellors, citizens, universities and the research community, the third sector, profit and non-profit companies. In June 2015, a final event with 150 participants closed the consultation process that, overall, involved some 700 people. The Milan 2015-2020 Food Policy guidelines, defining five priorities and two instruments for the implementation of the Milan Food Policy, were approved by the City Council on 5 October 2015 (Comune di Milano, 2015).

Governance structure's description and functioning

The Metropolitan Food Council and the monitoring system were the instruments designed to be used to achieve the defined priorities while still considering existing policies, programmes and projects/activities, including those of the subsidiaries of the municipality working in food-related domains (e.g. municipal markets). The definition of the food council model to be implemented in the Municipality of Milan was based on a study carried out as part of the MoU with Fondazione Cariplo. The study investigated approaches adopted worldwide to address different food policy aspects at city level in terms of structures, responsibilities and objectives (Comune di Milano *et al.*, 2016). In May 2016, the City Council approved the establishment of the Metropolitan Food Council but its implementation has not concretised yet.

Food governance is implemented within the municipality and involves coordination across departments. Institutional actors include the vice-mayor as Coordinator of the Milan Food Policy; the Board of Interdepartmental Coordination, composed of the leaders of the municipal departments dealing with the various aspects of the food policy (i.e. Education, Trade, Agriculture, Environment, Social Affairs, and Finance); and the Food Policy Office (Comune di Milano *et al.*, 2018). The **Food Policy Office**, established in 2017, has since then been in charge of coordinating with the Board of Interdepartmental Coordination and with agencies/utility operators of the municipality; of testing interaction approaches with food system's stakeholders (including the civil society, the private sector and the academic community); and of managing relations at the international level especially within the MUFPP Secretariat and the Eurocities Working Group Food. Food policy actions may take the shape of new projects, re-orientation of existing activities, and new incentives. A budget allocation of €32.8 million was made for the implementation of different actions of the food policy over the period 2016-2018 (Comune di Milano, 2018). However, specific initiatives may also benefit from the financial support of EU-funded projects and external actors (e.g. private donors) (see acknowledgements, Annex I).

Making the food system more sustainable

The five priorities of Milan Food Policy are (Comune di Milano, 2015):

- To ensure healthy food and drinking water for everybody in order to protect human dignity and improve quality of life.
- To promote the sustainability of the food system with the aim to facilitate the consolidation of all the components of the system and of the activities necessary for its management while promoting local food production and consumption.
- To increase consumers' knowledge and awareness on healthy and safe food and on the importance of the sustainability of its production and distribution processes.
- To fight against waste by reducing surpluses and food waste during the different stages of the food chain, thus reducing food environmental impact as well as social and economic inequalities.
- To support and promote a city-based agri-food research focused on improving food system processes at the urban level and on developing cutting-edge technologies.

Barriers

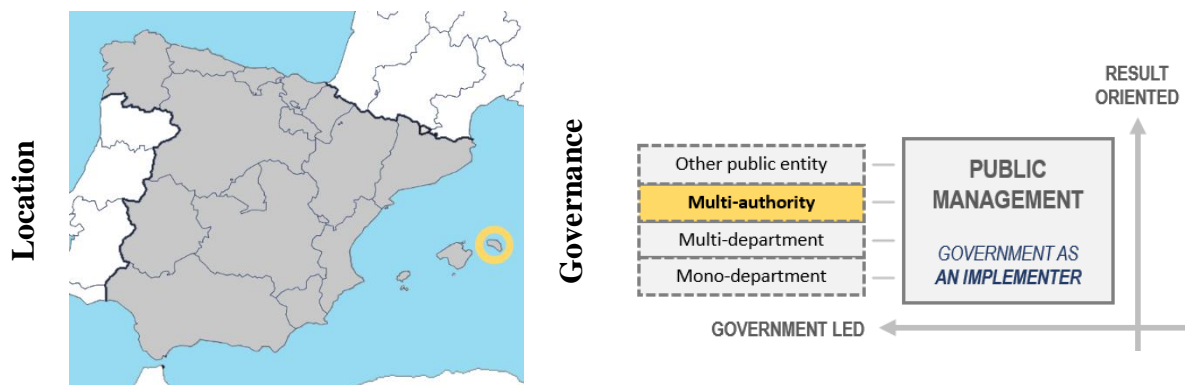
- Heterogeneity of the initiatives carried out makes creating a coherent monitoring system complex.
- Citizens' participation process is limited to specific initiatives or projects, without a structural involvement in the food policy design.

Opportunities

- The food policy is structurally integrated in the municipality from the strategic and operational point of view.
- An important budget is allocated for implementation.

Case 7 Multi-authority food governance coordinated through an external organisation in Menorca, Spain

Menorca is one of the islands of the Balearic archipelago. It has a population of some 93.000 inhabitants and is a UNESCO declared Biosphere Reserve since 1993. With 66% of its territory being protected, and 88.4% of its surface used for agricultural or forestry use, the island has a high number of ongoing initiatives in the food and gastronomy sector (Fundación Daniel y Nina Carasso, 2019; Menorca Island Council, 2019). In January 2020, Menorca was awarded the title of European Region of Gastronomy 2022 by the International Institute of Gastronomy, Culture, Arts and Tourism. The island is highly dependent on food imports for both domestic and tourist (e.g. restaurants and hotels) consumption. A recent study found that only 19% of total consumed food was produced locally, and the rest was imported (Menorca Reserva de Biosfera [website](#)).



The process leading to LRAs' involvement in food governance

Because it is a largely protected territory, since 2005 several agro-environmental practices have been promoted, with a view to extensively manage and concurrently maintain the landscape. In 2015, various stakeholders urged the administration to pay more attention to the peculiarity of the island's agri-food production and the potential of its gastronomy sector. With the Declaration of Montgofra 'Gastronomy and local product' the administration and public authorities at all levels were asked to develop a strategic vision for the island and to implement policies for the protection of local and seasonal products, for the promotion of their consumption and sale (including in public canteens of schools and hospitals), and for the support of the gastronomy sector as a tourist resource ([Declaration of Montgofra, 2015](#)). In 2017, the Menorca Island Council joined the MUFPP since the pact was providing a suitable framework for the development of a sustainable, resilient and diversified food system as called for in the Declaration of Montgofra (Menorca Island Council [website](#)). With the financial

support of the Daniel y Nina Carasso Foundation, the Menorca Biosphere Reserve Agency of the Menorca Island Council, in collaboration with VSF Justícia Alimentària and other partners (the public company Semilla which is active in promoting local food, and local action groups), carried out diagnostic studies on food supply, demand and consumption habits. As a result, a public procurement guide to facilitate the supply of local products to the island's public administration was published and a food strategy was elaborated (Fundación Daniel y Nina Carasso, 2019). The strategy was developed following a participatory approach and through the organisation of thematic tables.

Governance structure's description and functioning

The Insular Council of Menorca acts as **Food Council**. The food strategy is **mainstreamed in the work of the various departments of the Council as well as of the municipalities of the island**. However, coordination of this work is currently done by an external organisation, VSF Justícia Alimentària, which manages to guarantee the cross-departmental and cross-institutional nature of the strategy (Fundación Daniel y Nina Carasso, 2019).

Making the food system more sustainable

Menorca's 2017 food strategy aims at encouraging collaboration between the various local administrations involved in the food policy; promoting healthy food that is affordable to everyone; contributing to the production of responsible food; conserving natural, cultural and gastronomic values linked to primary activities; encouraging short food chains; and reducing food waste (Menorca Island Council, 2019). The Action Plan of the Biosphere Reserve of Menorca, published in January 2019, reiterates the institutional support for implementing the food strategy and allocates further financial resources for complementing actions such as the promotion of sustainable food production, the marketing and consumption of sustainable food, and the implementation of training activities (Menorca Island Council *et al.*, 2019). In June 2020, the Insular Council of Menorca published a guide on measures to prevent and reduce food waste, an additional follow-up action to the 2017 food strategy.

Barriers

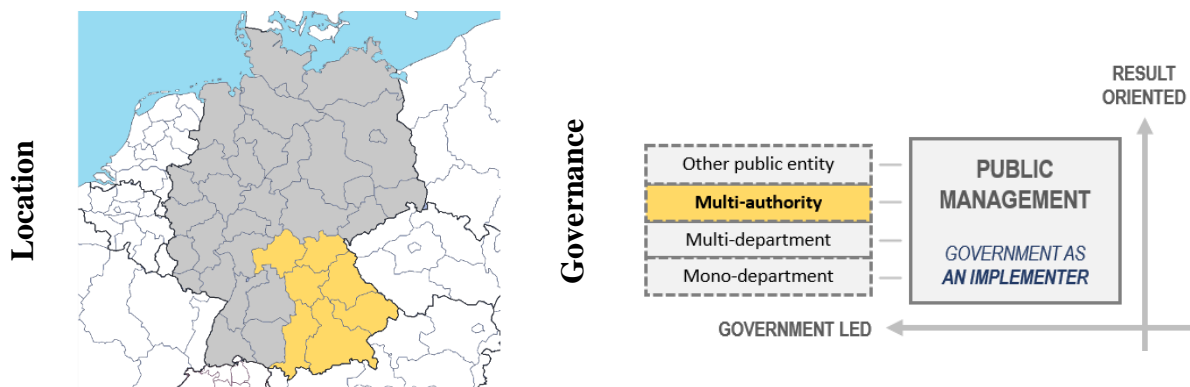
- Keeping the coordination of the food strategy political work external is not a viable option (Fundación Daniel y Nina Carasso, 2019).
- Better monitoring of the implementation of the strategy is necessary in order to understand its social, environmental and economic impact (Fundación Daniel y Nina Carasso, 2019).

Opportunities

- The public administration reacted well to the call for action made by the civil society. Formal commitments (Declaration of Montgofra, MUFPP) guarantee political follow-up.

Case 8 Associations of local authorities as eco-model regions in Bavaria, Germany

Bavaria has the highest number of organic farms and the largest organic area among German regions. In 2019, the region had over 10,000 organic farms (i.e. 10% of Bavarian farms and a third of national organic farms), 346,000 hectares of organically cultivated land, and 3,400 companies processing and trading organic food (LVÖ Bayern [website](#)). In order to further increase organic production and meet domestic demand, in 2012, the Region initiated the BioRegio Bayern 2020, a regional programme funded and managed by the Bavarian State Ministry of Food, Agriculture and Forestry (StMELF). The programme's implementation is supported by the four organic associations of the region as well as by the so-called eco-model regions.



The process leading to LRAs' involvement in food governance

Notwithstanding the reference to 'region' in their names, the eco-model regions of Bavaria are found at the sub-regional level. They are recognised by the Regional Government and are at the core of the implementation of the BioRegio Bayern 2020 programme. The idea behind the creation of these eco-model regions was to involve local communities in the programme and have their contribution in tackling the programme's objective of conversion to organic farming and food. Currently, there are 27 eco-model regions in Bavaria, engaging 520 municipalities and covering almost 30% of Bavaria's area. They are established on a competitive basis. Three open calls were launched since the beginning of the programme: in 2014, 2015 and 2019. In the 2019 call, 15 new eco-model regions were selected according to their proposals for the future development of organic agriculture and food in their respective areas (Bavarian State Research Centre for Agriculture [website](#)).

Governance structure's description and functioning

Eco-model regions are **associations or alliances of local authorities** (cities, districts, counties, municipalities) which partner to implement a common plan to boost the organic sector in their geographical area. Unlike the eco-cities which require a council's decision, members of the eco-model regions associate to implement a common work plan. They may use an existing cooperation agreement if they are already working together, or finalise another ad-hoc agreement for cooperating in the eco-model region. Members of the eco-model region decide responsibilities and how they are going to share the costs. They also nominate the project manager (see acknowledgements, Annex I). The project management of these alliances is co-funded (75%) by StMELF with up to €75,000 per year for a maximum of two years, which may be extended by 3 more years (StMELF [press release](#) of 2 May, 2019). These alliances also receive technical and organisational support from other institutional entities in the region, including the organic farming associations and their umbrella organisation LVÖ.

The most important stakeholders are grouped into a network group which is responsible for coordinating the eco-model region. Other networking activities are the responsibility of the project manager. Decisions are formally taken by the associated local authorities (e.g. mayors) but it is common for these decisions to be agreed upon in the network group as local community's support and connection/cooperation with locally-based initiatives is essential for the functioning of the eco-model regions (see acknowledgements, Annex I). This same model of eco-model region or similar ones have been adopted by the German regions of Hesse and Baden-Württemberg.

Making the food system more sustainable

The aim of the BioRegio Bayern 2020 is to double regional organic farming production by 2020. Recently, it was announced that the programme would be extended to 2030 in order to have 30% of the agricultural area of the region managed organically. The programme envisages the implementation of various measures in the areas of education, counselling, funding, marketing and research.

The eco-model regions implement projects related to agricultural production, processing, marketing, and food services (hotel industry, catering) as well as information and awareness raising (Bavarian State Research Centre for Agriculture [website](#)). The aims are to strengthen rural areas, diversify strategies for organic farming, build regional identity, increase organic food in catering, promote healthy food and food from the region, and strengthen networking and cooperation capacity.

Barriers

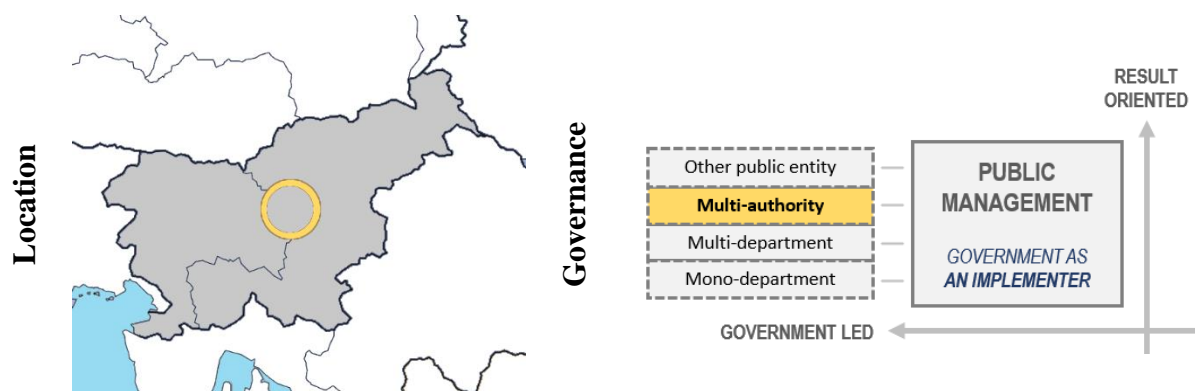
- Competitive process: convincing implementation plans need to be put together to obtain the eco-model region label.

