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A trajectory of social innovations for the direct purchase of organic food by food services: a case study in Florianópolis, Brazil

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Introduction: Although interest in the so-called short food supply chains (SFSC) has grown in recent decade, studies and social innovations that emerged from this phenomenon have made little progress in involving food actors outside the home. The article analyzes the conditioning factors for forming short food supply chains involving food services and organic farmers' organizations, understanding them as potential social innovations.

Methods: The research used questionnaires with food services, participant and non-participant observations, and secondary data analysis with regional farmers' organizations in the Greater Florianópolis region.

Results: Food services, which mostly do not yet purchase organic products from local producers, are interested in integrating purchasing initiatives directly from farmers and their organizations. However, they have presented several conditions for this. Nevertheless, farmers have the capacity, at least in part, to respond to the required conditions due to their innovative trajectory and socio-organizational capacity.

Discussion: The provision of food services, associated with the trajectory of social innovations in SFSC by farmers around Florianópolis, shows a potential to converge different interests for the generation of new initiatives, following the innovative trajectory led by social actors who work with the rural area. This could increase the impact of ongoing SFSC initiatives, ensuring consumers access local food, even when eating out.

KEYWORDS

food systems, short food supply chains, social innovations, organic agriculture, restaurants

1. Introduction

In the face of the crisis of distrust that affects the agrifood system, several supply alternatives have emerged, expressing new values and consumers' concerns with aspects related to the safety of their food (Goodman, 2003; Portilho, 2009; Méndez and Espejo, 2014). Given the centrality of food for the development of humanity, access to healthy and sustainable food is a social need that has increasingly aroused several actors' interest, generating citizen practices around food (Souza et al., 2021). This phenomenon has aroused the interest of more and more consumers, who are worried about the consequences of the globalized agrifood system, and have sought to ensure greater levels of information and control over the quality, origin, and form of production

of their food (Goodman and Goodman, 2009; Dubuisson-Quellier et al., 2011; Fonte, 2013).

Short food supply chains (SFSC) are an essential element of this process, bringing together farmers and consumers of superior quality food, especially organic and agroecological agriculture (Marsden et al., 2000; Renting et al., 2003; Darolt, 2013; Kneafsey et al., 2013). Many SFSC initiatives, by reformulating many social practices around food production, supply, and consumption, can be interpreted from the perspective of social innovations (Caulier-Grice et al., 2012; Murray et al., 2012; Moulaert et al., 2013). Recently, this concept has been mobilized in studies on SFSC, understood in the sense of new solutions to provide opportunities for the sale and access to superior quality food under the specific conditions and interests of the social actors involved. Some initiatives provide opportunities for processes of change in social relations, based on the social engagement of the actors (Chiffoleau and Loconto, 2018; Mert-Cakal and Miele, 2020; Alberio and Moralli, 2021; Souza et al., 2021).

The emergence and development of these initiatives contribute to a sustainable transition of agrifood systems (Renkema and Hilletofth, 2022). Although not sustainable *per se* (Evola et al., 2022), they can promote significant changes in food supply planning, contributing to expanding production and consumption of higher-quality food (natural, organic, agroecological, etc.). Although they have gained increasing relevance, especially in the articulation between farmers and consumers, a more significant impact of this type of experience would require increasing the involvement of other social actors. In this sense, we argue that the theoretical approach to social innovations comprises a relevant analytical tool to understand aspects that condition the construction of successful SFSC since such initiatives generate changes in social practices and reconfigure social relations in production, supply, and food consumption.

Still little explored in studies involving SFSC, food services may provide opportunities to expand organic foods' production, dissemination, and consumption. They are commercial enterprises that operate in the production and marketing of meals, such as restaurants, cafeterias, hotels, and delivery services, and constitute actors in the food system that generate aggregate demand, which would allow the sale of greater volumes of food, compared to individualized consumption (Proença, 2000; Johns and Pine, 2002; Mamalis, 2009; Leal, 2010; Baldwin et al., 2011). In practical terms, the expansion of the purchase of products for food services in SFSC initiatives would represent a demand that would enhance the expansion of organic food production by local/regional producers and conditions so that more farmers could convert their farms to more sustainable production modes.

Nevertheless, few studies have addressed the appropriate conditions for the engagement of food services in SFSC. From an empirical perspective, most of the literature has focused on institutional food services, which are financed by the public authorities (Galli et al., 2014; Borsatto et al., 2020; Soares et al., 2021). On the other hand, little is understood about the conditions in which private enterprises could engage in SFSC dynamics, which limits action around the construction of successful experiences. It was in this context that a workshop was developed in Florianópolis to discuss the potential of a connection between food services and organizations of local organic farmers. During the meeting, in which some kitchen professionals and farmers participated, despite the potential demonstrated by the participants, the lack of knowledge and communication between these actors represented the main challenges for a connection between the sectors of organic agriculture and food services. Furthermore, the study focuses on a theoretical field still under construction, exploring on the emergence of social innovations in SFSC initiatives, in particular on the mechanisms through which innovations previously conceived by the actors can favor the emergence of new forms of collective action (Petropoulou et al., 2022).

Based on this issue, this study seeks to answer the following questions: what conditions can influence the participation of food services in purchasing organic food from local farmers' organizations in Florianópolis? Are farmers able to answer these conditions? Based on these questions, this study aims to analyze the conditioning factors for forming short food supply chains involving food services and organic farmers organizations in the Greater Florianópolis region, understanding them as potential social innovations. To this end, a case study was developed from aspects related to the organization of farmers in the region to offer their products and aspects of the demand for food services. Besides this introduction, the article is structured in four sections. The first presents the main aspects of the concept of social innovation, presenting common elements between this theoretical approach and the concept of SFSC. In the following sections, we presented the methodological aspects of the research, followed by the results and discussions of the study. Finally, we presented the conclusions of the study.

2. Theoretical approach

2.1. On the concept of social innovation

Social innovation comprises social practices that trigger new solutions to social problems or needs faced by social groups. In practical terms, it represents conscious changes in how individuals and groups act collectively to face common problems (Murray et al., 2012; TEPSIE, 2014; Agostini et al., 2017). Hence, they can be conceived as forms of collaborative action in which different actors produce responses to social demands, whether restricted to a specific context or even to broader social issues (Souza et al., 2021).

This concept is often associated with community-based actions or those undertaken by organized civil society, as they emerge from contexts of the inefficiency of the market and state performance (André and Abreu, 2006; Caulier-Grice et al., 2012). However, some authors argue that such innovations can also emerge from public institutions or even from entrepreneurial actions (social entrepreneurship) (Gerometta et al., 2005; Bittencourt and Ronconi, 2016; Andion et al., 2017). Besides, they could also arise intersected the three dimensions of society (State, market, and civil society), provided by the interest of several public and private actors in building responses to problems faced by specific social approaches. Such initiatives can arise in several domains, including economic life, often linked only to technological and commercial innovation (Bignetti, 2011). Ayob et al. (2016), in a study on the evolution of the concept of social innovation, point out that they can be expressed from two different traditions. The first would see such innovations as a product resulting from increasing the aggregate individual utility of any innovation. The second tradition sees social innovations as a process in which different actors proceed collaboratively in such a way that they promote the restructuring of power relations in the social system.

Although the literature on the subject is broad and, consequently, has diverse understandings, studies on social innovation have several common aspects, which allow for identifying a socially constructed innovation (Caulier-Grice et al., 2012). The main one corresponds to novelty or inventiveness in relation to new practices. Although it is not necessarily something unique and original, it would represent something new for the beneficiary public (Murray et al., 2012). In other words, innovations represent new ways of acting, different from the practices previously adopted by the public involved.

On the other hand, according to Schneider and Menezes (2014), not all novelty is necessarily an innovation. Social innovations tend to establish more effective solutions compared to previous practices. That is, the novelty needs to be perceived as advantageous to the public it was designed for, presenting improvements in results and demonstrating its effectiveness compared to previous practices. In this perspective, the emphasis is on initiatives to improve or positively impact the lives of their adopters. The focus is on the ability of innovations to generate transformations or changes in the social and productive context (Bignetti, 2011; Caulier-Grice et al., 2012).

