SHORT FOOD SUPPLY CHAINS FOR LOCAL FOOD: A DIFFICULT PATH

Msc. Thais Rucabado Palomar, Research team on Agroecology, Food Sovereignty and Commons; Sociology and Peasants Studies Institute; Cordoba University. Building Gregor Mendel, Rabanales Campus. 14080 Cordoba, Spain.

PhD. Mamen Cuéllar Padilla, Research team on Agroecology, Food Sovereignty and Commons; Sociology and Peasants Studies Institute; Cordoba University. Building Gregor Mendel, Rabanales Campus. 14080 Cordoba, Spain.

Corresponding Author:

Mamen Cuéllar Padilla

E-mail adress: mcuellar@uco.es

Phone number: 0034-957212644

ABSTRACT

Agri-food globalisation is having a serious adverse impact on small and medium-sized family farms in the province of Málaga (southern Spain), 43% of which have disappeared over the last 10 years. Short food supply chains are emerging as a potential option for this type of farm, but as a strategy it is apparently not being implemented strongly enough over the region as a whole. The present case study sought to explore the initiatives carried out by local producers to date in implementing short food supply chains throughout the province and to examine, from the standpoint of the production sector, the constraints hindering its development and the strategies currently being adopted with a view to addressing them. The analyses carried out under local producers perspective shows us that although short food supply chains are interesting for family farms, in terms of prices, economic profit and social recognition, the abilities and capacities these channels require to producers, jointly with technical, flexibility and time demands, make these channels to be not that successful and attractive. Small producers interested in short food supply chains must be aware of the special importance of social linkages and the need to take care of them; as well as of the need of establishing synergies and cooperation with other producers and stakeholders, in order to facilitate the tasks associated and that not every food product suit short food supply chains.

KEYWORDS

short food supply chains, local producers, constraints, small producers marketing.

HIGHLIGHTS

Short supply chains of local food is regarded as a viable alternative for small and medium-sized farms in the province of Málaga, but their development is being constrained by a number of difficulties.

Farms marketing their produce through short supply chains are creating hybrid food spaces.

There is a dilemma between the need to expand or diversify the supply chains in order to guarantee the viability of local farms and the need to dedicate important efforts to stabilize each short supply chain.

INTRODUCTION

The province of Málaga (southern Spain), has a population of nearly 1.6 million. Attracted by its 175 km of coastline and its 26 protected nature reserves, 1.8 million tourists visit the province every year (IECA, 2014; INE,).One feature that has been boosted with a view to strengthening the tourist sector is local cuisine, based on traditional recipes and local food; these are showcased in a number of local food fairs and festivals, including the Málaga Goat Festival in Casabermeja; the Perota Soup Day in Álora, and the Handmade Cheese Fair in Teba. A number of public and/or private initiatives have also been launched, among them the Km0 Gastro Club, Carta Malacitana, the Spanish Association of Málaga Goat Breeders, Guadalhorce Tourism and Sabor a Málaga. One might reasonably expect that this potential food demand, coupled with the drive to support local cuisine, would favour local agri-food development in a province with 313,000 hectares of arable land (MADECA 2014) and 739,00 head of cattle (JA, 2014). Yet 43% of small and medium-sized farms in this province have gone out of business over the last ten years (INE, 2014).

Málaga is not the only province affected. According to reports and statistics published by the European Commission, the number of farms in the EU-27 fell by 25% between 2000 and 2010; 98% were small farms (Forti and Henrard, 2014).

This process can be attributed, in many cases, to the absorption and concentration of food supply chains by multinational companies (Segrelles, 2010), and to the strategic role of these companies as intermediaries between producer and consumer: supply requirements or prices and payment terms difficult to face by small and medium size farms (García and Rivera, 2007; MAGRAMA, 2006, 2010). In 2015, for example, 73,7% of food purchases by Spanish households were made in supermarkets, hypermarkets and discount stores (MAGRAMA, 2016); the five major operators in this sector accounted for 50,4% of market share (Reyes, 2016). In this scheme, “conventional” food supply chains are drowning the small and medium producers.

