



Contents lists available at ScienceDirect

Journal of Rural Studies

journal homepage: www.elsevier.com/locate/jrurstud

Governing the reterritorialization of agricultural activities: An assessment of food planning policies in France

Tianzhu Liu¹

INRAE, Université Paris-Saclay, AgroParisTech, UMR SADAPT, 22 Place de l'Agronomie, 91120, Palaiseau, France

ARTICLE INFO

Keywords:

Local food policy
Local food system
Public policy analysis
Farmland preservation
Farm diversification
Food governance

ABSTRACT

This paper examines how food planning policies address the reterritorialization of agricultural activities (RAA), a crucial component of local food systems. While food planning as an integrated local policy promoting local food systems has gained increasing research attention, most of the research has been urban-centric, resulting in a limited understanding of how it includes RAA. This paper fills this research gap by assessing 39 food planning projects in France, where the state defines food planning by national law and supports local projects. Through document analysis and semi-structured interviews, RAA-associated food planning policy goals, instruments, and agri-food professional actors' involvement are identified. The empirical findings highlight the central role of RAA in French food planning projects; it either serves as the primary motivation behind these projects or evolves into a substantial component as the projects develop. A wide range of policy instruments with local innovation to support RAA are identified, with more frequent use of informational and economic than regulatory and coercive instruments, and more focus on economic development than on ecological transition. Minority and majority farmers' organizations are involved in food planning processes with varying degrees of engagement across territories, reflecting local governance strategies. The analytical methods in this study may contribute to future research to better comprehend RAA in local food policymaking. The systematic overview of RAA-associated food planning measures also offers insights to policymakers in other contexts regarding food policy design. The paper concludes by arguing that food planning extends beyond urban food supply; it also presents an opportunity to leverage RAA for rural revitalization and transformation, in terms of production models, rural-urban links, and local governance.

1. Introduction

Public policy plays a critical role in supporting the development and improvement of local food systems. Local food systems imply closer links between producers and consumers by referring to food being oriented to local consumers instead of to the global market (Enthoven & Van den Broeck, 2021; Eriksen, 2013; Feagan, 2007). Such closer links have the potential to counteract the negative consequences of a global food system, such as diet-related diseases, climate change, unfair farmers' income, and food injustice (Allen, 2010; Béné, 2020; Feagan, 2007; Hinrichs, 2003). Although food policy interventions have usually targeted the national and international level, local-level policies have been increasingly recognized as significant in facilitating the local food system (e.g., Pothukuchi and Kaufman, 1999; Pothukuchi, 2009; Mansfield and Mendes, 2013; Moschitz, 2018; Sibbing et al., 2019; Doernberg et al., 2019; Mattioni et al., 2022). Previous studies have

shown that local authorities are able to improve the local food system by leveraging diverse policy instruments, such as land-use regulations, public procurement, and communication (Candel, 2020; Doernberg et al., 2019; Mattioni et al., 2022; e.g., Sonnino and Spayde, 2014). Although many local-level food policies are still sectorial, the integrated local food policy, henceforth referred to as "food planning", has become increasingly popular with local authorities (Blay-Palmer, 2009; Candel, 2020; Mansfield and Mendes, 2013; Morgan and Sonnino, 2010; Liu et al., 2024a; Sibbing et al., 2019).

Research on food planning emphasizes its mitigating effect regarding the rural-urban divide by locally linking food production and consumption (Candel, 2020; Morgan and Sonnino, 2010). However, food planning research has thus far mainly focused on food access and consumption (i.e., urban aspects), but less so on food production and provision (i.e., rural and rural-urban linkage aspects) (Dehaene and Tornaghi, 2021; Deh-Tor, 2021). Nevertheless, the transformation of the

E-mail address: Tianzhu.liu@unibe.ch.

¹ Present address: University of Bern, Institute of Geography, Hallerstrasse 12, 3012 Bern, Switzerland.

<https://doi.org/10.1016/j.jrurstud.2024.103302>

Received 1 November 2023; Received in revised form 11 May 2024; Accepted 16 May 2024

Available online 20 May 2024

0743-0167/© 2024 The Author. Published by Elsevier Ltd. This is an open access article under the CC BY license (<http://creativecommons.org/licenses/by/4.0/>).

perspective on food production and provision from a global to a local one obviously constitutes a crucial component of the local food system. It is referred to as the reterritorialization of agricultural activities (RAA) and includes activities such as local farming, local processing, local food transport and logistics, local sales, community-supported agriculture, and agri-tourism (Liu et al., 2024a).

In this paper, reterritorialization refers to the redefinition of the relationship between food and territory, the reinforcement of social ties, and a new relation between places, producers, and consumers with the development of local food systems (Dansero and Pettenati, 2018). It expands beyond the simple notion of geographical proximity of food production and consumption to include the material, identity-related, and organizational dimensions of the link to the territory (Ginelli et al., 2020). Reterritorialization is proposed as an approach that emphasizes the participation of diversified stakeholders at the different stages of the supply chain in a given region that are involved in the local and ecological transition (Lamine et al., 2019; Lohest et al., 2020). It encompasses two interrelated notions of the local food system (Lamine et al., 2019): alternative food networks, which oppose the global food system and underline the proximity between producers and consumers (Renting et al., 2003) and high-quality food improvement, which emphasizes territorial anchorage based on cultural, natural, socio-economic and institutional embeddedness (Sanz Cañada and Muchnik, 2011). Scholars studying rural areas also use the concept of reterritorialization, emphasizing the changing human-environment relations in rural areas along with the process of stakeholders' coordination, in relation to exterior structural challenges such as suburbanization and in-migration, while highlighting local stakeholders' efforts to reassign the access and use rights defined by the government authorities (Brogden and Greenberg, 2003; Woods, 2015; Hurley and Ari, 2018). Although the approach to reterritorialization in this study aligns with the broad interest in restructuring spaces and human-environment relations, it does not address the latter points. Instead, this study adheres to the concept as articulated in the food literature, focusing on the new relations developed with local food systems, between products and local specificity, rural and urban spaces, and stakeholders at the different stages of the supply chain. Yet, a systematic understanding of how RAA is included in food planning is still lacking.

Therefore, this study seeks to understand how food planning addresses RAA by investigating a sample of food planning projects in France. Specifically, a systematic analysis of food planning projects is pursued. Food planning is approached as a type of public policy and analyze its policy inputs (i.e., the process of governing) and policy outputs (i.e., policy programs). The objective is to identify and comprehend (1) the place of RAA-associated policy goals, (2) the policy instruments employed for RAA, and (3) the involvement of essential RAA-related stakeholders in food planning projects. By conducting this study, the aim is to enhance the understanding of how food planning could practically include RAA and to provide valuable insights that can guide policymakers in creating enabling and supportive policies for a more sustainable local food system.

The focus of the analysis is on France because the French state actively supports local territories to develop food planning projects (projet alimentaire territorial, or territorial food project, hereinafter referred to as "food planning") through national law with a strong interest in strengthening local supply chains. At the national level, the Ministry of Agriculture carries the responsibility of promoting local food planning development through a labeling system and a financial program (Lamine et al., 2023). This institutional context creates favorable conditions for local food planning projects to pay particular attention to agricultural production and provision (Liu et al., 2024a). With the incentive from the state, more than 400 food planning projects have been developed through April 2023, covering rural and urban territories (Ministry of Agriculture, 2023). Given the significant number and diversity of these local projects, coupled with state support, French food planning projects offer an ideal basis for analysis to understand the food

planning measures dedicated to RAA.

The paper proceeds as follows. Section 2 presents the relevant literature on food planning and RAA and points out the focus of this research. Section 3 lays out the case studies, contexts, data collection, and data analysis based on an analytical framework. The most important results of the analyses, focusing on policy goals, policy instruments, and main RAA-associated stakeholders of food planning, are presented in Section 4. The paper concludes with a discussion of the findings, policy implications, and an agenda for future research.

2. State-of-the-art: food planning and the reterritorialization of agricultural activities

Although strategies for supplying consumers with local food have existed since ancient times (Bognon, 2015; Daviron et al., 2017), applying food planning to support local food systems has re-emerged in modern administrative systems over the last 20 years (Pothukuchi and Kaufman, 1999, 2000). In the literature, three major strands have been identified to be related to RAA: RAA as a component in food planning goals, food planning instruments dedicated to RAA, and local food governance.

The first strand of the literature focuses on RAA as an approach and/or a goal of food planning. Food planning has been shown to achieve goals of food justice, a healthy urban environment, environmental improvement, and economic development through structuring the local food system (Candel, 2020; Sonnino, 2016). RAA-associated activities (i.e., local food production and provision) are essential means to achieve these goals (Sonnino and Spayde, 2014; Ilieva, 2017; Filippini et al., 2019; Candel, 2020). Different aspects of RAA are emphasized in food planning projects according to their prioritized goals (Liu et al., 2024a; Moragues-Faus, 2017; Sonnino and Spayde, 2014). For instance, some food plans tend to emphasize urban agriculture to achieve the central goals of improving a healthy environment and social equity, whereas others focus more on professional farming associated with the environmental and economic benefits of agriculture (e.g., Filippini et al., 2019; Prové et al., 2019). In general, however, food planning has been found to pay more attention to small-scale urban agriculture than broader, professional agricultural activities (Prové et al., 2019; Sibbing et al., 2019; Sonnino, 2009). By bringing together agroecology and urban food planning, Dehaene and Tornaghi argue that food production and provision have not been sufficiently integrated into food planning (Dehaene and Tornaghi, 2021; Deh-Tor, 2021). They appeal to address essential RAA elements in planning, including linking land use to soil care, giving a central role to agroecological farmers, and reinforcing farmers' autonomy so as to build local control over food security.

The second strand of the literature deals with local policy instruments for RAA. Research covering different geographies of the world has examined the policy instruments that local authorities could leverage to promote the local food system. According to the literature, the instruments for local food production include, for example, land-use regulations, public land provision to local producers, economic incentives, and technical support to local farmers (Horst, 2017; Filippini et al., 2019; Diehl et al., 2020; Morley and Morgan, 2021; Mattioni et al., 2022). Regarding policy instruments that connect local food production and consumption, supporting physical food infrastructure (e.g., farmers' markets and local processing industries) and public procurement (e.g., school canteens purchasing from local farmers) have been identified as significant measures (Morgan and Sonnino, 2010; Mansfield and Mendes, 2013; Sonnino et al., 2019; Candel, 2020; Liu et al., 2024a).

