Short Food Supply Chains in Urban Areas: Who Takes the Lead? Evidence from Three Cities across Europe

Stefano Grando,* Joy Carey, Els Hegger, Ingrid Jahrl, and Livia Ortolani

Abstract

Short food supply chain (SFSCs) initiatives have developed throughout Europe as an alternative to the long industrialized chains characterizing the contemporary global food industry. They are often driven by small-scale actors belonging to different phases of the chain (producers, retailers, consumers) and rooted in specific territorial contexts. Innovative organizational models of SFSCs are attracting interest in the academic field (Jarosz, 2008, Khan and Prior, 2010, Aubry and Kebir, 2013) and beyond (RUAF, 2015). This work contributes to the debate with a focus on the logistics of SFSCs in urban and peri-urban areas across Europe, specifically on the role of local intermediaries in facilitating connections between urban consumers and peri-urban and rural farmers. The structure of three small/medium enterprises (SMEs) acting as local SFSC intermediaries has been analyzed by a research network involving researchers and entrepreneurs in a mutual learning process. The aim was to identify the main business objectives of local intermediaries in SFSCs, the elements that from the SMEs point of view characterize SFSCs and their vision of sustainability. A simple theoretical model has been developed to look at leadership of SFSCs in urban and peri-urban areas. The research process provided interesting insight into the contribution that qualitative research can give to SMEs’ reflection on their organizational model (Zakic et al., 2014).

Core Ideas

Local intermediaries can stimulate innovative organizational models in short chains.

Leadership in short chains determines prioritization between sustainability goals.

Trust and communication, more than distance, are short chain key elements.

Flexible regulation can contribute to speeding up development of innovative partnerships.

Qualitative research can support SMEs with an integrated vision of their supply chain.

Short Food Chains Between Market Competition and Social Embeddedness

The development of SFSCs has attracted a lot of interest among social and economic researchers. Several studies have been published in recent years highlighting aims, characteristics, potential, and critical points of these practices. At a more theoretical, yet related, level, the issue of how to define SFSCs and how to distinguish them from other supply chain types (with attributes like “long,” “global,” “mainstream,” “industrialized”) has also been debated.

Abbreviations: AFN, alternative food network; CAN, Cooperative Agricoltura Nuova; SFSC, short food supply chain; SME, small/medium enterprise; W&D, Willem&Drees.
Following Marsden et al. (2000) we move beyond the basic possible definitions of SFSC, such as those based on the number of steps along the chain or the geographical distance between producer and consumer. The “shortness” is found by Marsden et al. (2000) in the fact that the product reaches the end consumer embedded with specific information regarding its characteristics, place of production, and processing methods, and that this information is channeled through specific relations between producers and consumers. These relations can be face-to-face as with direct selling practices, or mediated by a small-scale player. Besides, they can be based on spatial proximity, when producers and consumers (and eventually intermediaries) are in the same area and they can meet personally, or spatially extended, with information mediated by persons, or through the web.

The variety of the forms SFSCs can assume suggests that there is an opportunity to go beyond the mere focus on “shortness,” however defined. Recent literature regards alternative food networks (AFNs) as a broad range of networks between producers, consumers, and other actors embodying alternatives to the standardized industrialized supply chains (Murdoch et al., 2000; Renting et al., 2003), which also include small/local retailers (Kneafsey et al., 2013). The notion of alternative food provision systems (Watts et al., 2005; Lutz and Schachinger, 2013) also aims at capturing a wide range of practices that are in various ways “alternative” to a mainstream mode of food production, distribution, and consumption. Small scale activities, personal relations, a different understanding of food quality (Goodman, 2003) with attention paid to territories, traditions, green methods, farmers’ welfare, but also to the possibility of establishing different power relations through more balanced social interactions (Holloway et al., 2007), are among the features characterizing these “alternative” initiatives. In this perspective, the notion of social embeddedness (Hinrichs, 2000; Jessop, 2001; Sage, 2003; Chiffolleau, 2009) expresses, as well summarized in Kirwan (2004), that in real life “the highly abstracted conception of the market and its associated economic activity is always embedded within a wider political, cultural, and social framework” (ibid. p. 397). Similarly, the concept of relations of regard (Sage, 2003) describes those situations in which, in contrast to the neo-classical market exchange, the development of interpersonal relations is more than just a pre-condition or a side-effect of the exchange, but is in fact a crucial aspect of the transaction. The role and the characters of the products exchanged remain central: in Sage’s words, “the ability to construct value and meaning from the product establishes the basis for a relationship of regard” (ibid., p. 49).