Opportunities

- Sub-regional alliances allow the implementation of tailored solutions which adapt well to the characteristics of the territory.
- Eco-model regions are models for territorial development.

Case 9 Contractual partnership for short supply chains and local food awareness among the municipalities of the Heart of Slovenia

The ‘Heart of Slovenia’ is an area ‘*stretching from the Kamnik-Savinja Alps to Dolenjsko and from the hinterland of Ljubljana to the municipalities situated along the Sava River*’ (Gradišek *et al.*, 2016). In this area, the food system is characterised by small farms and family farms. Over a period of almost two decades, the ‘Heart of Slovenia’ has become a trademark for quality produce/products as well as a vision for regional development according to sustainability principles.



The process leading to LRAs’ involvement in food governance

In this geographical area, **development partnerships among municipalities** are the way to cooperate in the food policy domain. Development partnerships at the local level were first encouraged by the government of Slovenia in the late 90s (OECD, 2007). In the ‘Heart of Slovenia’, several municipalities first networked in 2002 within the framework of a rural development project. In 2006, eight of these municipalities founded the Development Partnership of the Centre of Slovenia. One year later, with a view to access EAFRD funds under the Rural Development Programme of the Republic of Slovenia 2007-2013, six of these municipalities established the Local Action Group (LAG) ‘The Heart of Slovenia’. In 2008, the ‘Heart of Slovenia’ brand was launched and over the years it was joined by other municipalities. Finally, in 2013, to cope with this expansion, the ‘Heart of Slovenia’ and its brand were put at the core of the work of The Development Centre of the Heart of Slovenia (Gradišek *et al.*, 2016).

Governance structure’s description and functioning

The Development Centre of the Heart of Slovenia is a private company connecting a number of municipalities located east of the capital city

Ljubljana. Originally, the company's name was Development Centre of Litija as it was funded and owned by the municipality of Litija. After the change of its name into Development Centre of the Heart of Slovenia, the ownership of the company has remained with the municipality of Litija while the other municipalities are **engaged in its activities on a contractual basis**. Each year the Development Centre prepares a work programme on the basis of which a yearly contract is signed with individual municipalities. Therefore, partners of the Centre may change from year to year. Currently, the partnership includes six municipalities: Litija, Šmartno pri Litiji, Kamnik, Lukovica, and Mengeš. Individual municipalities fund the activities and projects agreed upon in the work plan (see acknowledgements, Annex I).

So far the Centre has participated in 32 international projects across 16 European programmes (Development Centre [website](#)). The Centre also leads the Heart of Slovenia LAG established in 2016 in order to participate in the new programming period 2014-2020 and where, among the 39 representatives of public institutions, businesses, associations, organisations and individuals that make up the LAG, there are also six municipalities of the area.

Making the food system more sustainable

The work of the Development Centre is driven by the needs of the territory and by development goals. This work originally started at the municipal level but it soon gained a broader dimension as a consequence of the core function of the Development Centre to connect and integrate local stakeholders. In 2013, the Development Centre of the Heart of Slovenia was given the following tasks (Gradišek A. *et al.*, 2016): connecting and integrating local stakeholders; providing training, education and advice in the three priority areas of development of the Heart of Slovenia (entrepreneurship, self-sufficiency and tourism); developing and promoting new products/services and corresponding sale channels; communicating and promoting the Heart of Slovenia region, including through the management of its brand; preparing projects for attracting funding in the region; and drafting strategic documents for the municipalities of the region. As leader of the Heart of Slovenia LAG, priority is also given to developing entrepreneurship and job creation; developing social services in rural areas; increasing the added value of food products; increasing local self-sufficiency; and promoting short food supply chains (LAG [website](#)).

Barriers

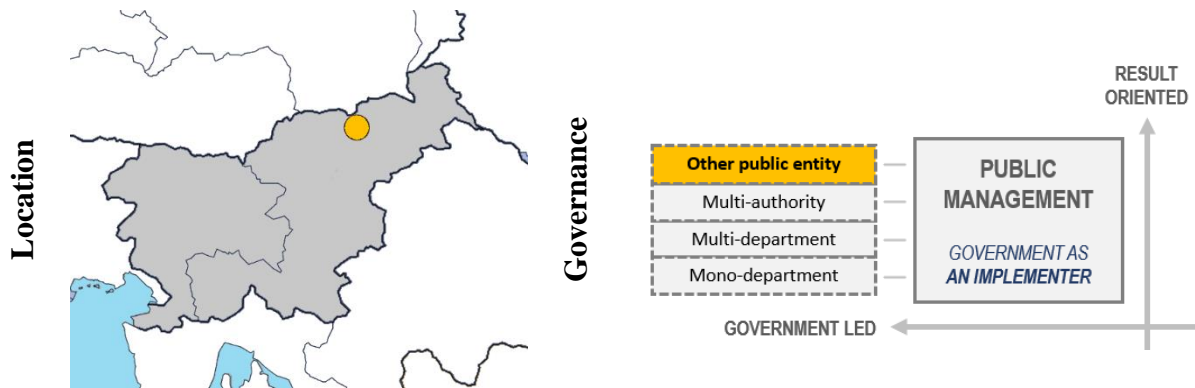
- Yearly renewal of contractual partnerships with municipalities may undermine continuity if political will is unstable or political changes occur.
- Continuity is essential to pursue change as *‘regular and reciprocal communication between stakeholders in the local food supply chain takes time (and a great deal of experience) to establish’* (ENRD, 2016).

Opportunities

- Partnering among Slovenian municipalities allows reaching a critical mass of financial resources and a suitable scale for operating a food system (e.g. sufficient quantity and variety of produce for commercial supply).

Case 10 An institute to support the transition of the city of Maribor, Slovenia, to a circular economy

The municipality of Maribor counts almost 96,000 inhabitants and has 37% of its territory, or 5,500 hectares, classified as agricultural area (IWM, 2018). The city struggles for self-sufficiency in areas like energy, water and food, and experiences soil loss, lowering of quality nutrients in food and weak healthy eating habits (UIA [website](#)).



The process leading to LRAs' involvement in food governance

Maribor is the first municipality in Slovenia to have initiated the transition from a linear to a circular economy. The process started in the framework of the Interreg Alpine Space 'Greencycle' project (Nov 2016 – Apr 2020) co-funded by the ERDF with €1.65 million. Maribor was one of the five pilot cities of 'Greencycle' and in this role it planned 'Wcycle', a project focussing on the development of a city-based model for waste and secondary material recycling and control. In April 2017, in order to implement 'Wcycle', the municipality established the Wcycle Institute Maribor (IWM). In 2018, also as a requirement of the 'Greencycle' project, the city developed and published its local 'Strategy for the transition to circular economy in the Municipality of Maribor'.

Governance structure's description and functioning

IWM has been established with a long-term view and is therefore continuing to pursue its mission beyond the end of the 'Greencycle' project. The institute is **made up of five companies owned or partially owned by the Municipality of Maribor**: Snaga, public company for waste management and other municipal services; Energetika Maribor, public energy company; Nigrad, public company for infrastructural works; Mariborski vodovod, public water company; and Marprom, public company for urban transport (Novak, 2018; Circular City Funding Guide [website](#)). IWM has been established by the five public

utilities companies as an independent legal entity. The founders decide on the most important matters related to the institute. Other instruments of governance include: a Director who has management responsibility and represents the Institute at the operational level; the Institute's council and a council of experts. The Institute's council is composed of seven members which include the five founders' legal representatives (i.e. the companies), one representative of the employees of the institution (elected by the employees), and one representative of interested third parties who is appointed by the Mayor of the Municipality of Maribor. The expert council performs an advisory and supportive role to the work of the institute and includes at least three members (Wcycle founding act).

IWM coordinates the projects carried out by the participating companies. Projects relate to transformation processes where inputs are waste, surplus heat, wastewater, unused land, and the social environment; and outputs are materials, products, energy, water, land, and a co-operative economy. Processes are integrated horizontally among the thematic areas covered by the companies (e.g. the output of one area is used as input into another area). The working model of IWM is also meant to optimize the operations of the participating public utility companies in order to provide their services to citizens at the best quality/price ratio. Initial financing (€50,000) was provided in equal parts by the founders. Further funding is expected to be raised by IWM (Wcycle founding act).

Making the food system more sustainable

Within the process-based approach implemented by IWM, the local food system contributes with the recovery of bio-waste (input) which is then turned into fertilisers and recycled garden soil (outputs). Notably, this process is further developed in the Urban Innovation Action 'Urban Soil 4 Food' (€3 million from ERDF), led by the Municipality of Maribor and also participated in by IWM. The circular economy strategy further specifies that IWM's work areas also relate to sustainable food production, sustainable use of land and circular procurement. Additionally, under the sustainable mobility area, the circular economy strategy plans the design of an urban space for the marketing of centrally produced food (IWM, 2018). Overall, IWM and its horizontally aggregated activities are expected to impact in social, economic and environmental terms as new (green) jobs, new business opportunities and new added value will be created while involving the widest possible range of different actors (collaborative economy) (IWM, 2018).

Barriers

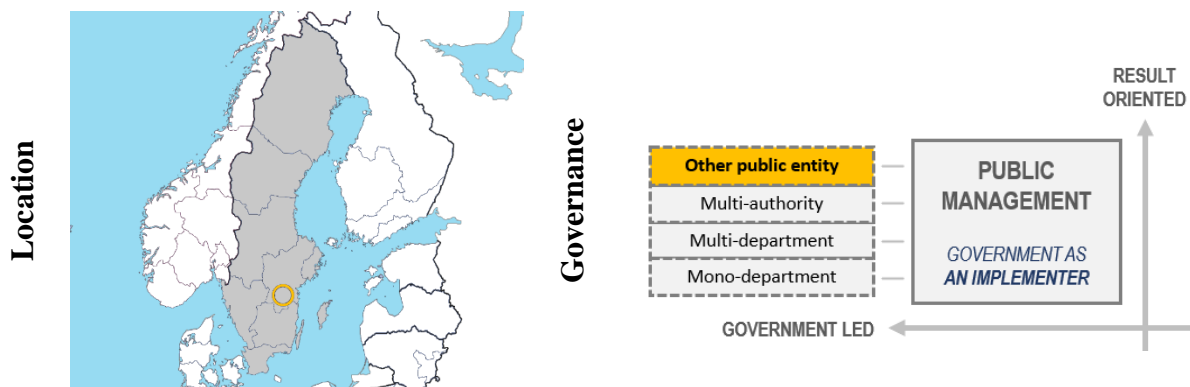
- Uncertain funding undermines the capacity of IWM to scale-up activities (Circular City Funding Guide [website](#)).

Opportunities

- IWM's governance structure determines a new business model based on collaborative projects which tackle circularity of materials and resources.

Case 11 Municipal companies to turn food and meat waste into biogas in Linköping City and in Östergötland County, Sweden

Linköping is the fifth largest municipality of Sweden (160,000 inhabitants) and the capital of Östergötland County (Municipality of Linköping [website](#)). It is a modern industrial city surrounded by an agricultural district. During the 90s, the city decided to convert its bus fleet from diesel to a less polluting fuel. Instead of investing in the extension of the natural gas grid, the city decided to invest in the conversion of organic waste into biogas. This solution was also optimal for reducing the organic material that was entering the wastewater treatment system and for solving the problem of treatment of waste products from the local abattoir (IEA Bioenergy Task 37, 2007).



The process leading to LRAs' involvement in food governance

In 1995, the Municipality of Linköping, the local abattoir (Swedish Meats AB) and the Federation of Swedish Farmers (LRF) created Linköping Biogas AB. In 1996, with a city government financing of €140,000, the company built and entered into operation a biogas plant (GIZ, FAO and RUAFA, 2016). Increasing financial and technical needs finally brought the plant under the full control of the public sector. Since 2004, the plant has been owned and operated by Svensk Biogas, a wholly owned subsidiary of the municipality-owned Tekniska Verken which is responsible for water, energy and waste. Swedish Meats and LRF are still part of the process as customers and suppliers (Svensk Biogas [website](#)).

Svensk Biogas produces biogas from organic waste and residues such as slaughterhouse waste, residues from the food industry, food waste from households, shops and restaurants, and other biomass residues from agriculture (Smart City Sweden [website](#)). Svensk Biogas has production facilities in Linköping and Norrköping. It also distributes biogas in Östergötland and nearby areas through the operation of several gas filling stations which are used by the regional bus fleet. By mixing waste with animal manure, the company also obtains

bio-fertiliser (about 52,000 tonnes per year) which is then returned to the agricultural sector. Since 2015, its bio-fertiliser is KRAV-certified and therefore fulfils the standards for organic production (GIZ, FAO and RUAFA, 2016), further enhancing the linkages between rural and urban areas.

Governance structure's description and functioning

Linköping's municipal group includes the City Council and the municipal company Linköping Stadshus AB. In 2019, the City Council had 9,921 employees, a turnover of €1 billion and a profit of €4.3 million. In the same year, Linköping Stadshus AB had 1,381 employees, a turnover of €0.7 billion and a profit of €67 million (Linköping, 2020). Linköping Stadshus AB is the parent company of the municipality which controls several other companies among which are Tekniska verken and, under the latter control, Svensk Biogas.

The municipal group is led by the Municipal Council. The Council is also responsible for all its companies and therefore has the duty to supervise their operations. A Municipal Board reviews the activities of each company and assesses whether these activities are carried out according to the companies' missions as determined by the City Council. Linköping Stadshus AB leads and formally owns all its subsidiaries (Linköping Stadshus AB, 2020).