While most studies are based on single cases, some also pursue a systematic approach to analyzing the typology of policy instruments from a panel of food policy documents, either based on food-associated sectorial policies or integrated food planning (for example, Filippini et al., 2019; Doernberg et al., 2019; Sonnino et al., 2019; Sibbing et al., 2019; Candel, 2020; Mattioni et al., 2022). These studies have analyzed the typologies of food policies in terms of their goals, the type of policy

instruments, and the action fields. These explorations provide methodological references for studies on RAA in food planning.

The third strand of the food planning literature is about local food governance, in which a lack of participation in food planning processes of agri-food professionals has been identified. Recent food planning studies emphasize the new collaboration forms between public and civil society stakeholders in the local food system governance, represented by the establishment of Food Policy Councils (FPCs). FPCs provide a deliberative platform for different actors to communicate, including, for instance, governmental actors, civil society organizations, activists, and researchers (e.g., Campbell, 2004; Prové et al., 2019; Bassarab et al., 2019). However, empirical studies highlight that farmers as essential actors of RAA lack involvement in food planning (Mansfield and Mendes, 2013; Hebinck and Page, 2017; Jablonski et al., 2019; Prové et al., 2019). Some cases have shown that some farmers were ignored or only formally participated in food planning without a comprehensive understanding of the process, while others participated without a genuine interest in the issue (Cretella, 2019; Jablonski et al., 2019). Indeed, Magoni & Colucci (2017) provided evidence of the importance of farmers' contributions to improve RAA, by showing that local farmers' strong commitment to agriculture helped ensure the success of an agricultural park project.

Summarizing and identifying the research gaps, there is already a strong focus in food planning research on planning goals, policy instruments for the local food system, and new types of food governance with diverse stakeholders. However, the role of RAA in food planning needs to be further clarified, and the policy instruments for RAA merit a systematic analysis to reinforce the understanding. In addition, agri-food professionals as significant stakeholders in food planning need to be further studied, including their interests, their relationship with other stakeholders, and their mobilization in the planning processes. These gaps are particularly addressed in the research design.

3. Research design and methodology

3.1. Context: food planning in France

Food planning is a new type of local policy developed in France, issued by the Agriculture Law² in 2014. In France, agriculture has long been regarded as a concern of farmers and addressed through (inter) national policies, notably the European Common Agricultural Policy. Local authorities historically wield little power over agriculture and food matters. Previously, territorial agricultural policies were implemented at local levels, but only focused on environmental practices without consideration of food supply chain aspects (Léger et al., 2006). Since the early 21st century, there has been a surge in both citizen-led and agricultural initiatives supporting local farming activities. Simultaneously, certain local authorities, especially those in urban areas, have shown interest in formulating local strategies to support local, high-quality food, and short supply chain activities. The growing interest culminated in the issue being raised in the National Assembly, resulting in the integration of food planning into the Agriculture Law (Lamine et al., 2023).

According to this Law, food planning aims to “bring closer producers, processors, distributors, public authorities and consumers and develop local agriculture and improve food quality” (Article 1) and contributes to “developing short supply chains, in particular from organic production” (Article 39). The Food Law³ (2018, article 24) reinforced the emphasis on organic food production by setting “the objective of a 50%

supply rate of sustainable and quality products, including 20% of products from organic farming” in collective catering. These objectives are integrated into the Rural Code⁴ for their relevance to rural development.

The state defines food planning projects with a flexible and non-binding framework. The state incentivizes local territories to develop food planning through a labeling program and an annual financial program, managed by the Ministry of Agriculture. The financial program funding is dedicated to both investment in planned actions and the position of a project manager. An additional investment was allocated in 2020 to support the implementation of food planning actions within the framework of the Covid-19 pandemic recovery plan (Lamine et al., 2023).

There is no defined responsible body for launching and managing food planning projects. Both public and private stakeholders (non-profit or for-profit but with collective interests) are eligible to apply for funding from the national financial program. Food planning is not an embedded competence for any public authorities; it has to be based on competences from different stakeholders from public and private sectors.

3.2. Analytical framework

The analytical framework contained three significant elements derived from the literature: food planning goals, policy instruments, and stakeholders with a specific focus on agri-food professionals (Table 1). Policy goals and instruments are significant components of any policy design (Howlett, 2014). The analysis of them contained both the processes and the outcomes and was built upon theories of public policy analysis and local food systems. Agri-food professionals as stakeholders were analyzed through their roles and interests in food planning projects.

Policy goals refer to objectives and targets that authorities aim to achieve in a specific policy field (Howlett, 2014). The analysis of policy goals was conducted through inductive methods. To understand the place of RAA in food planning policymaking, policy goals were categorized into two groups: those directly associated with RAA and those not directly associated with RAA.

Policy instrument analysis was based on theories of policy instrumentation and their application in local food systems. Public policy instruments are tools that government bodies use to achieve their policy goals (Howlett, 2014). They are not neutral but rather possess political implications, organizing specific social relations between the govern-

Table 1
Analytical framework.

Policy goals	Policy instruments	Stakeholders (agri-food professionals)
RAA-directly associated	Typology (Doernberg et al., 2019; Vedung, 1998)	Participants
RAA-non directly associated (inductive)	<ul style="list-style-type: none"> Regulatory Economic Informational 	Level of involvement
	<ul style="list-style-type: none"> Farmland preservation and access to land Transition of farming practices Structuring local food chains 	Interests
		Strategies of engaging them
Output & Input (process)		

² Agricultural Law: Loi n° 2014-1170 du 13 octobre 2014 d'avenir pour l'agriculture, l'alimentation et la forêt.

³ Food Law: Loi n° 2018-938 du 30 octobre 2018 pour l'équilibre des relations commerciales dans le secteur agricole et alimentaire et une alimentation saine, durable et accessible à tous.

⁴ Rural Code: Code rural et de la pêche maritime.

ment bodies and those it is addressed to, through the representations and meanings they carry (Lascoumes and Le Gales, 2007). In essence, policy instruments are political choices made by local actors within the legal framework to achieve their objectives, offering insights into governance capacity and models as well as the change in public policy (Lascoumes and Le Gales, 2007). The analysis of food planning policy instruments for RAA was conducted across two dimensions.

The first dimension referred to public policy instrument typologies. Vedung (1998) developed a policy instrument typology based on the concept of power, namely the authoritative force involved in the governance efforts. Regulations, economic means, and information constitute the three types of instruments, each representing the power relation between government bodies and the governed. Regulations influence people by means of formulated rules and directives; economic policy instruments hand out or take away material resources, inciting people in cash or in kind; and information attempts to influence people through the transfer of knowledge, the communication of reasoned argument, and persuasion (Vedung, 1998). Doernberg et al. (2019) applied and adjusted Vedung’s typology in food policy analysis with a systematic approach to understanding how cities can intervene in food issues through sectoral policies. Drawing from the typologies of Vedung (1998) and Doernberg et al. (2019), the analysis categorized instruments into (1) regulatory instruments, including formal planning

(land-use and development planning), procurement regulations, etc., (2) economic instruments, in kind (public procurement/provision of services and infrastructure/contracts and leasing conditions on city-owned properties/vouchers) and in cash (direct investments, duties/subsidies, compensation payments), and (3) informational instruments, including information, education, advice, labeling, training, analysis, networking, etc.

The second dimension of policy instruments analysis was the action fields that the instrument belongs to. RAA action fields were categorized from Ericksen’s (2008) definition of the food system component and include (1) farmland preservation and access to land, (2) transition of farming practices, and (3) structuring local food chains (Liu et al., 2024a).

As policy goals and instruments are political decisions, the analysis was complemented by an examination of the interplay between key stakeholders. These stakeholders encompassed (1) the state, i.e., national government and its local-level agencies, which set the framework of food planning with incentives to encourage local initiatives; (2) local public authorities or entities in charge of food planning projects; and (3) agri-food professionals and their representative unions or organizations, economic actors involved in food production, processing, and distribution. Their interplay was supposed to illustrate power dynamics and compromises made in the policy design process.

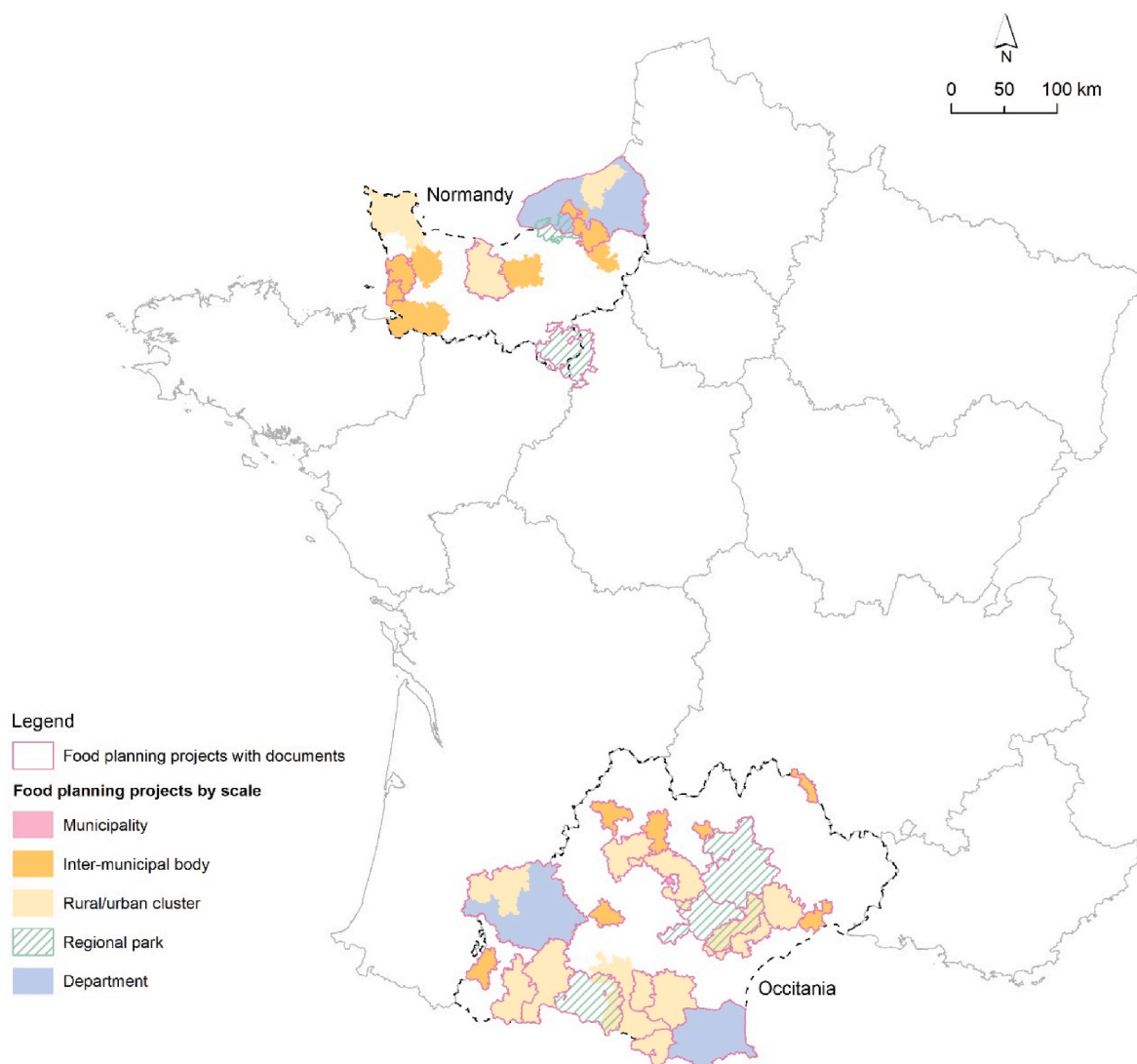


Fig. 1. Distribution of studied food planning projects in France.