Consumers’ involvement in alternative chains is far more complex and multi-dimensional than in the neoclassical perspective. Their role is not only to choose the best option in terms of price and quality: they become active actors (sometimes even promoters) of processes in which food and food chains are charged with values and meaning ranging from social to ethical to ecological. Through their involvement they become co-producers of the food they purchase, and on a more abstract level, co-promoters of the innovative social processes those chains represent (Brunori et al., 2011). This key role of consumers in the so-called local food movement is leading to the identification of different sub-movements (Werkheiser and Noll, 2014).

In a niche market the growth in number of actors offering local and fresh products contributing to sustainable development, following a neoclassical economic assumption, should lead to a competition among such actors to reach a minority of consumers. However, consumers in urban areas are so numerous that there is room for small-scale actors to create new niches and to enlarge them, also through the development of innovative organizational models of SFSC able to reach new segments of consumers.

Urban areas provide a large number of consumers with different levels of income and preferences. Different models of SFSC can reach them and often the role of intermediaries such as the ones analyzed in this paper is to develop business models that facilitate the involvement in SFSCs of a large number of consumers with different types of preferences. Specialized short chain retailers can provide a market channel to farmers who would be otherwise unable to have direct access to a specific type of end consumer, because of their small scale or their logistical context. A farmer willing to diversify his/her market channels can consider direct selling, even through farmers’ networks together with local retailers.

The SMEs involved in this research are to some extent involved in local grassroots initiatives and engage in debates with local authorities. They have a clear perception of their own influencing effect on the broadening of consumers’ awareness about the social and ecological implications of their food habits. The aim of this paper is to highlight the determinants of competitiveness and complementarity of different organizational models of SFSCs, led by actors who play different roles along the supply chain, in urban and peri-urban areas across Europe.

RESEARCH PROCESS AND METHODS

This paper is the result of a mutual learning process involving a group of researchers and entrepreneurs from three different EU countries (Italy, Switzerland, and The Netherlands). The main aim was to discuss the issue of sustainability of SFSC experiences in urban and peri-urban areas across Europe, integrating the perspectives of SMEs and researchers, with a focus on logistic and SFSC organizational models. Two research institutions and five SMEs were involved in the process; two of the SMEs had a role of researcher/consultant and the other three represented specific experiences of intermediaries working in SFSCs in three cities (Rome, Zurich, and Rotterdam) that face the trade-off between consumers’ visions and consumers’ choices every day.

A participated prioritization exercise, conducted with the Metaplan technique (Schnelle, 1979; Davies et al., 2012), led to the identification of the SMEs’ needs and issues of interest in relation to the research focus. Then, the analysis of each
SME business model was deepened with particular focus on its logistic arrangements and with the aim of identifying their goals, values, and the constraints they have to cope with in their daily activity.

A self-assessment tool, provided by the consultant SME, was adapted to the focus of the study and used to undertake a “Sustainable Business review” for each best practice to identify a baseline of current performance and to help identify areas for future improvements.

It became clear that focusing only on logistic arrangements and on the distribution phase would not have led to meaningful results. Hence the tools were meant to holistically address a broader range of issues like the SMEs’ overall objectives, their relations with the territory, their ideas about SFSCs with their specific values, advantages and disadvantages, and the suppliers’ and partners’ aims, interests, and relations with the SMEs.

Two more focused assessment tools (the “SME Short Food Chain Review” and the “Supplier Survey”) were developed and then submitted to the SMEs and their suppliers (or partners in the Cooperative Agricultura Nuova [CAN] case), respectively (see Box 2 in Fig. 1). The aim of the first tool was to look in more detail at the local supply/short chain impacts and to decide which elements are most applicable to the individual SMEs and therefore useful to measure, as well as to facilitate a self-reflection process by the SMEs. The Supplier Survey was aimed at helping the local intermediaries assess the benefits of keeping the supply chain short. At the end of the process some reflections were made on the basis of the tool’s outcomes and the participants’ feedback on their experience within the project (see Box 3 in Fig. 1).