Alternatives put forward to improve the sustainability of small and medium-sized farms have focussed on two major lines: redesign of farms using new multifunctional models (Renting et al., 2008); and innovative forms of marketing (Hendrickson and Hefferman, 2002; Renting et al., 2003; Venn et al., 2006; Chiffoleau, 2009; Day-Farnsworth et al., 2009; King et al., 2010), related to a certain degree of differentiation on the basis of the production process, the provenance and quality of the produce (Diamond and Barham, 2011), and the establishment of closer relationships with local or distant consumer communities.

As various authors have reported, consumers are increasingly aware that local food tends to be of higher quality, more natural, fresher and tastier, and also contributes both to the economy of rural areas and to their environmental sustainability, thus improving the welfare of farmers and farming communities (Guptill and Wilkins, 2002; Winter, 2003; Born and Purcell, 2006; Kneafsey et al., 2013).

This has led to constant growth in the number of consumers seeking more sustainable neighbourhood models which enable them to buy local food and in doing so support local farmers (Pérez and Vázquez, 2008; Adams and Salois, 2010; Calle et al., 2012; Focus Group SFSCM, 2014).

In this respect, short food supply chains (henceforth SFSCs), in their various guises, may provide an economic solution to the gradual decline in the purchasing power of small and medium-sized farms and thus, in the last analysis, improve their sustainability. However,

and despite the favourable context for the development of SFSCs in the province where this case study was performed, the attempts made so far to implement SFSCs have failed to build up a market sufficiently large to improve the sustainability and continuity of the vast majority of small and medium-sized farms.

The present study sought to examine why SFSCs are not answering to small and medium sized farms sustainability problem as far as they were expected. Three different aspects of this situation, from the perspective of the production sector interested in these potential alternative chains, have been analysed. First, the configuration of existing SFSCs across the province, secondly, the obstacles encountered by small and medium-sized initiatives when attempting to implement these SFSCs, which may be hindering their adoption and; thirdly, to identify some learnings that could help to address these constraints.

ABOUT THE CONCEPT OF LOCAL FOOD AND SHORT FOOD SUPPLY CHAINS

There are no single, clear definitions of what constitutes local food, or indeed SFSCs, applicable to all the many production, processing, marketing and distribution systems to be found at present (ENRD, 2012). Three different approaches have been used to develop a theoretical definition of what is “local”. According to the first approach, the term “local” can be applied to food produced, processed, marketed and consumed within a circumscribed geographical area (Morris and Buller, 2003). There appears to be no clear limit to this area, nor has there been any attempt to reconcile the various views in national or EU legislation; instead, limits appear to be dictated by context (Jones et al., 2004). In France, for example, the maximum distance is often set at 50 miles, whereas for United Kingdom farmers’ markets it is reduced to 30 miles (Focus Group SFSCM, 2014). When applied to conventional distribution, the geographical concept of “local” also varies considerably, covering anything from regions to whole countries (Abatekassa and Peterson, 2011).

A second approach links the idea of “local” to a distinctive value and quality associated with a given geographical area (Murdoch et al., 2000; Barham, 2003; Renting et al., 2003). The geographical origin of a product is thus taken as a guarantee, primarily of certain distinctive features linked to that origin, due to the biophysical attributes of the region, to the raising there of native breeds or varieties, or to the use of traditional production processes (Abatekassa and Peterson, 2011; Cuéllar and Castillo, 2015). Examples include Protected Geographical Indications—such as “Chivo Lechal malagueño” [Malaga Suckling Goat] and “Sabor a Málaga” [Taste of Málaga] and, more particularly, Protected Designations of Origin.

The third approach focusses on environmental, social and cultural aspects of local foods. Here, geographical distance, administrative limits and specific quality attributes are subordinated to an emphasis on linkages and networks within a given community, on the development of

agroecologically-friendly production and marketing practices and on the establishment of more horizontal relationships between stakeholders (O'Hara and Stagl, 2001; Jones et al., 2004; Ilbery and Maye, 2005; Feagan, 2007). This adoption of horizontal mechanisms, coupled with closer personal involvement, leads to new ways of generating trust, such as participatory guarantee systems (Cuéllar and Calle, 2011).