For the concept of social innovation, it is central to analyze the attendance of social needs (Moulaert et al., 2013). Such guidance distinguishes it from other innovation perspectives (Bignetti, 2011). While technological innovations, for example, are primarily oriented toward maximizing profits, social innovations address social problems or needs often faced by populations in situations of marginality or social vulnerability (Gerometta et al., 2005; André and Abreu, 2006; Juliani et al., 2020). This does not indicate that it arises unrelated to market issues but is seen as a means to satisfy the needs of individuals and social groups.

In addition, social innovations provide opportunities for changes, to a greater or lesser extent, in the social relations established, causing transformations in power relations. André and Abreu (2006) attribute such changes to the inclusion of marginalized actors in the design and implementation of new ideas and practices. The authors argue that this process promotes "the training of marginalized actors and subjects" (André and Abreu, 2006, p. 124), who tend to become protagonists in the construction of innovative solutions, a result of the empowerment of the public benefited by innovation. As Mulgan states, "some of the methods for cultivating social innovation start from the presumption that people are competent interpreters of their own lives and solvers of their own problems" (Mulgan, 2006, p. 150).

Studies on the development of social innovations, although with different emphases, approach them as a trajectory that, in general, refers to four common stages: (1) generation of new ideas from the problematization and perception of unmet social needs, which would correspond to the initial impetus of the process; (2) experimental implementation of the idea by a restricted group, which will evaluate the effectiveness of the idea or improvements in relation to previous practices; (3) dissemination of successful ideas, through the perception of the advantages inherent in the adoption of the new practice by external groups, and the consequent abandonment (totally or partially) of previous practices and; (4) adjustments in the original idea, which would occur through negotiation between the actors (pioneers and new adopters), in the configuration of practices and, consequently, of social innovation itself (Mulgan, 2006; Murray et al., 2012; Neumeier, 2012, 2017). According to Neumeier (2012), in this last stage, there are negotiations between pioneers and new stakeholders, an inflection point that can determine significant changes in the solutions initially thought.

2.2. The trajectory of social innovations in short food supply chain initiatives

The new forms of production, supply, and consumption inherent to SFSC may comprise innovative phenomena that deserve more attention from researchers. As a theoretical starting point, some authors have pointed out that the emergence of these initiatives is strongly associated with a chain of processes, which generate learning and bonds necessary for the emergence of socially contextualized innovations (Rover et al., 2016; Alberio and Moralli, 2021). Some aspects of social innovation are expressed in studies on SFSC initiatives and point to trajectories of collaborative action with innovation potential.

The emphasis on participation and the links established between the actors makes social innovations compatible with the SFSC approach. Chiffoleau and Loconto (2018), using as an example the community-supported agriculture (CSA) and its similar schemes such as the *gruppi di acquisto solidale* (GAS, Italy) and the *Association pour le Maintien de l'Agriculture de Proximité* (AMAP, France), define these innovations as horizontally articulated experiences, which "often citizen-driven, emerge locally to answer social needs that are not satisfied by public policies nor markets" (p. 310). According to the authors, in their most radical versions, such initiatives arise and develop with aspirations for social changes, which in this case refer to innovations that can transform the agrifood system. From the perspective of SFSCs, access to stable and fair markets comprises a social need of farmers, who often face difficulties in disposing of production and even fail to obtain satisfactory income from their production (Rover and Darolt, 2021). On the other hand, access to quality food is also a social issue since its accessibility is a central element for food and nutritional security (King et al., 2017).

One of the main components present in SFSC and key in social innovations concerns the articulation and engagement of actors around forms of collaborative action. Darolt et al. (2016), studying these experiences in France and Brazil, attribute cooperation between actors and political engagement to an important role in the development of experiences. In turn, Gelbcke et al. (2018) argue that the relational proximity in SFSC, supported by geographical proximity, favors the construction of markets by establishing cooperation processes in a given territory/space/region. Engagement in forms of collaborative action is a materializing element in social innovations, which are necessarily conceived from the active participation of actors. A requirement for this engagement comprises the alignment of interests, which tends to guide the relationships between individuals and groups and the forms of cooperation undertaken (Neumeier, 2012; Rover et al., 2016).

Another key aspect concerns the collective spaces of decision-making in which the initiatives are anchored. In this regard, Chiffoleau et al. (2019, p. 183) argue that "[…] the development of an SFC, and its economic dimension in particular, necessarily induces choices, negotiation between different values, compromises between economic and non-economic objectives, and even sacrifices." At this point, the collective management of initiatives would represent the formatting and adjustment of social innovations based on the consensus

produced between the different actors involved. According to Neumeier (2012), the new consensuses represent inflection points. The original objectives and characteristics of the experiences give way to others, reflecting the different values and interests mobilized in the negotiation between the actors.

The transformation in power relations, an important component in social innovations, is also addressed in some studies involving SFSC experiences, especially discussing the growth of the role of farmers and consumers. Such relationships are mobilized considering the empowerment of actors outside the industrial agrifood system, given the creation of alternatives to increase value addition from these experiences (Marsden et al., 2000; Orsini et al., 2019). From another perspective, Renting et al. (2003) emphasize the creation of new agrifood specialties and their role in the reconfiguration of power structures based on the construction of synergies between proximity relations and ecological and regional food identities.

This entire process does not emerge without antecedents that create appropriate conditions, which in a Schumpeterian perspective, is expressed by the notion of *path dependence*, which materializes the process of developing initiatives to approximate production and consumption. According to Aléssio and Rover (2014), local/regional development processes [which include initiatives such as SFSC], can be interpreted "as a chain of organizational dynamics and local technological trajectories, which influence each other and condition the possible paths to territorial development" (p. 113). This perspective considers the historical analysis of development processes and organizational dynamics fundamental. It deepens the look at the role of pre-existing experiences and innovations in a given location in developing new solutions with innovation potential (Arend et al., 2012; Bernardi, 2012). Specifically within the SFSC, innovative processes generate fundamental elements for new initiatives, namely trust, social bonds between actors, co-production and sharing of resources, and collective learning that empowers those involved.

Confidence is strictly related to establishing associative interfaces (Marsden et al., 2000; Sonnino and Marsden, 2006). According to the authors, "associational interfaces (networks) are often informal but are highly significant in establishing trust, common understandings, working patterns, and forms of cooperation between different actors in a supply chain" (p. 431). The authors add that "[…] where such interfaces do not exist, it may take many years to rebuild relationships and trusts to a point where regional actors, or actors across a supply chain, can create the conditions necessary to effectively and efficiently meet and maximize consumer demand" (p. 431). In other words, trust is a key element in building successful SFSC initiatives. Nonetheless, this trust goes beyond that established between consumers and farmers in the commercial process. It covers all actors involved in the process. With each successful collective initiative, the actors can intensify mutual trust, consequently allowing the construction of new initiatives with higher levels of organizational complexity.

In turn, social bonds materialize through the relationship established between individuals, which materializes with a higher or lower level of cooperation (Renting et al., 2003; Darolt et al., 2016). According to Renting et al. (2003), many of the SFSC experiences originate from "new market relationships which are built around new forms of association and institutional support" (p. 408). Various forms of interaction between individuals and groups are mobilized, ranging from informal associations for the purchase of inputs or services in production to the constitution of formal organizations for the marketing of products (in the case of production, marketing, or consumer cooperatives). Once in operation, such bonds, thought of here as social infrastructures, can be mobilized to meet other demands of those involved. An emblematic case is the groups of farmers of the Ecovida Network of Agroecology, which was designed to ensure the verification of the conformity of organic foods (organic certification), but serves many other purposes (Rover et al., 2016). Therefore, the links established and that model of the relational networks can be accessed to construct new SFSC initiatives.

Shared resources comprise all the components that materialize production-consumption experiences. On the one hand, they represent tangible components, which are constituted from the production factors activated in the production process and mobilized in the constitution of a range of products (and services) to be made available in the commercial circuits, in addition to the logistical infrastructures mobilized in the structuring of the SFSC. On the other hand, they comprise intangible resources, such as "[…] local skills, historical and cultural practices, as well as traditional knowledge in the production and processing of products" (Schneider and Ferrari, 2015, p. 65). In this regard, the emphasis is on the synergisms inherent in collective action and the combination of different resources, which contribute to achieving common objectives. In this perspective, new initiatives can access the flows of products, infrastructures (social and material), knowledge, and pre-existing practices, which can grant, at least initially, favorable conditions for their development.