In parallel to the work of the SMEs, the researchers involved in the mutual learning process worked on a model to generalize findings of the discussion and provide a framework to analyze the role of intermediaries on SFSCs in urban and peri-urban areas across Europe. The theoretical model, based on the main finding of the whole research process and discussions between researchers and entrepreneurs, was tested including two other examples of SFSCs for each of the three cities (Rome, Zurich, and Rotterdam) in the analysis. Such examples have been identified by researchers in a previous desk analysis of the city-region context, with qualitative interviews conducted with key actors of the SFSC development in each city region.

The added value of this work is also to provide methodological insights to qualitative research methods, such as the development of mutual learning processes, which are sometimes likely to capture dynamic processes more accurately than quantitative surveys (De Walt and De Walt, 2002). A desk analysis of the context, integrated with qualitative interviews with key actors of local SFSCs in each city region has been used as a base to build the mutual learning process of the heterogeneous group of actors (Leeuwis and van den Ban, 2004). The collective analysis of the SME development trajectories gave interesting elements for reflection that will be presented in the results section.

THE SMES: BUSINESS, CONTEXTS, AND OBJECTIVES

The Dutch Retailer Willem&Drees

Willem&Drees (W&G) is a grocery wholesaler of fresh products, focused on seasonal products and dedicated to short chain delivery. The firm supplies the points of sale with products from selected farmers as close to the point of sale as possible. Customers are not the final consumers, though there is interest in this sense for future market diversification: currently W&D connects producers with supermarkets, office canteens, and other out-of-home food consumption points. All products are packaged at farm level, delivered to W&D or collected from the farm by W&D, stickered at the distribution center of W&D, and then delivered to the customer directly or through cross-dock.

W&D is interested in the development of more efficient distribution models and in the search for the most sustainable balance between food mile shortening and product availability. This balance is pursued through information and communications technology tools under the assumption that the wider the assortment the more logical and rational it becomes to choose larger distances.

The company works with 130 farmers (data about SME current activity [customers, employed people etc.] refer to the year 2014, when the research was carried out). In 2013, W&D sold to 250 supermarkets, which account for about half of their market sales, and to a number of individual shops, wholesalers, restaurants, and two big catering companies. In 2013, they sold 50% directly and 50% cross-dock, but the expectation is that cross-dock will grow in the future. The increase in cross-dock delivery means W&D is no longer able to pick up and deliver the produce with their own vans and externally hired trucks are needed.

W&D is not solely focused on Rotterdam: in 2013 they started working at the national level. At the moment W&D works with one central distribution platform where all the produce is gathered before being distributed to customers. This could be seen as an inefficient logistical pattern; however, since the number of cross-dock deliveries is growing, efficiency also seems to be increasing.

W&D was interested to discuss with researchers and other actors the choice between two logistical systems: centralized (based on one single distribution center) or decentralized (relying on multiple centralized distribution centers) with attention to the effects the different arrangements were likely to have on suppliers and customers and to the company’s communication strategies.

The Swiss Retailer Pico Bio

Pico Bio is a wholesaler specializing in the delivery of mainly regionally produced food to the catering sector, restaurants, and shops in the metropolitan area of Zurich. An organic farmer established it in 1997. In 2009, after a phase of expansion, the company moved from the center of Zurich to the outskirts.
There are currently 24 employees, most of them involved in handling the distribution phase, with a very flat hierarchy.

The geographical scope of the activity is focused on two strands: in terms of customers, delivery occurs within an area of about 60 km; in terms of producers the area is within a distance of around 200 km. This is based on the choice to cooperate with smaller farms, though a bit farther away, instead of cooperating only with larger organic farms near Zurich. Currently Pico Bio cooperates with 50 producers and 42 processors (mostly dairies and butchers). Fruit and vegetables are the main products traded, accounting for 70% of the whole turnover.

Pico Bio delivers to over 290 customers (109 catering services and canteens, 76 restaurants, 74 small retailers/organic shops, 18 private households and 21 distributors), which are mostly in the city of Zurich and in the surrounding area. Around 5000 different products (98% organic) are traded through Pico Bio. Goods not available in Switzerland are imported. About 1200 articles are stored in the central store house in Dietikon, near Zurich.

Two critical needs for improvement have been expressed by the SME: the challenge to cope on one side with an unpredictable supply by their producers, on the other with scattered customers demanding small quantities of product at the same moment of the day; the search for more efficient logistical arrangements, with complex daily tour planning needs to be assessed.