The conceptual framework governing SFSCs is highly diverse, not only in terms of forms of organisation and sales techniques but also in terms of the internal social processes driving these channels and their immensely varied socioeconomic, ecological and territorial ramifications.

Most authors appear to agree that neither the number of middlemen nor the distance between producer and consumer are critical to a definition of a short supply chain (Marsden et al., 2000). Indeed, there appears to be no consensus regarding the number of intermediaries, although it is certainly assumed that SFSCs operate with fewer middlemen than "conventional" supply chains. Some authors thus provide no maximum number (Renting et al., 2003; Marsden et al., 2000), while others suggest that the number should be "minimal" or, ideally, nil (Ilbery and Maye, 2005). The definition of "*circuit court*" provided in 2009 by the French Ministry of Agriculture includes just one intermediary between producer and consumer (e.g. shop, restaurant, school canteen). Processors (e.g. slaughterhouses, oil-mills, etc.) are regarded not as intermediaries but as service providers (Kneafsey et al., 2013).

Marsden et al. (2000) and the authors of later studies (Renting et al., 2003; Soler and Calle, 2010; Focus Group SFSCM, 2014) stress that a key characteristic of the new SFSCs and the difference between "conventional" ones is their capacity to re-socialise or respatialise food. Food reaches the consumer embedded with information on the food itself, the production methods employed and the people involved. Such foods are commonly defined by the locality or even the specific farm where they are produced. Another major feature is the emphasis on building relations of trust and transparency between the actors in the chain, and especially between producer and consumer. This "allows the consumer to make value-judgements about the relative desirability of foods on the basis of their own knowledge , experience or perceived imagery" (Marsden et al., 2000 p.2). Thus "shortening" the supply chain is not just a question of physical distance or the number of agents involved, but also, fundamentally, a question of building shared values and trust in regional quality and/or environmental sustainability, and of the organisational and cultural conditions established in trading.

Comentado [A1]: The term Value Chains is being applied to this concept. Attention to this term and some analysis may help compare and contrast this term/approach with the SFSC approach discussed in this paper.

For other authors, including Sevilla et al. (2012), the main issue, apart from the physical shortening of the distance travelled by the food product, is that of practically and actively redefining the power relationships between the agents involved. The aim should be to empower producers and consumers, and bring them closer together as part of a win-win strategy. This consideration places much tighter limits on the kinds of supply chains employed, since local brands and Designations of Origin do not entail the redefining of these parameters.

In this research, in order to select the initiatives through which we were going to identify the difficulties that small and medium sized farms face when developing SFSC, we established criteria that were readily identifiable prior to in-depth analysis of individual experiences: a. physical proximity, establishing the boundaries of local at the administrative demarcation of the province (in this case the province of Malaga); b. marketing approach defined in terms of both number of intermediaries

(maximum of one) and geographical proximity (production, processing and sale within the province of Málaga).

METHODOLOGY

A method based on structural analysis was used in order to achieve these aims, drawing on a case study. The idea was to obtain and process information on the problem, taking into account the knowledge, visions and social structures (Alberich, 2002; Cuéllar and Calle, 2011) of the actors involved in the production and marketing of local food in the province of Málaga.

Research was carried out in several stages. Experiments by producers in implementing short supply chains in the province were mapped, using primary and secondary sources, and after the criteria already defined.

The study focussed on three sectors—meat, dairy and fruit and vegetable. Meat and dairy sectors were chosen because of the funding source interests (a producers cooperative network). And the fruit and vegetable sector was chosen partly because it is the sector which has launched most SFSC initiatives in the province, and partly because it employs highly-innovative processes, and was thus able to provide other perspectives and experiences.

A total of 24 initiatives were studied (see figure 1), accounting for almost 500 local farmers, i.e. 1.9% of the province's farms according to data published by the Spanish National Institute of Statistics (2009).