Finally, the collective learning process is essential in strengthening and expanding initiatives to bring production and consumption closer together. This is due to the frequent collective sharing of good practices, experiences, and learning. Successful practices are transmitted to new actors, who increase their ability to cope with difficulties and format proposals more appropriate to local conditions. Chiffoleau et al. (2019) argue that this process empowers "*non-specialists*" actors (mainly interested consumers), who begin to effectively participate in the management of SFSC initiatives, modeling new economic standards. This process activates forms of citizenship around food supply (Hassanein, 2008; Renting et al., 2012; Zagata, 2014). Besides, successful experiences create optimism among those involved, who empower themselves and increase their ability to build effective responses to meet new social needs.

These aspects are conditions that favor the expansion of SFSC initiatives. It should be mentioned that they can express themselves in any collective action linked to production, supply, and food consumption. However, we emphasize that in innovative initiatives of great repercussion and success, such aspects gain relevance to the point of catapulting the emergence and development of new initiatives. In this perspective, we mobilize the notion of the trajectory of social innovations (Souza et al., 2021) to explain the continuous generation of innovative solutions undertaken by local social actors.

2.3. Food services in short food supply chain experiments

The mobilization of food services can affect the expansion of SFSC and, consequently, the transformation of local agrifood systems, representing a fertile field for innovation around agrifood supply. Food services include private or public enterprises that operate in producing and distributing meals (Proença, 2000). They encompass a

variety of establishments such as self-service restaurants, a *la carte* restaurants, *fast food*, bars, snack bars, bakeries, and hotels, among others (Leal, 2010). Studies on their performance in SFSC experiences are still scarce, and the understanding that such actors play little engagement in this type of initiative predominates.

Nevertheless, studies that have addressed food services around the transformation of the agrifood system have focused on two main analytical fronts. One of them seeks to understand restaurants' challenges, motivations, and interest in using higher-quality ingredients (especially organic foods) to prepare meals (Poulston and Yiu, 2011; Lu and Gursoy, 2017). A second front works with a perspective of approximation in production-consumption relations, with the attention of researchers on the development of more sustainable gastronomy, often associated with high cuisine, *chefs*, and gastronomic tourism (Krause and Bahls, 2013; Zaneti and Schneider, 2016; Niederle and Schubert, 2020).

According to Poulston and Yiu (2011), professionals who work in restaurants have a common understanding and awareness of organic products and their relationship with a more sustainable agrifood system. However, specifically in the case of medium-sized restaurants, although the businesses were thought to be considering social and environmental beliefs, the professionals reported that, at the beginning of the business, the expectation of simultaneously guaranteeing profit, environmental protection, and customer satisfaction was unrealistic. This may be related to the increase in meal prices, which according to Lu and Gursoy (2017), tend to reduce the advantages related to the inclusion of organic ingredients in menus.

Niederle and Schubert (2020), researching the practices adopted by vegan restaurants in Porto Alegre (Brazil), identified that restaurants that buy food directly from farmers tend to access organic products via SFSC and tend to adapt the menus according to seasonal production. According to the authors, this practice differs from the purchasing policy of restaurants that buy mostly from supermarkets and wholesale. The authors add that restaurants that buy organic food are interested in expanding the quantities purchased, but face some obstacles, among which stand out, higher prices; higher logistics costs; irregularities in the supply in terms of scale, diversity, quality, and quality seasonality of products.

Besides introducing top-quality ingredients, reflections on the role of restaurants, chefs, and other food services in building healthier and more sustainable food systems have increased. According to Krause and Bahls (2013), the efforts to develop and materialize sustainable gastronomy are relatively recent. This trend has grown, given the increase in the social perception of the effects of food on health. The actors point out some practices that guide more sustainable gastronomy, among which stand out the use of seasonal, local, and organic ingredients; adopting adequate transport, packaging, and storage; and reduced losses, waste, and full use of raw materials.

Zaneti and Schneider (2016), studying the factors that condition the use of unique ingredients by chefs of contemporary gastronomy, mention that the main motivators for using such products relate to taste, differentiated quality, search for identity, and professional recognition. The authors analyze that the consumption of such products is more associated with the search for distinction and positioning in the gastronomic sector than with the search for a more sustainable gastronomy. This would lead to a unilateral appreciation, as only chefs would guarantee appreciation economically from the prices of products or symbolic from the distinction and identity linked to such products. However, the authors argue that the interaction between chefs, diners, and farmers can potentially promote new spaces for socialization and commercialization among the actors.

Paciarotti and Torregiani (2018), in a study, focused on the logistical aspects of structuring SFSC initiatives in the region of Marche (Italy), found poor communication between restaurant professionals with farmers and their organizations, as well as farmers with weak logistical structures, unable to meet the conditions of the sector. Although these aspects hinder the interaction between restaurants and farmers, both parties show interest in building possibilities for direct marketing, either as a strategy for expanding and diversifying markets (farmers) or offer meals with organic and local ingredients (restaurants). These aspects comprise essential elements in the construction of initiatives that bring together food services and local farmers, representing challenges to be overcome in social innovation with SFSC between them.

3. Materials and methods

3.1. Research strategy

This study is part of research developed to understand the conditions and stimulate the construction of SFSC initiatives involving food services and organic farmers in the Greater Florianópolis region. This article seeks especially to analyze the conditioning factors for forming SFSC initiatives involving these actors. The research comprises a case study of exploratory nature and qualitative approach, organized into two fronts of action. The first concerns the trajectory of the actors integrated with SFSC initiatives operated by organic farmers in the Greater Florianópolis region. The second, more focused on food services, developed between October 2021 and April 2022, sought to identify their interest and conditions for purchasing food directly from farmers and their organizations.

3.2. Data collection and processing

On the first front, we proceeded to collect data by reviewing local studies on the subject, analyzing secondary data, and participant observation in meetings and events with leaders of local farmer organizations. We utilized of participant observation, materialized by accompanying the authors to events and meetings that involve the public, and by their connection with segments of family farming that work with organic and agroecological agriculture. This front aimed to identify social innovations around production and marketing, and understand to what extent they contribute to social actors being able to undertake new collective actions with innovative potential.

In turn, in the second front, we sent an online questionnaire for food services in Florianopolis. We started by identifying the food services from the list of enterprises available on TripAdvisor®, while verifying their operations from the information available on Google Maps®. This process identified 691 establishments operating in the meal production sector in Florianopolis, to which, we sent an invitation, by text message to all of them with a link to access the questionnaire (Google Forms®) forwarded via emails, WhatsApp®,

and direct messages to pages on social networks.[1] The invitation allowed the participation of 35 establishments, which constitutes the intentional sample of this research. The questionnaire was available between August 2021 and April 2022, and contained questions about the characterization of the respondent, the profile of the establishment, the policy of food purchasing, the use of organic ingredients, and the interest and conditions/requirements for participation in an initiative of organic food purchasing directly from farmers' organizations in the region. The data were organized in spreadsheets and are described here and analyzed from the theoretical framework of social innovations. The study was approved by the Ethics Committee in Research with Human Beings of UFSC, protocol no. 4.375.733 and CAAE 38425120.9.0000.0121.

3.3. Limitation

The study developed in the context of the social restriction resulting from the covid-19 pandemic. Due to this condition, we chose to develop the research entirely online, without the possibility of in-person visits to the enterprises. In this sense, the restriction made it difficult to carry out a more in-depth study. However, considering what this article proposes, the investigation contributes to understanding the conditioning factors for the formation of SFSC involving food services, as well as relevant aspects in the formation of social innovations in this field.

4. Results and discussions

4.1. The production and access to organic food in greater Florianópolis region

Florianópolis is the capital and one of the largest urban centers in Santa Catarina, Brazil. According to IBGE—Instituto Brasileiro de Geografia e Estatística (2021), its population was estimated at 516.524 inhabitants. The Greater Florianópolis region is composed of 21 municipalities, with 1224.400 inhabitants, and a conurbation area of approximately 1 million inhabitants (see Figure 1) (IBGE—Instituto Brasileiro de Geografia e Estatística, 2021). Although it is an extremely urbanized region, the municipality still has areas occupied by agricultural establishments, especially family establishments. The region originally occupied by indigenous people, has a strong identity linked to the Azorean colonization of the 17th century. Furthermore, the area was also occupied in the 19th century by other European immigrants (mostly Germans and Italians). Agriculture was strongly influenced by European cultures, which play a leading role in forming cooperative and associative initiatives, especially linked to family farming (Búrigo, 2010). The Brazilian Agricultural Census (IBGE—Instituto Brasileiro de Geografia e Estatística, 2017) counted the existence of 10,088 agricultural establishments in the region, of which 7,466 are considered family farming. Most family farms (53%) are between 10 and 50 hectares.

