



Unveiling farmers' perspectives on urban food policies: The case of farmers' markets in Bologna (Italy)

Francesca Monticone^{*}, Antonella Samoggia

University of Bologna, Department of Agricultural and Food Sciences, Bologna, Italy

ARTICLE INFO

Keywords:

Farmers' market
Alternative food network
Urban food policy
Multi-level governance (MLG)
Exploratory factor analysis (EFA)
Multinomial logistic regression (MNL)

ABSTRACT

Farmers' Markets (FMs) are increasingly recognised for their transformative potential in the food system, as they represent a viable alternative to large-scale food distribution in urban areas. Given their increasing importance at city level, ad hoc urban food policies to regulate FMs have been implemented by several Italian municipalities. However, both policymakers and academia tend to focus on consumers' opinions and needs, while farmers' perspectives on urban food policies regulating FMs have been overlooked, as well as the relationship between various levels of governance involved in FMs. The present research aims to fill this gap by delving into farmers' drivers for selling at FMs, as well as their perceptions on FMs Regulation in Bologna (Italy). The research adopts a Multi-Level Governance (MLG) theoretical approach to show the relationships between the three levels of governance involved in FMs (macro, *meso*, micro) and provide recommendations on how the governance dynamics can be improved. The study adopts a mixed-methods approach, analysing questionnaire answers with a combination of quantitative and qualitative methods to gather comprehensive insights from FMs farmers. In terms of quantitative methods, the answers of 140 FMs participants are analysed through an Exploratory Factor Analysis (EFA) and a Multinomial Logistic regression model (MNL).

Key findings maintain that farmers' drivers for selling at FMs in Bologna are aligned with the value proposition of Bologna FMs Regulation. Thus, the relationship with consumers, which allows for direct exchange and increased consumers awareness, is the main driver. However, farmers believe the Municipality (the macro level) could further address FMs farmers' needs and drivers (the micro level). The *meso* level of governance, namely FMs organising associations, should be an intermediary between the macro and the micro levels, that better informs and processes the flow of information and decisions between the two. By analysing farmers' perspectives, this study offers significant insights into the dynamics of local food systems and the role of urban policies in shaping these systems. It highlights the need for harmonising regulatory frameworks with the needs of FMs farmers to improve urban food policies. The findings from Bologna can be helpful for other cities facing similar challenges in urban food system governance.

1. Introduction

Farmers' markets (FMs), as well as other types of Alternative Food Networks (AFNs), are increasingly finding recognition for their transformative potential in the current food systems, especially at urban level (Sonnino, 2023; Sonnino, Tegoni, & De Cunto, 2019). The Milan Urban Food Policy Pact, for example, clearly states the need for policy support towards public food markets in cities. Thus, FMs represent one of the key implementations of urban food policies.

Before the urban level, FMs are regulated at Italian national level through the Ministerial Decree (MD) 20 November 2007, which

established FMs organisational requirements and standards (ISMEA, 2011; Marino & Cicatiello, 2012). Such MD defined FMs as markets reserved to direct sale, in order to “meet the needs of consumers regarding the purchase of agricultural products that have a direct link with the production territory”, placing the focus on consumers. The MD 20 November 2007 left autonomy to the municipalities on FMs authorisation, supervision and promotion, therefore several cities have implemented the MD through municipal regulations (Fattibene, Maz-zocchi, Antonelli, Marino, & Romagnoli, 2023). In the present study, the City of Bologna was adopted as a case study, as in November 2022 a new Regulation on FMs (DC/PRO/2022/76) was approved. Such Regulation

^{*} Corresponding author.

E-mail address: francesca.monticone2@unibo.it (F. Monticone).

is considered a good example of participative policy design, as it was developed following a consultation process between the Municipality and most of the stakeholders involved in FMs. However, it remains unclear whether its value proposition reflects farmers' drivers to participate in FMs or not.

In fact, the Regulation's value proposition, as its national counterpart, focuses on consumers' benefits rather than producers'. As the Ministerial Decree focuses on the needs for consumer to buy agricultural produce directly from producers, the Bologna regulation frames FMs as fostering local development by strengthening the relationship of trust between citizens and farmers as well as enhancing social cohesion, nutrition education and consumer awareness of the cultural value of food. According to the regulation, FMs benefits are mainly of social and environmental nature. The explicit economic benefit recognised to FMs in the Regulation is guaranteeing farmers the payment of a fair price and an alternative distribution channel for their products, while at the same time providing consumers the right quality-price ratio. In the Regulation, FMs are described as guaranteeing consumers, through direct contact with farmers, about the agricultural products quality, with regard to information (origin and price), safety and aspects related to food sovereignty, also recognising the seasonality of local products the value of healthiness of the food (food nutrition). The Regulation also states that buying at the FMs increases consumers' awareness towards the problems of farmers and the rural world. The Regulation highlights the positive impacts of FMs on the environment, mainly in terms of shortening the food supply chain as well as reducing waste resulting from packaging.

Overall, such formulation leans towards beneficial aspects for citizens rather than farmers, in line with the national regulation. Despite farmers being equally important in FMs, their perceptions are understudied: both policymakers and academia, as analysed in the following section, tend to focus on consumers' opinions and needs, while farmers' perspectives on urban food policies have often been overlooked. In the case of Bologna, it remains unclear whether the Regulation's value proposition reflects farmers' drivers to participate in FMs and whether it is in line with farmers' priorities. To do this, it is necessary to first analyse farmers' drivers in FMs participation.

The present research aims to fill this gap by asking farmers their drivers for selling at FMs, as well as their perceptions on FMs Regulation in Bologna (Italy), currently a key implementation of urban food policy in the city. The study will be guided by two research questions:

RQ1: Which drivers influence farmers' participation in Bologna FMs?

RQ2: To what extent farmers' drivers for participating in Bologna FMs are aligned with the value proposition of Bologna FMs Regulation?

1.1. Theoretical framework

The Multi-Level Governance (MLG) theory provides a comprehensive theoretical framework to analyse FMs, their stakeholders and the policy process that led to the approval of the Regulation on FMs (DC/PRO/2022/76). MLG theory was developed in the early 1990s by the political scientist Gary Marks (Bache & Flinders, 2015; Marks, 1993). Stemming from the idea of making various levels of government cooperate, the MLG theory has later shifted its focus beyond public authorities by bringing the focus to a diverse range of actors, both private and public, operating across various levels of territorial organisations (Committee of the regions, 2009). Thus, MLG theory considers the roles of government institutions as well as non-governmental organisations, emphasising the collaborative and sometimes competing dynamics that shape policy outcomes. An interesting body of literature in the urban studies sector adopt MLG theory to analyse policy processes in the environmental sustainability and climate change governance (Sandström & Elander, 2021; Westman, Castán Broto, & Huang, 2019). Through the MLG theory, they examine the interactions and shared responsibilities across various levels of authority.

In this study, we focussed on three levels of governance – macro,

meso, micro –, each one corresponding to one stakeholder involved in FMs in Bologna. At the macro level, we identified the municipal authority of the city of Bologna as the entity responsible for approving the Regulation on FMs (DC/PRO/2022/76). As stakeholders at the meso level, we considered the associations organising FMs, while farmers participating in FMs were the micro level. By incorporating multiple perspectives, the MLG theory highlights how diverse actors coordinate or conflict, revealing the complexity and adaptability required to manage FMs in diverse sociopolitical and economic contexts. Fig. 1 summarises the adopted theoretical framework.

1.2. State of the art

FMs studies typically fall into the academic literature that focuses on criticising modern food systems, while presenting FMs as valid expression of local food systems and/or alternative food networks (Brunori et al., 2016; Feenstra, 2002). Such academic literature typically addresses the benefits of FMs, often focussing on the point of view of consumers and less frequently on farmers' selling at FMs.

FMs represent a viable alternative to large-scale food distribution, providing a variety of health, social, environmental, and economic benefits. Social and environmental stances are often portrayed as the stronger ones, to the detriment of the economic benefits (Leiper & Clarke-Sather, 2017). First, FMs provide access to fresh and nutritious food, as well as higher fruits and vegetables consumption (Hu, Clarke, & Zendejdel, 2021; Jilcott Pitts, Wu, Gray, & Lonnais, 2020). Second, FMs support community engagement and social cohesion, and create a relationship of trust between consumer and farmer that expands consumers awareness on the challenges of the current food systems. Third, the environment benefits from FMs as they tend to promote sustainable

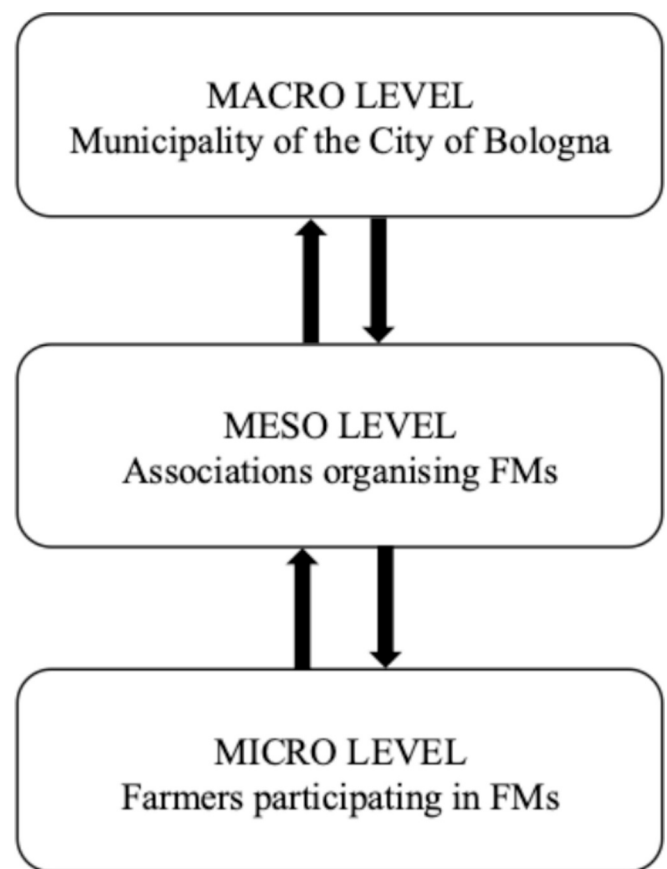


Fig. 1. Multi-Level Governance theory representation adapted to the Bologna's case study. Source: authors elaboration adapted from Fairbrass and Jordan (2001).

agricultural practices, the spread of organic farming and an increased biodiversity due to a wider variety of products farmed (Marino & Cicatiello, 2012). Specifically, farmers selling at FMs in Bologna also apply a more effective and sustainable use of land than those selling to conventional food outlets (Mazzocchi & Marino, 2018). Last, FMs are boosting local economic growth by eliminating intermediaries, as well as enhancing market access for small-scale farmers (Verano, Figueiredo, & Medina, 2021). In turn, FMs benefit from coordination and cooperation among stakeholders, enabling the pooling of resources and expertise, which is essential for the long-term success of FMs (Belletti, Torres Salcido, Scarpellini, Mengoni, & Marescotti, 2024; Brunori, Rossi, Ceruti, & Guidi, 2010).