Figure 1.- Producers initiatives on SFSC studied

The mapping process included also systematisation of initiatives sponsored by the public administration and/or partner bodies with a view to helping the production sector to market produce through SFSCs. A total of 8 initiatives were included from this group.

Finally, interviews were carried out with a total of 13 key bodies—10 producers, 1 online shop and 2 public administration and/or partner bodies—selected with a view to representing the broadest possible range of organisational structures and SFSCs implemented by the production sector. A detailed description of the cases studied can be found in table 1.

Table 1.- Key informants interviewed profile

SYSTEMATIZATION OF SFSCs IMPLEMENTED IN THE PROVINCE OF MALAGA UNDER A PRODUCERS PERSPECTIVE

The SFSCs mapped in the province of Malaga varied considerably in terms of configuration, a finding also reported by other authors both for Andalusia (Soler and Calle, 2010; González et al., 2012; Sevilla et al., 2012) and for Europe as a whole (Karner, 2010; ENRD, 2012; Kneafsey et al., 2013). The primary distinction in terms of the type of channel used was between "direct" and "indirect" channels. "Direct" channels include those in which the food is sold from the producer straight to the consumer, through consumer groups, farmers' markets and fairs, producers' on-farm shops—individual or collective—or at the processing site, as well as online orders with home delivery or delivery to pick-up points. "Indirect" channels are those in which food is sold through an intermediary. It may include other

producers, physical shops (independent shops or chain stores), the hotel and catering sector or online shops/platforms managed by other agents representing producer groups or product-based groups.

Figure 2. Description of SFSCs by type of channel implemented.

The main interesting findings while making the map were the following. First, we identified that some of the criteria used by a number of author to classify SFSC —among them Renting et al. (2003), Venn et al. (2006), González et al. (2012) and Kneafsey (2013)—are scarcely explicative under a producers perspective. Criteria such as the relationship between consumers and producers and the role of this relationship in constructing value and meaning or community, for example. Although important to analyze, from the perspective of producer-driven initiatives, a given channel may encompass various forms of participation, various kinds of relationships with the consumer and differences in the construction of value. Moreover, these may be developed in other spaces, and thus to some extent cease to be tied to the actual food purchase. Thus, although there may be some match between the SFSC used and a given type of producer/consumer relationship and value construction, the degree of cooperation and collective interaction within a given channel may vary considerably, depending on the stakeholders and the relational spaces involved rather than on the channel chosen.

Second,

this classification helps to identify the various options open to the producer, who normally develop more than one of them. Several combinations are possible and, in most cases, single producers/organisations need to implement a number of different short supply chains in order to sell the whole production.

Thirdly, some organisations make simultaneous use of SFSCs and other channels, giving rise to what Ilbery and Maye (2006) and López et al. (2015) term "hybrid strategies". Authors found that producers and organisations producing large volumes but with limited diversification still tend to opt for non SFSC. Even so, they have a very positive view of SFSCs, which they regard as favouring proximity with the consumer and generating added value.

Small producers with diversified output and/or links to other groups display a clear preference for SFSCs. Similar findings have been reported by López et al. (2015) for the marketing of organic produce in Extremadura and Madrid. Farmers and organisations producing medium volumes tend to adopt hybrid strategies: those producing a limit range of products and not tending to associate with other groups with a view to diversification are more interested in opening/expanding conventional supply chains, whereas those with more diversified output generally opt to strengthen existing SFSCs.

Fourth, we have identified 5 factors that determine several different chain configurations which facilitate adaptation to producers, that is, in a same SFSC model, different configurations related to these factors can be found: a) use of own and shared resources (tangible and intangible); b) the functions to be assumed; c) the motivations of the participant producers ; d) the kind of relationship sought; and e) the values to be transmitted.

Comentado [A2]: It appears that an attempt is being made to somehow equate direct and indirect in terms of SFSC. Clearly a direct channel is short but indirect can have 1 (by author definition SFSC) or many intermediaries, so I'm not sure of the value of this line of analysis to central premise of the paper. Instead of offering clarity it adds more confusion.
NO SE HA ENTERADO...