3.3. Material and methods

The case study areas were identified as a part of a PhD project investigating land and food planning policies. These cases are territories where food planning projects were being elaborated and are located in two French regions: Normandy and Occitania. In total, 39 territories were included in this research, and 29 of them had available policy documents (officially published or working draft) (Fig. 1; Appendix). The available documents are dated between 2018 and 2022.

The studied food planning projects were developed at different scales, ranging from municipal, inter-municipal, rural/urban cluster, regional park, to departmental scales. Most examined food planning documents were at the inter-municipal or rural cluster scales. The sample covered a large number of rural areas. Specifically, rural clusters and regional parks are highly rural areas. Departments cover cities and rural areas. Inter-municipal bodies vary from metropolitan areas that are more urban to a group of rural communities that are more rural, but always encompass rural hinterlands. The only studied municipal-level food planning project is on a middle-size city, surrounded by large rural areas.

While most projects were managed by public authorities, three were managed by other entities, including a cooperative, an NGO, and an association uniting several institutes and organizations. The project leaders have different competences, and these competences may affect food planning strategies. This study focused on analyzing the and did not aim to compare different competences.

Document analysis and semi-structured interviews were conducted for data collection and analysis. The food planning documents were obtained firstly from official websites and subsequently supplemented by interviewees in cases where documents remained in draft form or had not yet been made public. A systematic online check of updated documents was made in May 2022. A total of 29 documents (among 39 investigated projects in the entire study) were available and enabled the document analysis on policy goals and instruments. All documents were coded for policy goals and policy instruments following the analytical framework (Table 1) by using the software Atlas.ti. For policy goals, the headings of strategies were inductively coded. Regarding policy instruments, each RAA-related action in the action lists or descriptions of actions were coded.

The semi-structured interview analysis was based on over 40 interviews conducted within the framework of the aforementioned PhD thesis. Interviews were mainly held with food planning project managers, and in some cases, with staff working at the Chamber of Agriculture, elected officials, and consultants in relevant agencies. The selection of project managers as primary interviewees was deliberate due to their comprehensive understanding of the food planning process, their oversight of different involved stakeholders, and their relatively neutral political position. The interview data pertinent to this research included several key aspects: (1) the initiation, schedule, and evolution of the food planning projects, (2) interventions and local initiatives within food planning facilitating RAA, along with the rationale behind these choices, and (3) the involvement and roles of agri-food professional stakeholders in the food planning processes. Interviews were conducted between January and October 2021, a period marked by the impact of the Covid-19 pandemic, which imposed travel restrictions. Consequently, questions regarding this impact on food planning projects were addressed alongside inquiries into the schedule and evolution of these projects. Interview transcriptions were analyzed using the software Atlas.ti.

4. Results

4.1. Policy goals: RAA with a central role in food planning

4.1.1. An overview of policy goals

An overview of food planning goals (Fig. 2) reveals that a number of

goals are directly associated with RAA, indicating its central role. The overarching goal was improving local food production, adopted by the highest number of territories ($n = 27$ out of 29). This goal contained several topics: (1) improving environmental farming transition, (2) preserving farmland and resources, (3) facilitating farm transfers, (4) diversifying local products, and (5) encouraging self-growing by both professional and non-professional producers. Furthermore, 24 food planning projects (ranking fourth) aimed to develop local supply chains, for example, to “accompany local producers in their development and facilitate the distribution of their products in the territory” (Communauté de communes Granville Terre & Mer, 2022, p. 33). All food planning projects included at least one of these two key goals, highlighting the significance of RAA.

Improving collective catering, a goal of 16 territories, could be a crucial component of RAA as it helps structure local food chains through public procurement power (Sonnino et al., 2019). This goal corresponded to varying approaches; some territories focused on sustainable cuisine practices, while others emphasized local sourcing, such as “developing the supply of organic, quality, local products in collective catering” (PNR du Perche, 2021).

Three other RAA-associated goals were adopted by fewer territories. Enhancing the value of agri-food culture and heritage ($n = 6$) contributes to territorial marketing and tourism. Developing the agri-food profession ($n = 5$) refers to maintaining local agricultural employment. These two goals revolve around territorial development through agriculture and food. Only three territories included the goal of “improving agri-food innovation.”

Besides RAA-related goals, there were goals related to food consumption and waste, health and social justice, and local food policy governance. Goals such as raising consumer awareness and enhancing social justice were included by most territories ($n = 25$ each). Governance, referring to unifying local public and private stakeholders in local food systems, was a target in 19 territories. Less frequent goals were health improvement ($n = 8$) and waste reduction ($n = 5$). The coexistence of these diverse goals demonstrated the systematic approaches that food planning projects addressed.

4.1.2. RAA among systematic goals

Interviews on food planning project initiation and evolution revealed diverse approaches to RAA across territories, highlighting the central role of RAA among systematic goals. Some territories initially focused exclusively on RAA and later broadened their scope to connect RAA with other topics. This process usually occurred in rural territories, which primarily launched food planning by developing the local agricultural economy and supply chains. For instance, the food plan of inter-municipal body Granville Terre et Mer in 2017 solely developed short supply chain structuring, which was then rejected by the national financial program due to its exclusive emphasis on the economy. Therefore, the local authority reworked it into a comprehensive food plan, integrating social, environmental, and economic aspects. Similarly, the inter-municipal body Grand Cahors initially solely concentrated on improving market gardening, but gradually expanded the plan to include responsible consumption. The policymakers realized the need to address food system issues to fully structure the supply chain:

I find that the old [food planning project] was too focused on the actions of the inter-municipal body and that it had only two essential actions, which were the vegetable center and the farm incubator. [...] And what I would like to bring out in the update is a much more global approach [...] I proposed to the elected official in charge of the food planning to do it in three axes with: first, production; second, processing and distribution; and third, consumption. (civil servant, inter-municipal body Grand Cahors, Occitania, 2021/10/05)

In contrast, certain territories initially lacked an RAA focus but later had to address it, because policymakers recognized its essential role in

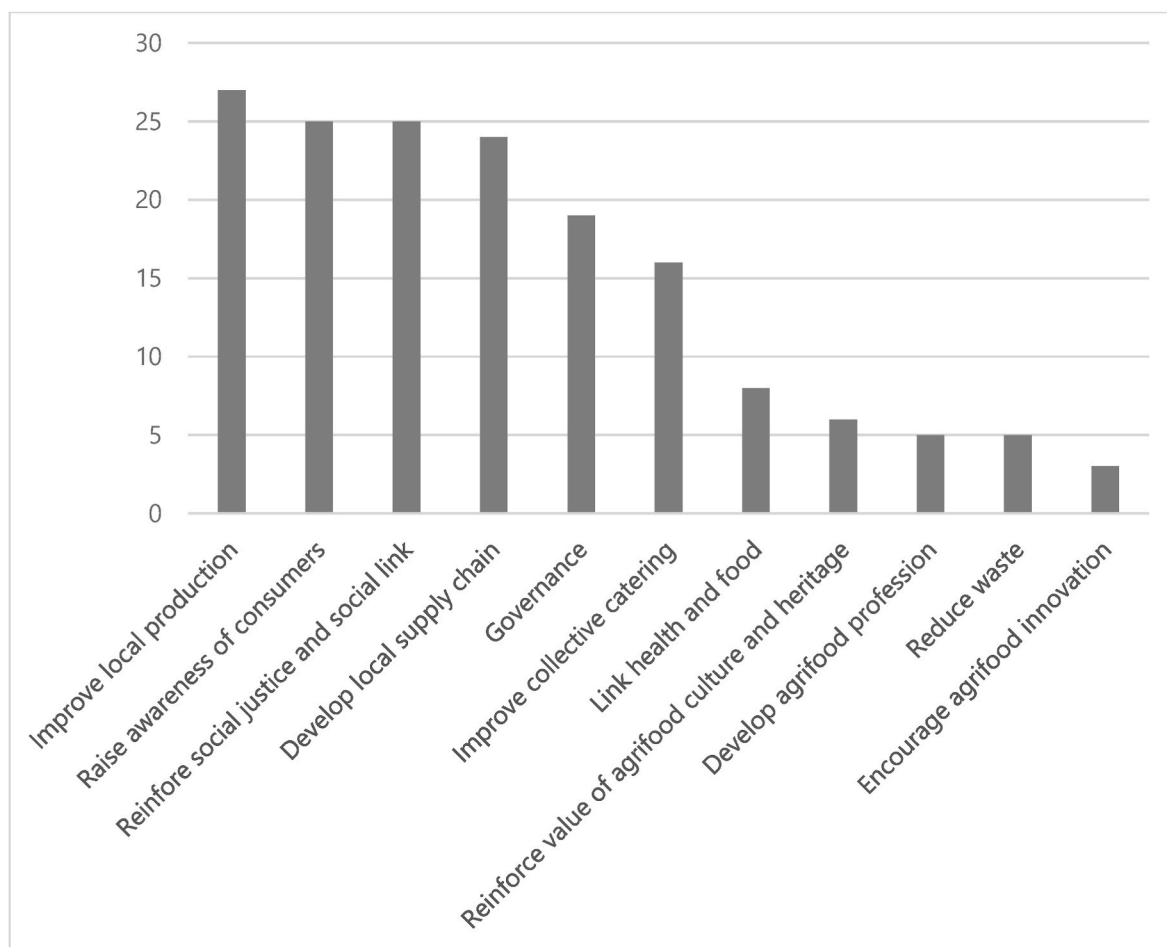


Fig. 2. Goals and number of food planning projects that addressed them.