Making the food system more sustainable

Tekniska verken's wide range of competences allows the company to link sectors to create efficiency and circularity of resources. It also creates linkages between urban and rural areas. Rural and urban organic waste has to be aggregated to get the volumes that allow an efficient operation of the biogas plant. Outputs of the plant are then used in rural areas (biofertiliser) and in urban areas (biogas) enhancing both agricultural sustainability and the city's environmental conditions. Tekniska verken's vision is to develop the world's most resource-efficient region while contributing to making Linköping an attractive municipality in which to live and work. Included in the Tekniska verken goals set by the City Council is the reduction of climate impact emissions in accordance with the municipality's goal of carbon neutrality by 2025. This requires company's development work as well as higher material recycling and collaboration with academia and universities for developing more environmentally-friendly activities and services.

Barriers

- Organisational confusion due to the complex structure of the municipal group.
- The authority has set ambitious goals but not the roadmap (Gustafsson and Mignon, 2020).

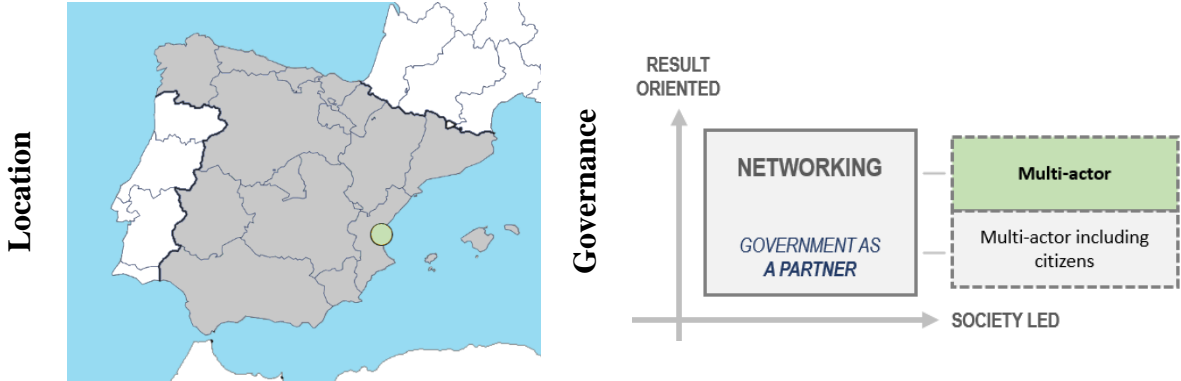
Opportunities

- The many municipal companies are under the operational and financial control of the Municipality. This ensures that the companies' missions contribute to the achievement of the environmental targets of the city and county. In turn, this guarantees continuity of public support for the companies.
- Municipal companies are profitable and create local employment.
- The local authority delegates the operational aspect of the policy to a municipal company (Tekniska verken). Bound by its mandate, the company is rather free to determine how the mandate is achieved.
- Early involvement of local stakeholders in the decision-making process of setting up a biogas plant.

1.2 Examples of food systems’ network governance by LRAs

Case 12 CALM, the food policy council of Valencia, Spain

Valencia is the first Spanish city to establish a food council. Its food system relates to urban and peri-urban agriculture activities in the historical gardens of the ‘Huerta’, a belt of fertile and irrigated agricultural land surrounding the city. The landscape structure of the Huerta is an Arabic heritage characterised by a dense network of water channels and rural roads. In late 2019, this waterscape was included in the FAO register of Globally Important Agricultural Heritage Systems (GIAHS [website](#)). The historical ‘Huerta’ includes 40 municipalities and covers a total of 12,000 hectares but the crop area rises to over 30,000 hectares when considering the whole metropolitan area of Valencia (RUAF Foundation, 2017). Typically, farms are small and grow irrigated crops such as fruit, vegetables and rice. According to FAO, there are 6,000 family farms in the ‘Huerta’ which apply sustainable agricultural techniques. Production is partly used for personal consumption and is partly commercialised to local and municipal markets ([GIAHS website](#)).



The process leading to LRAs’ involvement in food governance

In 2018, the city of Valencia established its municipal food council or CALM (*Consejo Alimentario Municipal*). This was the result of a participatory process started in 2016 and facilitated by the Municipal Department of Agriculture. The whole process was supported, including financially, by the Daniel y Nina Carasso Foundation. It also took advantage of the well-established citizen movements which developed over the 2000s in order to protect the ‘Huerta’ from urban expansion and to maintain its sustainable development. Various economic and social stakeholders of the territory dealing with food, sustainability and healthy diets matters were involved in this participatory process that finally **took the form of a working group**. Concurrently, diagnostic studies of the food system and of

its actors, including from the point of view of marketing, short value chains, and public procurement were carried out. The working group focused on the development of a municipal Integrated Action Plan to promote agricultural activity, and of a Development Plan for the Huerta. In addition, it also worked on preparing the proposal for the candidature of Valencia to become the World Capital of Food 2017. The success of the city's application contributed to strengthen alliances among stakeholders in the city, including with the private sector (RUA Foundation, 2017).

Governance structure's description and functioning

CALM is a **consultative and participatory body** aimed at improving the city's food governance in line with the commitments made by the city in 2015 as signatory to MUFPP. The council includes representatives of the municipality and of the regional government, of non-profit organisations, federations, groups and networks involved in the agri-food sector, professional associations, universities, consumer and user organisations, and agricultural organisations. The list of the members of CALM counts 41 representatives. The council is governed by the Plenary which meets twice a year, is chaired by the Mayor and includes all representatives of CALM. The Standing Committee, which meets twice a month, is in charge of CALM's daily activities. Debate, discussion and generation of proposals occur at the level of permanent or temporary working groups. Currently, there are three working groups which focus on sustainable public procurement, short food chains, and sustainable and healthy food policies for vulnerable groups (Ajutament de València [website](#)).

The work of CALM relates to three main areas: i) promotion of the active participation of food system's stakeholders in the shaping of the system and exchange of information with them; ii) facilitation of internal coordination within the municipality among the different departments involved in food-related policymaking; and iii) support in progressing against the commitments made by the city under the MUFPP. Furthermore, CALM is expected to collect information about the food system; propose innovative solutions to tackle a sustainable food system able to develop the local economy; establish connections between the different sectors involved in the food system, as well as between the social, economic and environmental dimension of the system; review the regulations and legislation that affect the food system; and make recommendations to public institutions and administrations. CALM's work is detailed in annual work plans.

Making the food system more sustainable

In 2018, the food council prepared the Agri-Food Strategy ‘València 2025’, later ratified by the municipality, and the strategy’s first Action Plan 2020-2021 for its implementation. Identified strategic lines are (Ajutament de València, 2018):

- a) promote the territory’s food culture, including awareness on the impact of individual food choices;
- b) promote the transition of food systems (agriculture, livestock, fisheries) towards more sustainable models in environmental and social terms;
- c) create fairer food chains and local marketing opportunities;
- d) consolidate a participatory and transparent local food governance;
- e) guarantee access to sustainable and healthy food to all;
- f) introduce criteria for food sovereignty in municipal urban and territorial planning.

Barriers

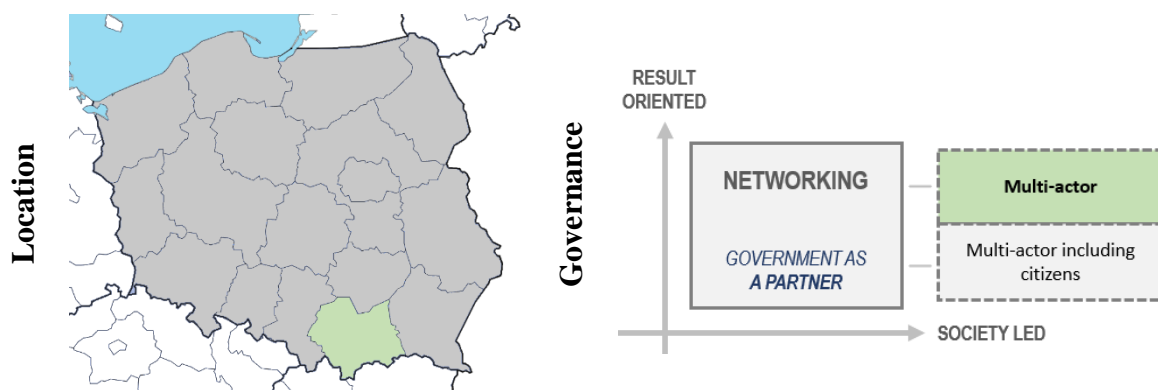
- Limited coordination between the municipality and the region affects adequate food planning at the local level (RUAF Foundation, 2017).
- Private sector’s inadequate involvement in the process.

Opportunities

- Political willingness and commitment (e.g. through MUFPP) to work for sustainable food systems.
- Existence of mature citizen movements and platforms supporting the establishment of the food council. The historical importance of the ‘Huerta’ facilitated the mobilisation of civil society for its protection and contributed to raise awareness on sustainability issues among the general public.

Case 13 A multi-actor council to grant quality food certification in Małopolska, Poland

In the Małopolska region, agricultural land represents 60% of the total area. The region has a high number of farms (143,841, in 2018, the majority of which are individual farms) and a low average farm size (slightly over 6 hectares versus a national average farm size of 13 hectares) (Business in Małopolska Centre, 2015; Główny Urząd Statystyczny, 2020). Farm structure and favourable growing conditions have facilitated the development of a rich tradition of local food. In the region, protection, identification and differentiation of agricultural products and food products are used to support the development of rural areas. EU quality schemes (i.e. PGI, PDO and TSG), national schemes (i.e. the List of Traditional Products), and regional initiatives identify quality products.



The process leading to LRAs' involvement in food governance

The Regional Culinary Heritage trademark is part of a European network and supports the promotion and development of culinary identity within the region and abroad. The regional culinary heritage concept was developed in 1994 as part of the cross-border cooperation between the Swedish region Skåne and the Danish island of Bornholm. It was then introduced in the island of Rügen, Germany, and in the Swinoujscie region, Poland. In 1997, the European Commission and Region Skåne financially supported the expansion of the network on a European scale. In 2000, the European Regional Culinary Heritage network became self-financing (COE, 2001). Members of the network are regional authorities that share a common logo, comply with agreed criteria, and carry out joint activities and marketing initiatives. Within each member region, Regional Authorities establish their regional network of producers, processors and distributors for the promotion of regional food. Currently, the European network has 45 members which are principally located in the Northern and Eastern parts of Europe. Ten Polish regions belong to the network.

Małopolska is a member of the European Network of Regional Culinary Heritage since 2014. The decision to join the network was taken by the regional government through Resolution No. XXXVII/607/13 in May 2013. The decision was in line with the regional development strategy 2011-2020 which highlighted the need to improve competitiveness of agriculture through the implementation of instruments for the support of organic farming and of the marketing of high-quality regional food products (Małopolska Region, 2011).

Governance structure's description and functioning

The Regional Authority is the owner of the licence for the use of the regional culinary heritage trademark in Małopolska Region. Currently, Małopolska's regional network counts 41 members. Participation in the network is free but accession is regulated. Members may be food producers, agri-food processors, restaurants and providers of catering services, wholesaler and/or retailers of agri-food products. Products must meet high quality standards, be traditional cultivars of the region, or be registered in a quality scheme (European/national). All applications for joining the network are handled by the Department of Agriculture and Rural Development of the Marshal's Office of the Region. The Department is also in charge of coordinating all the activities of the network. However, applications need to be cleared by the **Traditional Products and Culinary Heritage Council**. This Council, appointed by the Regional Authority, is the consultative and advisory body of the Marshal of Małopolska Region on matters related to both traditional products and the network (Marshal's Office of Małopolska Region, 2019).

Chaired by the deputy-Marshall of the Region, the Council mirrors a multi-actor composition as it includes institutional representatives from various policy areas (e.g. tourism, culture) as well as from the education and business sectors. Namely, its members are: Director of the Department of Agriculture and Rural Development Office of the Region (Deputy-Chairman); Councillor of the Regional Assembly; Regional Coordinator of the Culinary Heritage Małopolska Network and Chief Specialist in the Department of Agriculture and Rural Development of the Region; acting Director of the Małopolska Agricultural Advisory Center in Karniowice; Member of the Board of the Małopolska Chamber of Agriculture; Region's Inspector of Commercial Quality of Agricultural and Food Products; Representative of the Provincial Inspectorate of Trade Inspection in Kraków; Representative of the Ethnographic Museum Seweryna Udziela in Krakow; Representative of the Faculty of Food Technology of the Agricultural University of Hugo Kołłątaj in Krakow; Head of the Department of Cultural Anthropology at the Ignatianum Academy, Director of the Agricultural Advisory Center in Brwinów, Krakow Branch; Director of the

Malopolska Tourist Organization; and the meat processing company ‘Płatek’ Spółka Jawna.

Making the food system more sustainable

The objectives of the Malopolska Regional Culinary Heritage network are:

- Development and promotion of the natural food market (traditional, local, regional and organic) based on local/regional resources.
- Cooperation and exchange of knowledge and experience among members.
- Strengthening of local/regional identity.
- Regional culinary offer to consumers/tourists.
- Increase of the culinary attractiveness of the region.
- Promotion and development of sectorial SMEs as well as strengthening of their competitiveness.
- Raise the interest in high-quality natural food.
- Regional development.
- Cooperation with the other member regions of the European network.

Members of the network are allowed to use the logo, have their products promoted on the network’s and Region’s websites, participate in promotional events within the region and benefit from co-financing to take part in events across the country and abroad. In fact, the food network is not only intended for local development. The network’s logo characterises locality of food but also makes products visible to consumers outside the region therefore externalising the business opportunities of its members.

Barriers

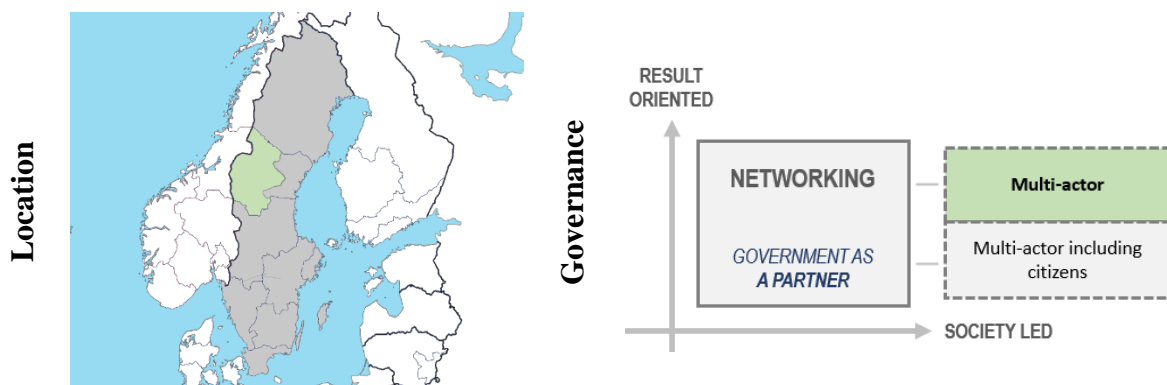
- Participation in the regional network is selective.
- There might be difficulties for small-scale producers to affiliate.