### The Italian Cooperative “Agricoltura Nuova”

The Cooperative “Agricoltura Nuova” (CAN) was founded in the late seventies in the south of Rome by a group of young unemployed people and activists. The cooperative is mainly engaged in primary production, but it is also delivering green services to the city both “on-farm” (direct selling, hospitality, locations for picnics and parties, didactical farming, etc.), and “off-farm” (biomass collection and composting, garden maintenance). The farm is also experimenting with more sustainable resource use (solar energy, organic waste, biodynamic farming).

About 40 people work in the cooperative, plus others involved temporarily, according to seasonal needs.

The products have always been sold through a range of short-chain channels. There are four direct selling points in the south-west of the city. In addition, products are sold through two farm shops. Here the range includes products from other local farms and non-food items such as ecological housecleaning products, to offer customers a wider range of products and to ensure a retail point for other producers. Some products are also sold in a shop owned by the Italian association of organic farmers in the city center.

In 2003, CAN, acting as an intermediary, hosted the first “offer group” of organic farmers, a consortium of around 10 farmers engaging in a box scheme (“Officinae bio”), mainly directed at collective purchasing groups. The scope of this intermediary activity reached an average of 500 boxes per week. Half of the boxes are usually collected directly from the...
The work confirmed how SFSC actors pursue efficiency and flexibility in their distribution systems following a different logic than industrial chains. They cannot rely on scale economies, whereas economies of scope and flexible arrangements could be suitable for them. These solutions are important for the business as such but also because, when adequately communicated, they become a marketing lever for consumers concerned with what is behind and beyond the food product they purchase. This raises the point of the specific role that communication, trust, and transparency play for SFSCs.

As SFSC actors aim at providing alternative options for consumers willing to diversify their market choices and to pay more attention to social, ecological, and ethical concerns, they put a lot of effort into building and maintaining trust. The need to be transparent and coherent with the trust of consumers often becomes the main driver of their business choices. However, such effort is not always well communicated to the consumers.

All the SMEs stressed the value that the self-assessment tool proposed in this research may have for external communication towards suppliers and other chain partners such as customers, policymakers, and other stakeholders. Thinking in an integrated way about the various characteristics of their supply chain helped to define which points of strength can be communicated to explain the SFSCs’ specific value. The research process gave SMEs tools to think about the way in which communication reflects their specificities, back-stories, and achievements.

Consumers engaging in SFSCs are generally keen to spend more time, or pay a price premium, for high quality food produced with social and ecologically sustainable methods. Yet, more and more often they expect to be told the story behind that food and its producers. Communication is hence fundamental to build trust. Adequate communication of the specific values of food and food chains can attract more customers, who can also be open to accept some unpredictability in the food supply, and justify a price premium.

Trust in SFSCs is often personal, or mediated by a label behind which persons are recognizable (in the conventions theory approach the domestic convention is attributable) (Kirwan, 2006). Even when these chains deliver organic products the trust in the method (a form of civic convention) is mediated by the personal relationship with the farmer or the retailer, alongside and beyond the organic certification.

Similar reflections can be made, at different levels, for the role of communication towards policymakers and towards other chain actors. Relations with suppliers or other partners can be deepened and strengthened thanks to a (mutual) more comprehensive communication about each other’s aims, values, and needs.

Social and Ecological Sustainability: Evidence and Tradeoffs

The process of building trust and communication with consumers is based on direct relationships. If an appropriate holistic communication strategy towards customers is a fundamental tool for the entrepreneurs in SFSCs, the transparency in the content of this information is also strongly relevant. The possibility for consumers to directly verify information is crucial in SFSCs. Farmers and small retailers engaged in SFSCs should identify which strengths they can truly communicate to their consumers. Some elements for reflection have been derived from interaction with the SMEs and the qualitative results of the questionnaires submitted to SMEs and their suppliers. The importance for SMEs of an holistic vision of the businesses and their innovation strategies has been highlighted, as well as the role that communication plays to strengthen the relationships within the supply chains (or, in the case of CAN, to establish new chains), both internally (between suppliers and retailers) and externally (towards final consumers).