achieving associated goals (e.g., health and social justice). An emblematic case was the inter-municipal body Haut Allier provided an emblematic case. Although the local authority initially developed the food plan centering on “health” and “equity” through promoting education and nutrition without addressing RAA, it soon realized that these approaches were insufficient and that providing high-quality food was indispensable. The local authority later developed local sourcing projects through collective catering to link consumption and local production. Interviewees in this territory reported the process:

Initially, we worked on health and food issues within the framework of the local health contract.⁵ We worked on nutrition, food education, etc. But one of the local health contract’s objectives is to fight against social and territorial inequalities in health, and these nutrition education actions did not enable us to structurally modify how people eat and access quality food for the most precarious people. [...] collective catering, particularly school catering, can be a tool for equity in a territory and access to quality food for all children, which, in terms of health, has an interesting impact. [...] if we did not change the working attitude of the producers, we might not be able to have a local supply in line with the demand that we have to develop. (civil servants, inter-municipal body Haut Allier, Occitania, 2021/10/04)

Additionally, interviewees in some territories reported that the

⁵ The local health contract (contrat local de santé) is a tool jointly developed by the regional health agency and local authority to reduce territorial and social inequalities in health.

initial focus of food planning on improving collective catering supply expanded to a broader range of RAA-associated issues. Such an expansion was prompted by the Covid-19 pandemic, which enlarged the local question from collective catering to agriculture, direct sales, and other short supply chain activities.

4.2. Policy instruments: diversified and innovative instruments for RAA

Food planning policy instruments are given in an overview with their frequency of use, sorted by action fields (farmland preservation and access to land, transformation of farming practices, and structuring local supply chains) and by instrument typology (regulatory, economic, and informational) (Fig. 3 and Table 2).

4.2.1. More “soft” than “hard” measures

Clearly, food planning projects generally used informational and economic rather than regulatory instruments. Among the ten most frequently used instruments, the top five were informational, with the objective of structuring local supply chains or increasing farmland preservation and access (Fig. 3). Moreover, three economic instruments for the development of local food infrastructure, and two informational instruments to develop local farmland strategy or make maps to increase local food visibility to consumers were used. In contrast, regulatory instruments were less frequently employed, with less than a quarter of territories adopting the top two regulatory instruments. The use of regulatory, economic, and informational instruments is detailed in the following.

(1) Regulatory instruments

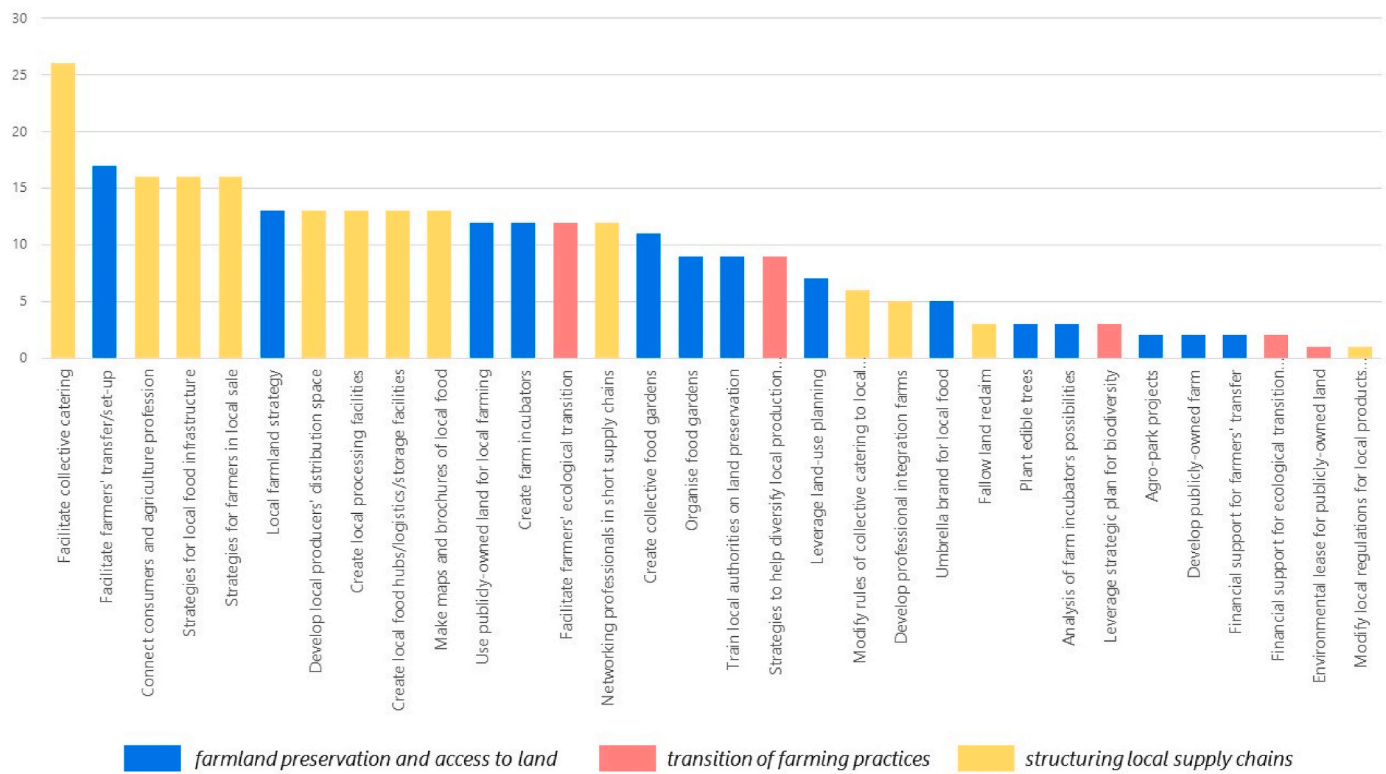


Fig. 3. Policy instruments used by action fields with the number of territories.

Regulatory instruments were only employed for the preservation of farmland and the structuring of local supply chains. The regulatory instrument used to preserve farmland was leveraging land-use planning and the associated instruments (e.g., delimitating pre-emption perimeters in peri-urban areas for agricultural and natural land preservation) (n = 7 out of 29, 24.1%). To structure local supply chains, six territories planned to adapt procurement contract specifications to prioritize local sourcing in collective catering. This included both direct intervention (where the authority is responsible for collective catering) or assistance to authorities to implement the modification. One territory planned to modify local acts to increase the visibility of local products, i.e., “strengthening the Small Business Act on food and making it a lever of visibility for local products” (Toulouse, 2019, p. 8).

(2) Economic instruments

Local territories used a wide range of economic instruments to increase local farmers’ access to land and to structure local supply chains. Most instruments revolved around developing local food infrastructure (i.e., local processing centers, local food hubs or logistics, and producers’ distribution spaces; n = 13 for each infrastructure type) and initiating local farming projects (i.e., creating farm incubators (n = 12), creating local food gardens (n = 11), developing professional social integration farms (n = 5), establishing publicly-owned farm (n = 2), and setting up agro-parks (n = 2)). Some territories also intervened in the land market by dedicating public land to local farming activities (n = 12), reclaiming fallow land (n = 3), and applying the environmental lease for public land (n = 1). Other than the instruments explicitly documented in official plans, interviewees also reported the use of other

instruments, such as temporary use of public land and collaboration with the Rural Land Agency⁶ for land acquisition to set land reserves for RAA.

Three urban territories aimed at introducing food elements into cities by planting edible trees in public spaces, while two territories financially supported farmers’ transfer. For example, a territory planned to donate vouchers to farmers to seek partners for “tailor-made” farm transfer solutions. Additionally, three territories planned to leverage biodiversity and environment-associated programs, which refer to the environmental compensation for farmers.

Although using public land and reclaiming land seem to be efficient instruments for RAA, interviewees explained various reasons why local territories do not always include these measures. First, local territories do not always hold enough public land, or they are reluctant to dedicate the land to RAA. Second, the land might be too dispersed, inaccessible, or polluted. Third, local authorities may lack information on available land, which is particularly problematic in rural territories due to insufficient institutional, technical, and human resources. An interviewee exposed this general problem:

The stake is firstly the knowledge of the land. Since we are a young authority, the challenge is to have an up-to-date land observatory. We currently have a small land service of two people at the level of the inter-municipal body. So, it is more in the day-to-day business than in forecasting. (civil servant, inter-municipal body Cotentin, Normandy, 2021/04/02)

(3) Informational instruments

⁶ Rural Land Agency: SAFER, Société d’Aménagement Foncier et d’Établissement Rural. A public limited company specializing in rural land management. It has the right to purchase and dispose of pre-emption rights of rural properties.

Table 2
Incidence of different types of policy instruments applied in the food planning projects.

Instrument type	Instruments employed (number of food planning projects that applied the instrument)
<i>Farmland preservation and access to land</i>	
Regulatory	Leverage land-use planning and associated instruments to preserve farmland (e.g., Peri-urban Perimeter, Protected Agricultural Areas) (n = 7)
Economic	Use publicly-owned land (or buildings) for local farming ^a (n = 12) Create farm incubators to facilitate new farmers and new practices (n = 12) Create collective food gardens (n = 11) Develop professional integration farms (n = 5) Fallow land reclamation (n = 3) Plant edible trees in public space (n = 3) Financial support for farmers' transfer (n = 2) Develop publicly-owned farm to supply collective canteens (n = 2) Agro-park projects as demonstrative projects (n = 2)
Informational	Information, advice and networking to facilitate farmers' transfer/set-up (n = 17) Local farmland strategy, monitoring and management (publicly-owned land, farm transfer, fallow land, etc) (n = 13) Analysis, information and organization to facilitate food gardens (n = 9) Train local authorities on land preservation tools (elected officials, professionals) (n = 9) Analysis of farm incubators possibilities (n = 3)
<i>Transition of farming practices^c</i>	
Economic	Leverage agro-environmental compensation in biodiversity/climate change strategies (n = 3) Financial support for ecological transition farmers (n = 2) Environmental lease for publicly-owned land (n = 1)
Informational	Information, communication and advice to facilitate farmers' ecological transition (e.g., agroecological farming, agroforestry practices, planting hedges) (n = 12) Analysis and strategies to help diversify local production types (n = 9)
<i>Structuring local supply chain</i>	
Regulatory	Adapt procurement contract specifications of collective catering to increasing local and/or sustainable food sourcing ^b (n = 6) Modify local regulations to improve local products' visibility (n = 1)
Economic	Develop local producers' distribution space (farm'rs' markets, drive-throughs, produc'rs' shops, third places, etc.) (n = 13) Create local processing facilities (n = 13) Create local food hubs/logistics/storage facilities (n = 13)
Informational	Analysis, advice, communication to facilitate collective catering to increase local and/or sustainable food ^b (n = 26) Activities to connect consumers and the agriculture profession (farm visits, events, agritourism, etc.) (n = 16) Analysis and strategies for local food infrastructure (n = 16) Training, information, advice and strategies to facilitate farmers in local sales (incl. supply collective catering) (n = 16) Make maps and brochures to increase local initiati'es' visibility to consumers (n = 13) Networking professionals in short supply chains (n = 12) Umbrella brand for local food (n = 5)

Note.