Opportunities

- The cross-sectorial council helps link food production to tourism and tourism development strategies.

Case 14 A multi-actor partnership to implement the regional food strategy of Jämtland Härjedalen, Sweden

Region Jämtland Härjedalen is one of Sweden's sparsely populated northern areas. It is home to some 127,000 inhabitants (2015 data) and is challenged by extreme climatic conditions, a declining and ageing population, and long distances to be covered. Region Jämtland Härjedalen is characterised by attractive landscapes and by an important tourism industry that integrates regional food producers. Culture and creativity are considered to be other relevant economic assets (OECD, 2017). Since 2017, the region has a directly elected County Council with a mandate for regional development (OECD, 2017). Regional strengths in food, culture and tourism have been used as drivers for regional development. In its regional development strategy 'Jämtland Härjedalen 2030 – Innovative and Attractive' (which is currently under revision), high-quality food products and gastronomy contribute to entrepreneurship, creativity and authenticity and finally to the attractiveness of the region for both tourists and residents.



The process leading to LRAs' involvement in food governance

Jämtland County had already launched a food strategy in 2011. The focus on food was driven by the important acknowledgements the county received in the gastronomy sector. In fact, in 2010, the Municipality of Östersund, the county's capital city, was named a UNESCO Creative City of Gastronomy; and in 2011 the Ministry of Agriculture appointed Östersund as the Food Capital of Sweden. The update of the 2011 food strategy started as part of the cooperation that followed this nomination. A collaborative project 'Creative Region of Gastronomy' (2015-2018), participated in by Region Jämtland Härjedalen, Östersund Municipality, The Federation of Swedish Farmers - Jämtland, Jämtland Härjedalen Tourism and Torsta AB (a company owned by Region Jämtland Härjedalen and other public and private entities) engaged with a high number of

stakeholders in the sectors of gastronomy, culture and tourism. The Regional Development Board (appointed by the Council) then decided that the framework of this project presented the right opportunity to initiate reviewing and updating the 2011 regional food strategy. Beginning in 2016, a number of meetings, group discussions and interviews were conducted in all municipalities of the county towards this scope. All actors of the food value chain were involved, from the institutional level to the private sector (Region Jämtland Härjedalen [website](#)). The food strategy was published in 2017.

Governance structure's description and functioning

The food strategy is **governed by a regional partnership** including representatives from Region Jämtland Härjedalen, Jämtland Härjedalen Tourism, County Administrative Board of Jämtland, Mid Sweden University, Östersund Municipality, National Farmers' Association of Jämtland, Eldrimner (a national resource centre for food craft) and Torsta AB. The partnership is coordinated by Region Jämtland Härjedalen through Torsta AB. The partnership has other responsibilities, including: keeping the dialogue open with relevant stakeholders; functioning as a meeting point between research and businesses; making regional, national and international contacts; and preparing and following up an action plan for the implementation of the strategy. The action plan for 2019-2020 was adopted in June 2019.

Making the food system more sustainable

The strategy is structured around three main areas. The first area relates to sustainable business and considers regulatory and food safety aspects of the food sector; opportunities for increasing food production; need for food infrastructure; potential of creative food; financing opportunities and labour availability. Overall, by 2030, the strategy aims at having competitive and profitable businesses in the food sector and at increasing food production's volume and value. The second area assumes that knowledge and innovation are essential for increasing competitiveness. Research has to be driven by needs and innovations have to suit regional businesses, including with a view to adapt to new markets and open up export opportunities. New product development in the food and gastronomy sectors is expected to broaden supply, create new businesses and increase profitability. By 2030, the strategy aims at making the region a recognised hub for food and gastronomy, with a competence centre that covers the full food value chain and a well-established relationship with top universities. The third area relates to conscious consumption and focuses on increasing awareness of, and demand for, regional products (including in public catering), on expanding new markets (e.g. visitors who travel for experiencing new food, the so-called 'foodies') and on enhancing the region's gastronomic profile. The strategy aims

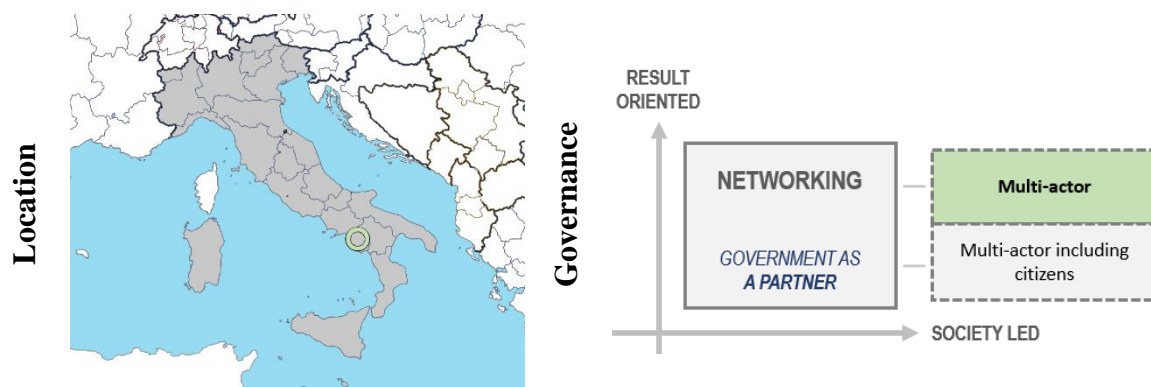
at having more local food available in shops, restaurants and canteens and at becoming a well-known national and international gastronomic and creative destination.

Opportunities

- Regional partnerships encompassing a wide range of actors are able to pursue multiple targets while facilitating synergies across sectors.

Case 15 A multi-actor district for the development of organic agriculture in the Province of Salerno, Italy

Cilento is an area located in Southern Italy, in the Campania region, within the boundaries of the province of Salerno. The ‘Bio-distretto Cilento’ is a district within this area which is devoted to organic agriculture. It covers around 3,200 km² across 39 municipalities and currently engages more than 450 organic farmers with some 2,300 hectares of agricultural land. Olives, vines, vegetables and fruits (figs in particular) are the main agricultural products, while in the livestock sector small-sized farms coexist with large-sized buffalo farms that dominate dairy production. In Cilento, tradition in food is coupled with strategic cultural assets such as the archaeological sites of Paestum and Elea Velia, the Padula Charterhouse and the National Park of ‘Cilento, Valle di Diano e Alburni’. In 1998, Cilento was listed as a UNESCO World Heritage Site for its natural and cultural assets and since 2010 it is acknowledged as one of the areas where the intangible heritage of the Mediterranean diet is preserved.



The process leading to LRAs’ involvement in food governance

The origins of ‘Bio-distretto Cilento’ date back to the early 2000s. In 2001, national Legislative Decree n. 228 assigned the task of identifying rural districts and quality agri-food districts, and of facilitating their development as self-standing entities, to Italian Regional Authorities. The decree opened the way to the territorial aggregation of stakeholders within agri-food systems, but the necessary regulatory processes at the regional level took time to be initiated. In 2004, in order to cope with a rising demand for institutional support by the local farmers, in particular for the marketing of their products, ten municipalities (i.e. Ascea, Casal Velino, Pisciotta, Castelnuovo Cilento, Ceraso, Orria, Perito, Prignano Cilento, Salento, and Stella Cilento) took the initiative to initiate some coordinated actions. A number of public debates participated in by the Italian Association for Organic Agriculture (AIAB) and open to citizens, social/cultural

associations and research institutions were intended to discuss feasible options not only for marketing but also for the sustainable development of the whole territory. This public engagement process led to the establishment of ‘Bio-distretto Cilento’, the first organic district in Italy. In September 2009, a memorandum of understanding (MoU) was signed between the Regional Authority, the Province of Salerno, the national body representing municipalities and communities in mountain areas (i.e. Unione Nazionale Comuni Comunità Enti Montani – UNCEM), the managing authority of the national park in the area (i.e. ‘Parco Nazionale del Cilento, Vallo di Diano e Alburni’), AIAB, and the Association Città del Bio (Regione Campania, 2009). The MoU was made official in October 2009 through a resolution by the Campania Region. The regional law recognising rural districts and quality agri-food districts was not published until August 2014.

Governance structure’s description and functioning

The MoU included indications of functioning mechanisms and of a preliminary governance structure. Signatories to the MoU were in charge of designing and implementing initiatives to promote and support ‘Bio-distretto Cilento’ coherently with the Regione Campania’s policy related to the agri-food sector. To discuss initiatives and their implementation, a roundtable participated in by all the signatories to the MoU was set (Art. 3 of the MoU). Feasibility and implementation of each approved initiative was subject to the availability of funds to be procured by the partners of the bio-district (Art. 4 of the MoU). From 2009 to 2012, most of the fund-raising was carried out by AIAB (Pugliese *et al.*, 2015). Starting in June 2011, an ad-hoc non-profit association ‘Bio-distretto Cilento’ was established to better coordinate initiatives, projects and efforts of all those involved. All the district’s actors (e.g. municipalities, organic farmers, consumers associations, and tourism operators) are members of the ‘Bio-distretto Cilento’ association. As such, they participate in the General Assembly and nominate their representatives in the Board of Directors. The Board of Directors is the governance body of the association. It is nominated every three years. All members of the ‘Bio-distretto Cilento’ association participate in defining activities through the approval by the General Assembly of a yearly Strategic Plan. All members also contribute to identifying financial resources for activities’ implementation (see acknowledgements, Annex I).

Making the food system more sustainable

The ‘Bio-distretto Cilento’ focuses on organic production according to the four main initiatives foreseen in the MoU: i) development of a pilot for the certification of organic farmers; ii) creation of guidelines for organic farmers aimed at preserving and farming traditional local products; iii) implementation of an awareness campaign in schools about organic food and the Mediterranean diet;

and iv) development of a pilot for the adoption of a Mediterranean diet-based menu in public and private canteens of the Cilento area. Activities have been implemented on a project basis. For example, technical advice to farmers on organic production and creation of local markets for organic produce was supported through regional structural funds. Within the framework of the national Organic Action Plan, financial support was given to the development of short food supply chains, in particular with a view to introduce local organic products in school canteens. Training activities addressed to local farmers interested in converting their production according to organic principles were organised using funds from the EU Leonardo Da Vinci Programme, in a project participated in by AIAB and aimed at promoting social farming (Multifunctional Agriculture in Europe - Social and Ecological Impacts on Organic Farms). According to Pugliese *et al.* (2015), the experience of ‘Bio-distretto Cilento’ demonstrates that an organic district favours sustainability from: the social perspective, by adding value to rural areas (also in terms of job opportunities) and consolidating the culture of the territory; the economic perspective, by allowing organic producers and other actors of the local food system to act as a unique market player (e.g. exploiting a common label, fostering a short food supply chain, saving costs for individual certifications); and the environmental perspective, by encouraging biodiversity (e.g. sustaining traditional agricultural products and techniques) and protecting natural resources (e.g. soil, water and landscape). Municipalities have the key role of promoting organic food in public canteens, raising citizens’ awareness on organic agriculture and organising organic markets.

Barriers

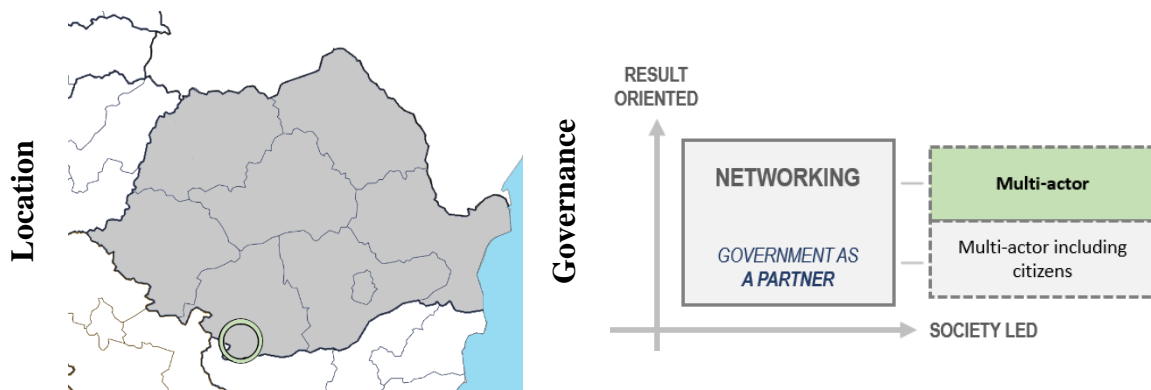
- The lack of regular funding and the related impossibility of developing mid-term strategies affected continuity of the district’s activities.
- The approach has not created the expected systemic cooperation among local stakeholders. Limited integration with tourism services, predominance of old-style generations of farmers and competitive individual producers’ behaviours prevented the expected economic boost of the Cilento area (CREA, 2017).

Opportunities

- Bio-distretto Cilento is considered a successful example (also internationally) of how to make existing food systems more sustainable. IN.N.E.R., the International Network of Eco-Regions (including Bio-distretto Cilento) was established in December 2014 to exchange practices. IN.N.E.R. developed a tool-kit including guidelines for the establishment of an organic district as well as examples of constitutive acts, statutes and templates for formalising LRAs’ support of the organic district.