Agricultural production in the state, especially in the regions near Florianópolis, is strongly influenced by geographical conditions marked by mountains and slopes that restrict the use of agricultural machinery and consequently favor labor-intensive production (Viegas, 2016). The predominant vegetation is the Atlantic Forest (Vibrans et al., 2021), a biome recognized as a biodiversity hotspot (Rezende et al., 2018). Rainfall in the region is abundant, due to the warm, humid air rising near the mountain slopes (windward), although they decrease in winter (averages around 100 mm; Monteiro, 2001). The region has high temperatures throughout the year (>18°) with the exception of the winter months (June, July, and August; Pereira and Nascimento Júnior, 2022).

Family farming accounts for most of the conventional and organic foods consumed in the region or directed to more distant markets. Research developed by the Agricultural Research and Rural Extension Company of Santa Catarina (EPAGRI), pointed out that in 2012 the organic production in the region generated R$4 million in revenue. The adoption of organic horticulture predominated in the region, and the main food products were cassava, sweet potato, onion, black bean, green corn, tomato and physalis (Zoldan and Mior, 2012). Organic production is commercialized in a diversity of markets. Rover et al. (2016) identified 91 retail establishments selling organic food in Florianopolis, which were divided into supermarkets, specialty stores, grocery stores, and farmer's markets, which provided products from both local (especially *in natura*) and non-local farmers. In addition to these, there is a diversity of SFSC that supply a diversity of local products.

The edition of the National Register of Organic Producers (CNPO), published in September 2022, pointed out that Santa Catarina had 1,564 regularized organic establishments, which corresponds to 6.6% of the total organic establishments in the country (23,632), distributed among the activities of primary animal and vegetable production, processing, and sustainable extraction. Of the total organic establishments in the state, 14.8% are located in the Metropolitan Region of Florianópolis (MAPA, 2022). This percentage corresponds to 232 establishments regularized in the region, where participatory certification or Participatory Guarantee System (SPG) regularizes 74%, and the other 26% are certified by audit. The Ecovida Network of Agroecology regulates all establishments regulated by participatory certification. This network comprises an interorganizational articulation between several social actors and support entities interested in developing agroecology and family farming in southern Brazil (Perez-Cassarino, 2012; Darolt, 2013; Rover and Lampa, 2013; Rover et al., 2016).

The Ecovida Network is formed from a diversity of organizations (organic/agroecological farmers, NGOs, advisory institutions, universities, consumers, etc.) that work around the production, regularization, and marketing of organic/agroecological foods. Among those who work with farmers in the surroundings of Florianópolis, the Center for Studies and Promotion of Group Agriculture, the Vianei Center for Popular Education, the Slow Food Movement (Núcleo Mata Atlântica), the Agricultural Research and Rural Extension Company of Santa Catarina (EPAGRI) are worth mentioning. It is worth mentioning that these entities act within the Network and in actions taken by each. These and other actors, more recently, have been working to promote awareness, mobilization, and greater involvement of consumers within the Network. Some of them have also worked in constructing markets for organic farmers in

1 At times, there were also attempts to make contacts *via* phone calls, but there was little participation from this approach.

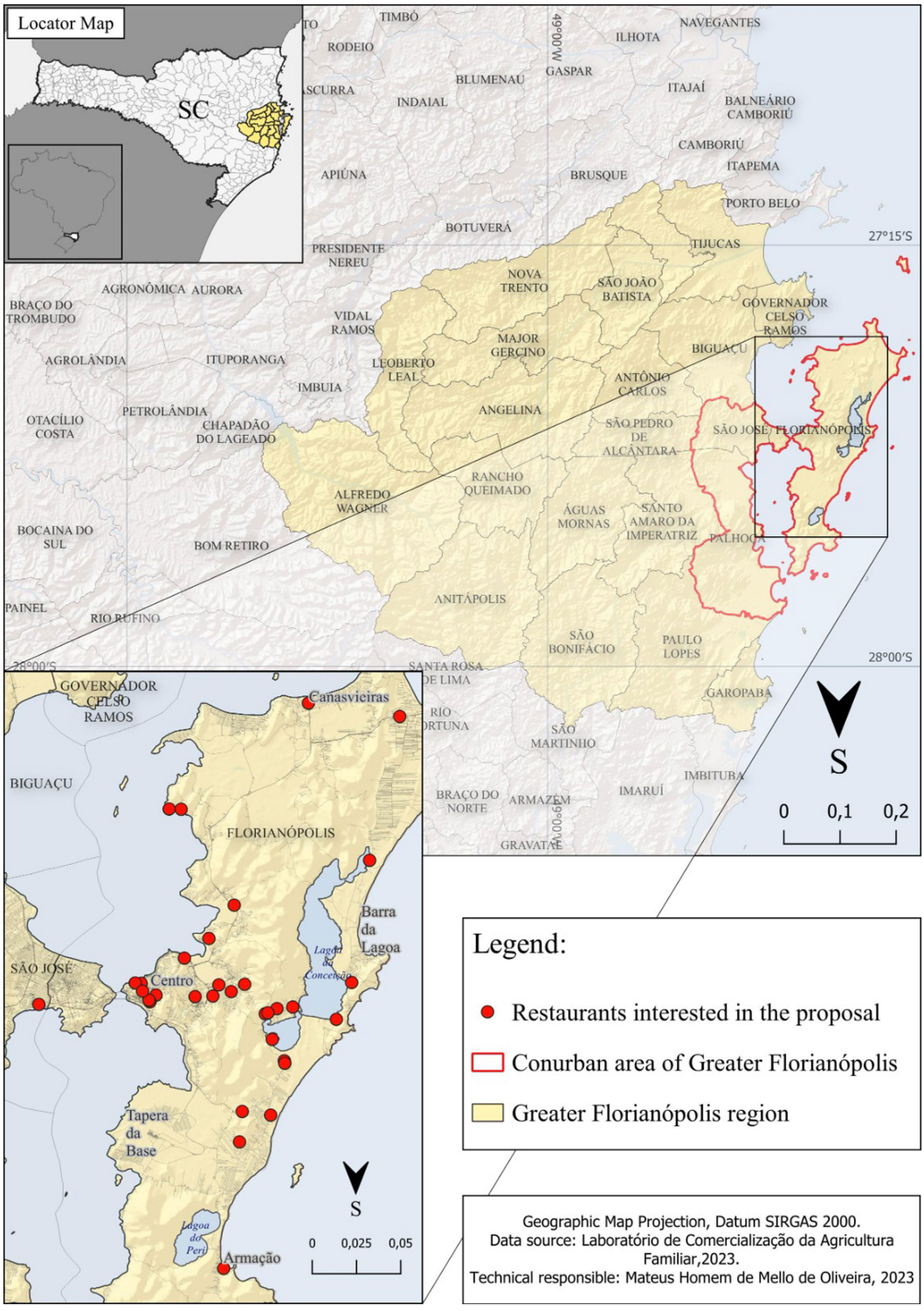

FIGURE 1
Representation of the trajectory of social innovation undertaken by rural actors around the Greater Florianópolis region, plus the perspective for a new configuration. Prepared by the authors (2022).

Florianópolis, emphasizing SFSC experiences. The Ecovida Network involves approximately 4,500 farming families, organized in 340 groups and supported by 20 NGOs. It covers farmers from the three states of southern Brazil to the south of São Paulo, totaling 352 municipalities (Ecovida, 2022). It was from this organization that the first Brazilian SPG was established, the Ecovida Association for Participatory Certification, which regulates most organic farmers in the region and greatly influences the participatory certification experiences that emerged in the country later. Some studies have argued that it represents an innovation due to its structure and

organizational dynamics and the differentiated marketing relationships it provides for farmers (Rover, 2011; Rover et al., 2016; Oliveira et al., 2020).