^a Publicly-owned land use may overlap with some other instruments, e.g., creating agro-parks, as such projects may use publicly-owned land. They were categorized as two instruments because they represent two types of action: (1) mobilizing land and (2) developing projects.

^b These two instruments lead to the economic effect: the mobilization of public procurement power. They were classified as informational instruments according to how the instruments were operated.

^c Some land-associated instruments may also contribute to the transition of farming practices (e.g., farm incubator for organic market gardening). They were not separately presented (1) to avoid repeating and (2) because the transition of farming practices was not the major intention of the instruments.

Informational instruments were the primary instrument type used in food planning. Nearly all food planning documents included instruments that improve collective catering with local and sustainable sourcing (n = 26). Local territories may also provide information, advice, training,

and networking activities to facilitate farmers' access to land, promote ecological transition, and reinforce local supply chains. Many territories leveraged these instruments to facilitate farmers' transfer and/or set-up (n = 17), connect professionals (producers, processors, restaurants, and canteens) (n = 12), promote ecological transition (n = 12), raise local authorities' awareness and knowledge of land preservation (n = 9), and/or improve farmers' local supply chain capacity (n = 6).

Some territories developed innovative instruments to meet the specific needs of RAA. For instance, some worked to raise awareness among existing farmers to sell their land by separating to affordable sizes for new entrants, in consideration of supplying available and affordable land. Some facilitated new farmers' group purchases of land or develop shared ownership of farmland, recognizing that:

[a farm] is too expensive for one person, or is too big for one person, perhaps it is of interest to several people. (staff, cooperative Maison Paysanne, food planning of Pays Haute Vallée de l'Aude, Occitania, 2021/09/28)

Some food plans also included developing strategies or conducting analyses, dedicated to local food infrastructure (n = 16), local sale avenues (n = 16), local farmland preservation and use (n = 13), production diversification (n = 9), better organization of food gardens (n = 9), and/or farm incubators (n = 3). Moreover, local territories may create opportunities to better connect consumers and producers, through organizing activities and events (n = 16) and making maps and brochures to increase local initiatives' visibility to consumers (n = 13). Five territories also planned to develop an umbrella brand for local food.

4.2.2. Economic ambitions over ecological transition

With regards to the use of policy instruments by action fields, there were significantly more policy instruments dedicated to access to land and the structuring of local supply chains than the transition of farming practices. This discrepancy, evident both in the number of instruments and the number of projects that applied them (Fig. 3), underscores the emphasis of food planning policies on economic development rather than on ecological transition.

Only 13 out of 29 analyzed food planning documents incorporated at least one instrument facilitating the ecological transition. Additionally, the most frequently employed instrument was informational, in contrast to the seldomly applied economic and absent regulatory instruments. Many interviewees reported that this preference for informational instruments over others was driven by local authorities' wish to avoid conflicts between farmers. Notably, they emphasized that the transition into organic farming was a sensitive and contentious issue, because it risks creating opposition between organic and conventional farmers. Therefore, local territories must carefully address the discourse surrounding this issue in order not to hinder the progress of food planning:

We try not to put our finger too precisely on that [promoting organic production], because we know that our territory is not only organic, it is also everything that is more conventional and more traditional agriculture as well [...] [organic] is part of the food system, but it is not a topic on which we focused particularly because, politically, it does not work, because it would exclude too many enterprises and a large part of the system that fixes our territory. (civil servant, inter-municipal body Cotentin, Normandy, 2021/04/02)

Despite the situations mentioned above, a few food policies did contain an explicit focus on ecological transition. Two exemplary cases were the Montpellier Metropolis, which established "agroecological and food policy," and its neighboring rural cluster of Coeur d'Hérault, which included "agroecological innovation and water management" in their food planning document. In the former case, there had long been a strong political commitment to the issue of agroecological transition (Michel and Soulard, 2019). In the latter case, the interviewees reported that the necessity for agroecological transition was driven by the key issue of water management in the territory.

4.2.3. Connected policy instruments and action fields

Although food planning instruments were categorized in different action fields, they were found to be interconnected (Fig. 4). Notably, interviewees emphasized that collective catering acted as a catalyst for promoting farmers' set-up and strengthening the local supply chain, owing to its potential to provide a reliable outlet for upstream activities. For instance, the Haut-Languedoc Regional Park employed a range of measures to encourage farmers' set-up by ensuring an outlet through collective catering:

Objective 4.2: Place collective catering as a lever for the set-up of farmers

4.2.1: As soon as farmers are set up, encourage exchanges and collective approaches (e.g. setting up a subscription to guarantee a certain number of purchases that encourage the setting up of farmers).

4.2.2: Develop the pooling of meat purchases to enhance the value of an entire animal.

4.2.3: Creation of public management systems for organic market gardening and agroforestry (dedicated to collective catering).

Source: Le Projet Alimentaire Territorial (PAT) 2021–2026 (PNRHL, 2021)

The transition of farming practices and the structuring of local supply chains was identified to be closely related, in that a guaranteed market serves as an incentive for farmers to make a transition of their farming practices. For instance, the Metropolis of Rouen planned to “work on the structuring of agricultural supply chains in order to offer outlets to farmers who change their practices” (Métropole Rouen Normandie, 2019, p. 14). Instruments for farmland preservation and access to land were also identified to connect to the ecological transition, as they help dedicate land to targeted farming practices.

4.3. Agri-food professionals' involvement in food planning

Both majority (defending conventional farming and economic sustainability) and minority (promoting ecological transition and peasant farming) farmers' organizations were identified as significant stakeholders in food planning, albeit with varying degrees of engagement. Interviewees reported that these organizations were often responsible for different tasks of food planning. Major farmers' organizations (represented by the Chamber of Agriculture, a farmers' support organization) primarily handled farms' take-over, whereas minority farmers' organizations worked on ecological-oriented farmers' set-up and practices. According to several interviewees, food planning provided an opportunity to bring these historically opposing farmers' organizations, helping to balance the dominant role of the Chamber of Agriculture, for instance:

... there is the majority network and the alternative network. [...] We would like the inter-municipal body to play the role of facilitator and mediator because we are a neutral actor. [...] Depending on the project, some people will go to ADEAR [a peasant farmer support organization] and others to the Chamber of Agriculture. [...] our objective is to get everyone working. We have this objective of impartiality and equity. We consider them all to be more or less on the same level. (civil servant, inter-municipal body Ouest Aveyron, Occitania, 2021/06/15)

Minority farmers' organizations, which support peasant farming and agroecological transition, were generally proactive in food planning because it aligned with their objectives. Nevertheless, the Chamber of Agriculture, albeit seen as defending conventional farming, was also recognized by almost all the local territories as a significant stakeholder in food planning. Interviewees reported four main reasons for which food planning should engaged the Chambers of Agriculture. First, they act as key mediators in the dialogue between public authorities and farmers, especially because public authorities historically lacked the right and the standing to intervene in the farming world. Second, they support farmers with their expertise, particularly in facilitating farm

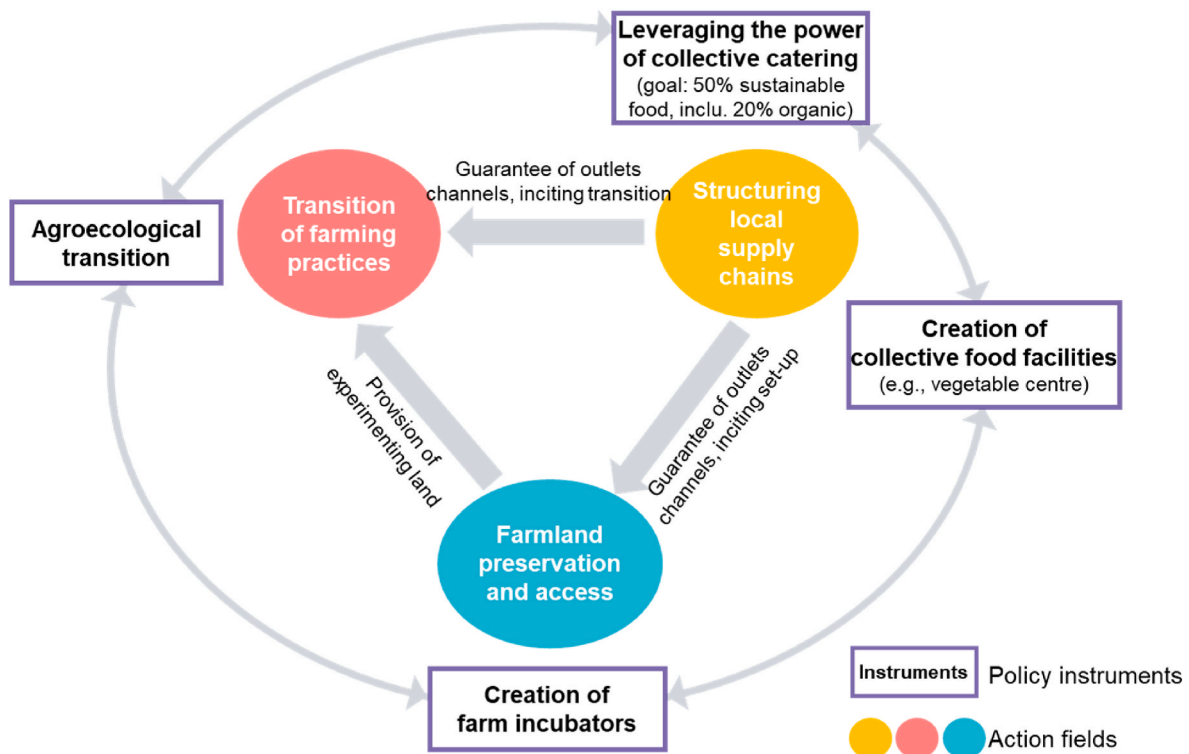


Fig. 4. Diagram of connections between policy action fields and between policy instruments (as examples).

holdings' transfer. The latter, although not only targeting RAA, is a significant component of most food plans. Third, some territories are aware that promoting RAA should be based on conventional farmers' transition, and the Chambers of Agriculture are unignorable facilitators for this transition. The fourth reason was related to the third, as involving the Chambers of Agriculture in food planning was also a strategy to promote the transition of the Chambers themselves.