Case 16 A Fisheries Local Action Group for sustainable fisheries development in Dolj County, Romania

Dolj County is located in the southern part of Romania, close to the border with Bulgaria. With a population of about 700,000 inhabitants, a total area of 7,414 km² and 111 administrative-territorial units (i.e. three municipalities, four cities and 104 communes) the county is one of the largest in Romania. Agricultural land represents almost 80% of the county's area (Dolj County [website](#)). Although agriculture is central to its economy, fisheries activities have some potential for the socio-economic growth of the territory due to the proximity of the Danube River. The river, as well as the lakes and ponds it forms through flooding, remain a key asset of the territory (Dolj-Danube FLAG [website](#)).



The process leading to LRAs' involvement in food governance

The Dolj County's area along the Danube River already saw the organisation of local stakeholders into a Fisheries Local Action Group (FLAG) during the 2007-2013 programming period of the European Maritime and Fisheries Fund (EMFF) (FLAG Calafat [website](#)). For the 2014-2020 programming period, the composition of the FLAG changed. The current FLAG covers an area of about 1,500 km² and encompasses the localities of Calafat, Bailesti, Cetate, Maglavit, Motatei, Ciupercenii Noi, Poiana Mare, Piscu Vechi, Ghidici, Rast, Negoii, Catane, Bistret, Carna, Macesu de Jos, Gighera. Each of these localities decided to join the FLAG upon the decision of its council (see acknowledgements, Annex I). The FLAG's objectives are defined in a strategy that aims to create a framework for the sustainable development of the area and of its fisheries communities. It is funded through the EMFF and is based on the community-led social development approach (Dolj-Danube FLAG [website](#)). The starting point for the development of the strategy was a robust SWOT analysis of the territory. Among the threats are the decline of the fishing sector in the area caused by the lack of investments, lack of professional alternatives/improvements for

fishermen, competition from cheaper imported fish products, exploitation of natural resources without regulation/attention to the environment, limited market opportunities for fisheries, and limited interest of young people in maintaining local traditions including those related to fisheries. Among the opportunities are the exploitation of the economic potential of fishing, aquaculture and processing activities; the promotion of fishing tourism and ecotourism; the valorisation of fishing traditions; the development of short fish supply chain initiatives; and the implementation of new production/processing technologies for fisheries. Priorities, goals and actions have been defined through a bottom-up approach based on consultation with local key stakeholders and citizens' involvement.

Governance structure's description and functioning

The Dolj-Danube FLAG 'Asociata Grup Local Pescaresc Dunarea Dolj' is a non-profit association founded in 2016 by one local public authority, private fisheries companies, and civil society organisations, including a local fishermen's association (Dunarea Dolj [Factsheet](#)). It operates as a public-private partnership and is governed by the Board of Directors (5 members) nominated by the General Assembly. At the operational level, the Administrative and Technical Office supports the management of the FLAG (Asociatia Grup Local Pescaresc Dunarea Dolj, 2016).

The strategy is structured into three measures: i) revitalisation of tourism and valorisation of natural resources through traditional fisheries, ii) local development through investments in aquaculture companies and in fish distribution services and infrastructures, and iii) creation of skills and diversification of competences within the sector. Each measure has specified objectives, actions, target (private and public) beneficiaries, indication of eligible projects/initiatives, total budget allocation, co-funding rules and expected results. The strategy is implemented through calls for projects. On average, the FLAG opens two calls a year which are addressed to local stakeholders concerned with the fish supply chain (including municipalities of the area). Guidelines support beneficiaries in proposing projects. A Selection Committee (3 members) decides on projects proposed for funding (Asociatia Grup Local Pescaresc Dunarea Dolj, 2016). Examples of funded projects relate to the modernisation of fish restaurants in the area, the development of tourism in 'Baltii Cilieni' area, and the promotion of local gastronomy (i.e. 'Fish Road: From Source to Plate'). The Dolj-Danube FLAG received €1.8 million funding for the period 2014-2020, out of which almost €1.4 million are from the EMFF and the remaining part comes from regional funds (Dunarea Dolj [Factsheet](#)).

Making the food system more sustainable

The Dunarea Dolj FLAG aims at increasing local awareness on existing opportunities for the sustainable development of fishing activities. Measures proposed in the Dunarea Dolj strategy relate to: promotion of local gastronomy, valorisation of fishery products, revitalisation of tourism activities, upgrading of accommodation infrastructure, activation of ecotourism (including fisheries routes for tourism), valorisation of natural resources, protection of habitats, modernization of basins aquaculture, improvement of fisheries distribution channels, reinforcement of professional skills for fishermen but also diversification of competencies for new occupational perspectives in fisheries. Target results in terms of employment by 2023 are creation of 28 new jobs and maintenance of 13 jobs (Asociatia Grup Local Pescaresc Dunarea Dolj, 2016).

Barriers

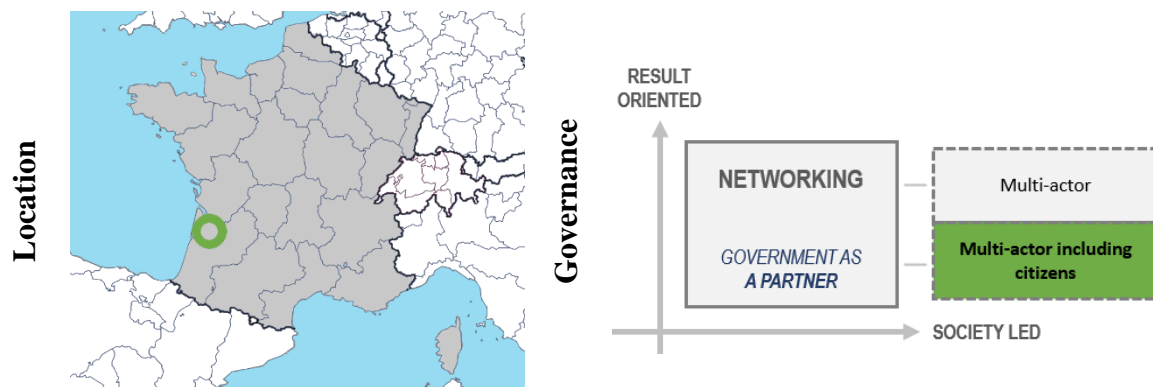
- The effectiveness of the strategy is measured only in terms of job creation/maintenance.

Opportunities

- Availability of funds is a key driver for sustainable economic development of a territory based on a specific food supply chain.
- Adoption of the FLAG mechanism offers a robust governance approach which is easy to be implemented even by small-sized cities.
- Continuity of FLAG's interventions across programming periods allows local stakeholders to implement a strategy according to a medium-term perspective.
- Information sharing about the funding opportunities through social media and dissemination through the FLAG website (which has published calls for proposals) foster active participation of the fisheries stakeholders to the FLAG objectives.

Case 17 The food policy council of Bordeaux Métropole, France

Bordeaux Métropole accounts for almost 750,000 inhabitants and is located in the Gironde Department in the Aquitaine region. Bordeaux Métropole is an association between the city of Bordeaux and neighbouring municipalities, created by the French Parliament back in 1966. It is governed by the Metropolitan Council where 105 councillors selected from the councils of the 28 participating municipalities sit (WB, 2019). Bordeaux is the capital of the region and the main city of the association where about one third of the inhabitants of the metropolitan area live (Bordeaux Métropole [website](#)). The city of Bordeaux has been a signatory to the Milan Urban Food Policy Pact since October 2015.



The process leading to LRAs' involvement in food governance

In the last decades, the metropolitan area suffered from a steady urbanisation of its surroundings with the related loss of peripheral agricultural area (i.e. its green belt) that traditionally had supplied local agri-food products. By considering the growing food demand of the urban area, in 2011, the Urban Community of Bordeaux (now Bordeaux Métropole) commissioned the 'Quévremont report' in which the food self-sufficiency of the metropolitan area was estimated to be only one day (EC, 2019). In 2014, Bordeaux Métropole was one of the three target areas of a two-year project on the territorial governance of food systems (IUFN, 2016). From 2016 to 2019, another project (the GouTer project) provided Bordeaux Métropole with a mapping of the food system players, an analysis of the strengths and weaknesses of the food consumption trends, and an overview of existing food-related initiatives and instruments for the creation of an integrated public food policy (CCGAD [website](#)). The metropolitan food system was re-designed, taking into account, among other factors, social, economic and environmental aspects such as employment, citizens' health, environment, urbanisation, energy transition and valorisation of local agro-food communities. The Department for Energy, Ecology and Sustainable Development of Bordeaux

Métropole was the key actor in engaging the metropolitan area's food system stakeholders, including municipalities, private sector actors and civil society (professional associations, humanitarian and charity organisations, professional trainers, and consumer groups). In 2016, a number of multi-stakeholder workshops collected ideas on how to formalise a food governance council for the metropolitan area. Some 130 territorial stakeholders were involved and in May 2017 a Food Policy Council ('Conseil Consultatif de Gouvernance Alimentaire Durable' - CCGAD) was established by the Bordeaux Métropole Council and officially activated on 19 October 2017 as a three-year pilot for local food system governance (FAO, 2018b). An action plan was developed with the support of all relevant stakeholders and was implemented in 2019 (CCGAD, 2019).

Governance structure's description and functioning

The Food Policy Council of Bordeaux Métropole is structured in a Steering Committee for its management and operates through four thematic workshops. The Steering Committee is composed of four elected officials from Bordeaux Métropole (i.e. the vice-president for sustainable development, the vice-president for nature and natural and agricultural areas, the councillor for the development of local agriculture and short supply chains, and the councillor for food), by the Bordeaux Métropole team (i.e. from the Department for Energy, Ecology and Sustainable Development and from the Department for Nature), by representatives of the regional government of Aquitaine, and by representatives of the five groups into which stakeholders were organised. These groups are: actors dealing with public policies (e.g. public bodies, associations, research institutions); actors concerned with food production; actors concerned with food processing; actors concerned with food distribution; and actors supporting awareness raising on food sustainability and promoting change towards healthy and environmental friendly food consumption. The latter group also includes citizens and one citizen is elected to represent the group in the Steering Committee.

Food Policy Council stakeholders meet in thematic workshops ('ateliers de fabrique') to collectively draft opinions, recommendations and proposals for the elected officials of Bordeaux Métropole. Priority is given to four themes: providing every citizen with access to sustainable and quality food supply, reducing food waste, strengthening the agri-food capacity of the territory, and re-designing food chains while encouraging short food supply chains (CCGAD [website](#)). As part of the governance model, there is also a system of benchmark indicators for each thematic priority which is aimed at assessing the impact of the Food Policy Council governance approach on the local food system. Indicators will be used to assess the piloted three-year governance approach (FAO, 2018b).

Making the food system more sustainable

The Food Policy Council is conceived as the instrument for revitalising the food system of the metropolitan area according to sustainability principles and by strengthening the connections between rural and urban territories. Food became an opportunity to address some of the economic, social, environmental, and cultural challenges of the territory. Networking between administrative levels of government and between the territorial actors concerned with food was considered strategic in developing an integrated food system. The awareness and involvement of as many stakeholders as possible, including citizens, was also considered essential (CCGAD [website](#)). The food policy implemented in Bordeaux Métropole aims at guaranteeing equity among the various food system's actors (from producers to consumers) and at prioritising citizens' health through improved diets. In line with Bordeaux Métropole's strategy for High Quality of Life, shorter food supply chains enhancing product traceability and reducing transport emissions and costs are encouraged. Support is also foreseen for small agri-food producers to create employment. Food waste reduction is a further goal of the food policy (FAO, 2018b).

Barriers

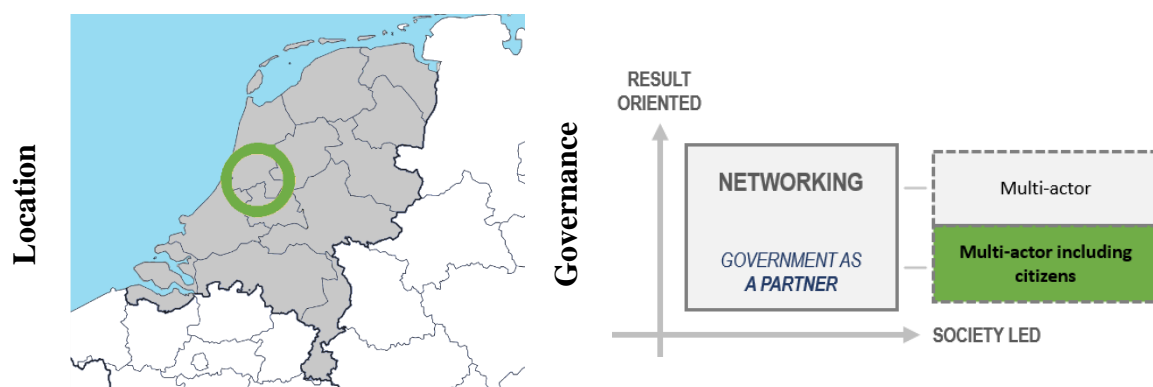
- Indicators used to monitor the impact of the Food Policy Council's performance are not regularly disclosed to the public and this affects the participatory character of the governance approach.

Opportunities

- Trust and reciprocity were crucial to ensure the adequate commitment of the food system stakeholders (FAO, 2018b). The participated definition of an action plan with indicated responsibilities and timing favours policy's ownership and pragmatism.
- The systemic and large-scope food policy implemented by the Metropolitan Authority reinforces the credibility of the governance approach.

Case 18 Quadruple-helix based food governance for a sustainable food system in the Amsterdam Metropolitan Area, the Netherlands

The Amsterdam Metropolitan Area (Metropoolregio Amsterdam - MRA) is a Dutch partnership of 32 municipalities, two provinces (North Holland and Flevoland) and the Transport Authority Amsterdam. Around 2.4 million people (i.e. over 14% of the Netherlands' population) live in the area (MRA [website](#)). Food is a relevant economic sector also because of the presence of an agricultural cluster, Greenport NHN, that provides 38,500 jobs in the agri-food sector and contributes to a fast-growing organic production sector. Since the area is endowed with two key logistics hubs (i.e. Amsterdam Airport Schiphol and the Port of Amsterdam), it has also become home to a number of international food production and processing players (GreenPort Noord-Holland Noord, 2019). Research, industry and government cooperate to transfer innovation in the agri-food sector. Agri-food is also a priority in the RIS3 West Nederlands (Regional Innovator Monitor Plus [website](#)).