For Rover et al. (2016), the Ecovida Network comprises an example of social innovation in that "is an organizational network that innovates and transforms the agricultural systems in which it takes part" (p. 10). This would be based on the social relations between farmers and the entities supporting the network. The relations between producers are established from the SPG's own confidence generation system. Brandenburg et al. (2013) argue that the expansion of organic production, previously mainly destined for the self-sufficiency of farming families, generated the social need to access more distant markets, where interpersonal relationships are not enough to generate trust. This problem and the high certification costs by audit mobilized social actors in the construction of the participatory certification process, which has since promoted the construction of bonds between farmers, increased mutual trust, and shared resources. From the meetings to verify the conformity of the establishments (verification visits), farmers exchange experiences on the production process and create partnerships in dealing with issues experienced in each group. This interaction generates many collective initiatives, contributing to the satisfaction of social needs and the empowerment of family farmers, whether in relation to aspects of the production or marketing of products.

The structure and organizational dynamics of the Network, especially the groups of farmers and regional centers, create conditions for constructing various innovative initiatives based on the relationships and social bonds that have existed since its constitution. An initiative of great scope is the Southern Circuit of Food Circulation, a logistical scheme created in 2006 by several cooperatives and NGOs, aiming to exchange and circulate products between the different centers and regions covered by the Network. This innovation came from the social needs of farmers to access more distant markets and diversify the range of products offered in local markets, providing access to food not produced locally or out of season. The initiative, which was strengthened with the creation of the SPG, has several principles and operating rules and operates from stations, centers, and substations that send and receive products from different regions of the Network. The products are accessed by the local actors of each station/region and made available in various commercial equipment, such as institutional markets, consumer groups, fairs, and specialized stores, among others (Magnanti, 2008). According to Niederle (2014), the process allows the distribution of differentiated foods in the regions covered by the Network, favoring the diversification of the products offered by actors linked to it.

The collective arrangements of the Ecovida Network are also mobilized and adapted for access to institutional markets. According to Oliveira et al. (2020), although the fairs remain as predominant market equipment, the increase in organic production triggered the search for other forms of commercialization, among them the institutional markets, specifically the Food Acquisition Program (PAA) and the National School Feeding Program (PNAE). Often, farmers mobilize from the groups as a strategy to guarantee a productive scale and expand the diversity of food to be offered. In some cases, farmers create associations and cooperatives in order to meet formalization requirements, which link producers to institutional markets (Niederle, 2014). The formation of formal organizations also favors obtaining greater amounts of credit resources, which enable the construction of collective infrastructures necessary for market access.

More recently, the attention of the actors of the Ecovida Network has turned to initiatives that generate greater approximation with the sphere of consumption. As evidenced from participation in meetings with farmers' organizations, the pursuit for fair and stable commercial alternative markets and for guarantee of greater profitability has stimulated the construction of SFSC initiatives, especially in large consumption centers, such as the Greater Florianópolis region. Taking advantage of the growing risk perception of consumers regarding the industrial agrifood system and the search for new food practices, farmers and support entities have built processes that promote greater consumer engagement around agrifood supply.

Souza et al. (2021) identified 10 SFSC initiatives, covering 28 organized consumer groups supplied by 209 farming families, totaling approximately 24 tons of monthly organic/agroecological food. Most farming families that supply these initiatives are linked to the Ecovida Network. Also, the construction of these initiatives was supported by several support entities (public institutions and social organizations), which also interact with the Network. In other words, the existence of the Network generates conditions for constructing SFSC initiatives. The social innovation that enabled the regularization of many farmers, and the entire social structure linked to it, have contributed to the emergence of new initiatives that sometimes promote innovation in the relations of production, marketing, and consumption of organic food at the local level.

A representative experience, and interpreted as social innovation, are the Responsible Consumer Cells (Escosteguy, 2019). Created by the Family Agriculture Marketing Laboratory (LACAF), linked to the Federal University of Santa Catarina (UFSC), it constitutes a form of SFSC based on advance ordering and payment, in which consumers organize themselves collectively for the acquisition of organic food directly from groups of farmers in the vicinity of Florianópolis. A differential of this initiative is adopting a single delivery point, under the responsibility of consumers, which reduces logistics costs and makes product prices more accessible compared to other marketing channels (Grade and Mergen, 2020). The groups of farmers, all integrated into the Ecovida Network, are responsible for the supply and delivery on-site, articulating in the collective planning of the offer. The experience that began in November 2017 with a group of farmers providing 27 product baskets currently counts on the involvement of 6 farmers, supplying 12 groups of organized consumers. The initiative provided the opportunity to market approximately 200 tons of organic food in 2021 and guaranteed access to these products to more than 500 families of consumers (LACAF, 2022).

In summary, farmers and their organizations have been articulated with several actors in coping with social needs and formulating a common project of agriculture and agrifood system. The main social innovations emerging from this articulation are summarized in Figure 2. This process conceived a trajectory that initially problematized and innovated in coping with the difficulties of regularizing establishments and organic products. Social relations and resources designed for this purpose have been mobilized to face several other needs, emphasizing access to more profitable and stable markets. These have produced socially constructed innovations, significantly impacting the local agrifood system.

Advancing this innovative trajectory would imply mobilizing and articulating new actors. Food services are enterprises that

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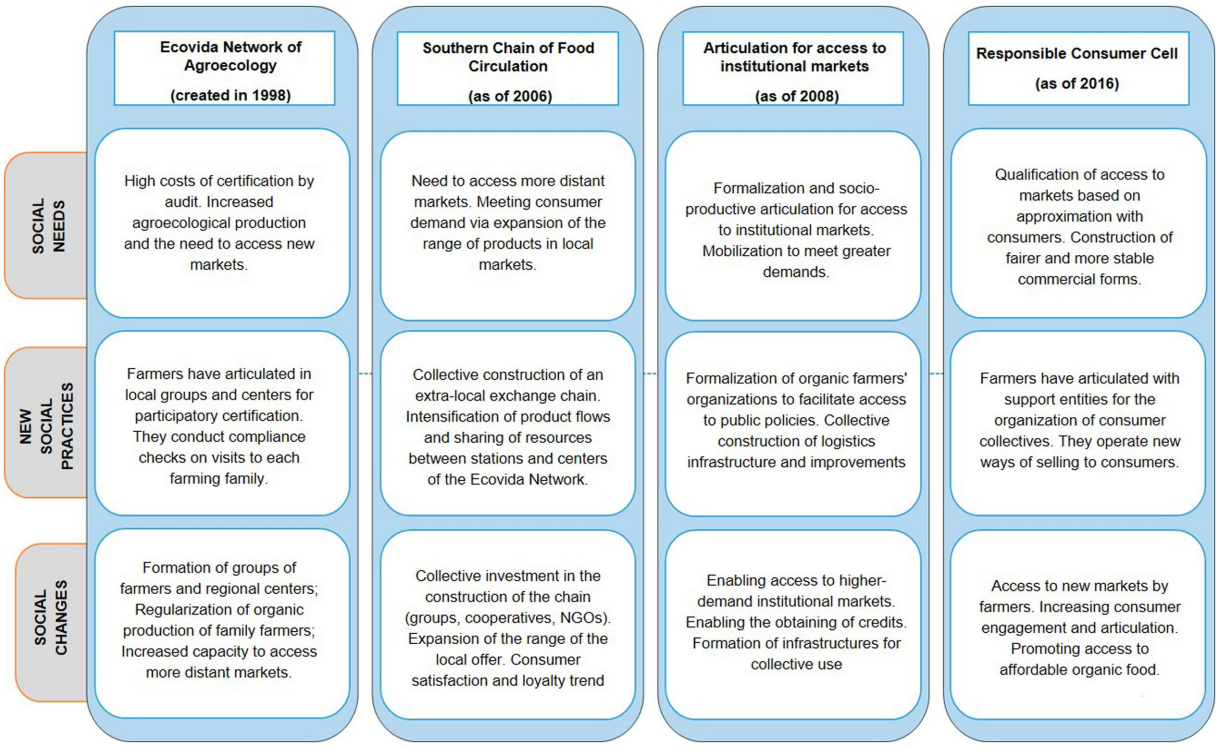

FIGURE 2
The main social innovations around the production and supply of organic food in Greater Florianópolis. Prepared by the authors (2022).

have the potential to have significant impacts in terms of volumes of food demanded and could contribute to changes in agrifood planning. Based on this perspective, the next section explores the demand potential and the conditioning factors for a possible approximation of this segment in the construction of SFSC initiatives.