Similarly to the FMs Regulation described above, academic literature on FMs predominantly focuses on consumers' point of view rather than producers' (Neumann & Mehlkop, 2023; Török, Kovács, Maró, & Maró, 2024). Most researches explore consumer behaviour, preferences, and motivations, such as the desire for fresh, local produce and the social experience of shopping at FMs. In a recent systematic review of consumers shopping at FMs, Maró et al. (2023) observed a steady increase of articles on the topic in the last two decades, particularly the last 10 years. Such body of literature analysed both consumers' barriers and drivers for purchasing at FMs, as well as their socio-demographic characteristics. The main barriers identified are mainly convenience-related barriers such as opening hours, location, and supply variety and availability, as well as higher prices (Chen, Yu, & Fu, 2021; Dobbelstein, Corbishley, & Mason, 2021). Other than barriers, additional aspects such as frequency of visiting and shopping at FMs and the amount of money spent were also extensively analysed (Elepu & Mazzocco, 2010; Ma & Chang, 2022).

This consumer-centred approach leaves gaps in understanding the challenges and opportunities faced by farmers. Sporadic research focussed on their point of view to identify barriers and drivers for their participation in FMs. A few drivers were found by previous literature. The ability to share the value and qualities of local production through a direct relationship with consumers is the most important motivation for farmers (Azima & Mundler, 2022; Benedek, Fertó, & Molnár, 2018; Demartini, Gaviglio, & Pirani, 2017). FMs also represent a good economic opportunity for farmers allowing them to regain market power by getting a fair price for their produce (Warsaw, Wentworth, Lewis, Isaacs, & Traore, 2022). However, social motivations such as community building are also crucial (Mazzocchi & Marino, 2018) and ranked higher than economic ones (Griffin & Frongillo, 2003). Moreover, farmers joining FMs for social reasons are the ones with the higher FMs' retention rate (Montri, Chung, & Behe, 2021). Beside drivers, some barriers were also identified, such as logistics and management costs and the difficulty in achieving a real premium price (Hardesty & Leff, 2010; Uematsu & Mishra, 2011).

Last, a few authors interviewed or surveyed both consumers and producers in order to provide an overview of both sides (Marino, Mastronardi, Franco, De Gregorio, & Cicatiello, 2013; Mengoni, Marescotti, & Belletti, 2024; Schmutz, Kneafsey, Kay, Doernberg, & Zasada, 2018).

Albeit several studies exist on farmers' drivers, none of them does the additional step of linking them to active policies or regulations. None of past studies interpret farmers' drivers to assess their alignment with urban food policies, and how these match the reasons of their participation in FMs. As a result, there is a need for more research that addresses the perspectives of farmers and links them with urban food policies. The present research aims to fill this gap by assessing whether farmers' drivers for selling at FMs in Bologna are aligned with the value proposition of Bologna FMs Regulation, one of the key implementations of urban food policies.

2. Methods

2.1. Data collection

Data were collected through a questionnaire filled by farmers selling at FMs, administered by researchers between July and October 2023 both in person and on the phone. A total of 140 answers were collected, which represent 82 % of the total number of farmers selling at FMs in Bologna (170). Some farmers are present in more than one market areas. The 30 missing farmers either could not be reached by the researchers, or they were seasonal farmers whose experience of the market is limited – therefore not adequately informed, thus excluded from the research. Using the RAOSOF sampling technique, the sample was obtained with a confidence interval of 95 %, an error margin of 4 %, and response interval confidence of 50 %. Before distributing the questionnaires, the researchers contacted FMs managers to communicate their research objectives and survey process, as questionnaires were administered during market opening hours. Since some of the FMs managers were farmers, they were also included as part of the sample, but overall the contact with FMs manager was crucial as it allowed for the creation of a relationship of trust between the research team and the interviewees.

The use of a questionnaire provided a combination of quantitative and qualitative data that allowed to gather comprehensive insights from FMs farmers. The questionnaires included three main sections. The first section consisted of items assessing farmers' drivers to participate in FMs. The survey focused on four topics: economic, social, consumer and environmental items. Additional items were used as a proxy for overall farmers' satisfaction. This first section addressed both RQ1 and RQ2, as it consisted of items drawn from both the Bologna's FMs Regulation and previous literature on farmers' drivers to join FMs. Using both sources was important to assess the alignment of farmers' drivers for selling at FMs in Bologna with the value proposition of Bologna FMs Regulation. Table A in the Annexes shows the sources of questionnaire items. To further delve into RQ2, the second section of the questionnaire included six items regarding farmers' opinions on the Bologna's FMs Regulation. The final section covered the descriptive characteristics of farmers' participating in FMs, focusing on their economic profile. After testing the questionnaire with 5 farmers, the researchers discussed the adequacy of the items and merged some of them as they were found redundant.

The questionnaire included both open-ended and close-ended questions, where farmers' level of agreement was elicited through a seven-point Likert scale (ranging from 1 “Strongly disagree” to 7 “Strongly agree”). Close-ended questions stimulate the answer and provide quantitative data, while open-ended ones generate a discussion with the interviewer on the issues raised during the face-to face survey administration, thus providing qualitative data. Such mixed-methods approach, that adopts both qualitative and quantitative methodologies, allows for a complete and nuanced analysis that takes into account not only the numerical assessment of certain items, but it also provides a comprehensive perspective behind such figures.

2.2. Data analysis

Data elaboration consisted of two consecutive steps, both carried out using SPSS version 14.0.

First, to assess the dimensionality of the constructs on farmers' drivers and identify latent factors, an Exploratory Factor Analysis (EFA) was conducted on the 31 items of the first part of the questionnaire on farmers satisfaction. 16 items with cross-loadings smaller than 0.4 were dropped. The EFA (principal component with Varimax rotation) was performed on the remaining 15 items. Data reliability was tested through the Cronbach's alpha value. If alpha >0.90, the reliability is perfect (Cortina, 1993). If alpha is between 0.70 and 0.90, the reliability is high. If alpha is between 0.50 and 0.70, the reliability is considered moderate. If alpha <0.50, then the reliability is considered low.

Cronbach alpha values confirm the factors' reliability.

Chi-square tests were then adopted to scope the association between farmers socio-demographic and management characteristics and their main drivers to sell at FMs, as well as their opinions on municipal food policies.

Second, data elaboration applied a Multinomial Logistic regression (MNL) to assess the likelihood of a farmer to belong to one FMs organisations or the others based on their drivers to participate in FMs. The multinomial logit regression model is a generalisation binary logit regression in which the dependent variable has taken more than two options with no specific order between choice options. Multinomial regression is used when the outcome variable being predicted is nominal and has more than two categories that do not have a given rank or order. One value is designated as the reference category. The probability of belonging to other categories is compared to the probability of belonging to the reference category. Goodness-of-fit statistics and Nagelkerke's R2 index were calculated.

3. Results

3.1. Farmers and FMs characteristics

On a weekly basis, the city of Bologna has 21 FMs in 20 different market areas. The market areas have between 10 and 20 stalls.

FMs in Bologna are organised by six food-related associations, each overseeing one or more market areas (Table 1). Each organisation has a different set of values – namely approaches to farming and visions of agricultural values –, as well as various social and political backgrounds. This diversifies the FMs organisation and their management. In particular, one of the markets stands out for the number of activities, such as kids' games, workshops, live music and street food. This FM promotes touristic activities, and it is the only one located in an area managed by a public-private partnership. The other FMs occupy public areas and carry out various activities and services beyond food selling, but their focus remains the exchange between farmers and citizens.

As showed in the map (Fig. 2), the 20 market areas are well spread across the Metropolitan City of Bologna, with a notable concentration in the city centre and the nearby peripheral zones. The Southern periphery of the city is characterised by hills and a lower population density, therefore lacking FMs presence.

Table 2 shows the demographic characteristics of the participants. The demographics in the study sample were similar to both the national and the regional agricultural census: likely to be men, with a lower level of education, and aged 51–60. However, the study sample data were also slightly different, as the number of farms with a young manager were double the national average (4 and 2 %, respectively) and the percentage of graduated farmers was 5 times the national and regional average

Table 1

Summary of farmers participating to the survey for each FMs association. Source: authors.

Associations organising FMs	N° of farmers active in the FMs	% of farmers interviewed	Market areas	Markets
Campi Aperti (CA)	73	82 %	6	6
Mercato Ritrovato (MR)	48	88 %	1	2
Produttori di Borgo Panigale (PBP)	23	78 %	2	2
Slow Food / Eta Beta (SF)	22	87 %	2	2
Produttori Agricoli Emiliani (PAE)	20	85 %	5	5
Coldiretti (C)	15	87 %	4	4
Total	201*	/	20	21

* Note: the total is above 170 because some farmers sell in more than one market area.