The process leading to LRAs' involvement in food governance

The process behind the definition of the current food governance in MRA has been fragmented and influenced by changes brought forward by the interests of big regional players as well as by political decisions. In addition, local/regional stakeholders and public authorities initiated different paths. One of the first movers was the City of Amsterdam with the 2007-2012 Testing Ground Amsterdam pilot, an institutional initiative supported by municipal, provincial and regional authorities. When the initiative matured and was oriented towards the participation of civil society through the creation of a food council, it was stopped because of city government change. A new food strategy of the City of Amsterdam was published in 2019, but in the meantime (2018) the provinces of Noord-Holland and Flevoland published their policy memorandums on the sustainability of the food system. De facto, these other MRA actors decided on a

food policy based on the existing cluster on food, which was intended as an institutionalisation of the triple helix model where industry, research institutions and government cooperate. The conference 'Food flows in the Amsterdam Metropolitan Area' in December 2017, financially supported by the provinces of Noord-Holland and Flevoland as well as by Rabobank Amsterdam was a turning point for the food governance of the MRA. Although a Food Council MRA was launched as an informal civil society's initiative and its regional food manifesto was signed by the provinces, by Radobank and by a number of food stakeholders, in February 2019, upon the initiative of the Province North Holland and Rabobank, another governance structure was established. The 'Voedsel Verbint' Foundation (i.e. Food Connect Foundation), as this new structure was called, became the food governance structure of reference for all the actors undertaking initiatives for a sustainable food system in the MRA (van der Valk, 2019).

Governance structure's description and functioning

Government, companies, education and research stakeholders, associations and networks as well as civil society participate in Food Connect according to their competences and roles in activating their networks to carry out Food Connect activities. Food Connect acts through a strategic plan (Beleidsplan 2020-2023) focusing on six themes: circular food economy, eating healthy is living healthy, smarter food logistics and transport, food landscapes: food from our own region, talent creation and retention for the food economy, and learn and take advantage of data. Each of the six themes is led by one/two representatives of the stakeholders and activities are monitored including in terms of efficiency and effectiveness. The plan is implemented through management staff (1.5 people in 2019) and is directed by a Steering Committee. The Steering Committee is composed of representatives from the Province of Noord-Holland, the Province of Flevoland, the municipalities of the MRA, the Public Health Department of Amsterdam (GGD Amsterdam), Meerlanden Holding (a company providing environmental services), Greenport Noord-Holland Nood, Radobank, universities (i.e. Hogeschool Inholland, Aeres Hogeschool, Hogeschool van Amsterdam), the Slow Food Youth Network (SFYN), and the Food Council MRA. The Steering Committee is also responsible for the definition of the long- and short-term vision and strategy of the foundation; the decision of the topics/approaches to be pursued; and the design of the strategic plan. Food Connect is financially supported by the MRA, the provinces of North Holland and Flevoland, Rabobank Amsterdam, LTO North and several municipalities of the MRA (Voedsel Verbindt, 2020).

Making the food system more sustainable

The mission of Food Connect is to work for a better food system by structuring the regional food landscape, by joining forces, sharing knowledge and stimulating and facilitating cooperation and innovation. Its vision is to become the agri-food hub of the MRA and of its surrounding agricultural areas. Its ambition is by 2030 to transform the MRA into a region having adequate healthy food; citizens with healthier consumption habits; stronger connections between urban and rural areas; new talents in the food industry; a flourishing economic environment for both large and small food processing companies; a transparent food chain; and waste recycling capacity (Voedsel Verbindt, 2020).

Barriers

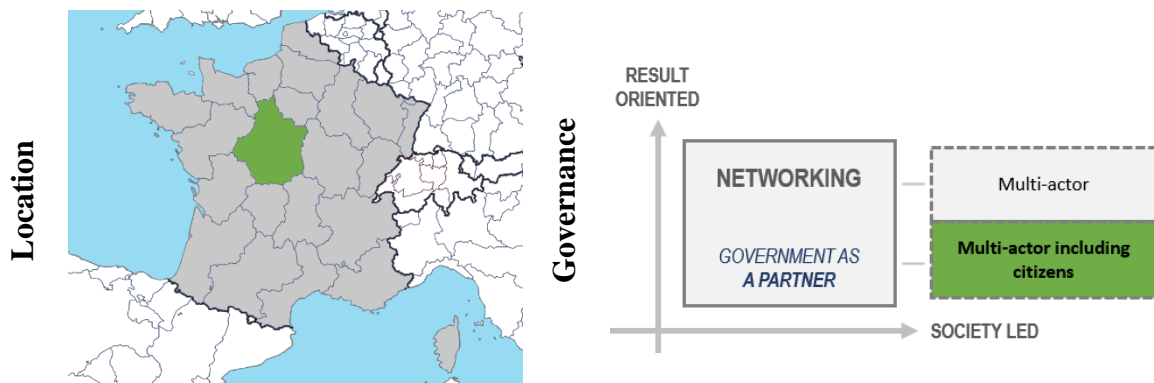
- Since Food Council MRA was created as a spontaneous citizens' movement, it did not have legal status for a while. For this reason, it lost attractiveness for active participation by institutional actors and was not eligible to access government funding. The citizens' food council was completely relying on the voluntary contributions of its members.

Opportunities

- Support from the Amsterdam Economic Board (i.e. the advisory board to the regional government in MRA on economic policy and innovation) and from Radobank made LRAs committed to the establishment of the 'Voedsel Verbint' Foundation.
- The triple helix model already implemented in the territory is the structural basis on which a citizens' inclusive food policy has been built.

Case 19 Participatory governance for the future Territorial Food Systems of Centre-Val de Loire Region, France

The Centre-Val de Loire region is located in the central part of France, covers about 6% of the French area and, in 2018, had some 2.5 million inhabitants, or 3.8% of the national population. It is one of the less populated areas of the country with a population density (66 inhabitants per km²) which is less than half the national average (Regional Innovation Monitor Plus [website](#)). Agriculture and food processing are considered key sectors for the region and provide 11,900 jobs. The region hosts a number of relevant agri-food stakeholders such as national and international producers of cereals, oleaginous seeds, milk and beverages; leading agri-food cooperatives; the Bio Centre, an inter-professional association networking regional agri-food stakeholders focused on organic; IFRIA Centre-Val de Loire, a regional training centre for the food business; Area Centre-Val de Loire, a regional professional association for food businesses; the Isaac Newton food engineering hub; Food Val de Loire, an agri-food entrepreneurship hub; and Open Agrifood, a forum for agriculture, agri-food and sustainable distribution (Dev'up [website](#)).



The process leading to LRAs' involvement in food governance

In 2015, a national law on the new territorial organisation of the Republic (law 'NOTRe') changed responsibilities at the territorial level, giving Regions the task of determining strategic orientations for their economic development, territorial planning and waste reduction and management. The Centre-Val de Loire Region addressed food as part of its economic development strategic planning and within its 'Regional scheme for economic development, innovation and internationalisation' (SRDEII) which was adopted in December 2016. The new policy approach promoted by the Region was based on a consultation process that took place in the first semester of 2017. Six meetings were held, participated in by representatives of the chambers of agriculture and commerce, trade unions,

hotel industry, InPact network, consumers' associations, organic farmers' groups and other associations related to agriculture, local food, nature and tourism. The output of these meetings was the participated design of a new regional food strategy. In December 2017, the Regional Council of Centre-Val de Loire approved the regional food strategy 2017-2021 (Conseil régional du Centre-Val de Loire, 2017).

Governance structure's description and functioning

The Department of Agriculture and Forestry leads the implementation of the regional food strategy in part through coordination with other departments whose action contributes to the achievement of the strategy's goals. However, the future local food governance lies with the envisaged Territorial Food Systems (TFSs) (or SAT - 'Systèmes Alimentaires Territoriaux') to be established throughout the region in the next ten years. In the food strategy, TFSs are intended to be instruments for increasing territorial food autonomy thus favouring food security. The TFS model implies a closer relationship between local actors dealing with food production, processing, distribution and consumers, and requires integration between actions undertaken by local authorities with those undertaken by the Region. Identification of key elements of a TFS with types of stakeholders to be involved, governance approach and functioning as well as framework conditions needed for their establishment is foreseen under Action 18 of the regional food strategy. TFSs' establishment is expected to build upon the existing initiatives of the Territorial Food Projects (or PAT - 'Projets alimentaires territoriaux'), a national scheme implemented in each French region (Conseil régional du Centre-Val de Loire, 2017). Towards this scope, InPact Centre, a regional network of associations promoting sustainable agricultural and rural development, has carried out two studies with the aim of identifying already implemented TFPs in the region which could represent the initiation of TFSs (InPact *et al.*, 2018; InPact *et al.*, 2019). The pre-requisite for any TFS is the establishment of participatory governance among all the local agri-food stakeholders of the food system. Analysis of the governance aspect was carried out by the Region in part through the participation in the GouTer project. The conclusion is that a TFS may tackle food self-sufficiency only if its actors managing the local food supply (e.g. agri-food producers, stakeholders involved in processing activities, in logistics and in distribution) adapt to the needs of the actors demanding food (e.g. consumers, restaurateurs, catering services, canteens). This implies a participated governance model and requires incentives for the transformation of local food supply chains. The Regional contract of territorial solidarity (or CRST - 'Contracts Régionaux de Solidarité Territoriale') already supports local initiatives focusing on diversification of agriculture and relocation of the food chain (Centre-Val De Loire [website](#)). In addition, the regional food strategy 2017-2021 foresees meeting the costs for the establishment of TFSs through the financial instruments managed

by the Department for the Development of the Territory and the Department for Economy (Conseil régional du Centre–Val de Loire, 2017).

Making the food system more sustainable

The strategy is structured into six axes aimed at bringing together producers and consumers, exploiting collective catering as a lever for change, using gastronomy and local produce as showcase for quality of life in Center-Loire valley, stimulating economic players towards quality of food, promoting citizen’s awareness and education on sustainable food, and supporting creation of TFSs. Axes are organised into 20 actions, each with its own challenge, aim, description/content, expected results, implementation approach (including possible financial sources/funding options), main actors to be involved, and timing (Conseil régional du Centre–Val de Loire, 2017).

Barriers

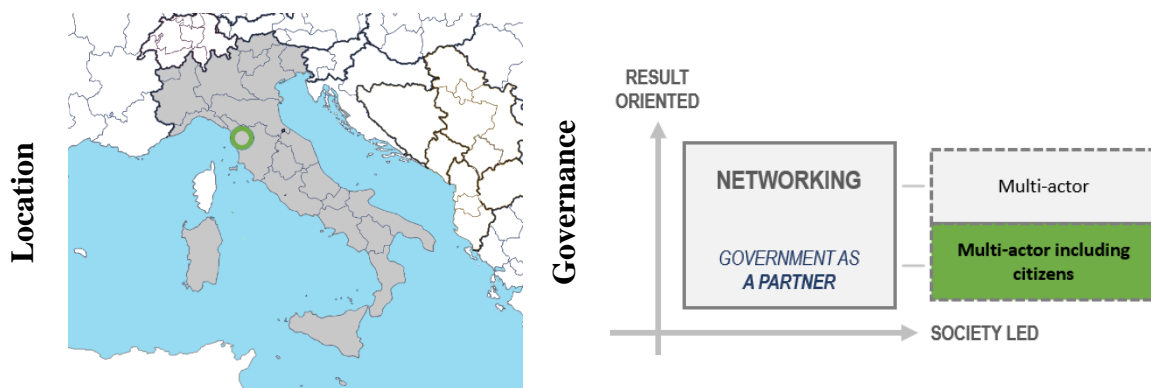
- Establishment of TFSs requires re-structuring of local food chains, including adaptation of infrastructures (e.g. logistics platforms) and creation of ad-hoc buildings (e.g. distribution points). Lack of clear identification of structural requirements of TFSs by the concerned public authorities may hamper their formation (Nougaredes, 2018).

Opportunities

- Adapting the local food supply chain to the achievement of territorial food security requires setting up participated food governance structures. Binding financial support for the establishment of these governance structures is a way for the Region to steer the process.
- The Regional Authority is not forcing the establishment of TFSs in all territories but is leveraging on existing initiatives, including those launched at the national level.

Case 20 Collaborative governance led by municipalities to develop a local sustainable food system in Tuscany, Italy

The Lucca Plain encompasses the territories of 9 neighbouring municipalities in the province of Lucca. The province of Lucca is one of the main industrialised areas of the Tuscany region and, at the same time, an area with a high flow of tourists due to its cultural heritage, the presence of seaside locations and the production of high-quality agricultural produce. Sustainability aspects of the agri-food system of the Lucca Plain were put on the policy agenda further to the endorsement, in 2018, of the Milan Urban Food Policy Pact by some of the plain's local authorities.



The process leading to LRAs' involvement in food governance

The key step towards a structured governance of the local food system occurred in April 2018, when the Municipality of Lucca (around 90,000 inhabitants) and the Municipality of Capannori (around 45,000 inhabitants) signed a memorandum of understanding with the three other small municipalities of the Lucca Plain (Altopascio, Porcari and Villa Basilica) to launch the Circularifood project. The project, co-financed by the Tuscany Region and supported by the Provincial Authority of Lucca, by Laboratorio di studi rurali Sismondi and by Slowfood, started in May 2018 and aimed at developing an integrated and co-designed action plan for food by the end of the year and according to five main stages. The first stage was a mapping exercise for the identification of the food stakeholders of the territory, with a focus on those promoting initiatives for a sustainable food system. In September 2018, in Lucca, the five municipalities organised an event for awareness raising and information sharing among local stakeholders: food waste, the right to access food, enhancement of the local food chain, and conscious food consumption were the topics discussed. This 'inspiration stage' was followed by a 'principles' definition stage where one focus group per municipality was organised with local stakeholders to define the principles upon which the new

local food system was expected to be based. The next stage was based on an open lab experience focused on the co-design of an action plan for inclusive actions, of operational instruments, of related pilot projects on food and of a governance structure. The Circularifood project closed its activities (i.e. feedback stage) with a public event organised in Capannori in January 2019 in which the inter-municipal strategy for food, ‘La Piana del Cibo’ (Food Plain), was presented with an action plan and a governance structure to make it operational. All the stages of Circularifood were managed by an executive board made up of representatives from each of the five municipalities. In July 2019, the five municipalities signed a pact for the implementation of ‘La Piana del Cibo’ (Comune di Capannori *et al.*, 2019).