4.2. Conditioning factors for the purchase of organic food by food services in Florianópolis

A total of 35 food service representatives from Florianópolis answered the questionnaire. The majority owned the establishments (54%), but also held management positions (37%), were chefs (34%), and/or nutritionists (3%).[2] In most establishments (77%), the dish options were individual and pre-defined on the menu, which can be in an à *la carte* system for on-site consumption, frozen lunch boxes, or delivery, and set meals. The others had varied services such as free buffet, weight, and/or performances such as bars, snack bars, and cafes. The establishments served an average of 89.3 meals, ranging from 10 to 600 daily. Most respondents stated that menu planning occurs every 6 months, weekly or monthly, with 37%, 28%, and 17%, respectively.

Most respondents (54%) said they did not use organic foods at meals, and 31% said they had never used these products. Among the reasons for non-use, the price and unavailability of products/suppliers were the most prominent factors. The price, diversity, regularity, and delivery volume were factors highlighted as having a great influence on buying organic food (Figure 3). The condition of payment was not shown to be an essential factor for the purchase of organic products since 77% of respondents indicated that they were an element with little or no influence on the purchase decision.

Based on the experience with previous studies, the research team listed scenarios with possible adaptations to enable the acquisition of organic food from local family farming and requested that the representatives indicate the level of agreement with the statements (Table 1). Adaptations related to the payment of the products and the place of delivery were the most prominent items, with many respondents disagreeing with the possibility of implementing them. Although payment terms have been approached as a factor with little influence on the purchase decision, respondents highlighted that it is essential to make the payment always after receiving the products. Delivery to the establishment was also an important condition for most food services, although several are open to receive in a nearby location. On the other hand, the purchase of a diversity of items that farmers have and minimum quantity to enable delivery was widely accepted, as well as the union with other places for a collective purchase.

Of the 35 respondents, 31 (86%) showed interest in purchasing organic food directly from family farmers in the region (their location is shown in Figure 1). This practice would be a novelty for most establishments since 57% do not buy the products directly from farmers (whether organic or conventional). Among the

2 Some respondents declared to exercise more than one function, which is why the sum of the percentages is greater than 100.

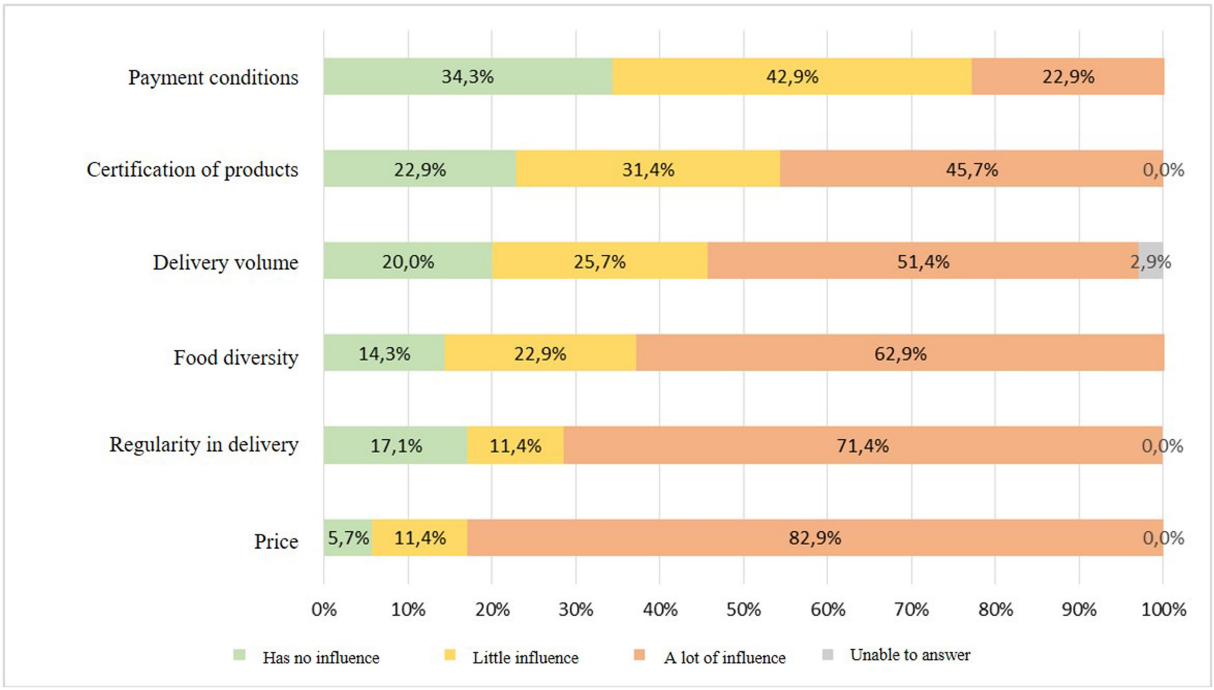

FIGURE 3
Influence of factors related to purchasing organic food by food services in Florianópolis. Prepared by the authors (2022).

TABLE 1 Level of agreement of the respondents regarding the possible adaptations necessary to acquire organic food from local family farming.

Adaptations necessary for the acquisition of organics	Disagree	Neither agree nor disagree	Agree
Purchase a minimum diversity and quantity that enables delivery	14.3%	11.4%	74.3%
Join other restaurants to make the purchase collectively feasible	25.7%	11.4%	62.9%
Receive food only at the site of my venture	14.3%	25.7%	57.1%
Conduct visits to the properties to observe the production conditions	14.3%	28.6%	57.1%
Include unconventional food plants in menu preparations	31.4%	8.6%	54.3%
Make the payment only after a deadline after delivery	14.3%	31.4%	54.3%
Acquire food from farmers in transition, who do not yet have organic certification	20.0%	28.6%	48.6%
Receive orders at a delivery point near my venture (need to travel)	54.3%	8.6%	37.1%
Prepare menus based on available food	37.1%	25.7%	37.1%
Elaborate preparations with food available in greater quantity	34.3%	28.6%	37.1%
Contribute to the costs of boxes where food will be transported with farmers	37.1%	25.7%	34.3%
Make the payment at the time of delivery of the products	42.9%	31.4%	25.7%
Make the payment in advance	48.6%	31.4%	20.0%

Prepared by the authors (2022).

establishments that showed interest, the weekly demand was approximately 1,208 kg of fruits, 2,005 kg of vegetables, 1,684 packs of leafy vegetables, 595 kg of roots and tubers, and 228 kg of legumes. Concerning the level of processing, most establishments (51%) said they did not buy processed fruits and vegetables, acquiring them without any processing, or at most, minimally processed (sanitized and chopped). The others claimed to purchase some processed products, even though food without processing predominates.

The representatives of the food services were also able to list some conditions they considered indispensable for the establishment's participation in an initiative to purchase organic food directly from producers in the region. The most mentioned element refers to an affordable price of the products, mentioned by 42% of the establishments concerned (this factor was also cited as a reason for not using these products). The delivery guarantee was the second most cited condition (26%), followed by the quality of

the products (22%), the need for delivery on site or near the establishment (19%), and adequate payment terms (16%; including issues such as deadline and issue of bills). Meeting these main conditions could make it possible to increase the use of organic food by local farmers for food services.

4.3. Between the interest of demand and the socio-organizational capacity of supply: convergences for organic SFSC among family farmers and food services

4.3.1. On the interest and conditions presented by the demand

Most food services surveyed showed interest in acquiring organic food from local producers and their organizations. Nevertheless, they place some constraints on materializing direct buying and selling initiatives. As in other studies, reducing organic prices stood out as the main condition for food services to participate in SFSC initiatives (Poulston and Yiu, 2011; Silva and de Sousa, 2013; Niederle and Schubert, 2020). This is important, considering the need for food services to apply an overprice on meals to enable their operation while ensuring the competitiveness of the establishment in the sector.

The regular and constant supply of food by local producers has been pointed out as a barrier to the supply of food services (Colasanti et al., 2012; Harris et al., 2012; Sidaner et al., 2013; Soares et al., 2015; Niederle and Schubert, 2020). In our study, diversity of products, regularity, and delivery volume were important constraints presented by food service representatives. The management of these establishments is complex and requires trust in suppliers and a supply guarantee. Failures in receiving food generate problems throughout the meal production process, which may imply an increase in the cost of meals, stress on the entire work team, and failures in the delivery of the service. Thus, managers generally opt for security in supply, giving preference to suppliers who already have a relationship of trust. The regularity of supply and the production volume is considered the main limiting factors for access to markets by family farmers (Vieira and Del-Grossi, 2008). Thus, to ensure that an SFSC becomes a social innovation, it would be necessary to strengthen the trust relationships between buyers and suppliers, built over time. Nevertheless, building this trust would require an initial awareness of farmers about the constraints presented by food services, as well as a negotiation with them to identify possible elements of flexibility in their conditions for purchase. It would also be worth identifying the food services that proved to be more flexible to adapt their conditions, menus, etc., to make the direct purchase-sale proposal feasible.