(55 and 10 %, respectively) (Emilia-Romagna, 2020; ISTAT, 2021). The average farm size (in terms of Utilised Agricultural Land) of the sample (22 ha) was double the national average (11 ha) (ISTAT, 2021), but in line with the regional one (19 ha) (Emilia-Romagna, 2020). The median value (10 ha), however, was in line with the national average.

The number of organic farms was of course much higher than the national average (72 and 6 %, respectively) (SINAB, 2020), as the presence of organic products improves the chances to win the bid for market areas.

Most farms were located in the region Emilia-Romagna, while only 4 % were outside the regional borders, as they provide products growing only in warmer climates (i.e. oranges and oil). For this reason, the median value is quite different from the mean value: 40 and 73 km of distance from the FMs, respectively. When considering only the subset of respondents from inside the Metropolitan City of Bologna, the average farm distance from FMs is 25 km, confirming the FMs connotation as a Short Food Supply Chain. For 14 % of farmers, FMs are the main or sole produce sales outlet, as they sell from 91 to 100 % of their produce at the FMs. Other than that, on-farm direct sales, local grocery stores and restaurants are the second sales outlets in parallel to FMs. The combination of these selling channels is quite common, as 19 % of farmers sell both on-farm and to local grocery stores, while 22 % sell both on-farm and to restaurants (Table B in the Annexes). Farmers stated to prefer these three options as they are more similar to FMs, such as being local and allowing direct contact with consumers.

3.2. Farmers' drivers to participate in FMs (RQ1)

Satisfaction with selling at FMs is very high for all respondents (mean = 6.5/7), and direct contact with consumers is the main farmers' driver to sell FMs (Table 3). The relationship with consumers, namely creating a relationship of trust and communicating the quality and value of local food production (6.81 and 6.72, respectively), allows for a direct exchange which increases the connection between rural and urban worlds (5.91). Such connection, however, does not necessarily result in innovations in the produce value proposition, as capturing new consumers trends is not a priority for farmers (4.48). While these items can be interpreted with a social lens, the economic nature of such relationships must not be overlooked. Consumer loyalty increases when a personal relationship is built and a certain level of trust is reached, therefore increasing sales. However, farmers highlighted how satisfactory earnings are not necessarily reached (5.74), but selling at the FMs is still convenient as it allows them to increase their consumer base. Another economic advantage is the possibility of controlling the price for their produce (5.34), which allows them to get a fair price compared to other sales outlets (6.13). Costs are not lower than in other outlets (3.99), as well as stress levels (4.06). Environmental drivers are also of great importance, both in terms of shortening the supply chain (6.43) and of increasing biodiversity (6.01).

Overall, a good level of alignment between farmers' drivers for selling at FMs in Bologna and the value proposition of Bologna FMs Regulation emerges.

3.3. Key drivers to participate in FMs – Exploratory factor analysis

Table 4 presents the results of the EFA conducted on the 15 items of Table 3 with cross-loadings higher than 0.4. The results support a three-factor model, explaining 59 % of the total variance.

The “Consumer driver” factor has the highest mean (6.72) – calculated as the average of the items merged into the factor –, which confirms its higher relevance for farmers. It encompassed the exchange happening at the point of sale, from communication of the quality and value of local and seasonal food to the social acknowledgment of farmers' work. During the face-to face survey administration, it emerged that farmers feel their presence at the FMs helps increasing consumers' awareness on local food production, and it is one of the main drivers to

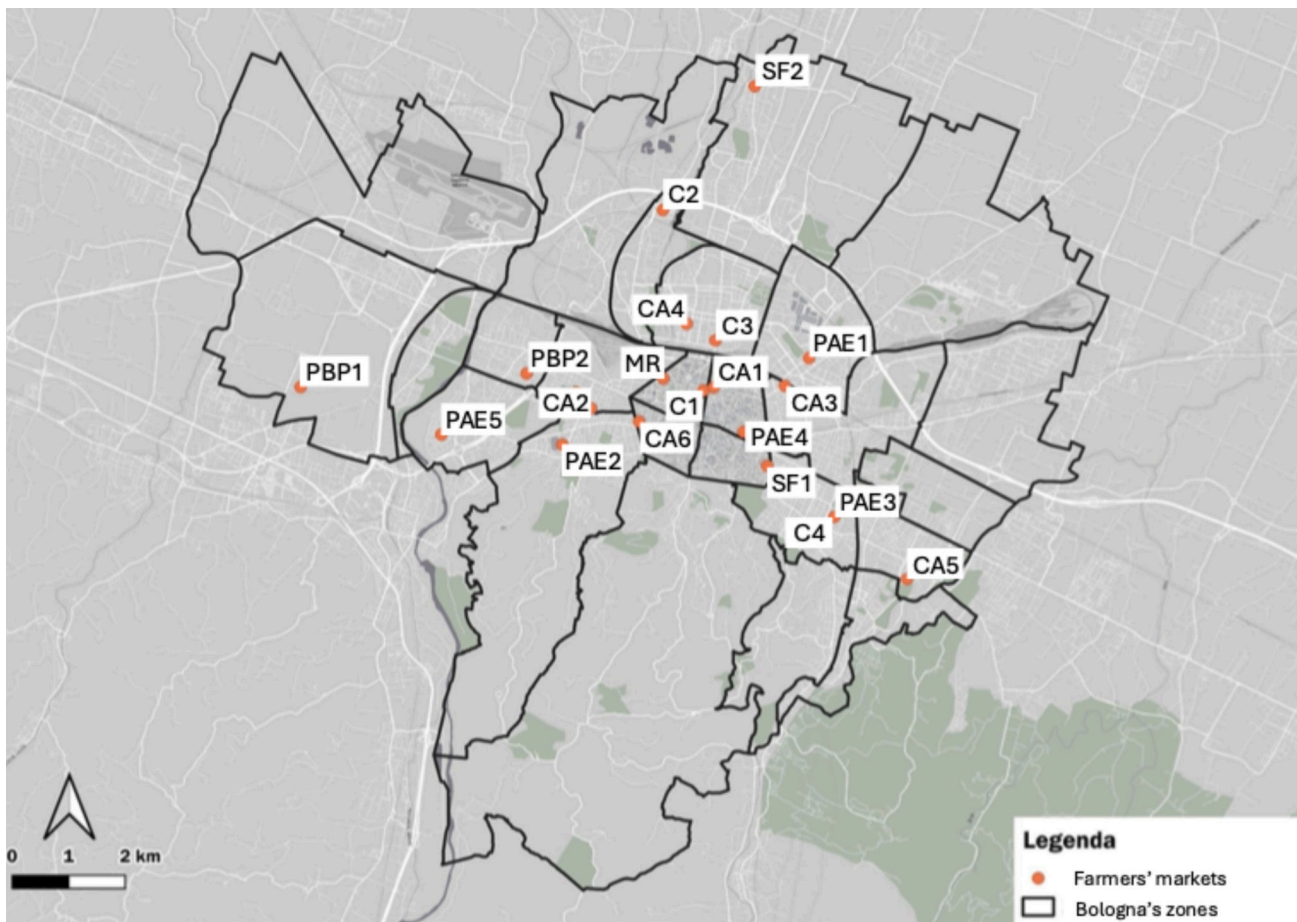


Fig. 2. Map of Bologna's FMs. Source: authors' elaboration on Comune di Bologna Open Data. Legenda: CA1, CA2, CA3, CA4, CA5, CA6 = markets organised by the association Campi Aperti; MR = market organised by the association Mercato Ritrovato; PBP1, PBP2 = markets organised by the association Produttori di Borgo Panigale; SF1, SF2 = markets organised by the association Slow Food/Eta Beta; PAE1, PAE2, PAE3, PAE4, PAE5 = markets organised by the association Produttori Agricoli Emiliani; C1, C2, C3, C4 = markets organised by the association Coldiretti.

sell at FMs. At the same time, most of them are disillusioned about the change that they can make, and they commented that consumers who buy at FMs are already conscious about local and fair food. The FMs selling dynamic is also deemed too fast to educate buyers, and farmers believe it is FMs organisers who should take the lead on educational activities. Farmers feel more effective in educating their consumers with direct sales at the farm.

As for the “Environmental driver” factor (mean = 5.66), the more consumer-friendly sustainability aspects (i.e. plastic-free packaging) are strong drivers for farmers, as deemed more feasible. Environmental practices on the production side, such as providing environmental services and diversifying farming methods, are slightly less important for respondents. During the face-to face survey administration, it emerged that green agricultural practices, such as diversification of farming methods for increasing biodiversity, are implemented by farmers anyways, regardless of their presence at the FMs.

The “Social driver” (mean = 5.52) included the civil and community aspects, such as cooperation among farmers (both economic and personal) as well as the relationships that are activated with other parts of society during market hours and beyond. Fostering opportunities for socialisation for the local community by creating a local gathering point is also a crucial driver for farmers, and it also allows them to be acknowledged by the local community. During the face-to face survey administration, it emerged that the Municipality or the neighbourhood councils often ask FMs organisers to set up markets in areas where inclusive activities are needed to strengthen the social structure. This becomes problematic when farmers feel they are called to solve a

societal matter without being in turn supported by the local authorities, as emerged during the survey administration.

3.4. FMs organisations drivers to participate in FMs

Significant differences emerged among the drivers for farmers belonging to different FMs organisations. As shown in Table 1, six FMs organisations operate in the city of Bologna. This part of the analysis merges them in the following three groups: “Value-oriented”, “Market-oriented” and “Intermediate” (Fig. 3). The grouping was based on the associations' statutes, history and values.

First, the organisation Campi Aperti (“Value-oriented”) stood on its own, as its statute declares that they aim to develop policy actions towards food sovereignty (Alberio & Moralli, 2021). Campi Aperti makes up 45 % of the sample, and they distinguish themselves for a horizontal type of governance. The opposite group (“Market-oriented”) is composed by Coldiretti, Produttori Agricoli Emiliani and Produttori di Borgo Panigale. They were labelled as “Market-oriented” as the latter two were associations created solely to give farmers a sales outlet, and the former by statute aims to “support the interests of the categories represented [ed. farmers] in the context of economic policies that enhance the resources of agriculture”. All three FM organisers are characterised by a vertical type of governance where one or two representatives oversee the relationships with the Municipality. The Slow Food Earth market and Mercato Ritrovato were grouped together (“Intermediate”), as the latter was a Slow Food Earth market before acquiring its own status. They are both influenced by the Slow Food

Table 2

Demographic characteristics of the study sample. Source: authors.