Comentado [A3]: No definition of conventional channels is provided? Are we to assume conventional is "long" or "not short" but if so, how can you have a hybrid. Again, this appears to just be adding confusion to what is being analyzed – SFSCs as defined by the authors or a more broad 'alternative marketing' approach?
TAMPOCO SE HA ENTERADO

Comentado [A4]: I think this passage highlights the central difficulty with this article – not clearly articulating what SFSCs mean for this study. While it was made above: (lines 187-191) the authors now re-insert value relations into the definition.

I think the paper would benefit from more analysis and clarity by the authors to distinguish the attributes of:
Local food as defined by geographical distance
SFSC as very few (1) intermediary between producer and consumer.
Value chains – where values are being transmitted throughout the food system (production, processing, etc) to the consumer.
These could be contrasted to vertically integrated industrial agriculture models.

As it reads now, the authors variously define SFSC as various combinations of items 1-3 above, don't define 4 as the 'normal' or control state; and while items 1-3 are not mutually exclusive they are not necessarily similar. It is possible to have long supply chains that still are value chains as it is possible to have short supply chains that are not valued based and both of these can happen with a short or large geographical distance.

The manuscript would be improved with a table relating the attributes above and then a simple Venn Diagram to show how they do and do not overlap with each other.
TIENE TODA LA RAZÓN… SIMPLIFICAR… LOS VALORES SERÁN UN RESULTADO...

Fifth, and related to that, there are some key elements that will influence the most producers chosen, as they are related to possible difficulties, barriers and challenges that are in the basis of the limiting answer SFSC are giving to them. These key elements are about: firstly, the range of potential functions that the producer might undertake within the marketing channel, which would be governed to a large extent by the resources invested and the skills developed. A producer might simply produce, or might also take part in the processing, marketing and distribution of his/her own produce and that of others, and might even be involved in training/awareness-raising or agritourism.

Secondly, the number of people comprising the organisational structure. In some cases, the initiative might be the work of a single producer, while in others it might involve formal or informal organisations such as farmers' associations or cooperatives, with a view to sharing out some of the functions. Members of these organisations might sell their produce individually, or jointly with other group members.

Thirdly, linkage with other initiatives or structures, enabling advantage to be taken of the synergies provided by networks of varying complexity operating at provincial, regional, national or international level.

Figure 3. Description of SFSCs in the province of Málaga by organisational structure.

Some of the producers' associations studied, for example, were created with the aim of providing spaces for direct marketing and awareness-raising, by organising markets and running activities there. Common spaces like these help producers to engage with each other, and may lead both to the emergence of groups, within the farmers' association, with a particular interest in expanding their marketing channels, and to the building up of contacts and sharing of skills enabling some producers to market their produce individually and to distribute that of other producers. One such group additionally belongs to a regional direct-marketing network and has also established links with nationally-based groups.

SFSCs AS SOLUTIONS FOR SMALL AND MEDIUM-SIZED PRODUCERS: BARRIERS AND LEARNINGS

Despite the initiatives implemented, the number of small and medium-sized farms in Málaga province continues to decline, and fewer than 2% of farms are involved in SFSCs. This study identified a number of constraints preventing larger-scale implantation of SFSCs, that are intrinsic to these supply chains. In some cases authors present learnings from the case study that could help to overcome these barriers.

a. Required infrastructure, capacities and logistics

In order to market their produce through SFSCs, producer need a certain logistical infrastructure, which varies as a function of the type and volume of the produce itself, the need for processing, storage conditions, distribution points and relationships with consumers.

Comentado [A5]: It is not clear what the extended classification is.

Comentado [6]:

Moreover, the producer—as indicated earlier—has to take on new roles. In many cases, due to lack of resources, shortage of time to launch new activities, and/or lack of training, producers are obliged to make new investments and contract new staff, all of which leads to increased costs.