The roles of Chambers of Agriculture in food planning governance varied across territories. These roles included active ones such as regional food planning coordinator, co-manager of food planning, or close partners (Liu et al., 2024a). In some instances, however, the Chambers of Agriculture acted only as inactive participators. In these cases, interviewees claimed that the Chambers of Agriculture participated in food planning meetings and provided professional advice but without really implementing actions. This was due to the lack of no long-term political commitment between the public authority and the Chamber of Agriculture, as explained by interviewees.

[Chamber of Agriculture] is partner, to a certain extent [...] we give them all the elements we have to help them move forward when they ask us, but at the same time they set up projects that could fit completely into the food planning and of which we are not even aware, so it is not a fluid partnership. [...] It could be much better if there was political cohesion [...] There is no partnership agreement, no partner [...] For the moment, it is just exchanges between technicians that do not go too far, unfortunately. (civil servant, departmental council Gers, Occitania, 2021/06/17)

Nevertheless, local authorities may strategically take action to actively involve the Chamber of Agriculture. For instance, the local authority of the inter-municipal body Haut Allier intentionally invited the Chamber of Agriculture to be co-manager in the evolution of food planning, because the inter-municipal body wished to engage better with the Chamber of Agriculture so as to change them and further influence farmers' behaviors:

... the Chamber of Agriculture is there to advise farmers in their development, in their evolution, etc. [...] in the advisory mission, we have to bring the fact that we have to change the way of producing, the way of seeing things locally. And this is what will define this sort of convergence between the consumer and the producer. But, since we are a local authority, if we go and talk to the farmers, we will never have the right message because today it is the Chamber of Agriculture who is with the farmers to prepare their evolution. [...] It must be a driving force in the system (civil servant, inter-municipal body Haut Allier, Occitania, 2021/10/04)

In addition to farmers' organizations, existing agri-food supply chain enterprises were identified as vital yet missing professional stakeholders in food planning. They were considered significant in shaping the local supply chain by transforming their economic models to incorporate local producers and products. Despite the active participation of some food logistics providers in food planning in a few territories, most interviewees noted challenges in mobilizing such economic stakeholders for food planning. These challenges included, according to interviewees, time constraints, resistance to changing established economic models, and a lack of perceived opportunity in food planning. Differences in sourcing methods and quantity requirements between enterprises and food planning further contributed to this disconnect. Some territories sought to overcome these challenges by altering communication methods, such as dialoguing with regional agri-food enterprises associations to raise awareness at the institutional level and actively contacting enterprises instead of waiting for their participation. This highlighted the need for adaptable methods when involving diverse stakeholders.

5. Discussion and conclusion

This study was to investigate how food planning addresses RAA through systematic analysis of policy documents and semi-structured interviews in a sample of French food planning projects. The empirical study highlights the central role of RAA in food planning and uncovers a wide array of innovative policy instruments to support it. These instruments lean more toward providing information and economic incentives than regulatory enforcement, and emphasize economic aspects over ecological ones. These trends give an indication of local governance models and their capacity to shape local food systems. Moreover, the findings highlight the role of farmers' organizations in food planning as well as the local governance strategies to engage these stakeholders. It is suggested that food planning can be a lever for rural development through relinking rural-urban actors and territories, ultimately reshaping their relationships. To facilitate this, innovative institutional design adapted to local contexts is imperative.

First, the results show that RAA occupies a central role in food planning. It constitutes either the motivation of food planning projects or develops to be a significant component of them as food planning evolves. This differs from a previous study which argued that RAA is "just a means to an end" of the local food policy (Sonnino, 2016, p. 5). In the cases examined, French territories indeed set RAA as food planning goals with diverse themes varying from improving local production, developing local supply chains, to maintaining local agricultural employment and preserving agri-food heritage. This feature of French food planning projects aligns with the French national initiative to promote food planning with an emphasis on local short supply chains, as previously identified by Liu et al. (2024a). This study also provides evidence of how food plans evolve to be more systematic, linking cross-sectoral topics such as health and equity. On the one hand, it highlights the significance of linking RAA and other territorial development issues in food planning. On the other hand, scaling up towards more systematic goals and approaches also poses challenges to public policy design and implementation regarding local competences and cross-sectoral collaboration (Mattioni et al., 2022).

Second, finding from this study highlights the extensive range of RAA-related food planning policy instruments, either traditionally used or innovatively designed. This finding enriches the local food policy instruments identified in previous international studies (e.g., Doernberg et al., 2019; Sibbing et al., 2019; Candel, 2020; Mattioni et al., 2022). Several factors may account for the rich array of policy instruments identified in French cases. First, the national financial program financially supports local project manager positions, which provides local territories with essential human resources to translate policy goals into concrete instruments; the lack of these human resources has been previously found to be a major hindrance to food policy instruments design (Sibbing et al., 2019). Second, the Covid-19 pandemic may have increased local stakeholders' awareness of RAA and motivated local authorities to adopt instruments to facilitate it (Chiffolleau et al., 2020; Liu et al., 2024b). Third, food planning as an integrated policy serves as a platform for communication and innovation by bringing together diverse public and private stakeholders. They not only could propose instruments, but also serve as potential actors for project implementation. The integrated policymaking process is likely to stimulate innovation in policy instruments, in contrast to the predominant single-sector food-related policymaking cases studied by Sibbing et al. (2019) and Doernberg et al. (2019).

Food planning policymaking processes should also be viewed through the lens of the integration of top-down and bottom-up approaches. Although the state sets a top-down national framework, it remains flexible and non-binding, allowing ample room for local stakeholders to interpret and design actions tailored to local contexts. These interpretations and designs are shaped by local dynamics, including power relations between stakeholders - particularly between major and minor farmers groups - local political orientations, and

historical interactions between local authorities and farmers groups. Therefore, local food planning design reorients national goals to accommodate varying local interests. This process helps us to understand why ecological transition is not always prioritized, the diverse performance observed across localities, and the strategically designed instruments.

Food infrastructure that connects production and consumption appears to be a significant component in food planning projects, including physical facilities and collective catering (Sonnino et al., 2019). Numerous policy instruments have been developed to address these aspects, and many others connected to them (e.g., farmers' set-up, transition to ecological practices). These findings contrast with previous studies emphasizing the "missing middles" in local food policies (Sibbing et al., 2019; Sonnino et al., 2019; Candel, 2020). For the physical food infrastructure, its prevalence is likely connected to the emphasis placed by national law on local supply chain structuring and the investment from the national financial program, especially with the additional budget from the pandemic recovery plan in 2020. Concerning collective catering, a measure that Candel (2020) has previously identified as a feature in French local food policies, its wide use may be attributed to the Food Law (2018) that sets quantitative sourcing goals for sustainable food in school catering. These findings suggest the significant impact of institutional contexts on the choice of policy instruments.

Third, the results of policy instruments highlight specific features of food planning, which also represent challenges to supporting RAA through local policies. Basically, food plans were found to primarily use economic and informational instruments, with limited use of regulatory measures. Sibbing et al. (2019) have argued that local authorities often hesitate to adopt coercive instruments because food is a personal issue, and they do not wish to impose strict rules on market players. This explanation might be applicable to the French context. It is also likely that local territories wish to implement food planning rapidly, while regulatory instruments take time to be approved. Another explanation might be the local authorities' wish to provide a flexible framework to incite the commitment of actors to food planning. Local public authorities' aim has been to mobilize different local actors and not to slow them down by imposing rules and objectives that are too difficult to implement. On the one hand, the lack of "hard" measures may cause a lack of legal certainty and binding force. On the other hand, "soft" measures may sometimes be more efficient than hard ones because they are easier to implement (Allmendinger and Haughton, 2010). Therefore, policymaking should address the combination of different types of instruments (Howlett, 2014).

Additionally, the findings underscore a predominant use of instruments for access to land and structuring local supply chains rather than for the transition of farming practices. This unbalanced use of instruments indicates that RAA tends to be more oriented towards economic development rather than the ecological transition. An explanation is the intention of food planning to find shared interests that gather different stakeholders of the territory. In this sense, food planning could be a neutral arena for communication and an opportunity to foster "small steps" towards agroecological transition in a "silent" way (Lucas, 2021). Further, although the analysis categorized policy instruments into distinct action fields, the results reveal these instruments are interconnected. Farmland access, farming practices transition, and local supply chains are associated with and support each other. The interconnection between instruments offers references to policymaking in similar fields, highlighting the potential synergies that can be created when developing policies for RAA.

Fourth, the study identified the involvement of majority and minority farmers' groups in the food planning process, further highlighting the role of food planning as a platform to engage diverse and sometimes conflictual stakeholders. This contrasts with previous studies that have pointed to the missing role of farmers in food planning (Cretella, 2019; Jablonski et al., 2019).

The role the Chamber of Agriculture plays in food planning is particularly noteworthy, because it is traditionally seen as defending mainstream conventional farmers who may not be in favor of the local food system transition (Perrin and Baysse-Lainé, 2020). In most of the studied cases, the Chamber of Agriculture is recognized as an important and even vital actor in food planning. This study suggests that the historical views of the Chamber of Agriculture and its relationship with local authorities significantly influence their roles in food planning, reflecting a path dependency logic. However, local authorities could take actions to proactively affect the role of the Chamber of Agriculture in food planning and, subsequently, in food system transition. An implication of these results is that food planning project leaders should act to bridge mainstream agri-food professions with transition regimes, through strategical organizational and governance approaches.