Item	N° of observations	Percentage	Mean	Median	St dev
Age	139		50.06	50.00	13.52
21–30		4			
31–40		22			
41–50		25			
51–60		28			
61–70		17			
Above 70		4			
Education level	140		/	/	/
High school and below		61			
Post-high school		39			
Gender	139		/	/	/
Female		26			
Male		72			
Prefer not to say		1			
Years of experience in agriculture	139		24.76	20.00	15.79
Less than/equal to 25		62			
>25		38			
Years selling at the FM	135		9.33	9.00	6.09
Below/equal to 9		50			
Between 9 and 35		50			
Farm size (Ha)	128		22.64	10.00	31.60
Less than/equal to 5		27			
Between 5 and 20		38			
More than/equal to 20		35			
Percentage of own production sold at the FM	139		97.31	100.00	8.51
Percentage of processed produce sold at the FM	138		55.66	75.00	44.40
Percentage of sales happening at the FM	136		57.48	60.00	31.33
0–10		13			
11–20		7			
21–30		8			
31–40		6			
41–50		8			
51–60		9			
61–70		13			
71–80		11			
81–90		11			
91–100		14			
Sales outlets other than the FM	140				
Direct sales		58			
Restaurants		30			
Small local shops		27			
Other		21			
Bulk buying groups		20			
Wholesales markets		20			
E-commerce		18			
I sell everything at the market		9			
Supermarkets		7			
Canteen		0			
Farm location	140		/	/	/
In Bologna city area		8			
In the Metropolitan city area of Bologna		46			
In the region Emilia-Romagna		41			
In other Italian regions		4			

Table 2 (continued)

Item	N° of observations	Percentage	Mean	Median	St dev
Distance between the farm and the FM (km)	139		73.02	40.00	169.80
Types of products sold	140		/	/	/
Fresh (fruits and vegetables)		40			
Processed food		46			
Other		14			
Organic certification	140		/	/	/
Yes		72			
No		28			

Note: missing values in the number of observations were information the participant could not remember or because the respondent was an employee of the farm manager (while data refer to the farm manager).

Table 3

Farmers' drivers to participate in FMs (number of observations = 140). Source: authors.

Drivers <i>I participate in FMs to...</i>	Mean	St dev
Create a direct relationship of trust with consumers	6.81	0.47
Communicate to consumers about the quality and value of local food productions	6.72	0.52
Increase consumers awareness on food origin and seasonality	6.63	0.84
I am satisfied of selling at the FMs	6.58	0.68
I would recommend selling at the FMs	6.55	0.69
I would you like to still be at the FM in the next 3 years	6.51	0.85
Sell products that allow shortening the supply chain	6.43	1.01
Get a fair price	6.13	1.14
Sell products that reduce packaging	6.06	1.32
Have more opportunities for networking and create personal relationships with other farmers	6.04	1.33
Sell products that increase biodiversity by growing a good variety of plants	6.01	1.43
Activate social ties and collaboration between various parts of society (i.e. farmers, citizens, etc)	5.96	1.40
Increase the connection between rural and urban worlds	5.91	1.50
Have a secure and alternative distribution channel for the farm products	5.90	1.23
Foster opportunities for socialisation for the local community creating a local gathering point	5.86	1.56
Get satisfactory earnings	5.74	1.30
Increase the farm sales	5.64	1.53
Spread the culture of certified organic farming	5.63	1.84
Sell products that allow us to provide environmental services such as water management and soil health care	5.49	1.62
Minimise waste caused by unsold products	5.39	1.73
Diversify our farming methods (conversion to organic)	5.36	1.78
Control prices	5.34	1.68
Be acknowledged by the community	5.25	1.63
Have more opportunities for cooperation and economic exchanges with other farmers	5.24	1.79
Support urban redevelopment through the enhancement of peripheries	5.15	1.70
Have more opportunities for skills development	4.79	1.85
Better meet consumers' preferences and capture new trends	4.48	1.82
Provide job and volunteer opportunities	4.27	1.96
Be less stressed out compared to other sales outlets	4.06	1.91
Optimise logistics and management costs	3.99	1.75
Create positive spill over effects on adjacent businesses on market days	3.81	2.06

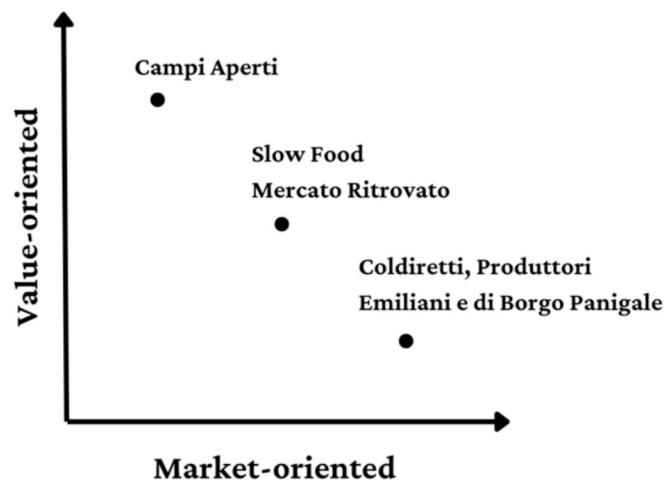
Note: level of agreement measured on a 1 to 7 Likert scale (1-“Strongly disagree”, 2-“Disagree”, 3-“Somewhat disagree”, 4-“Neutral”, 5-“Somewhat agree”, 6-“Agree”, 7-“Strongly agree”).

association values of “promoting the right to good, clean and fair food for all”, but Mercato Ritrovato by statute aims to “create a place for the presentation and sale of food products by producers”, therefore placing

Table 4

Results of the exploratory factor analysis. Source: authors.

Drivers <i>I participate in FMs to...</i>	Consumer driver	Environmental driver	Social driver
Have more opportunities for cooperation and economic exchanges with other farmers			0.731
Have more opportunities for skills development			0.732
Activate social ties between various parts of society			0.775
Foster opportunities for socialisation for the local community creating a local gathering point			0.665
Be acknowledged by the community			0.450
Have more opportunities for networking and create personal relationships with other farmers			0.731
Create a direct relationship of trust with consumers	0.782		
Communicate to consumers about the quality and value of local food productions	0.818		
Increase consumers awareness on food origin and seasonality	0.822		
Spread the culture of certified organic farming		0.514	
Sell products that allow us to provide environmental services such as water management and soil health care		0.726	
Diversify our farming methods		0.748	
Sell products that increase biodiversity by growing a good variety of plants		0.697	
Sell products that reduce packaging		0.752	
Minimise waste caused by unsold products		0.621	
Cronbach alpha	0.795	0.795	0.831

**Fig. 3.** FMs organisations grouping according to their social and political identity.

them in the middle between values-oriented and market-oriented.

As shown in Table 5, five of the farmers' drivers to participate in FMs are significant when related to FMs organisations. This means that there is a difference in the way such drivers are interpreted in the various FMs organisations, because of their different identities. In particular, the social and environmental drivers emerging from the EFA are of different importance for various organisations, as the "Market-oriented" may prioritise economic aspects compared to the "Value-oriented" one.

Table 5

Results of significant Chi-square tests of farmers' drivers versus FMs organisations. Source: authors.

Drivers <i>I participate in FMs to...</i>	FMs organisations Sig.
Provide social benefits to the community (SOCIAL DRIVER)	0.052**
Provide environmental benefits to the community (ENVIRONMENTAL DRIVER)	0.001***
Get satisfactory earnings	0.043**
Optimise logistics and management costs	0.016**
Support urban redevelopment through the enhancement of peripheries	0.021**

Note: ***, ** refer to statistical significance at the 1 %, 5 % levels, respectively (only significant items were reported). Items in capital letters are the EFA's factors.

Other commercial aspects such as getting satisfactory earnings and optimising logistics and management costs are also given different relevance in various FMs organisations, as they might be more of a concern for the "Market-oriented" ones.

The present research also tested the relationship between farmers' drivers and their socio-demographic and managerial characteristics through Chi square tests, but no significant results emerged. The sample can thus be considered homogeneous, as there are no significant differences in their drivers based neither on socio-demographic characteristics (e.g. age, gender, education level), nor on managerial aspects, such as dimension of the farm or percentage of sales at FMs.

3.5. Differences among FMs organisations – Multinomial logistic regression (RQ1)

The present study then aims to understand if farmers with dissimilar drivers for selling at FMs have different probability to belong to one or the other FMs organisations. In consideration of the three FMs organisations described in Fig. 1, a Multinomial Logistic regression model (MNL) was used to construct statistical models to describe the relationship between the farmers' drivers (three factors emerging from the EFA plus the items that did not get into a factor) and three types of FMs organisations. Logistic regression applied a set of predictors (explanatory variables) to estimate the logit the natural log of the odds [probability/(1-probability)] of an event outcome.

Table 6 shows which independent variables significantly predict whether farmers are included in the "Intermediate" or in the "Market-oriented" FMs organisers group versus the "Value-oriented" group (i.e. Campi Aperti). Campi Aperti was selected as a reference group as it stands out for being more driven by values than by economic reasons. In this context, MNL defines how the independent variables are related to the probability of farmers being in one outcome group versus the reference group.

The values of comparison variables were dichotomised, and the presented results are for the value under the mean (cfr the means in Table 4 for the first three variables and Table 3 for the other items).