Governance structure’s description and functioning

The guiding principle for the design of ‘La Piana del Cibo’, namely the involvement of the local food system stakeholders (local authorities, farmers, processors and distributors of the food supply chain, associations in the territory as well as citizens) was also applied to its implementation. In line with the outcomes of the Circularifood project, the inter-municipal pact outlines the objectives to be achieved by 2023 and the fundamental principles shared by the involved municipalities for a local, sustainable, healthy and fair food system. The governance structure of ‘La Piana del Cibo’ is based on a number of bodies. The ‘Agorà del Cibo’, or Food Square, is a participative body open to all food system’s stakeholders (including citizens). It is expected to meet at least twice per year to discuss and propose food policies and related actions. The ‘Agorà’ appoints the President who also takes the role of president of the Food Council, and the Coordinators of the Thematic Tables. The Food Council is the decision-making body aimed at supporting and promoting the inter-municipal food strategy. It is composed of its president, eight experts nominated by the municipalities and the Coordinators of the Thematic Tables. Thematic Tables are made by the stakeholders of the ‘Agorà’ which are organised around specific challenges of the Lucca Plain food system, namely, local production, education and nutrition, access to/waste of food, urban gardens, and life styles. Mayors of the five municipalities, or their representatives, sit in the Assembly of Mayors whose specific tasks are to monitor results, assess and operationalise initiatives proposed by the Food Council and support the activities of the ‘Agorà’ and of the Thematic Tables (‘Piana del Cibo [website](#)).

The ‘Piana del Cibo’ office, staffed with two civil servants from the Municipality of Capannori, where the office is established, coordinates the activities of the various governance bodies. Over the period 2019-2021, the five municipalities are committed to allocate an overall annual budget of €20,000 for the ‘Piana del Cibo’. The contribution of each municipality is defined in the pact signed in July

2019. It is proportional to the population and area of each municipality (see acknowledgements, Annex I).

Making the food system more sustainable

The main goals of the inter-municipal pact are to make the local food system (Comune di Capannori *et al.*, 2019):

- sustainable, by safeguarding natural resources (i.e. land, water, air, biodiversity) and minimising surplus and waste;
- based on the protection of everyone’s right to access food and on the promotion of the social and cultural value of food thus allowing for healthy and safe nutrition, respectful of individual ethical and religious choices;
- able to affirm the unique role of farmers as ‘custodians of the territory’;
- grounded in the collective and individual responsibility of citizens-consumers, as their food choices impact upon the dynamics of local food supply chains and affect territorial and societal development.

The integrated food strategy of the municipalities of Capannori, Lucca, Altopascio, Porcari and Villa Basilica is based on six fundamental principles: Food is Circularity; Food is Knowledge and Consciousness; Food is Education; Food is Inclusion; Food is Territory; and Food is Health. The challenges related to these principles are addressed in a participatory manner and in an operative modality by the Thematic Tables of *La Piana del Cibo*. Operational programmes, one for each of the challenges addressed by the thematic tables, outline the actions to be undertaken.

Barriers
<ul style="list-style-type: none">• Lack of monitoring of the activities and assessment of the outcomes may affect active participation of citizens.
Opportunities
<ul style="list-style-type: none">• The decision-making process of ‘La Piana del Cibo’ implies information sharing and common action between municipalities and within municipalities. It also implies the re-organisation of competences and responsibilities within local authorities which are now distributed among various areas dealing with agriculture, health, social services, education, environment, and urban planning.

Part 2 Conclusions with recommendations

This part draws from the evidence collected under Part 1.

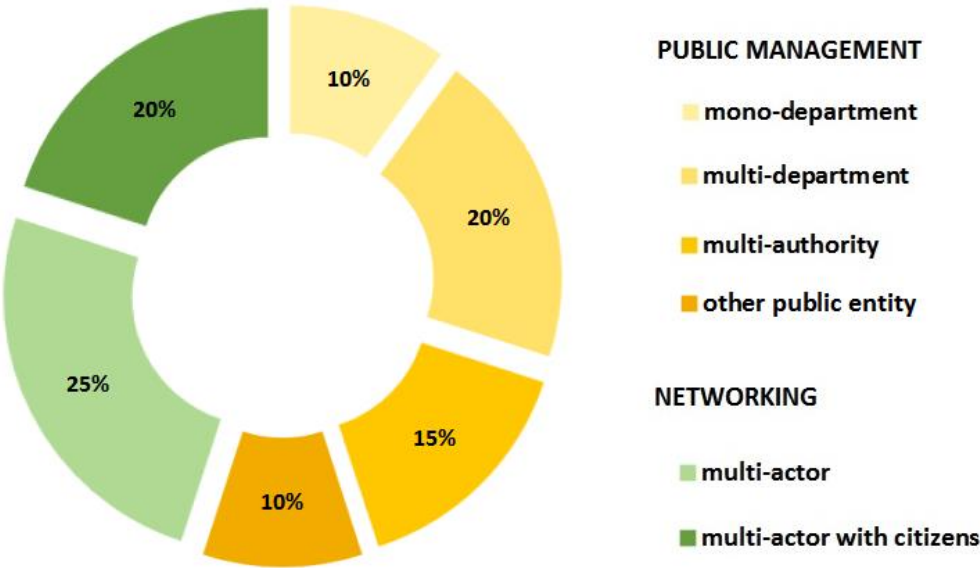
2.1 The role of LRAs in food system governance

Our **first research question** is to understand the role of European local and regional authorities in territorial food system governance. Towards this scope, in Part 1 we propose a governance typology (Figure 1) which covers a range of prevailing roles of the public authority, from regulator to implementer, partner and facilitator.

First, with reference to our governance typology, none of the twenty selected cases refers to the ‘policy design’ approach. **At the local and regional level public authorities do not assume a merely regulator role in the governance of their food systems.** Rather, they play an active role in management and implementation. Similarly, it is noted that **in no case is food governance fully delegated to citizens** (‘active citizenship’ approach).

Public management of the food systems (implementer role) covers 55% of the cases (Figure 2). Within this governance type, multi-department approaches prevail (20% of the cases) on the other arrangements for public management implementation (mono-department, multi-authority and publicly-owned external entities/companies).

Figure 2. Governance approaches of the food systems in the cases



Second, there is an **evident tendency of LRAs to open up the governing process of food policy to parties outside the government, including citizens**. Forty-five per cent of our cases are classified under the ‘networking’ approach (multi-actor and multi-actor with citizens). The opening up of the food policy governing process to citizens is found in four cases. However, with the exception of the Amsterdam Metropolitan Area, the other cases (Bordeaux Métropole, Centre-Val de Loire and The Food Plain) seem to still be in a pilot stage.

This study provides evidence that LRAs use a range of diverse approaches to govern the changes towards sustainability of their food systems. The prevailing roles of LRAs in the governance of their territorial food systems are the role of **implementer within an institutional framework**, and of **partner within a framework which opens up to the participation of actors external to institutions**.

2.2 The contribution of LRAs to the F2F strategy

Our **second research question** is to outline LRAs' contribution to the European Commission's Farm to Fork (F2F) strategy. According to the sample of twenty cases collected, this study demonstrates that LRAs contribute to all aspects of the food chain as outlined in the F2F strategy. However, **none of the cases addresses these aspects altogether** (Figure 3).

It is also evident that **there is no correlation between the F2F domains addressed by the analysed food governance systems and the governance approach**. In fact, the same aspects of sustainability of food systems are pursued through different governance structures. For example, Baden-Württemberg implements a sustainable bioeconomy strategy which is governed within the Region (the public management type of governance) with a cross-departmental approach. This food governance contributes to the F2F strategy in the same domains contributed to by the Food Connect Foundation of the Amsterdam Metropolitan Area (which falls under the networking type of governance).

It is further noted that **sustainable food production, sustainable food processing and distribution are commonly addressed domains across the analysed food systems**. The policy domain of sustainable food consumption and healthy diets is also reasonably considered. About half of the cases address the reduction of food loss and waste. Finally, food security and food fraud are considered less frequently.

This study provides evidence that local and regional public authorities in some cities, metropolitan, rural and coastal/island areas have already initiated efforts for the transition of their food systems to more sustainable patterns. In some cases, they have envisioned the necessary changes in their territories' economic fabric at the strategic level and have mobilised necessary actors for implementation. In other cases, changes have only been theorised and implementation is done on a pilot basis.

Figure 3. Contribution to the F2F strategy of the food systems analysed in the cases

Governance sub-type	Case n°	R = region C = city A = area		Ensuring sustainable food production	Ensuring food security	Stimulating sustainable food processing, wholesale, retail, hospitality and food services	Promoting sustainable food consumption and facilitating the shift to healthy, sustainable diets	Reducing food loss and waste	Combating food fraud along the food supply chain
mono-department	1	R	Warminsko-Mazurska						
mono-department	2	C	Vaslui						
multi-department	3	R	Aragon						
multi-department	4	R	Baden-Württemberg						
multi-department	5	C	Ede						
multi-department	6	C	Milan						
multi-authority	7	A	Menorca						
multi-authority	8	R	Bavaria						
multi-authority	9	A	Heart of Slovenia						
other public entity	10	C	Maribor						
other public entity	11	A	Östergötland						
multi-actor	12	C	Valencia						
multi-actor	13	R	Małopolska						
multi-actor	14	R	Jämtland Härjedalen						
multi-actor	15	A	Prov.Salerno (Cilento)						
multi-actor	16	A	Dolj						
multi-actor with citizens	17	A	Bordeaux Métropole						
multi-actor with citizens	18	C	Amsterdam						
multi-actor with citizens	19	R	Centre-Val de Loire						
multi-actor with citizens	20	A	Prov.Lucca						

Note: attributions are made by the authors

2.3 Conclusions and recommendations on governance approaches

Conclusions and recommendations stemming from the cases have been grouped into the six sub-types of governance outlined in Part 1, namely four sub-types for ‘Public management’ and two sub-types for ‘Networking’.

2.3.1 Public management through one department

Case 1 and Case 2 fall under this governance type. Overall, mono-departmental governance arrangements show some inadequacies in effectively and/or comprehensively pursuing food policies for more sustainable food systems.

In Warminsko-Mazurska (Case 1), food policy is pursued through a multi-year programme for the development of regional, traditional and natural high-quality food. The focus on the policy is driven by the regional smart specialisation strategy whose definition process is participated. However, the high-quality food programme is prepared and implemented following a top-down approach led by the Regional Authority through one single department. Stakeholders are involved as implementers but have no say or role on governance aspects. Food smart specialisation is one way to unleash the collaboration potential of stakeholders in the food system but the label ‘smart specialisation’ does not automatically initiate active collaboration processes which instead remain passive cooperative relations.

In Vaslui (Case 2), the City Hall is pursuing a sustainable food system without having a specific department in charge or a specific document exclusively dealing with food policy. The most comprehensive document in this sense is the Vaslui Local Action Plan developed within the framework of one of the EU networks participated in by the Municipality. The main role in projects’ acquisition and management is played by a horizontal service (i.e. not specific for food policy) – the city’s Project Management Service – that reports directly to the Mayor. Project-based governance structures are temporary and in general incompatible with the development of a coherent and medium-term strategy for an urban food system. However, the presence of a Project Management Service within the local authority ensures some continuity of funding and has certainly amplified the visibility of the municipality at the international level. In turn, this visibility may have facilitated the undertaking of political commitments by the authority, for example with regard to the introduction of organic food in municipal canteens.

Recommendations

- # A mono-department led approach looks insufficient for implementing complex regional programmes with a variety of implementers as is the case, for example, when pursuing a smart specialisation. Complex programmes need to be governed by a structure embedding participatory elements as well as coordination mechanisms across government departments. In practice, food governance structures need to be comprehensive enough to reflect the complexity of the policy they are meant to implement.
- # For relatively small cities, a project management service is a good approach for reaching specific intermediate objectives on the way to making the urban food system more sustainable. However, a medium-to-long term vision is necessary to link these intermediated steps which otherwise risk remaining patchy achievements.
- # A food governance arrangement relying on short-term project funding is temporary and not-credible enough to the eyes of the food system's stakeholders. The lack of a credible funding strategy may result in the lack of stakeholders' commitment.

2.3.2 Public management through multi-departmental structures

Cases 3, 4, 5 and 6 fall under this governance type. Overall, governance arrangements across departments appear suitable for addressing complex situations, especially at the regional level. This type of governance is also found in two cities which embed food actions in the policies and corresponding programmes of the other departments. In all cases, food-related policies are allocated a budget for implementation.

The plan of Aragón Region for the control of the regional food chain (Case 3) is a cross-departmental output. The plan foresees department-specific programmes as well as cross-departmental programmes for implementation. Interdepartmental commissions are used to govern their preparation and supervision of implementation. Implementation is highly structured, therefore in the plan the Region explains comprehensively and in detail the type of relationship and coordination among departments, entities, levels and sub-levels. This case is an example of a complex governance structure in response to the need for coping with increasing food chain complexity.

Another multi-departmental approach at the regional level is found in Baden-Württemberg (Case 4). Although the region is famous for being highly industrialised, it has recently defined a regional bioeconomy strategy which emphasises the sustainable role of its food system as a source of innovation opportunities (e.g. innovative solutions and products in the food and nutrition sector, including in terms of quality of food) and environmental opportunities (e.g. less organic waste and less pollution at the various stages of the food chain). The bioeconomy strategy is meant as an umbrella policy. It will not replace single policies but, under the guidance of a Sustainable Bioeconomy Council, it will be used to create cooperation and linkages across regional departments to pursue its objectives.

The city of Ede has followed a different approach (Case 5). Its municipal food strategy is a self-standing piece of policy overseen by a councillor in charge and implemented by a dedicated team. In addition, the strategy has been translated into food actions across the policies and programmes of all the city's other departments. This integrated approach was accompanied by a budget allocation to each action and by the definition of a monitoring framework to measure progress. Although the city opens up to the involvement of, and the communication with, other stakeholders, including citizens, it keeps the governance of its food strategy highly institutionalised.