Economic sustainability is more a pre-condition, as we are talking about business, while ecological sustainability is a...
benchmarks, they have to take into account and they can use to promote their activity to local administrations and to consumers. This is often translated into reducing food miles, as in the case of W&D. However, supply chains characterized by low food miles are not necessarily better than long-distance ones in terms of greenhouse gas emissions and similar ecological indicators: factors like product specificities, transport means, climate conditions, and consumption patterns are highly influential in this regard (Garnett, 2011; Mundler and Rumpus, 2012). Other environmental goals, such as the use of local agrobiodiversity, can be promoted through SFSCs. These are aspects that certainly could be fruitfully communicated to consumers and stakeholders.

Not by accident, the SMEs themselves identified their main goals in the social more than in the ecological dimension. In particular, supporting small-scale farmers and granting them access to the market was indicated by the three SMEs as the common aim of the three businesses, as summarized in Table 1. Strengthening local communities was another goal, yet less central for all the three SMEs. The three companies interpret the support to farmers in different, yet not contradictory ways. W&D highlighted a sort of trade-off between availability and localness: the less common a product is in the areas surrounding the market, the farther away it can coherently be sourced. If adequately communicated, these decisions can be fully accepted by committed consumers. In the case of Pico Bio this trade-off assumes the form of a real business choice, where the company prefers supplying from smaller yet more distant farmers instead of relying on large-scale competitive farmers in the Zurich area. CAN’s vision clearly takes into account these trade-offs, as the network explicitly considers the possibility to increase the food miles to keep the chain under the control of farmers sharing some common values (attention to local food heritage, fair working conditions, multifunctionality, direct producer-consumer contact).

Having a direct, positive impact on the local economy seems to be less crucial from the SMEs’ perspective: employment strategies and pricing policy are not necessarily set according to these concerns, even if they operate in areas characterized by high economic development and high well-being.

Beyond Geography: New Definitions of Short Food Supply Chains

If shortness is regarded in geographical terms (food miles), it is the concept of “localness” which is at stake. In this regard the SMEs’ definitions of what is “local” are quite different from each other: W&D considers local food as always in season and always from the Netherlands; Pico Bio defines “regional” as within 60 km, “local” as within 20 km; CAN refers the term “local” to the countryside surrounding Rome. It is interesting to note that W&D encompasses seasonality in the concept of localness, probably echoing the debates about the tensions between the trend towards food chain re-localization and the common practice of eating out of season products.

The three SMEs give a rather different geographical scale to the concepts of “regional” and “local.” CAN considers local as the area that surrounds the city (a large metropolitan area which is a functional region in itself), whereas Pico Bio and W&D do not refer explicitly to any urban center.

In terms of distance, the CAN and Pico Bio definitions are more similar to each other, whereas W&D has a very different perception, which merges “local” with “national.” This definition seems to result both from the size and typology of its business and from the territory where it works: a small (much smaller than Italy) and flat (much flatter than Switzerland) country, in which distances can be covered with relative ease and in a short time.

Following from this argument, other characteristics must be considered alongside distance and number of steps to define the specificity of the food chains in which the SMEs are engaged. Both the activities performed within the research process and the outcomes of the supplier surveys demonstrate that the SMEs perceive themselves as involved in food chains alternative to the agro-food mainstream. This idea includes the concepts of small actors’ control over the chain and fair power relationships. These alternative food chains (or, to use a now common expression, alternative food networks) are hence characterized by a high degree of autonomy from the power of the large agro-food companies and large distributors. Keeping these chains alive and competitive is a complicated issue, in which the search for efficiency, scale economies, flexibility, trust, and reliability all play a decisive role, as argued in the previous paragraphs.

Different SFSC organizational models use different arguments, such as the ones identified in this research process (see Table 1), to drive their everyday business choices and to build trust in their food chain. Their prioritization defines the social and ecological sustainability trade-off of the specific food chain.

From the deep analysis of the three best practices and the discussion among researchers and practitioners, the idea emerged that SFSCs in urban areas can be designed, established, and innovated in different ways. Local intermediaries, such as the ones analyzed in this research, are needed to improve farmers’ business in urban areas, as they allow

Table 1. Possible drivers of short food supply chain (SFSC) intermediaries’ business choices.