Social and environmental drivers for FMs participation had a highly significant impact on the farmers' probability to be in one FMs organiser group or the other (both "Intermediate" vs. "Value-oriented" and "Market-oriented" vs. "Value-oriented"). Namely, farmers who rated low on social and environmental drivers are remarkably more likely to be in the "Market-oriented" rather than in the "Value-oriented" group, as well as in the "Intermediate" rather than "Value-oriented" group. Thus, the "Value-oriented" group is more likely to be made of farmers with high social and environmental drivers for FMs participation, which is coherent with the definition of the "Value-oriented" group itself. Consumers-related and economic drivers (getting satisfactory earnings and optimising logistics and management costs) had a significant impact on the farmers' probability to be in one FMs organiser group or the other

Table 6

Results of significant multinomial logistic regression. Source: authors.

Comparison variables	“Intermediate” vs. “Value-oriented”			“Market-oriented” vs. “Value-oriented”		
	Exp(B)	Std. err	p value	Exp(B)	Std. err	p value
Provide social benefits to the community (SOCIAL DRIVER)	3.388	0.703	0.083**	13.976	0.884	0.003***
Provide environmental benefits to the community (ENVIRONMENTAL DRIVER)	10.950	0.736	0.001***	29.465	0.886	0.000***
Have a direct relationship with consumers and increase their awareness (CONSUMERS DRIVER)	0.150	0.757	0.012**	0.198	0.803	0.044**
Get satisfactory earnings	0.258	0.551	0.014**	0.302	0.645	0.063**
Optimise logistics and management costs	0.733	0.604	0.607	0.143	0.755	0.010**
Create positive spill over effects on adjacent businesses on market days	0.402	0.573	0.112	0.147	0.720	0.008***
Support urban redevelopment through the enhancement of peripheries	1.277	0.585	0.676	0.167	0.781	0.022**
Meet consumers preferences and capture new trends	0.373	0.602	0.102	0.292	0.729	0.091**

Note: ***, ** refer to statistical significance at the 1 %, 5 % levels, respectively (only significant items were reported). Items in capital letters are the EFA's factors. Nagelkerke's R² index = 0.513.

(both “Intermediate” vs. “Value-oriented” and “Market-oriented” vs. “Value-oriented”). Namely, farmers who rated low on consumers-related and economic drivers are remarkably more likely to be in the “Market-oriented” rather than in the “Value-oriented” group, as well as in the “Intermediate” rather than “Value-oriented” group. Thus, the “Value-oriented” group more likely consists of farmers who aim to increase consumers awareness on local food production, while also lowering logistics costs and getting satisfactory earnings from the FMs sales. Such predictive variables are less strong than the social and environmental ones. Creating positive spillover effects on adjacent businesses on market days, supporting urban redevelopment through the enhancement of peripheries and meeting consumers' preferences and capture new trends significantly impact the farmers' probability to be in the “Market-oriented” group rather than the “Value-oriented” one. Namely, farmers who rated low on these three predictive variables are more likely to be in the “Market-oriented” group rather than the “Value-oriented” one. This is in line with the characteristics of the “Value-oriented” group, as those predictive variables are all aimed to create a pleasant environment around FMs.

3.6. Farmers' perceptions of FMs regulation (RQ2)

A limited number of farmers felt comfortable in answering questions on the FMs Municipal Regulation, thus the number of observations in this section is lower than in the previous section (Table 7). Many farmers felt they lacked the necessary information to provide informed answers, as they tend to delegate the relationships with the Municipality to their representatives. Of this section, the only question that all farmers were comfortable in answering was the evaluation of market areas, that builds on the farmers' direct experience.

In terms of the DC/PRO/2022/76 Regulation, it was quite well received by farmers (mean = 4.13), as it highlights social and community aspects that are also the main drivers for farmers to sell there. However, the standard deviation was high (1.99), showing polarised opinions on the matter. Such polarisation is also present in farmers'

answers about their involvement in the Regulation co-design process (1.95) and about the FMs support of the realisation of Bologna's Food Policy (1.92), whose mean is around neutrality in both cases (3.82 and 4.11, respectively). As emerged from face-to face survey administration, the DC/PRO/2022/76 was developed through a consultation process with the stakeholders involved (i.e. FMs organisers), but not all the respondents were aware of such process, as 57 % did not feel informed enough to answer the question. However, those who were more involved were not completely satisfied about the process. The lack of awareness is also true for the Bologna Food Policy – a municipal initiative to create a common urban policy for all food matters –, about which 74 % of respondents were uninformed.

Excluding from the analysis the subset of respondents from the only FM held on private grounds (Mercato Ritrovato), there is consensus on the low quality of services (i.e. toilets, electricity and water supply) at the market areas made available by the Municipality (mean = 3.95, st dev = 1.71). As emerged from face-to face survey administration, such areas are also considered too small to fit an appropriate number of stalls, as FMs organisers must turn down applications from additional farmers asking to join FMs. This issue was addressed in the DC/PRO/2022/76 Regulation, which states that FM organisers are in charge of proposing new market areas, adding a further burden on farmers.

There is limited satisfaction on the Municipality support for local food supply chains (mean = 3.80), as the Municipality is strongly criticised for not prioritising local food production with coherent and systematic policies and fundings. During the face-to face survey administration, the Municipality was criticised for being hypocritical, as it uses the success of FMs to show their interest in Short Food Supply Chains, while also allowing new supermarkets to open in the city centre.

Chi-square tests were adopted to scope the relation between farmers' socio-demographic and management characteristics and their level of satisfaction with the municipal policies on local supply chains and the FMs Regulation (items presented in Table 7). As for the previous section, this analysis did not produced significant results, while the intersection between the policy-related items and the FMs organisations did

Table 7

Items on farmers' perceptions of Municipal FMs Regulation. Source: authors.

Item	N° of observations	Mean	St dev
The FMs call for tender is transparent	55	4.73	1.69
I think the FMs market areas are appropriate	140	4.49	1.90
I am satisfied with the new regulation on FMs	85	4.13	1.99
FMs support the realisation of Bologna's Food Policy	36	4.11	1.92
There is a drive from the Municipality to support local supply chains	118	3.80	1.77
I feel that my voice was heard and my needs met during the Regulation co-design process	60	3.82	1.95

Note: level of agreement measured on a 1 to 7 Likert scale (1-“Strongly disagree”, 2-“Disagree”, 3-“Somewhat disagree”, 4-“Neutral”, 5-“Somewhat agree”, 6-“Agree”, 7-“Strongly agree”).

Table 8

Results of Chi-square tests of farmers opinions on food policy versus FMs organisations. Source: authors.

Item	FMs organisations Sig.
There is a drive from the Municipality to support local supply chains	0***
FMs support the realisation of Bologna's Food Policy	0.139
I am satisfied with the new Regulation on FMs	0***
I think the FMs market areas are appropriate	0***
The FMs call for tender is transparent	0.027***
I feel that my voice was heard and my needs met during the Regulation co-design process	0***

Note: ***, ** refer to statistical significance at the 1 %, 5 % levels, respectively.

(Table 8). Five out of six of the questionnaire items on local food policies and on Bologna's FMs Regulation are significant, showing that governance matters are more controversial than farmers' drivers to participate in FMs. While the level of satisfaction with FMs participation is quite homogeneous across farmers' socio-demographic characteristics, their opinions on Bologna's FMs Regulation are affected by a greater variation based on their affiliation with different FMs organisations.

4. Discussion

The present research offers valuable insights on the implementations of urban food policies in one specific case study: FMs in Bologna. We focussed on the drivers of farmers' presence at the FMs, as well as on their alignment with the value proposition of Bologna's FMs Regulation approved by the Municipality. The three main points of discussion arising from the results are presented below, aligned with the MLG theory and the three governance levels classification adopted: micro, meso and macro.

First, at the micro level, our results support that farmers participating in FMs in Bologna share a sense of overall satisfaction with their FMs experience. This high level of satisfaction can be attributed to several factors that foster a positive environment. The trust-based relationship between farmers and consumers plays a key role in building this satisfaction. Direct engagement allows farmers to establish a personal connection with consumers, share information about their products, and receive immediate feedback. While previous literature highlighted such importance especially on consumers side (Neumann & Mehlkop, 2023; Török et al., 2024), our results showed how farmers strongly agree with this driver. The questionnaire items regarding the way farmers can increase consumers' awareness at FMs received the highest agreement. The question remains whether such aspects are a matter of social or economic relevance. While on the consumers side the social aspect is surely more prominent, farmers' opinions are influenced by the economic benefit that such relationship entails. Consumers' loyalty and the percentage of retained customers is crucial for the economic sustainability of the farms, therefore placing this aspect as the main driver. This result also shows an overall good level of alignment between the micro and the macro level of governance: farmers' drivers for selling at FMs in Bologna (the micro level) are reflected in the value proposition of Bologna FMs Regulation approved by the Municipality (the macro level). Other aspects play a role in farmers' satisfaction. For example, our findings confirm previous scholars' claims on the importance of the sense of community built around local farmers, fostering a supportive environment where farmers feel valued and appreciated for their efforts (Diekmann et al., 2020; Marino & Cicatiello, 2012; Warsaw et al., 2022). Building relationships with fellow vendors also contributes to a positive atmosphere. Bologna's FMs also showcase locally produced and sustainable agriculture. Farmers who align with these principles find satisfaction in contributing to the local economy, promoting environmentally friendly practices, and meeting the growing demand for locally produced food. FMs are often known for promoting fair and transparent transactions, as farmers can receive fair compensation for their products. Overall, these factors create a positive and fulfilling experience at the micro level of FMs governance.