In conclusion, previous literature has shown that food planning is an effective lever for developing local food systems, yet the focus is mostly on urban areas, with a lack of understanding of RAA. This study was able to identify the way food planning addresses RAA by assessing a series of food planning projects in France. This approach combined systematic food planning document analysis and semi-structured interviews, allowing an in-depth understanding of RAA planning with generalizable patterns. The document analysis depicted the food planning goals that territories aim to achieve and the policy instruments they mobilize, revealing the governance capacities regarding RAA (Doernberg et al., 2019; Lascoumes and Le Gales, 2007). The semi-structured interviews further provided in-depth explanations of the motivation, strategies, and challenges in the policymaking processes. This approach, with the analytical framework, might be transferred to studies on RAA policymaking in other settings as well.

The empirical findings of this research not only contribute to policymaking in France but also provide insights for other countries. The connection between RAA and other territorial goals in French food planning projects sets a model, especially for nations focusing on consumption and urban aspects in their food policies. RAA is crucial for local food systems and should be thoughtfully integrated into the systematic goals of food planning. The diverse range of RAA-related policy instruments identified in this research stems from local experiments and can serve as references for other countries exploring policy design in this field. It is also suggested that policymaking considers a combination of regulatory, economic, and informational policy instruments for effective implementation. This study illustrates how food planning serves as a platform that brings together conflicting stakeholders, offering examples for other nations regarding handling power relations in policymaking. French food planning projects, as shown in this study, are the product of a flexible nationwide framework coupled with local efforts, combining bottom-up and top-down approaches. Consequently, it is imperative for other nations to tailor their policy design to suit their contexts and dynamics of stakeholders' relations. On the one hand, local policy design should be adapted to institutional contexts; on the other hand, institutional settings could be improved to provide an enabling context for RAA. In the meantime, French food planning practices could benefit from international experiences, particularly those rooted in bottom-up approaches, where governance models like food policy councils help to foster inclusivity in planning (Bassarab et al., 2019; Prové et al., 2019).

An added value of this research is its scope covering rural territories, which offers a better understanding of the intricate relationship between food planning and rural development. The research indicates that there is much to do in rural territories as significant suppliers of food provision. Rural territories need to deal with issues of farmland preservation and access, transition of farming practices, locally suited supply approaches, etc. All these issues extend beyond technical aspects and are deeply embedded in transforming social relations within rural areas. Furthermore, this research indicates that developing food planning goes beyond formulating rural territories as pure suppliers for cities and serves as a catalyst for rural development and rural-urban linkage. RAA-

associated food planning measures, as demonstrated in this research, can be a catalyst to develop the local economy that is related to local culture, formulating a new view and perception of the value of rural territories, embedding agriculture and food in the territory, and facilitating the transition towards sustainability. Ultimately, RAA is an opportunity to trigger the governance change.

While this study provided a comprehensive overview of food planning strategies for RAA, it could be further enriched by future research. One promising approach is the comparison between planning projects operated at different scales. Spatial scales usually correspond to administrative scales and legal competences, therefore affecting policy goals, instruments, and governance structures. Food planning strategies and governance models could also be analyzed with a comparative perspective between rural and urban territories, as the power of the agricultural lobby, the position of the agricultural economy, and the richness of human resources usually differ according to the degree of urbanization. Moreover, this study went through the evolution of the Covid-19 pandemic and witnessed rapidly emerging food planning projects, the formalization, the diversity as well as the change triggered by the pandemic. Future research could enhance our understanding of this complex issue by comparing the chronological evolution of these projects to identify key triggering factors and assess their impact on rural-urban linkages.

Funding

This work was a part of the author's PhD work supported by China Scholarship Council [grant numbers 201908310135] (2019–2022).

CRedit authorship contribution statement

Tianzhu Liu: Writing – review & editing, Writing – original draft, Visualization, Validation, Software, Methodology, Investigation, Funding acquisition, Formal analysis, Data curation, Conceptualization.

Declaration of competing interest

None.

Data availability

Accessible documents have been attached in the appendix; code is not suitable to be shared because certain interviewees required anonymous use; raw interview information is confidential.

Acknowledgements

I would like to thank to Romain Melot and Frédéric Wallet for their assistance in the data collection preparation and the early draft of this paper. I would like to thank to my interviewees for all the precious information they provided. I am deeply thankful for the time and effort invested by the two reviewers and the editor in reviewing and shaping this manuscript.

Appendix A. Supplementary data

Supplementary data to this article can be found online at <https://doi.org/10.1016/j.jrurstud.2024.103302>.

References

- Allen, P., 2010. Realizing justice in local food systems. *Camb. J. Reg. Econ. Soc.* 3 (2), 295–308. <https://doi.org/10.1093/cjres/rsq015>.
- Allmendinger, P., Houghton, G., 2010. Spatial planning, devolution, and new planning spaces. *Environ. Plann. C Govern. Pol.* 28 (5), 803–818. <https://doi.org/10.1068/c09163>.

- Bassarab, K., Clark, J.K., Santo, R., Palmer, A., 2019. Finding our way to food democracy: lessons from us food policy council governance. *Polit. Govern.* 7 (4), 32–47. <https://doi.org/10.17645/pag.v7i4.2092>.
- Béné, C., 2020. Resilience of local food systems and links to food security – a review of some important concepts in the context of COVID-19 and other shocks. *Food Secur.* 12 (4), 805–822. <https://doi.org/10.1007/s12571-020-01076-1>.
- Blay-Palmer, A., 2009. The Canadian pioneer: the genesis of urban food policy in Toronto. *Int. Plann. Stud.* 14 (4), 401–416. <https://doi.org/10.1080/13563471003642837>.
- Bognon, S., 2015. Nourrir Paris: Trajectoire de l'approvisionnement alimentaire de la métropole capitale, de la fin de l'Ancien Régime à nos jours. *Géocarrefour* 90 (90/2), 163–171. <https://doi.org/10.4000/geocarrefour.9776>.
- Brogden, M.J., Greenberg, J.B., 2003. The fight for the west: a political ecology of land use conflicts in Arizona. *Hum. Organ.* 62 (3), 289–298 (JSTOR).
- Campbell, M.C., 2004. Building a common table: the role for planning in community food systems. *J. Plann. Educ. Res.* 23 (4), 341–355. <https://doi.org/10.1177/0739456X04264916>.
- Candel, J.J.L., 2020. What's on the menu? A global assessment of MUFPP signatory cities' food strategies. *Agroecology and Sustainable Food Systems* 44 (7), 919–946. <https://doi.org/10.1080/21683565.2019.1648357>.
- Chiffolleau, Y., Darrot, C., Maréchal, G., Bodiguel, L., Akermann, G., Berger, B., Lallemand, F., Anne-Cécile, B., Egal, F., Guennoc, D., 2020. Manger au temps du coronavirus. Enquête sur les systèmes alimentaires. Apogée Edition. <https://hal.archives-ouvertes.fr/hal-03099263>.
- Communauté de communes Granville Terre & Mer, 2022. *Projet Alimentaire Territorial de Granville Terre et Mer*. https://www.granville-terre-mer.fr/fileadmin/user_upload/07_Economie-Numerique/Projet_Alimentaire_Territorial/148x210_LivretPAT_WEB.pdf.
- Cretella, A., 2019. Alternative food and the urban institutional agenda: challenges and insights from Pisa. *J. Rural Stud.* 69, 117–129. <https://doi.org/10.1016/j.jrurstud.2019.04.005>.
- Dansero, E., Pettenati, G., 2018. Reterritorialization, proximity, and urban food planning: research perspectives on AFNs. In: Corsi, A., Barbera, F., Dansero, E., Peano, C. (Eds.), *Alternative Food Networks*. Springer International Publishing, pp. 273–301. https://doi.org/10.1007/978-3-319-90409-2_14.
- Daviron, B., Perrin, C., Soulard, C.-T., 2017. Histoire des politiques alimentaires urbaines en Europe, de la ville antique à la ville industrielle. In: *Construire des politiques alimentaires urbaines. Concepts et démarches*, first ed. (Éditions Quae).
- Dehaene, M., Tornaghi, C., 2021. Conclusions. In: Tornaghi, C., Dehaene, M. (Eds.), *Resourcing an Agroecological Urbanism*, first ed. Routledge, pp. 221–229. <https://doi.org/10.4324/9780429433566-12>.
- Deh-Tor, C.M., 2021. Food as an urban question, and the foundations of a reproductive, agroecological urbanism. In: Tornaghi, C., Dehaene, M. (Eds.), *Resourcing an Agroecological Urbanism*, first ed. Routledge, pp. 12–33. <https://doi.org/10.4324/9780429433566-2>.
- Diehl, J.A., Sweeney, E., Wong, B., Sia, C.S., Yao, H., Prabhudesai, M., 2020. Feeding cities: Singapore's approach to land use planning for urban agriculture. *Global Food Secur.* 26 <https://doi.org/10.1016/j.gfs.2020.100377>.
- Doernberg, A., Horn, P., Zasada, I., Piore, A., 2019. Urban food policies in German city regions: an overview of key players and policy instruments. *Food Pol.* 89 <https://doi.org/10.1016/j.foodpol.2019.101782>.
- Enthoven, L., Van den Broeck, G., 2021. Local food systems: reviewing two decades of research. *Agric. Syst.* 193, 103226 <https://doi.org/10.1016/j.agry.2021.103226>.
- Ericksen, P.J., 2008. Conceptualizing food systems for global environmental change research. *Global Environ. Change* 18 (1), 234–245. <https://doi.org/10.1016/j.gloenvcha.2007.09.002>.
- Eriksen, S.N., 2013. Defining local food: constructing a new taxonomy – three domains of proximity. *Acta Agric. Scand. Sect. B Soil Plant Sci* 63 (Suppl. 1), 47–55. <https://doi.org/10.1080/09064710.2013.789123>.
- Feagan, R., 2007. The place of food: mapping out the 'local' in local food systems. *Prog. Hum. Geogr.* 31 (1), 23–42. <https://doi.org/10.1177/0309132507073527>.
- Filippini, R., Mazzocchi, C., Corsi, S., 2019. The contribution of Urban Food Policies toward food security in developing and developed countries: a network analysis approach. *Sustain. Cities Soc.* 47 <https://doi.org/10.1016/j.scs.2019.101506>.
- Ginelli, L., Candau, J., Girard, S., Houdart, M., Deldrève, V., Noûs, C., 2020. Écologisation des pratiques et territorialisation des activités: Une introduction. *Développement Durable Territ.* 11, n°1. <https://doi.org/10.4000/developpementdurable.17272>.
- Hebinck, A., Page, D., 2017. Processes of participation in the development of urban food strategies: a comparative assessment of Exeter and Eindhoven. *Sustainability* 9 (6). <https://doi.org/10.3390/su9060931>.
- Hinrichs, C.C., 2003. The practice and politics of food system localization. *J. Rural Stud.* 19 (1), 33–45. [https://doi.org/10.1016/S0743-0167\(02\)00040-2](https://doi.org/10.1016/S0743-0167(02)00040-2).
- Horst, M., 2017. Food justice and municipal government in the USA. *Plann. Theor. Pract.* 18 (1), 51–70. <https://doi.org/10.1080/14649357.2016.1270351>.
- Howlett, M., 2014. Policy design: what, who, how, and why?. In: *L'instrumentation et ses effets*. Presses de Sciences Po, p. 37.
- Hurley, P.T., Ari, Y., 2018. Saying "No" to (the) Oxygen Capital? Amenity migration, counter-territorialization, and uneven rural landscape change in the Kaz Dağları (Ida Mountains) of western Turkey. *J. Rural Stud.* 62, 195–208. <https://doi.org/10.1016/j.jrurstud.2018.08.008>.
- Ilieva, R.T., 2017. Urban food systems strategies: a promising tool for implementing the SDGs in practice. *Sustainability* 9 (10). <https://doi.org/10.3390/su9101707>.
- Jablonski, B.B.R., Carolan, M., Hale, J., McFadden, D.T., Love, E., Christensen, L., Covey, T., Bellow, L., Cleary, R., David, O., Jablonski, K.E., Jones, A.S., Meiman, P., Quinn, J., Ryan, E.P., Schipanski, M., Summers, H., Uchanski, M., 2019. Connecting