The complexity of the operation of food services was also evidenced in the delivery and payment conditions presented by the respondents. Many of them considered the food receipt in the establishment as an important factor. Traveling to seek food can generate the need to hire labor and increase the cost of meals, a situation not desired by managers. Payment after receiving the products is also expected, requiring a longer term in many cases. It is important to highlight that the receipt of food on-site and the possibility of payment after delivery are routine situations in Brazilian food services. Therefore, changes in this format could not be well accepted by managers and compromise the initiative's success. However, almost 40% of them express the possibility of receiving food in a place outside their enterprise, and more than 45% would accept the possibility of advance payment or at the time of purchase. These percentages open possibilities to initially negotiate with those more open to relax their conditions and ensure the purchase of organic food directly from farmers. Still, most managers consider it possible to buy diversity and minimum quantity to enable delivery by farmers. We emphasize the importance of raising awareness among food service managers about the implications of participating in a collective purchasing initiative and how this would imply in the planning of production and guarantee of farmers' income.

The lack of products available during certain times of the year (Colasanti et al., 2012; Niederle and Schubert, 2020) is also a difficulty in the local purchase of family farming by food services. Most interviewees report that they plan the menu daily, weekly, or monthly and consider it possible to make changes to the menus based on the availability of organic foods produced in the region. This was an important factor identified for the advancement of social innovation for direct purchase-sale since menus planned every 6 months or annually are more limited and could make it impossible to purchase seasonal food from family farmers. Menu planning, according to food availability, contributes to difficulties related to the supply of food from family farming (Soares et al., 2015; Sousa et al., 2015; Bianchini et al., 2020). For this to happen, there must be an effective negotiation between farmers and their organizations with food services (Schwartzman et al., 2017; Bianchini et al., 2020).

4.3.2. On the socio-organizational capacity of the offer

Meeting the conditions pointed out by food services requires the mobilization of actors to conceive common understandings and consensus among stakeholders. Adequate prices and the guarantee of organic food quality are conditions presented by the food services, for which negotiations between the parties could lead to new ideas and solutions. However, there is already an innovative trajectory of organic family farmers in the territory, with food certified through its organizational network. The possibility of direct sale would allow withdrawing gains from intermediaries and making room for the final price reduction. Cooperation with suppliers can enable food supply under conditions that meet the demands of food production (Risku-Norja and Løes, 2017). Hence, it would be necessary to build spaces for dialog between the food services concerned and farmers' organizations, which would allow the construction of a collaborative SFSC initiative.

Local farmers and their organizations are, at least partially, in a position to meet the demands of food services, especially due to the intercooperation network they have undertaken, generating a trajectory of social innovations. The Ecovida Network of Agroecology promoted the expansion of the associative interfaces accessed by farmers. Various forms of cooperation between farmers, institutions, and social organizations operating in rural areas have emerged, which have promoted the improvement of the capacity of farmers and their organizations to build collective responses to the difficulties faced, with emphasis on the construction of differentiated markets (Rover, 2011; Rover et al., 2016; Souza et al., 2021). For example, the conditions presented by the food services regarding the delivery logistics (guarantee and regularity) could be met by sharing logistics already available to the groups of farmers who supply the Responsible Consumer Cells or in the environment of the Southern Chain of Food Circulation of the Ecovida Network.

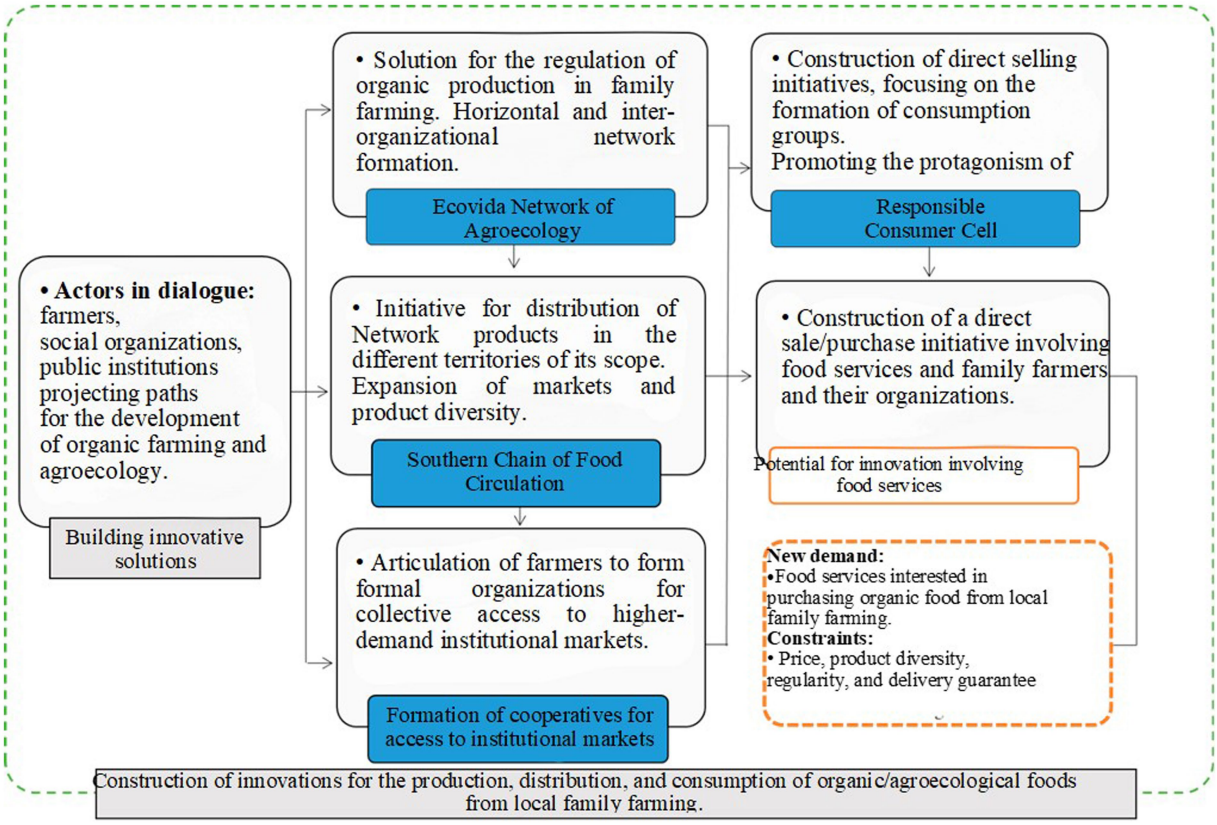

FIGURE 4
Location of food services that have expressed interest in participating in initiatives to buy organic food from local producers. Prepared by the authors (2022).

The diversity of products would also be a condition that farmers could meet, given the high productive diversity, especially those who access forms of direct sale (Rover et al., 2016). Besides, the groups of farmers also expand the range of products offered by exchanging products with each other as a way to expand their supply portfolio and circumvent the limitations of local seasonality.

4.3.3. Elements for a path of social innovation

The ability to respond to the conditions presented by food services results from a trajectory of commercial initiatives (Figure 4) undertaken from the dialog between farmers, their organizations, and support entities linked to the rural environment (public institutions and social organizations). Such initiatives represent social innovations conceived and implemented by these actors. The first innovation is the constitution of the Ecovida Network of Agroecology itself. The Network can be understood as the basis that structures the path of innovations because it is in the ballast of its organizational dynamics that other social innovations have been generated.

The actors have used the Network structure to design and implement collaborative commercial actions, materializing from various levels of cooperation, spaces for dialog, and decision-making. This is the case in both of the Southern Chain of Food Circulation, the articulation in formal organizations for access to institutional markets, and the Responsible Consumers Cell. With each new experience, they expand their performance, the cooperation interfaces, and the sharing of resources to respond effectively to new needs faced collectively and the performance of new support entities (public institutions or civil society organizations).