Second, the differences among the various associations organising FMs, situated at the meso level between Bologna's Municipal authority and farmers, emerge as a defining feature of the results. While farmers proved to be homogeneous when grouped by their sociodemographic or managerial characteristics, their affiliation with specific associations organising FMs proved to be the key differentiating factor. This reinforces the finding on the overall satisfaction of farmers across the whole sample, rather than being limited to a specific niche with distinct characteristics. What distinguishes respondents is their participation within a specific FMs organiser group. The mixed-methods approach proved particularly effective in capturing this point. The characterisation of FMs organisations emerged during the face-to face survey

administration, both from speaking with farmers and from the researcher observations of the FMs dynamics. These insights based on qualitative data were then confirmed through quantitative analysis. For example, farmers in the "Value-oriented" associations were more likely to prioritise social and environmental values. Overall, the diversity of values and identities among FMs organisations reflects the rich variety of communities and food systems they represent. By embracing this diversity, FMs organising associations, the meso level of governance, can better communicate the unique needs and preferences of the local farmers to the macro level, in order to foster better policymaking on local food systems. In the case of Bologna, FMs organising associations limitedly fulfilled their role of connection between the macro and micro level, as farmers were often unaware of the policymaking processes, where mainly the meso and macro levels were involved. The meso level should act as an intermediary between the macro and the micro levels of governance, that better informs and processes the flow of information and decisions between the two.

Third, the Municipality of Bologna, representing the macro level of governance, received little consensus on the new municipal Regulation on FMs. This low level of agreement highlights the complexities inherent in policymaking within a multi-level governance framework, where decisions made at the macro level may not be in line with micro level needs. While the Regulation value proposition aligns well with farmers' drivers for participating at FMs, disagreements persist over the FMs practical aspects and specifically the quality of market areas, in particular for those markets taking place on public grounds. Farmers have expressed a need for more and better stall arrangements and enhanced services to create a more pleasant working and purchasing environment, such as electricity supplies and parking lots. Additionally, they would appreciate more attention to fair competition. Currently the only requirement for farmers is selling local produce. However, some markets allow also food processors (e.g. bakers, butchers), while others have only food producers. This inconsistency has become a source of conflict with the macro level, as farmers perceive the Municipality creates distinctions between "real" and "not real" FMs, offering unequal levels of support to local agriculture. Also, while the new Regulation did not bring additional costs for compliance, it also did not reduce the existent ones, creating discontent among farmers. Ultimately, the agreement or disagreement with the new municipal Regulation largely depends on how it aligns with farmers' values and practices, as well as the perceived benefits or drawbacks this Regulation bring to the market dynamics. In the case of Bologna, the macro level, namely the Municipality through the new Regulation, does align with the micro level value proposition on FMs, but it does not fully capture farmers' practical needs.

To sum up, our findings concern both the governance dynamics of the actors involved in FMs in Bologna as well as the content of the Regulation on FMs (DC/PRO/2022/76).

As for the governance dynamics, the relationship between the three levels of governance can be improved. The study highlighted how the level of actual farmers' representation in the writing of the Regulation on FMs (DC/PRO/2022/76) process could have been better valued. Many farmers were not aware of the existence of the Regulation and/or the participative process that led to its approval. The meso level (the associations organising FMs) were in most cases fully in charge of the relationship with the macro level (Bologna's Municipality), excluding the micro level (the farmers). The only exception was the association Campi Aperti, where the level of farmers' political engagement is high. Better cooperation between the three levels of governance can be achieved by the meso level actively embracing its role of intermediary between farmers and the Municipality. In this way, farmers' opinions could be gathered by the associations organising FMs, and accurate feedback on farmers' needs and priorities could reach the macro level. Such engagement could foster trust and accountability, making farmers more likely to support and participate in governance initiatives. Overall, this approach could bridge gaps in representation and strengthen collaborative decision-making. Fig. 4 shows how the MLG presented at the

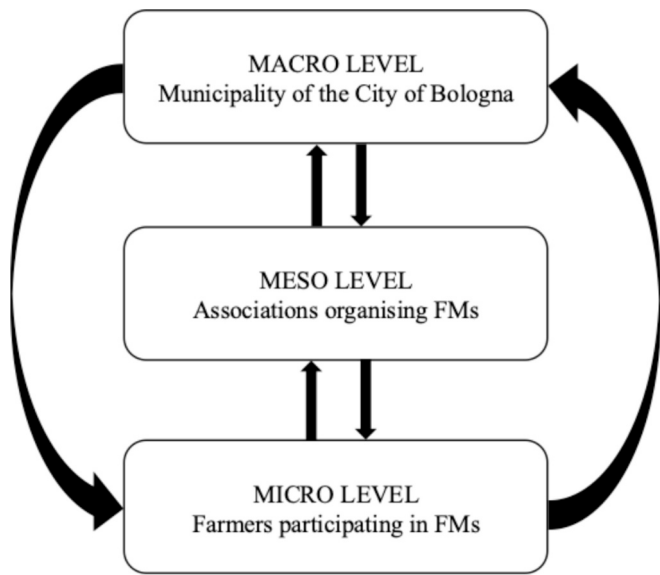


Fig. 4. Multi-Level Governance theory representation adapted to the Bologna's case study and harmonised with our findings on the relationships between the three levels of governance. Source: authors elaboration adapted from [Fairbrass and Jordan \(2001\)](#).

beginning of the study could be improved based on our findings. A nuanced understanding of local contexts, along with an inclusive approach to policy formulation that actively involves local farmers, can significantly enhance the effectiveness of urban food policies. The importance of including all the stakeholders is confirmed.

In terms of policy content, our findings show that farmers' drivers for selling at FMs in Bologna are aligned with the value proposition of Bologna FMs Regulation. Yet, such alignment is more theoretical than practical, as farmers argued that the Regulation can be improved to better meet their needs. For farmers, improvements to market areas' quality of services are essential. Key areas for enhancement include the provision of support facilities, which were found to be lacking.

4.1. Limitations of the study

The present study has two main limitations. First, despite the data collection process gathered a high number of the existing interviewees, these are still limited. However, the current study mitigated this limitation by adopting a mixed-methods approach that enhances results' validity. Second, face-to face survey administration may lead to potentially biased results, as they relied on respondents' subjective perceptions. Respondents may suffer from the social desirability bias, as they may feel pressure to provide socially acceptable or desirable responses. However, these biases were limited by asking a series of questions that proxy for the same concept, and by running the survey in person.

Annexes.

Table A
Sources of the questionnaire items.

I participate in FMs...		Source
Economic		
P1_Q1	To get a fair price	Regulation Demartini et al., 2017 Andreatta & Wickliffe, 2005 Azima & Mundler, 2022
P1_Q2	To control prices	

(continued on next page)

5. Conclusion

The present research on farmers' perspectives on FMs Regulation in Bologna offers valuable insights on the drivers of farmers' presence at the FMs, as well as on their alignment with the value proposition of Bologna's FMs Regulation approved by the Municipality.

In recent years, particularly following the 2015 Milan Urban Food Policy Pact, several municipalities have shown a willingness to support Short Food Supply Chains. However, the question of how to do so effectively, with the participation of various levels of governance, remains unresolved. The findings provide a research advancement on this topic contributing to the broader discourse on urban food policy and Multi-Level Governance, emphasising the need for harmonisation between various levels of governance.

The present study highlights the importance of adopting a multi-level governance perspective where macro level urban food policies are designed in coordination with *meso* level organisations and micro level stakeholders. In particular, the findings highlight the importance of creating a bridge between farmers and the Municipal authority when designing new policies, in order to facilitate a better understanding of farmers' needs and values, which were not fully met in the case of Bologna. These challenges demonstrate the critical role of macro level governance in shaping the effectiveness of multi-level governance structure. When macro-level policies do not fully align with the needs and realities of meso-level organisations and micro-level stakeholders, it can create tensions that challenge the goals of fostering resilient and inclusive local food systems.

In conclusion, this research provides a crucial contribution to our understanding of the intersection between local food production, urban markets, and policy frameworks. It calls for a collaborative approach involving farmers, consumers, and policymakers to create more resilient and sustainable urban food systems. As urban populations continue to grow, and as the world faces increasing challenges related to food security and sustainability, the lessons from Bologna offer important insights for cities worldwide.

CRediT authorship contribution statement

Francesca Monticone: Writing – review & editing, Writing – original draft, Methodology, Investigation, Formal analysis, Data curation, Conceptualization. **Antonella Samoggia:** Writing – review & editing, Validation, Supervision, Resources, Project administration, Methodology, Funding acquisition, Conceptualization.

Declaration of competing interest

The research leading to these results received funding from the European Union's Horizon 2020 under Grant Agreement No 862663.

The authors have no competing interests to declare that are relevant to the content of this article.

Table A (continued)