<table>
<thead>
<tr>
<th>Intermediaries’ Business Choices</th>
</tr>
</thead>
<tbody>
<tr>
<td>Food miles and greenhouse gas emissions reduction</td>
</tr>
<tr>
<td>Biodiversity conservation</td>
</tr>
<tr>
<td>Support to smallholder farmers</td>
</tr>
<tr>
<td>Strengthen local communities</td>
</tr>
<tr>
<td>Facilitate high quality and healthy food provision</td>
</tr>
<tr>
<td>Maintain the food chain under control of farmers</td>
</tr>
<tr>
<td>Positive impact on local economies</td>
</tr>
<tr>
<td>Fair employment strategies</td>
</tr>
<tr>
<td>Fair price definition policies</td>
</tr>
</tbody>
</table>
them to delegate the problem of logistics. That is why small-scale intermediaries play a fundamental role in the process of strengthening the network of actors involved in the SFSCs, a task even more difficult in urban and peri-urban areas.

The prioritization of one of the two areas of sustainability determines the kind of networks that local intermediaries decide to strengthen. Pico Bio and W&D focused more on the vertical network, connecting farmers and consumers through them, while CAN gave much more attention to the horizontal network of organic farmers. The relevance of the trust-based relationship with specialized retailers varies according to farmers’ size and interest in developing their own market. W&D suppliers highlight how their regional sales network (so consistent with their aims and ideals) is largely due to the retailer’s presence. Pico Bio underlines the limitation of farmers that do not consider intermediaries crucial for their business and decide to trade their products through Pico Bio only when they cannot sell them through their own market channels. Those differences are relevant and are at the base of complementarity among different SFSC experiences in urban areas. It is key for the business success of those small-scale intermediaries that all actors involved in SFSCs are aware of the social and ecological sustainability trade off.

We cannot consider each SME as if it is engaged in one single food chain. CAN obviously underlines the peculiarity of the direct physical contact between producer and consumer, which direct selling entails. Nevertheless CAN sell its own as well as other farmers’ products in its farm shop and through the box scheme (and the barter network will even expand this indirect selling). Hence there are both one-step or two-step chains gathered in the same market channels. W&D and Pico Bio are engaged in, or are willing to establish, different chains with different numbers of steps involved (at least two steps, since they are not producers, but even more when, for example, W&D delivers food to supermarkets). The analysis of cases discussed in this research process underlined how developing longer chains, with more steps and geographical distance, reduces the power of the trust-based relationships among actors of the SFSCs, moving to a system that asks for external guarantees, such as the ones of industrial chains (labels, third party certification, policy control etc.).

When the business develops, network size might increase as well as distances traveled. At the same time relations with the mainstream chains may develop, creating some hybrid arrangements, as in the case of W&D’s relations with supermarkets. The definition of what is meant by SFSC is a dynamic concept that should be regularly reviewed as innovative successful business models develop. What is important is the transparency in communicating to the consumers the real approach to the SFSCs in which they are embedded.

<table>
<thead>
<tr>
<th>Code</th>
<th>Type of local intermediary in SFSCs†</th>
</tr>
</thead>
<tbody>
<tr>
<td>RM1</td>
<td>Multifunctional organic agricultural cooperative</td>
</tr>
<tr>
<td>RM2</td>
<td>Private consumers social investment project</td>
</tr>
<tr>
<td>RM3</td>
<td>Local retailer</td>
</tr>
<tr>
<td>ZH1</td>
<td>Local retailer</td>
</tr>
<tr>
<td>ZH2</td>
<td>Food coop</td>
</tr>
<tr>
<td>ZH3</td>
<td>Community supported agriculture in urban area</td>
</tr>
<tr>
<td>RO1</td>
<td>Local retailer</td>
</tr>
<tr>
<td>RO2</td>
<td>Consumers’ coop</td>
</tr>
<tr>
<td>RO3</td>
<td>Web shop selling local farmers products</td>
</tr>
</tbody>
</table>

† SFSC, short food supply chain.

A THEORETICAL MODEL TO LOOK AT LEADERSHIP IN SHORT FOOD SUPPLY CHAINS IN URBAN AREAS

Looking at a generalization of research results, the use of the dichotomy between grassroots and business-oriented initiatives did not turn out to be highly relevant when describing different initiatives of SFSCs in urban areas. Looking at the leadership proved to be more relevant in understanding the dynamics within complex SFSCs. We define the leader acting a specific SFSC as the one that has the most important role in prioritizing the objectives and determining the sustainability trade off. This aspect strongly influences the governance of the food value chain and determines the organizational model of the SFSCs, as well as the business goals of actors involved in it.