- urban food plans to the countryside: leveraging Denver's Food Vision to explore meaningful rural-urban linkages. *Sustainability* 11 (7). <https://doi.org/10.3390/su11072022>.
- Lamine, C., Garçon, L., Brunori, G., 2019. Territorial agrifood systems: a Franco-Italian contribution to the debates over alternative food networks in rural areas. *J. Rural Stud.* 68, 159–170. <https://doi.org/10.1016/j.jrurstud.2018.11.007>.
- Lamine, C., Guennoc, D., Maréchal, G., 2023. Policy brief. Territorial food projects in France. <https://www6.inrae.fr/atter-rise/content/download/3654/35903/version/1/file/Policy-Brief-PAT-EN-v20230627.pdf>.
- Lascoumes, P., Le Gales, P., 2007. Introduction: understanding public policy through its Instruments? From the nature of instruments to the sociology of public policy instrumentation. *Governance* 20 (1), 1–21. <https://doi.org/10.1111/j.1468-0491.2007.00342.x>.
- Léger, F., Vollet, D., Urbano, G., 2006. Le Contrat Territorial d'Exploitation: La rencontre difficile d'un instrument à vocation territoriale et de la tradition sectorielle de la politique agricole française. *Rev. Int. Des. Sci. Adm.* 72 (3), 405–419. <https://doi.org/10.3917/risa.723.0405>.
- Liu, T., Korthals Altes, W.K., Melot, R., Wallet, F., 2024a. Reterritorialisation of agricultural activities in land-use and food planning: comparing The Netherlands and France. *Eur. Plann. Stud.* 32 (5), 952–972. <https://doi.org/10.1080/09654313.2023.2244567>.
- Liu, T., Korthals Altes, W.K., Wallet, F., Melot, R., 2024b. Recovery from the pandemic: planning the reterritorialisation of agricultural activities. In: Andres, L., Bryson, J.R., Aksel, E., Reardon, L. (Eds.), *Pandemic Recovery? Reframing and Rescaling Societal Challenges*. Edward Elgar Publishing Limited, pp. 186–197. <https://doi.org/10.4337/9781802201116.00023>.
- Lohest, F., Bauler, T., Sureau, S., Van Mol, J., Achten, W., 2020. Vers une complémentarité des alternatives alimentaires: Relocalisation des activités et écologisation des pratiques au sein de trois alternatives de distribution à Bruxelles. *Développement Durable Territ.* 11, n°1. <https://doi.org/10.4000/developpementdurable.17192>.
- Lucas, V., 2021. A "silent" agroecology: the significance of unrecognized sociotechnical changes made by French farmers. *Review of Agricultural, Food and Environmental Studies* 102 (1), 1–23. <https://doi.org/10.1007/s41130-021-00140-4>.
- Magoni, M., Colucci, A., 2017. Protection of peri-urban open spaces and food-system strategies. The case of parco delle risaie in milan. *Plann. Pract. Res.* 32 (1), 40–54. <https://doi.org/10.1080/02697459.2015.1028251>.
- Mansfield, B., Mendes, W., 2013. Municipal food strategies and integrated approaches to urban agriculture: exploring three cases from the global north. *Int. Plann. Stud.* 18 (1), 37–60. <https://doi.org/10.1080/13563475.2013.750942>.
- Mattioni, D., Milbourne, P., Sonnino, R., 2022. Destabilizing the food regime "from within": tools and strategies used by urban food policy actors. *Environ. Innov. Soc. Transit.* 44, 48–59. <https://doi.org/10.1016/j.eist.2022.05.007>.
- Métropole Rouen Normandie, 2019. Stratégie alimentaire pour une métropole en transition. <https://www.metropole-rouen-normandie.fr/sites/default/files/publicati on/2019/PAT.pdf>.
- Michel, L., Soulard, C.-T., 2019. Putting food on the regional policy agenda in montpellier, France. In: Brand, C., Bricas, N., Conaré, D., Daviron, B., Debru, J., Michel, L., Soulard, C.-T. (Eds.), *Designing Urban Food Policies*. Springer International Publishing, pp. 123–138. https://doi.org/10.1007/978-3-030-13958-2_6.
- Ministry of Agriculture, 2023. Près de 430 Projets Alimentaires Territoriaux (PAT) reconnus par le ministère au 1er avril 2023. <https://agriculture.gouv.fr/pres-de-430-projets-alimentaires-territoriaux-pat-reconnus-par-le-ministere-au-1er-avril-2023>.
- Moragues-Faus, A., 2017. Urban food policy alliances as paths to food sovereignty? Insights from sustainable food cities in the UK. In: *Public Policies for Food Sovereignty: Soc. Movements and the State*. Taylor and Francis, pp. 147–163. <https://doi.org/10.4324/9781315281797>. Scopus.
- Morgan, K., Sonnino, R., 2010. The urban foodscape: world cities and the new food equation. *Camb. J. Reg. Econ. Soc.* 3 (2), 209–224. <https://doi.org/10.1093/cjres/rsq007>.
- Morley, A., Morgan, K., 2021. Municipal foodscapes: urban food policy and the new municipalism. *Food Pol.* <https://doi.org/10.1016/j.foodpol.2021.102069>.
- Moschitz, H., 2018. Where is urban food policy in Switzerland? A frame analysis. *Int. Plann. Stud.* 23 (2), 180–194. <https://doi.org/10.1080/13563475.2017.1389644>.
- Perrin, C., Baysse-Lainé, A., 2020. Governing the coexistence of agricultural models: French cities allocating farmlands to support agroecology and short food chains on urban fringes. *Review of Agricultural, Food and Environmental Studies* 101 (2–3), 261–286. <https://doi.org/10.1007/s41130-020-00105-z>.
- PNR du Perche, 2021. Plan action PAT Perche 2021_05_18. <https://fr.calameo.com/read/0024904743041b89ab7b2?page=1>.
- PNRHL, 2021. Le projet alimentaire territorial (PAT) 2021-2026. <https://www.parc-haut-languedoc.fr/plan-alimentaire-territorial/?ActionsPAT>.
- Pothukuchi, K., 2009. Community and regional food planning: building institutional support in the United States. *Int. Plann. Stud.* 14 (4), 349–367. <https://doi.org/10.1080/13563471003642902>.
- Pothukuchi, K., Kaufman, J., 1999. *Placing the Food System on the Urban Agenda: the Role of Municipal Institutions in Food Systems Planning*, vol. 12.
- Pothukuchi, K., Kaufman, J., 2000. The food system: a stranger to the planning field. *J. Am. Plann. Assoc.* 66 (2), 113–124. <https://doi.org/10.1080/01944360008976093>.
- Prové, C., de Krom, M.P.M.M., Dessein, J., 2019. Politics of scale in urban agriculture governance: a transatlantic comparison of food policy councils. *J. Rural Stud.* 68, 171–181. <https://doi.org/10.1016/j.jrurstud.2019.01.018>.
- Renting, H., Marsden, T.K., Banks, J., 2003. Understanding alternative food networks: exploring the role of short food supply chains in rural development. *Environ. Plann.: Econ. Space* 35 (3), 393–411. <https://doi.org/10.1068/a3510>.
- Sanz Cañada, J., Muchnik, J., 2011. Introduction: Ancrage et identité territoriale des systèmes agroalimentaires localisés. *Écon. Rurale* 322, 4–10. <https://doi.org/10.4000/economierurale.2962>.
- Sibbing, L.V., Candel, J., Termeer, K., 2019. A comparative assessment of local municipal food policy integration in The Netherlands. *Int. Plann. Stud.* <https://doi.org/10.1080/13563475.2019.1674642>.
- Sonnino, R., 2009. Feeding the city: towards a new research and planning agenda. *Int. Plann. Stud.* 14 (4), 425–435. <https://doi.org/10.1080/13563471003642795>.
- Sonnino, R., 2016. The new geography of food security: exploring the potential of urban food strategies. *Geogr. J.* 182 (2), 190–200. <https://doi.org/10.1111/geoj.12129>.
- Sonnino, R., Spayde, J.J., 2014. The 'new frontier'? Urban strategies for food security and sustainability. In: *Sustainable Food Systems: Building a New Paradigm*. Routledge, pp. 186–205.
- Sonnino, R., Tegoni, C.L.S., De Cunto, A., 2019. The challenge of systemic food change: insights from cities. *Cities* 85, 110–116. <https://doi.org/10.1016/j.cities.2018.08.008>.
- Toulouse, Métropole, 2019. *Projet Agricole et Alimentaire Métropolitain: Adoption de la première feuille de route*. https://deliberations.toulouse.fr/data/archive/20191018_DELIBERATION_DEL-19-0788.pdf.
- Vedung, E., 1998. Policy instruments: typologies and theories. In: Bemelmans-Videc, M.-L., Rist, R.C., Vedung, E. (Eds.), *Carrots, Sticks & Sermons*, first ed. Transaction Publishers, pp. 21–58. <https://doi.org/10.4324/9781315081748-2>.
- Woods, M., 2015. *Territorialisation and the Assemblage of Rural Place: Examples from Canada and New Zealand*.