	<i>I participate in FMs...</i>	Source
P1_Q3	To get satisfactory earnings	Self-developed
P1_Q4	To increase the farm sales	Marino & Cicatiello, 2012 Silva, Dong, Mitchell, & Hendrickson, 2015 Demartini et al., 2017 Benedek et al., 2018 Azima & Mundler, 2022 Chiaverina et al., 2023 Hardesty & Leff, 2010 Demartini et al., 2017 Schmutz et al., 2018 Azima & Mundler, 2022
P1_Q5	To optimise logistics and management costs	Regulation Benedek et al., 2018 Azima & Mundler, 2022
P1_Q6	To have a secure and alternative distribution channel for the farm products	Regulation Benedek et al., 2018 Azima & Mundler, 2022 Griffin & Frongillo, 2003 Azima & Mundler, 2022
P1_Q7	To have more opportunities for cooperation and economic exchanges with other farmers	PRINTERDATE* MERGEFORMAT 12/02/2025 12:39:00 Azima & Mundler, 2022 Azima & Mundler, 2022 Thilmany, Tegegne, & Hines, 2012
P1_Q8	To be less stressed out compared to other sales outlets	
P1_Q9	To have more opportunities for skills development	
P1_Q10	To create positive spill over effects on adjacent businesses on market days	
Social		
P1_Q11	To support urban redevelopment through the enhancement of peripheries	Regulation
P1_Q12	To activate social ties between various parts of society (i.e. farmers, citizens, etc)	Regulation Marino & Cicatiello, 2012 Demartini et al., 2017
P1_Q13	To increase the connection between rural and urban worlds	Regulation
P1_Q14	To foster opportunities for socialisation for the local community creating a local gathering point	Regulation Marino & Cicatiello, 2012 Marino & Cicatiello, 2012 Azima & Mundler, 2022 Azima & Mundler, 2022
P1_Q15	To provide job and volunteer opportunities	
P1_Q16	To be acknowledged by the community	
P1_Q17	To have more opportunities for networking and create personal relationships with other farmers	
Consumer		
P1_Q18	To create a direct relationship of trust with customers	Regulation Andreatta & Wickliffe, 2005 Marino & Cicatiello, 2012 Demartini et al., 2017 Azima & Mundler, 2022
P1_Q19	To communicate to consumers about the quality and value of local food productions	Regulation Andreatta & Wickliffe, 2005 Marino & Cicatiello, 2012 Demartini et al., 2017
P1_Q20	To increase consumers awareness on food origin and seasonality	Regulation Marino & Cicatiello, 2012
P1_Q21	To spread the culture of certified organic farming	Regulation Azima & Mundler, 2022
P1_Q22	To better meet consumers' preferences and capture new trends	Andreatta & Wickliffe, 2005 Demartini et al., 2017 Azima & Mundler, 2022
Environmental		
P1_Q23	To sell products that allow shortening the supply chain	Regulation Marino & Cicatiello, 2012 Schmutz et al., 2018 PRINTERDATE* MERGEFORMAT 12/02/2025 12:39:00
P1_Q24	To sell products that allow us to provide environmental services such as water management and soil health care	Self-developed Schmutz et al., 2018
P1_Q25	To diversify our farming methods (conversion to organic)	Marino & Cicatiello, 2012 Azima & Mundler, 2022 Canavari et al., 2022 Schmutz et al., 2018
P1_Q26	To sell products that increase biodiversity by growing a good variety of plants	Regulation Schmutz et al., 2018
P1_Q27	To sell products that reduce waste resulting from packaging	Regulation Demartini et al., 2017 Schmutz et al., 2018
P1_Q28	To minimise waste caused by unsold products	Self-developed
P1_Q29	I am satisfied of selling at the FMs	Self-developed
P1_Q30	I would recommend selling at the FMs	Self-developed
P1_Q31	I would you like to still be at the FM in the next 3 years	Self-developed
P2_Q1	There is a drive from the Municipality to support local supply chains	Self-developed
P2_Q2	FMs support the realisation of Bologna's Food Policy	Regulation
P2_Q3	I am satisfied with the new Regulation on FMs	Self-developed
P2_Q4	I think the FMs market areas are appropriate	Self-developed
P2_Q5	The FMs call for tender is transparent	Self-developed

(continued on next page)

Table A (continued)

	<i>I participate in FMs...</i>		Source
P2_Q6	I feel that my voice was heard and my needs met during the Regulation co-design process		Self-developed
P3_Q1	What is the name of the farm?	Specify name	Self-developed
P3_Q2	What is the farm manager age?	Specify age	Govindasamy, Italia, Zurbriggen, & Hossain, 2003 Andreatta & Wickliffe, 2005 Silva et al., 2015
P3_Q3	What is the farm manager highest level of education?	High school diploma Post-high school title	Silva et al., 2015 Demartini et al., 2017 Azima & Mundler, 2022
P3_Q4	What is the farm manager gender?	Female Male Prefer not to answer	Silva et al., 2015 Azima & Mundler, 2022 Demartini et al., 2017
P3_Q5	How many years of experience in farming do you have?	Specify year	Silva et al., 2015
P3_Q6	How many years have you been selling at the FM?	Specify year	Self-developed
P3_Q7	What is the size of your farm?	Number of ha	Silva et al., 2015
P3_Q8	Do you produce all that you sell?	Specify percentage of own produce between 0 and 100	Self-developed
P3_Q9	Of the total of your sales, how much is processed?	Specify a percentage between 0 and 100	Govindasamy et al., 2003
P3_Q10	Of the total of your sales, how much happens at the FM in percentage?	Specify a percentage between 0 and 100	Govindasamy et al., 2003 Andreatta & Wickliffe, 2005 Connolly, Bogue, & Repar, 2022 Demartini et al., 2017
P3_Q11	Where do you sell your products locally other than the FM?	NA (if the answer before was 100 %) Household deliveries/Online platforms Solidal Purchasing Groups On-farm direct sales Wholesale markets Public procurement Supermarkets Local grocery stores Restaurants Other	Andreatta & Wickliffe, 2005 Marino & Cicatiello, 2012 USDA, 2019
P3_Q12	Where is your business located?	In the City of Bologna In the Metropolitan City of Bologna In the Emilia-Romagna region In other Italian regions	Andreatta & Wickliffe, 2005
P3_Q13	How far is your business located from the market?	Please specify kilometres	Self-developed
P3_Q14	Which products do you sell?	Fresh produce (fruit, vegetables, and eggs) Processed foods (all the rest) Other	Demartini et al., 2017 Andreatta & Wickliffe, 2005 Connolly et al., 2022
P3_Q15	Do you sell organic products?	Yes, with an official scheme Yes, with a PGS scheme No	Govindasamy et al., 2003

Table B

Cross-table of selling points alternative to the FMs.

	E-commerce	Bulk buying groups	On-farm direct sales	Wholesales markets	Canteens	Supermarkets	Local grocery stores	Restaurants	Other
E-commerce	/	8	15	2	0	2	6	10	1
Bulk buying groups	/	/	17	4	0	1	10	10	5
On-farm direct sales	/	/	/	13	0	7	26	31	14
Wholesales markets	/	/	/	/	0	2	9	10	8
Canteens	/	/	/	/	/	0	0	0	0
Supermarkets	/	/	/	/	/	/	6	6	1
Local grocery stores	/	/	/	/	/	/	/	23	9
Restaurants	/	/	/	/	/	/	/	/	9
Other	/	/	/	/	/	/	/	/	/

Table C

Non significant values results of the MNL.

Comparison variables	“Intermediate” vs. “Value-oriented”			“Market-oriented” vs. “Value-oriented”		
	Exp(B)	Std. err	p value	Exp(B)	Std. err	p value
To get a fair price	1.901	0.588	0.274	1.662	0.682	0.456
To control prices	1.063	0.554	0.912	0.818	0.651	0.757

(continued on next page)

Table C (continued)

Comparison variables	“Intermediate” vs. “Value-oriented”			“Market-oriented” vs. “Value-oriented”		
	Exp(B)	Std. err	p value	Exp(B)	Std. err	p value
To increase farm sales	0.425	0.568	0.132	0.714	0.712	0.637
To have a secure and alternative distribution channel for the farm products	1.257	0.580	0.693	1.412	0.688	0.616
To be less stressed out compared to other sales outlets	0.818	0.546	0.713	0.742	0.666	0.654
To increase the connection between rural and urban worlds	0.506	0.662	0.303	0.441	0.734	0.265
To provide job and volunteer opportunities	1.617	0.569	0.399	2.086	0.661	0.266
To sell products that allow shortening the supply chain	1.224	0.637	0.751	1.163	0.697	0.829

Data availability

Data will be made available on request.