Additionally, producers need to have at their command a flexible, dynamic logistical infrastructure enabling them to dispose of their produce (particularly in the case of seasonal foods consumed fresh) and to adapt smoothly to market circumstances. These factors generate uncertainty and are regarded as a risk, particularly in terms of the stability of contracted staff and the need to finance the investments required.

According to a report by TRAGSATEC (2013) on SFSCs in Spain, logistical issues are among the major constraints for online SFSCs, due to high transport costs. In our case, the main logistical constraint is linked to the size and volume of produce transported, regardless of the channel used.

Cooperation schemes observed are an answer to this barrier. They are based essentially on: a) sharing resources, infrastructure and logistics, leading to reduced costs, improved efficiency and larger channels; b) broadening the range of products on offer and mitigating the seasonality of production through the sale of produce from other farms, either acting as an intermediary or through exchange of produce; c) adopting a common approach and engaging with the Administration on legislative issues; d) sharing insights.

This practice, however, is less widespread in the livestock sector, due basically to a greater fragmentation of farms, the need to process products and/or more stringent health and hygiene requirements (transport of live animals, packing, cold chain regulations, etc.). Even so, there are interesting innovative schemes whereby a small food processing facility is placed at the disposal of local producers who want to manufacture their products and get their own brand of a concrete product. It is the case, for instance, of a collective cheese factory launched by a dairy products cooperative. Another example of this practice can also be found in different business incubators in the EU, that offer a commercial kitchen with license (LYONS, T. S., 2002).This allows the producer to embark on a commercial activity without needing to make heavy investments, and at the same time to learn about processing and acquire marketing experience.

Other schemes includes external actors such as distributors. Producers stress the importance of building horizontal trust-based relationships, with distributors who must believe in the project/product, as a means of establishing mutually-beneficial arrangements which have no adverse implications for the consumer or customer (other type of relationships are identified as unsatisfactory). An interesting initiative related to this idea are the regional food hubs taking place in US, that allow local producers to attend bigger markets organising the local offer and counting on useful services related to production, distribution and marketing (Barham et al., 2014).

Some producers operating online ordering systems use a network of shops as pick-up points; this facilitates the process for the consumer, concentrates orders at a limited number of delivery points and thus reduces costs.Most of these collective solutions drives us to the following difficulty related to the wide spreading of SFSC.

b. The importance of social linkages based on food and difficulties associated

SFSC means in many cases that producers band together with a view to pooling efforts and pursuing shared interests, which poses certain challenges. One of these is that producers may find it difficult or inability to cope with the strains arising when taking joint decisions within an associative or cooperative structure. This is due, among others, to cultural considerations: the absence of a participatory tradition; the passive attitude of certain members; the selfish attitude of members who place personal interests before the overall group vision; and the role of the member as a mere user in selling the produce, with no sense of ownership of the project. A further contributory factor is the difference between members in terms of production systems and economies of scale, which may hinder the establishment of fully-horizontal relationships within the association itself, since the larger-scale members will wield power and influence over the rest.

Moreover, although the creation of synergies and cooperation with other stakeholders is acknowledged as important, it is not always regarded as easy. Obstacles detected are primarily linked to local issues; certain models have become deeply rooted in given areas, and their particularly characteristics contrast sharply with those of other working models; rivalry, and the fear of reduced competitiveness, may give rise to mistrust and clashes between stakeholders, making it difficult to reach an understanding.

A number of authors including Dyer and Singh (1998) and Zander and Beske (2014) note that proximity is essential to overcome some of these barriers. Collaborative efforts are based on long-term trust and especially on reciprocity. It is essential that each party pursue a specific aim that fits into an overall general objective. Prior internal analysis of the enterprise itself and external analysis of the alliances to be constructed can help, as it can favour a common approach and strategic review of the proposed alliance. A number of producers stressed the need to have a clear idea of the issues involved, and to focus on common, general interests rather than personal interests, which in the long term results in higher advantages.