The city of Milan is where the MUFPP was initiated. It was therefore natural for the city to invest time and resources in meeting the objectives of the Pact (Case 6). The city implemented a thorough analytical and consultative process to outline guiding principles and priorities for its food policy. However, the well-designed Metropolitan Food Council was not established and the City governs its food policy through a multi-department approach and a Food Policy Office which is in charge, among other tasks, of technical coordination. Implementation occurs through a heterogeneous range of initiatives (e.g. projects, re-orientation of existing activities) and budget sources.

Recommendations

- # Multi-department governance approaches for food strategies or for tackling specific segments of the food chain appear effective in steering complex processes. They also emphasise the ability of food policies to contribute to territorial development (i.e. social and economic impact of food policy's implementation).

- # Multi-department governance approaches do not necessarily require the presence of 'physical' structures such as interdepartmental committees or food policy offices. They may simply be reflected in the integration of the concerned food policy into the policies and programmes of the

other departments. However, if intra-municipal coordination is reflected in the inclusion of sustainable food strategic priorities into the political programmes of different municipal departments, attention has to be paid not to lose overall policy coherence.

- # A multi-department approach benefits from the network/relations established with local actors by each involved department. Related food policy initiatives then become more easily embedded in the territory.
- # It is realistic to consider the multi-departmental governance of food-related policies if these policies are allocated a dedicated budget for implementation. Establishing a dedicated team for their implementation would be even better.

2.3.3 Public management through aggregation of public authorities

Cases 7, 8 and 9 fall under this governance type. Alliances of local authorities which are based on collaboration agreements may take different forms, including innovative ones. They seem to be effective in pursuing their policy objectives for more sustainable food systems.

In 2015, the Menorca Island Council started taking formal commitments in the food policy area (Case 7). About two years later, this led to the participatory definition of a food strategy which is implemented across council departments and across the island's municipal authorities. The uniqueness of this arrangement is that coordination of this food strategy policy work is done externally by an association (VSF Justícia Alimentària). Implementation of the strategy relies on different financial sources.

The eco-model regions of Bavaria (Case 8) are associations of local authorities whose establishment is facilitated by the Regional Government. They are at the core of the implementation of the BioRegio Bayern 2020 programme and contribute to tackling its objective of regional conversion to organic farming and food. These associations are given the 'eco-model region' label on a competitive basis. If selected, they receive a series of benefits and may start implementing their territorial plans. Governance is simple since, theoretically, decisions are made by the participating local authorities. But since these decisions are going to be implemented on the ground, they are usually agreed upon by involved stakeholders. The core of these models is the plan and its implementation. Plans

fit the characteristics of the territories perfectly. Eco-model regions are, in practice, models for territorial development with a simple governance structure.

Contractual partnerships have long been used in the Heart of Slovenia (Case 9) to tackle development goals in the areas of entrepreneurship (including in the agricultural sector), self-sufficiency (including food security) and tourism (including branding of agri-food products). These partnerships are among local authorities only, or among local authorities and other territorial actors (in the latter case, they are framed in the form of a LAG). A development centre owned by one of the municipalities (The Development Centre of the Heart of Slovenia) takes a coordinating role with respect to these contractual partnerships. Contractual partnerships are functional for tackling concrete needs. They are also necessary to reach a critical mass of financial resources and a suitable scale for operating a food system (e.g. sufficient quantity and variety of agricultural produce for commercial supply).

Recommendations

- # The eco-model region approach of Bavaria facilitates the creation of institutional food governance structures at the territorial level for tackling regional goals while prioritising territorial needs, involving local stakeholders and conforming to territorial characteristics. This approach appears to have a good transferability potential.
- # Contractual alliances among local authorities are appropriate to govern local food systems. They manage to engage local actors and have an evident impact on the development of their territories. Impact is even greater if they are connected to broader strategies and policies. The focus of these alliances is on implementation. Written contractual terms and simple governance arrangements are additional advantages of these approaches.
- # Delegating coordination across institutional actors to external (non-institutional) entities is a solution that may prove to be effective in the short run but that is unlikely to remain viable.

2.3.4 Public management through external public entities

Case 10 and Case 11 fall under this governance type. External entities which are still owned by the public authorities are used to tackle specific missions.

In the city of Maribor (Case 10) the aggregation of municipal public utilities has been established as an independent legal entity, the Wcycle Institute Maribor. The institute's mission is to pursue circularity of unused materials, heat, physical and social assets. Unused materials also include bio-waste from the agriculture sector which is then transformed into fertilisers and recycled garden soil. This governance structure, which is external to the local authority but is still under public control, allows the implementation of a new business model which is based on a collaborative approach among all concerned utilities (waste, energy, infrastructural works, water, and urban transport). The added value of one single entity gathering together all public utilities companies is to facilitate collaboration among them. Public utilities are united by shared mission and goals and inevitably look for synergies across their sectors of competence. Unfortunately, the Institute has no regular financing as it is expected to raise necessary funds through public tenders, the rendering of services, or voluntary contributions by third parties or by the member companies. This may undermine its operational capacity.

In the city of Linköping (Case 11), municipal companies under the operational and financial control of the Municipality are delegated specific missions which, overall, contribute to the achievement of the environmental targets of the City. The waste segment of the food chain is covered by Tekniska Verken and its subsidiary Svensk Biogas. These companies are given targets by the public authority but not a roadmap and therefore they are rather free to decide how to accomplish their mission. The recycling of rural and urban organic waste into biogas, which is then used for public transport in Linköping and in the county, is a well-established and well-known good practice of circularity of resources that still has potential for expanding further when opportunities arise (see, for example, the recent certification of the produced bio-fertiliser that fulfils the standards for organic production).

Recommendations

- # The waste segment of the food chain appears suitable to be governed independently from the other components of the food chain by using entities which are external to the local or regional authority and, possibly, which are already involved in the management of other waste streams.

- # External public entities which are given a specific mission to be achieved by public authorities benefit from these authorities' continuous political support.
- # Financial viability of these external entities is important as it determines their capacity to scale-up and impact on the sustainability of the food system.
- # External public entities are not bound to the modus operandi of their local or regional authority. Externalising specific missions is also a way to implement new business and/or cooperation models which would not be feasible for implementation within the public authority.

2.3.5 Networking with third public and/or private parties

Cases 12, 13, 14, 15 and 16 fall under this governance type. This governance type (as well as the next type which differentiates from this type only for the participation of citizens) includes some food policy councils which are usually found at the city or metropolitan level. Cities' involvement in the shaping of local food policies has become common since the launch in 2015 of the MUFPP. In fact, signatories to the Pact (210 cities as of July 2020) commit to developing food strategies and to implementing sustainable local food systems.

Valencia, a signatory to MUFPP, is the first Spanish city to have established a food council (Case 12). The council is a consultative and participatory body aimed at improving the city's food governance and at implementing the city's Agri-Food Strategy 'València 2025' and the strategy's first Action Plan 2020-2021. Although its creation has been partially motivated by citizens' movements, citizens do not directly take part in the council (but consumers' organisations are represented).

The Małopolska Region uses food quality as a driver for developing more sustainable food systems (Case 13). Małopolska is one of the several European regions joining the European Network of Regional Culinary Heritage. Membership to this network, which originated in the Scandinavian area in the early 90s, is especially common in Eastern Europe. At the regional level, the network is managed and run by only one department. However, participation in the network is governed by the Traditional Products and Culinary Heritage Council which mirrors a multi-actor composition including institutional representatives from various policy areas (e.g. tourism, culture) as well as from the education and business sectors.

Region Jämtland Härjedalen has a food strategy which is governed by a wide regional partnership (Case 14). Beside governance, the partnership keeps the dialogue open with relevant stakeholders; functions as a meeting point between research and businesses; makes regional, national and international contacts; and prepares and follows up the action plans for the implementation of the strategy.

Case 15 reports on the organic district of Cilento ('Bio-distretto Cilento') which is considered a good practice as it ultimately became an important actor for the social and economic growth of the territory. Lacking a suitable regional framework, the district arose from the initiative of local authorities which were urged to respond to the territory's needs. Its governance relies on an ad-hoc established non-profit association which is governed through a Board of Directors and, more importantly, a General Assembly participated in by all the relevant stakeholders of the district. Unfortunately, there is no regular funding of the association's activities and this affects its capacity to develop mid-term strategies.

The Romanian case shows the well-known importance of FLAGs (Case 16) (and of LAGs – see Case 9) in pursuing territorial development through local partnerships between public stakeholders, local associations and other private actors. Case 16 has been selected because it addresses the fishery sector, which otherwise was absent from our sample of cases, although it certainly represents an integral part of the European food system. The Dolj-Danube FLAG has a development strategy which is made operational through calls for projects. The FLAG is managed by a non-profit association governed by a Board of Directors.

Recommendations

- # Food councils at the city level are an expression of political willingness which is often related to a formal commitment made by the city. As already experienced in other sectors (i.e. the Covenant of Mayors for climate and energy), formal commitments of local authorities are likely to drive important changes and, in any case, are the essential condition for starting change. Initiatives like the MUFPP should therefore be encouraged and supported to become systemic across Europe.
- # Food councils at the city level usually work to connect urban and peri-urban areas. Less frequently, they enlarge their scope to connect to rural areas. The wider the scope of the food council, the higher the need to have regional government representatives in the council as local planning cannot oversee coordination with the regional level.
- # Food councils are effective as consultative and participatory governance structures but need to have operational instruments in place to impact on

the sustainability of food systems such as action plans for implementation.

- # Regional partnerships encompassing a wide range of actors are able to pursue multiple targets while facilitating synergies across sectors. As for the food councils, these partnerships have the potential to impact on the sustainability of food systems if they have operational instruments in place. Another necessary condition for impacting is the availability of regular funding. The case of Bio-distretto Cilento shows all the shortcomings of territorial partnerships that have to seek funding on a yearly basis.
- # Community-led local development is based on a governance arrangement which is tailored to the role and capacity of involved stakeholders. Continuity of FLAGs/LAGs' strategies across programming periods (although with different territorial partnerships) allows local stakeholders to plan with a medium-term perspective.
- # Evidence from our cases (Case 9 and Case 16) show that there is space for improvement in the measurement of performance and impact (i.e. monitoring) of governance structures for community-led local development.

2.3.6 Networking with third public and/or private parties and citizens

Cases 17, 18, 19 and 20 fall under this governance type. This type includes city food councils and other governance structures which also see the participation of citizens. Citizens are increasingly part of the transition process of food systems to more sustainable patterns. In some cases, citizens simply initiate processes by means of awareness initiatives or movements which bring sustainability issues (e.g. excessive urbanisation of green belts around urban areas) or requirements (e.g. requests for healthy and quality food) to the attention of local/regional authorities. In other cases, it is the local/regional authority which is looking for their contribution. In other situations, institutional and civil society's movements are opposing and do not necessarily find a meeting point.

The Food Policy Council of Bordeaux Métropole (Case 17) is the result of a reformulation process of the metropolitan food system as the system was found to be seriously weak in terms of food security. The council is managed by a Steering Committee which includes institutional actors (at the metropolitan and

regional levels) and representatives of local stakeholders from the food sectors, including citizens. The Food Policy Council is conceived as the instrument for revitalising the food system of the metropolitan area according to sustainability principles and by strengthening the connections between rural and urban territories. Food is treated as an opportunity to address some of the economic, social, environmental, and cultural challenges of the territory.

Food governance in the Amsterdam Metropolitan Area is managed through a foundation (the Food Connect Foundation) which is heavily participated in by the public sector but also by other regional stakeholders and citizens (Case 18). The Foundation is the expression of a quadruple-helix as it includes representatives of government, of research and education institutions, of businesses, and of civil society. Citizens' participation is achieved through the representative of the citizens-based Food Council MRA. This synthesis has certainly been facilitated by the fact that Dutch communities are generally well acquainted with helix models.

The food strategy of the Regional Council of Centre-Val de Loire aims at developing a number of Territorial Food Systems (TFSs) which are characterised by a certain degree of food autonomy and imply the relocation of some economic activities across their territories and the transformation of local food supply chains (Case 19). TFSs' establishment is expected to build upon existing initiatives but, importantly, it is tied to the set-up of participatory governance structures among all the agri-food stakeholders of the concerned local food system, including citizens.

The Food Plain is an inter-municipal strategy aimed at making the local food system more sustainable (Case 20). It is expected to provide access to healthy and safe food to all and to affirm the unique role of farmers as 'guardians of the territory'. The strategy is grounded in the collective and individual responsibility of citizens-consumers who influence the dynamics of local food supply chains through their food-choices. The governance structure of this local food strategy is articulated in a number of bodies, including the Assembly of Mayors, the Food Council, Thematic Tables and the 'Agorà del Cibo'. The Food Council is the decision-making body and is participated in not only by institutional actors but also by the food sector stakeholders (including citizens) represented in the 'Agorà del Cibo'.

Recommendations

- # Involving citizens in food system governance is not a straightforward exercise. The Food Connect Foundation of the Amsterdam Metropolitan Area shows how the process leading to participated governance may be turbulent and take several years before stabilising.
- # A mechanism to guarantee citizens' representativeness is crucial and needs to be built into the design of the governance structures. Representatives of food councils created by citizens (such as the Food Council MRA in the case of Amsterdam) are natural candidates to sit in governing bodies. If citizens are not organised into structured movements, they should be given the same opportunities as other stakeholders to be appointed to governing bodies, such as in the Food Plain case.
- # Systemic and large-scope food policies, such as the one implemented by Bordeaux Métropole, engage all relevant stakeholders. Organising these stakeholders and giving them an active role – and corresponding responsibilities – creates trust, reciprocity, and ownership.
- # Although no Territorial Food Systems have been developed so far in the Centre-Val de Loire region, the Region's food strategy envisions food systems which reflect the objectives of the F2F strategy. The EC should look closely at these initiatives/attempts made at the territorial level to learn from their experience and understand where it can best intervene to support changes and transformation processes.

In conclusion, there is evidence that the transition to sustainable food systems is not a trivial exercise and that it requires vision (strategy), planning (action plan), financial resources (dedicated budget), participatory design among all concerned actors (consultation, co-decision, coordination, ownership), coherence at the institutional level (mainstreaming across policies, coordination between the local and the regional level), monitoring (robust indicators, accountability), communication (visibility, dissemination) as well as flexibility to change and re-structure (including but not limited to infrastructural changes, new business models development, and uptake of innovation).

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