References

- Alberio, M., & Moralli, M. (2021). Social innovation in alternative food networks. The role of co-producers in Campi Aperti. *Journal of Rural Studies*, 82, 447–457. <https://doi.org/10.1016/j.jrurstud.2020.10.007>
- Andreatta, S., & Wickliffe, W. (2005). Managing farmer and consumer expectations: A study of a North Carolina farmers market. *Human Organization*, 61(2), 167–176. <https://doi.org/10.17730/humo.61.2.a4g01d6q8djj5lkb>
- Azima, S., & Mundler, P. (2022). Does direct farm marketing fulfill its promises? Analyzing job satisfaction among direct-market farmers in Canada. *Agriculture and Human Values*, 39(2), 791–807. <https://doi.org/10.1007/s10460-021-10289-9>
- Bache, L., & Flinders, M. (2015). *Multi-level governance: Essential readings*. In Multi-Level Governance: Essential Readings. Edward Elgar Publishing Limited. <https://www.elgaronline.com/display/Research/Reviews/9781783479788/9781783479788.xml>
- Belletti, G., Torres Salcido, G., Scarpellini, P., Mengoni, M., & Marescotti, A. (2024). Multilevel governance in farmers' markets: A stakeholder analysis in Tuscany. *Frontiers in Sustainable Food Systems*, 8. <https://doi.org/10.3389/fsufs.2024.1401488>
- Benedek, Z., Fertő, I., & Molnár, A. (2018). Off to market: But which one? Understanding the participation of small-scale farmers in short food supply chains—A Hungarian case study. *Agriculture and Human Values*, 35(2), 383–398. <https://doi.org/10.1007/s10460-017-9834-4>
- Brunori, G., Galli, F., Barjolle, D., Van Broekhuizen, R., Colombo, L., Giampietro, M., Kirwan, J., Lang, T., Mathijs, E., Maye, D., De Roest, K., Rougoor, C., Schwarz, J., Schmitt, E., Smith, J., Stojanovic, Z., Tisenkopfs, T., & Touzard, J.-M. (2016). Are local food chains more sustainable than global food chains? Considerations for assessment. *Sustainability*, 8(5), article 5. doi:<https://doi.org/10.3390/su8050449>
- Brunori, G., Rossi, A., Cerruti, R., & Guidi, F. (2010). Nicchie produttive e innovazione di sistema: Un'analisi secondo l'approccio delle transizioni tecnologiche attraverso il caso dei farmers' markets in Toscana. *ECONOMIA AGRO-ALIMENTARE*, Article 2009/3. <https://doi.org/10.3280/ECAG2009-003008>
- Canavari, M., Gori, F., Righi, S., Viganò, E., Canavari, M., Gori, F., Righi, S., & Viganò, E. (2022). Factors fostering and hindering farmers' intention to adopt organic agriculture in the Pesaro-Urbino province (Italy). *AIMS Agriculture and Food*, 7(1), Article agrfood-07-01-008. doi:<https://doi.org/10.3934/agrfood.2022008>
- Chen, C.-J. R., Yu, T.-H. E., & Fu, R. J. C. (2021). Strategic Management for Community-Based Markets: From consumers. *Perspectives and Experiences. Sustainability*, 13(10), Article 10. <https://doi.org/10.3390/su13105469>
- Chiaverina, P., Drogue, S., Jacquet, F., Lev, L., & King, R. (2023). Does short food supply chain participation improve farm economic performance? A meta-analysis. *Agricultural Economics*, 54(3), 400–413.
- Committee of the regions. (2009). *White paper on multilevel governance*. Brussels: European Union.
- Connolly, R., Bogue, J., & Repar, L. (2022). Farmers' Markets as resilient alternative market structures in a sustainable global food system: A small firm growth perspective. *Sustainability*, 14(18), Article 18. <https://doi.org/10.3390/su14181626>
- Cortina, J. M. (1993). What is coefficient alpha? An examination of theory and applications. *Journal of Applied Psychology*, 78(1), 98–104. <https://doi.org/10.1037/0021-9010.78.1.98>
- Demartini, E., Gaviglio, A., & Pirani, A. (2017). Farmers' motivation and perceived effects of participating in short food supply chains: Evidence from a north Italian survey. *Agricultural Economics (Zemědělská Ekonomika)*, 63(5), 204–216. <https://doi.org/10.17221/323/2015-AGRICECON>
- Diekmann, L. O., Gray, L. C., & Thai, C. L. (2020). More than food: The social benefits of localized urban food systems. *Frontiers in Sustainable Food Systems*, 4, Article 534219.
- Dobbelstein, T., Corbishley, K. M., & Mason, R. B. (2021). Factors encouraging and discouraging attendance at Farmers' Markets: An application of the Kano model. *The Retail and Marketing Review*, 17(1), 56–78. <https://doi.org/10.10520/ejc-irmr1-v17-n1-a6>
- Elepu, G., & Mazzocco, M. A. (2010). Consumer segments in urban and suburban farmers markets. *International Food and Agribusiness Management Review*, 13(2), 1–18.
- Emilia-Romagna, Regione (2020). *7° Censimento generale dell'Agricoltura: La struttura delle aziende agricole in Emilia-Romagna*.
- Fairbrass, J., & Jordan, A. (2001). Protecting biodiversity in the European Union: National barriers and European opportunities? *Journal of European Public Policy*, 8 (4), 499–518. <https://doi.org/10.1093/0199259259.003.0009>
- Fattibene, D., Mazzocchi, G., Antonelli, M., Marino, D., & Romagnoli, L. (2023). Modelling food policies in Italian urban agendas in the time of Covid-19: Experiences, challenges and opportunities. *Cities*, 135, Article 104199. <https://doi.org/10.1016/j.cities.2023.104199>
- Feenstra, G. (2002). Creating space for sustainable food systems: Lessons from the field. *Agriculture and Human Values*, 19(2), 99–106. <https://doi.org/10.1023/A:1016095421310>
- Govindasamy, R., Italia, J., Zurbruggen, M., & Hossain, F. (2003). Producer satisfaction with returns from farmers' market related activity. *American Journal of Alternative Agriculture*, 18(2), 80–86. <https://doi.org/10.1079/AJAA200238>
- Griffin, M. R., & Frongillo, E. A. (2003). Experiences and perspectives of farmers from upstate New York farmers' markets. *Agriculture and Human Values*, 20(2), 189–203. <https://doi.org/10.1023/A:1024065526440>
- Hardesty, S. D., & Leff, P. (2010). Determining marketing costs and returns in alternative marketing channels. *Renewable Agriculture and Food Systems*, 25(1), 24–34. <https://doi.org/10.1017/S1742170509990196>
- Hu, X., Clarke, L. W., & Zendehele, K. (2021). Farmers' Market Usage, Fruit and Vegetable Consumption, Meals at Home and Health—Evidence from Washington, DC. *Sustainability*, 13(13), Article 13. doi:<https://doi.org/10.3390/su13137437>
- ISMEA. (2011). *Analisi dei regolamenti comunali in materia di farmers' market*.
- ISTAT. (2021). Agricultural Census. <https://www.istat.it/en/permanent-censuses/agriculture>
- Jilcott Pitts, S. B., Wu, Q., Gray, W., & Lyonnsais, M. J. (2020). Examining changes in farmers' markets and in customers' farmers' market shopping frequency and fruit and vegetable purchase and consumption: Evaluation data from the partnerships to improve community health project, 2014–2017. *Journal of Hunger & Environmental Nutrition*, 15(1), 107–117. <https://doi.org/10.1080/19320248.2018.1512924>
- Leiper, C., & Clarke-Sather, A. (2017). Co-creating an alternative: The moral economy of participating in farmers' markets. *Local Environment*, 22(7), 840–858. <https://doi.org/10.1080/13549839.2017.1296822>
- Ma, C.-C., & Chang, H.-P. (2022). Consumers' perception of food and agriculture education in Farmers' Markets in Taiwan. *Foods*, 11(5), Article 5. doi:<https://doi.org/10.3390/foods11050630>
- Marino, D., & Cicatiello, C. (2012). I farmers' market: La mano visibile del mercato. In *Aspetti economici, sociali e ambientali delle filiere corte*. Franco: Angeli. <https://agrire.ionieuropea.univpm.it/it/content/article/31/30/i-farmers-market-la-mano-visibile-del-mercato-aspetti-economici-sociali-e>
- Marino, D., Mastronardi, L., Franco, S., De Gregorio, D., Cicatiello, C., & Pancino, B. (2013). Farmers' Markets, Producer and Consumer Behaviour: Analysis of Interactions with the Metrics of Sustainability. *2013 International European Forum, February 18–22, 2013, Innsbruck-Igls, Austria*, Article 164751. <https://ideas.repec.org/p/ags/iefi13/164751.html>
- Marks, G. (1993). Structural policy and multilevel governance in the EC. In *Vol. 2. The state of the European Community*. Longman.
- Maró, Z. M., Maró, G., Jámbo, Z., Czine, P., & Török, Á. (2023). Profiling the consumers of farmers' markets: a systematic review of survey-based empirical evidence. *Renewable Agriculture and Food Systems*, 38, Article e53.
- Mazzocchi, G., & Marino, D. (2018). The value of Farmers' Markets for the territory and the community: The case of Campi Aperti alternative food. *Network (Italy)*, 177–186.
- Mengoni, M., Marescotti, A., & Belletti, G. (2024). Farmers' markets as a sustainable model of producers-consumers relationships: Evidence from Tuscany. *Italian Review of Agricultural Economics (REA)*, 79(1), Article 1. doi:<https://doi.org/10.36253/rea-14895>
- Montri, D., Chung, K., & Behe, B. (2021). Farmer perspectives on farmers markets in low-income urban areas: A case study in three Michigan cities. *Agriculture and Human Values*, 38(1), 1–14. <https://doi.org/10.1007/s10460-020-10144-3>
- Neumann, R., & Mehlkop, G. (2023). Revisiting farmers markets – Disentangling preferences and conditions of food purchases on countryside data from Germany. *Food Quality and Preference*, 106, Article 104815. <https://doi.org/10.1016/j.foodqual.2023.104815>
- Sandström, U. G., & Elander, I. (2021). Biodiversity, road transport and urban planning: A Swedish local authority facing the challenge of establishing a logistics hub adjacent to a Natura 2000 site. *Progress in Planning*, 148, Article 100463. <https://doi.org/10.1016/j.progress.2019.100463>
- Schmutz, U., Kneafsey, M., Kay, C. S., Doernberg, A., & Zasada, I. (2018). Sustainability impact assessments of different urban short food supply chains: Examples from

- London. UK. *Renewable Agriculture and Food Systems*, 33(6), 518–529. <https://doi.org/10.1017/S1742170517000564>
- Silva, E., Dong, F., Mitchell, P., & Hendrickson, J. (2015). Impact of marketing channels on perceptions of quality of life and profitability for Wisconsin's organic vegetable farmers. *Renewable Agriculture and Food Systems*, 30(5), 428–438. <https://doi.org/10.1017/S1742170514000155>
- SINAB. (2020). *Facts and figures on organic farming in Italy*.
- Sonnino, R. (2023). Food system transformation: Urban perspectives. *Cities*, 134, Article 104164. <https://doi.org/10.1016/j.cities.2022.104164>
- 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>
- Thilmany, D., Teegeme, E., & Hines, B. (2012). *Farmers markets and direct Marketing in the Western US: Market trends and linkages with food system issues*. Western Economics Forum.
- Török, Á., Kovács, S., Maró, G., & Maró, Z. M. (2024). Understanding the relevance of farmers' markets from 1955 to 2022: A bibliometric review. *Journal of Agriculture and Food Research*, 16, Article 101108. <https://doi.org/10.1016/j.jafr.2024.101108>
- Uematsu, H., & Mishra, A. K. (2011). Use of direct marketing strategies by farmers and their impact on farm business income. *Agricultural and Resource Economics Review*, 40 (1), 1–19. <https://doi.org/10.1017/S1068280500004482>
- USDA. (2019). *National farmers market manager survey—Market performance*. Department of Agriculture: U.S.
- Verano, T.d. C., Figueiredo, R. S., & Medina, G.d. S. (2021). Agricultores familiares em canais curtos de comercialização: Uma análise quantitativa das feiras municipais. *Revista de Economia e Sociologia Rural*, 59, Article e228830. <https://doi.org/10.1590/1806-9479.2021.228830>
- Warsaw, P., Wentworth, C., Lewis, A., Isaacs, K., & Traore, A. (2022). Manager and vendor perceptions of farmers' markets' impacts on communities: Evidence from Michigan. *International Journal of Sociology and Social Policy*, 42(7/8), 712–726. <https://doi.org/10.1108/IJSSP-10-2021-0268>
- Westman, L. K., Castán Broto, V., & Huang, P. (2019). Revisiting multi-level governance theory: Politics and innovation in the urban climate transition in Rizhao, China. *Political Geography*, 70, 14–23. <https://doi.org/10.1016/j.polgeo.2019.01.002>