Proximity is also identified as crucial for a sound relationship with the consumer. Findings suggest that when personal contact is lost, and the relationship becomes more mechanical and detached, the consumer gradually reduces the volume and frequency of his/her orders, becomes more demanding and sets product price above other considerations. This finding suggest that considering SFSC as a marketing channel with certain technical characteristics (number of intermediaries, distance, for instance), regardless other intangible factors such as values and personal relations will not help the development of such chains. Incorporating this important aspect of SFSC will allow to assume, and design consequently, that these are key issues that must be taken into account.

Basically, it must be considered that the time required to nurture communications and maintain personal relationships with customers is a guarantee to ensure consumer satisfaction and loyalty (Barroso and Martín 1999; Cobo and González, 2007). And it poses something of a dilemma for the producer, who often has to choose between maintaining and enhancing customer relations or devoting the energy to finding new customers. The SFSC mechanism thus requires that top priority be given to ensuring consumer satisfaction and loyalty; so the SFSC expansion will be conditioned by the capacity of maintaining a high level of communication and personal relations with consumers. Some producers have found that a direct relationship with the consumer generates other added values, including personal acknowledgement of the producer's efforts and sustained, long-term consumption. These findings tally with relationship marketing and emotional marketing theories which regard keeping existing customers, rather than attracting new clients, as the key to business success (Barroso

and Martín 1999). According to this approach, customer satisfaction linked to quality and service creates loyalty, prompting new sales at a lower cost (Cobo and González, 2007).

Producers have also found that loyal customers becomes allied as they often act as advertisements, promoting the product by recommending it to people they know. Loyalty strategies, such as "friend" and "partner" schemes offering discounts or products access facilities, tend to be successful.

Another key strategy for some of these models is the creation of groups or communities, with a view to enhancing relationships through transparency and proximity, enabling the consumer to identify with the product and to participate in the project to the extent that he/she feels comfortable in doing so. Theses links are strengthened not just by face-to-face dealings but also by social or festive activities, which might help to stabilize and extend a developed SFSC. Examples of such activities includes workshops on the manufacturing of certain products, open days at farms and processing sites, and talks on responsible consumption, etc. The emotional experience creates a personal link between producer and consumer which far transcends the mere exchange of goods.

Internet can be an useful tool used not only as a sales channel but also to strengthen these social links with consumers. Websites, blogs and social media; are regarded as valuable tools, providing a comfortable, easy way for users to identify shared interests, from the pleasure of sharing an elaborate meal made with local food to various outlooks on life in a rural/urban environment. They also enable users to interact and exchange information, and to identify the SFSCs best suited to their purchasing habits.

c. The need to combine several SFSCs

Private consumer purchases are dictated by household requirements, and orders therefore tend to be small. In the case of direct selling, farmers need a large network of customers/consumers in order to dispose of their output.

All respondents stressed that a single SFSC was insufficient for marketing all their produce. Since some foods are perishable, various SFSCs need to be used simultaneously, together with other channels at lower prices, in an attempt to adapt to different consumer habits.

They report that dealing with various SFSCs and a large network of customers/consumers implies considerable effort, and that more time and money has to be spent on managing, selling and distributing produce. Similar problems are reported in an analysis by López García (2011) of SFSC implementation in Spain.

d. Not all products are suitable for short food supply chains

Some respondents noted that when marketing via SFSCs it is essential that the product be original and of good quality, without ceasing to be artisanal. They added that, since few customers are interested in products of this kind and also willing to pay for quality, the producer must identify clearly the potential market in order to adapt to it, and must also know where to find it and how to access it.

They also highlighted the need to organise production and create a corporate image, taking into account the importance of format and presentation (size, packaging, etc.) and ensuring that these appeal to the target clientele. Sometimes, producers may not be sufficiently aware of such strategies, and respondents recommended seeking advice from professional marketing experts.

403

404 **CONCLUSIONS**

405 SFSC are not answering to the expectations created around them related to the sustainability of small
406 and medium sized farms because of many constraints. In order to identify them, rather than focussing
407 on different types of producer-consumer relationship or on the values associated with specific
408 channels, our research highlights the importance of understanding what various types of channel entail
409 from the producer's perspective.