Leadership of SFSC initiatives range from farmers to consumers to single enterprises: each of these can also play the role of intermediary. Besides, the leadership may change over time or may be shared among more than one actor. The specific story of each initiative and the dynamic analysis of individual development trajectories shed light on the governance of the SFSCs in which the individual firm is involved.

Six other SFSC initiatives analyzed in the cities of Rome (RM), Rotterdam (RO), and Zurich (ZH) have been included in the theoretical analysis. Information on such initiatives was derived from in-depth interviews developed during the context analysis phase of the research. A total of nine initiatives of small intermediaries facilitating the logistics of SFSCs in urban and peri-urban areas across Europe have been analyzed in terms of leadership and how this influences their organizational model. Table 2 provides the list of the initiatives with the code for their identification in the figures shown below.

Figure 2 identifies the actual leadership of each initiative, considering also the role of different actors. The position of each case within the triangle gives an idea of who has stronger power within the specific SFSC. The closer an initiative is to a vertex, the more powerful the actor in the vertex is in defining the sustainability trade off and the business model communicated to the consumers.
RM1, RO3, and ZH1 put emphasis on producers’ needs, while RM3 and RO1 look more at logistical needs and consumers’ preferences. RM3, ZH1, and RO1 show a clear business attitude, but rely on the valorization of local sustainability, fairness, trust, and personal relations that are shared by many grassroots and community-led initiatives. ZH2, RM2, RO2, and ZH3 are organized and led by consumers and in this sense they are examples of communities which engage in grassroots projects. They provide consumers with the possibility to become actively involved in sustainable food provisioning. Consumers are involved in decision making, and also in voluntary work (in ZH3) and private investments (in RM2). As already said, organizational models change over time. RM1 started as a typical grassroots initiative and then developed into a business, yet remained consistent with its original aims and practices (all profit re-invested in the farm, similar wages for every worker, connection with social movements). RM2, led by consumers and initially more aimed at social goals, became a more profit-oriented business in which consumers tend to act more and more as investors. Today ZH1 represents a trusted small-sized intermediary on the local market but was funded by an organic farmer, so it strongly maintains the farmer’s perspective in its business choices.

Each of these initiatives responds to specific and context-related organizational needs. Aggregation of production is required for the delivery of fresh local (often organic) food to restaurants and catering services. Local quality food availability is still rare and small farmers find it hard to have access to this very fruitful market. In this case SFSC organizational models fill a gap that others cannot fulfill, either through specialized retailers or with the direct involvement of farmers when they are large and organized enough to bypass intermediaries, retaining a higher degree of control on the whole chain.

For an urban consumer group, buying all food directly from different small farmers can be inefficient for the time required and not satisfactory in terms of food variety, freshness, quantity, and timing. In this concern, trustworthy retailers sharing the same consumers’ (and farmers’) ideas can function as brokers to increase the efficiency of SFSCs. This search for efficiency and flexibility can take different forms.

When farms are efficient enough to organize by themselves and manage their market channels directly, direct selling or farmer-managed box schemes are established without reliance on intermediaries. However, specialized retailers supporting SFSC values could have a twofold objective: to allow rural farmers in more isolated areas to reach urban consumers and to improve efficiency in the logistics of peri-urban farmers that have sufficient production to enlarge their market. Farmers often consider those retailers as one among several opportunities for market diversification.

If we apply the triangle model to single cities (Fig. 3) we can see that in each city the three types of actors have some degree of leadership in at least one initiative. The simple model proposed in this paper allows us to analyze several SFSCs in a specific area in terms of leadership to communicate social, ecological, and economic goals, and of type of consumers reached (or actively engaged). Policymakers and new start-up business initiatives can use this tool to look for gaps and possible spaces to successfully develop new business and reach new segments of consumers.

Beyond their differences, the initiatives analyzed are all focused on social (and to a minor extent ecological) goals: small farmers’ survival, fair workers’ income, healthy food, and food consumers’ activism. These aims coexist with attention paid to the possibility of developing successful business models that allow all the actors in the SFSCs to make a profit.

![Fig. 2. Examples of leadership in SFSCs in urban areas.](image-url)
The research shows how different organizational models of SFSCs in urban areas are complementary rather than competitive as they match the needs of different actors and respond to different logistical requirements. Social goals and the search for economic sustainability often coexist in the same initiatives and reinforce each other’s.