More recently, social actors have turned their attention to the qualification of market access, understanding the approximation between production and consumption to ensure stable markets with higher yields. In this scenario, numerous SFSC initiatives have emerged, especially those of direct sale by advance orders, such as the experience of Responsible Consumer Cells and others distributed in the Greater Florianópolis region (Souza et al., 2021). In these experiences, we highlight the increased participation of consumers in their construction and development, which is the result of the work of institutions and social organizations that work in awareness, seeking accountability and change in their procurement and consumption practices.

In this context, the interest and availability of food services in practicing new dynamics of purchasing food products have the potential to bring about a new social innovation following the current innovative trajectory. Previous innovations could contribute to the emergence of a new experience, with attention to meeting the conditions of this critical segment of agrifood. This is because successful experiences have increased the capacity of farmers and their organizations to promote new collaborative actions, resulting from the empowerment of actors, which was constituted from four fundamental elements for the emergence of new initiatives: social bonds (Renting et al., 2003; Darolt et al., 2016), trust (Marsden et al., 2000), resource sharing (Schneider and Ferrari, 2015), and collective learning (Renting et al., 2012; Chiffoleau et al., 2019; Table 2).

TABLE 2 Components of social innovation in local SFSCs that contribute to the emergence of innovative solutions.

Element	Theoretical aspects	Empirical aspects (from existing innovations to that potential)
Social bonds	Social bonds materialize through the relationship between the actors and materialize with a higher or lower level of cooperation. Relationships are built under new forms of association and institutional support (Renting et al., 2003; Darolt et al., 2016)	- Rural social actors constituted the Ecovida Network, socially articulating themselves into groups for the viability of organic certification.
		- Farmers, organizations, and institutions have started to establish bonds that are mobilized to face several collective problems (social needs), especially from cooperation in accessing new markets.
		- The links established and strengthened in the initiatives can be accessed to structure a new purchase/sale initiative, based on the conditions of food services.
Trust	Trust comes from associative interfaces (networks), which are significant in establishing common understandings, work patterns, and forms of cooperation between the different actors in a supply chain (Marsden et al., 2000)	- The success of initiatives based on cooperation has increased the confidence of individuals with their peers.
		- The accumulation of trust has led actors to build new forms of cooperation, investing more resources and time in collaborative initiatives.
		- In addition to accessing existing ones, farmers should expand their cooperation interfaces (with other farmers and support entities) to provide food in quantity, diversity, quality, and regularity to food services.
Resource Sharing	Collective mobilization of tangible resources (production factors activated in the production process and mobilized in the constitution of a range of products and services, and the logistical infrastructures mobilized in the structuring of SFSCs) and intangibles (local skills and practices, traditional knowledge, etc.; Schneider and Ferrari, 2015)	- The actors involved share the resources they have in the construction of solutions designed in their spaces of dialog.
		- In many cases, actors build structures for storage, transportation, and sale of products collectively.
		- The mobilization of resources for the community has been expanded over time.
		- The resources mobilized in previous experiences may be triggered again in an experience involving food services, emphasizing logistics of meeting and distribution of products.
Collective learning	Collective sharing of good practices, experiences, and learning. Successful practices are transmitted to new actors, who increase their skills in coping with difficulties and formatting proposals more appropriate to local conditions (Renting et al., 2012; Chiffoleau et al., 2019)	- The Ecovida Network of Agroecology, as well as the Southern Chain of Food Circulation and the construction of new forms of the direct sale took place from spaces of dialog and learning between the actors.
		- The experiences exchanged and emerged from these initiatives enable essential knowledge of the potential emergence of food services innovation.

Prepared by the authors (2022).

4.3.4. Summarizing theoretical contributions

The interest of restaurants and other food services in organic food procurement is evidenced in the literature. However, the involvement of these segments with SFSC initiatives is still poorly explored, and with a more prominent focus on public sector enterprises (Galli et al., 2014; Borsatto et al., 2020; Soares et al., 2021). The first contribution of this study corresponds to the analysis of conditions imposed by food services to integrate SFSC initiatives. Similar to what was observed in a study on the purchase of organic food in public enterprises, that privilege proposals less costly (Galli et al., 2014), the price of food was the main conditioning factor for participation in a direct purchase experience from local producers. Additionally, issues related to logistics emerged as a central issue for the development of SFSC in this sector (Paciarotti and Torregiani, 2018), and the quality of products (appearance, size, freshness, etc.), expressing concern with the esthetics of the food served to customers.

The second contribution is related to the theoretical approach of social innovations in SFSC. Some recent studies that have addressed this perspective point out that innovations in these experiences can emerge as a result of successive collective actions (trajectory) undertaken by the actors involved in the SFSC (Alberio and Moralli, 2021; Petropoulou et al., 2022; Vercher, 2022).

However, little progress has been made in explaining or making the mechanisms explicit through which these trajectories triggered processes of social innovation. Here, although in an introductory way, we present some aspects that can contribute to the development of an innovative trajectory in the context of the SFSC, by mobilizing and attributing relevance to social ties, trust, resource sharing and collective learning.

In these terms, social innovations are conceived as a process resulting from the mobilization of different social actors. Farmers and other rural social actors working together to conceive, experiment and disseminate actions aimed at the production and selling of their products. Drawing on their accumulated repertoire of collaborative actions, they undertake ways to address their social needs, in order to resolve power asymmetries in the social system in which they are embedded (Ayob et al., 2016).

5. Conclusion

A transition to more sustainable agrifood systems requires the design of initiatives that enable changes to more responsible food practices. In this context, it is pertinent to include social actors around the configuration of innovations. This article analyzed the conditions for forming short food supply chains involving food services and organic farmers' organizations in the Greater Florianópolis region, based on research developed to understand and stimulate the construction of social innovations. We found that there is interest, conditions, and actors willing to become vanguard in the supply of meals associated with production-consumption approximation initiatives. This fact can be presented as a starting point for stakeholders to be able to mobilize different publics interested in an action with social innovative potential.

Food services expressed several conditions for participating in SFSC initiatives, from which the following stand out: the need for affordable prices, aspects related to logistics, product quality and payment conditions suited to the food services. At least in part, farmers are able to respond adequately to the conditions of this type of establishment. This strength is explained by the socio-organizational dynamics, derived from a trajectory of socially conceived innovations, which have improved their capacity for action, in the search for access to fair and more stable markets, especially from the articulation of farmers in local organizations, and multi-actor networks.

In theoretical terms, the research contributes to understanding the role of socially conceived innovations by agrifood actors in the construction of initiatives with an impact on generating transformations in local agrifood systems. In addition, it shows how the existence of experiences and previous social engagement can be a fertile field for the emergence of new social innovations, which we refer to as the trajectory of social innovations. According to the results, the interest of food services in integrating SFSC initiatives for the acquisition of organic products points to the potential for convergence between them and the set of organic farming actors in the territory, which would have the ability to add another social innovation to the ongoing trajectory, with a special role for farmers, their organizations, and support entities linked to the rural context. In other words, the provision of food services, associated with the trajectory of social innovations linked to SFSC supplied by farmers around Florianópolis, shows a possible approach with the potential to generate a new step in this trajectory of the territory. This could increase the impact of ongoing SFSC initiatives, ensuring consumers access local food, even when eating out.

The research has limitations especially for its descriptive nature and not providing any statistically generalized quantitative analysis. However, these same limitations provide favorable opportunities for the development of new studies. The first, regarding the theoretical perspective, deepening the understanding of the mechanisms that influence innovative trajectories would require studies that focus on social networks at multiple scales and mobilizing different theoretical perspectives. The second corresponds to investigating the conditions and productive potential of local farmers and the impact of creating innovations in SFSC for supplying food services, on top of a locus study aimed toward understanding the operation dynamics of the purchasing policy of these enterprises and the possible connection strategies with local farmers' organizations.

Data availability statement

The raw data supporting the conclusions of this article will be made available by the authors, without undue reservation.

Ethics statement

The studies involving human participants were reviewed and approved by Comitê de Ética em Pesquisa com Seres Humanos (CEPSH-UFSC). Written informed consent for participation was not required for this study in accordance with the national legislation and the institutional requirements.

Author contributions

AP: methodology, data collection, and writing—original draft. OR: methodology, supervision, and writing. SM: methodology, data curation, and writing. FT: methodology, data collection, and writing. All authors contributed to the article and approved the submitted version.

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Conflict of interest

The authors declare that the research was conducted in the absence of any commercial or financial relationships that could be construed as a potential conflict of interest.

Publisher's note

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