Interaction between Small/Medium Enterprises and Researchers: The Role of Qualitative Research

The work has been developed through a continuous interaction among partners. Nevertheless, matching research and business interests was not an easy process. In such an interactive process, interesting and valuable research outcomes must go hand in hand with useful outcomes for the SMEs (in the form of suggestions, evaluations, tools, new networks, etc.). Managing these issues from the beginning of the work helps to achieve mutual benefits, and to create synergies instead of conflicts between the two kinds of expectations. Yet, it requires a continuous attention paid by both researchers and SMEs to harmonize their specific expectations.

In this regard, the joint development of reflexive questionnaires between research and SME partners is a fruitful exercise in itself, in parallel with the (possibly jointly discussed in a face-to-face form) fulfillment of the questionnaires themselves. This is also true with regard to the tool developed for the external partners (suppliers for W&D and Pico Bio; other farmers for CAN), which led entrepreneurs to reflect on aspects of their supply chain relations usually overwhelmed by everyday activities and deadlines. In this case it was very helpful to have the input of local food consultants to help bridge the gap between practicalities for entrepreneurs and the research needs.

What was possible to achieve was support to the activities of SMEs in terms of an integrated vision of their supply chains, providing an additional informative base for their decision-making processes and suggesting more general and integrated reflections on their activities. On the other side the process gave researchers interesting insight into the actual dynamics of SFSCs and the role of small intermediaries in strengthening the SFSC network.

The process was an interesting practical example of mutual learning in which outcomes for practice (identification of arguments for SMEs communication strategies) and for research (theoretical models, role of small intermediaries in SFSCs in urban and peri-urban areas across Europe) have been developed. Qualitative research can then facilitate these knowledge exchange processes, allowing them to happen with
a balanced focus between research and practice. Qualitative research learns from actors involved in the process and has the objective to generalize results and make them available for society as a whole.

CONCLUSIONS

An initial context analysis, followed by specific in depth interviews with actors of SFSCs in Rome, Zurich, and Rotterdam, created a knowledge exchange process involving both researchers and entrepreneurs. This shared process revealed interesting insights into three innovative organizational models of SFSCs in urban and peri-urban areas across Europe.

The definition of SFSCs in these contexts goes beyond the number of steps or the geographical distance between producers and consumers. More crucial is (i) the presence of full transparent communication between farmers, small retailers, and consumers about food quality and food chain ethical values, and (ii) a certain degree of control on the chain by all actors involved in SFSCs, with more balanced power relations in favor of actors who are usually weak in mainstream industrialized chains.

The development of a knowledge exchange process that “forced” the small entrepreneurs to suspend their thinking on everyday business activities, and instead reflect holistically on their work was appreciated by SME representatives. The self-assessment tool made them simultaneously consider the various aspects and implications of their business, and provided an opportunity to communicate internally and share new ideas. This process clarified the relationship and trade-off between economic, social, and environmental goals. At the same time it generated ideas about how these relationships and trade-offs can be communicated to other actors of the SFSC, strengthening their partnership.

The identification of actors leading the process of prioritization of different sustainability goals is key to understanding the organizational model that determines the governance of a specific SFSC. The model proposed in this paper could be an interesting tool both for new entrepreneurs interested in starting up new initiatives and for policymakers to identify initiatives that contribute to social welfare, according to their political priorities. Higher flexibility in the regulatory framework for actors involved in the SFSCs could encourage and speed up this process of developing new partnerships in SFSCs.

Acknowledgments

This paper has been produced in the context of the research project “SUPURBFOOD”. This project has received funding from the European Union’s Seventh framework Programme for research, technological development, and demonstration under grant agreement no. 312126. The authors would like to thank all the people actively involved in the research process for their contributions. Thanks also to the anonymous referees for their comments. The responsibility for the content of the paper remains the authors’.

References

Garnett, T. 2011. Where are the best opportunities for reducing greenhouse gas emissions in the food system (including the food chain)? Food Policy 36(suppl.1):S23–S32. doi:10.1016/j.foodpol.2010.10.010


Schnelle, E. 1979. The metaplan method; Communication tools for planning and learning groups. Metaplan series No. 7. Quickborn, Hamburg