410 The producer profiles best suited to specific channels—and the skills the producer needs to develop
411 before implementing SFSCs—are governed by the functions required of him/her, by the individual vs.
412 collective nature of the process, and by the potential need for larger-scale linkages. Findings suggest
413 that the intensity of the producer-consumer relationship and the values transmitted through it are in
414 many cases unrelated to the supply chain itself, and depend more on the stakeholders involved and
415 on the relational spaces articulated in parallel to the supply chain.

416 The numerous skills required of producers are one of the main constraints to consider. Producers,
417 when entering into SFSC, quite apart from producing foodstuffs, have to take on the additional roles
418 of distributor, salesman, advertiser and public relations expert. These requirements have a threefold
419 dimension: technical (know-how), psychosocial (skills) and financial (investments); whose solutions
420 become harder in the context of small and medium sized producers. At the same time, since these are
421 often group initiatives (either undertaken by producers' associations or involving consumer input),
422 there is also a need for group emotional management, conflict-solving and communication skills, which
423 few producers possess.

424 Apart for the intrinsic exigence of each SFSC, most producers opted to use a combination of SFSCs to
425 dispose of their produce. In practice a single SFSC is in most of the cases not able to cover producers
426 marketing needs. Multichannel strategies need to be developed, which entails an increased workload
427 for the small producer, who is additionally required to develop new skills, making his/her work
428 considerably more difficult. This becomes ever worse when the producer needs to use also non SFSC,
429 in what have been termed "hybrid spaces". This hybrid, multichannel strategy provides a means of
430 overcoming the insufficient capacity of a single supply chain to absorb a producer's entire output. It is
431 also dictated by the structural characteristics and organisational/logistical skills of each production
432 unit, and by the attempt to adapt products and services to different client-groups with differing needs
433 and purchasing habits. The degree of producer reliance on these hybrid spaces depends essentially on
434 the volume and range of products. Less use is made of hybrid spaces when output is small and more
435 diversified.

436 In this context, producers often face the dilemma «whether to increase the volume of sales through
437 SFSCs or use a range of channels to ensure sale of the entire output». However, successful initiatives
438 suggest that it must not be resolved at the expense of existing customers' loyalty. Careful nurturing of,
439 and communication with, all the stakeholders in the chain (intermediaries and consumers) is essential,
440 not just to generate stability but also to guarantee the growth of SFSCs in return for a minimal effort,
441 taking full advantage of synergies with already-established mechanisms. This means that growth will
442 be slower, and therefore that more patience will be required, but it will lead to greater stability and
443 sustainability in the medium and long term. A striking aspect of this emphasis on caring for the
444 consumer is developing abilities to build socio-affective spaces in parallel to SFSCs; these serve to

strengthen links and facilitate acceptance of the product/project. In this respect, online technology is proving extremely useful.

Finally, not every product has a place in SFSC. The criteria of consumers using SFSCs to purchase local food are linked to quality rather than price or ease of purchase. "Quality" in these channels is understood as referring to produce of identified origin, displaying certain attributes associated with artisanal food products, and transmitting certain values in terms of social and environmental sustainability. This will be related not only with the production process, but also with the presentation and format of products.

A specific sight on SFSC from a producer perspective put in evidence that not only consumers needs facilities in order to get interested in SFSC, but also producers. The numerous exigences SFSC pose to producers are in the basis of the stagnation of this type of alternative for small and medium sized producers.

ACKNOWLEDGEMENTS

The authors are grateful to the Spanish Ministry of Education, Culture & Sport/MINECO, Banco Santander and CeiA3 for financing this research.

REFERENCES

Abatekassa, G. and Peterson, H.C. 2011. Market access for local food through the conventional food supply chain. International Food and Agribusiness Management Review 14(1): 41-60.

Adams, D.C. and Salois, M.J. 2010. Local versus organic: a turn in consumer preferences and willingness-to-pay. Renewable Agriculture and Food Systems 25(4): 331–341.

Alberich, T. 2002. Perspectivas de investigación social. In: La investigación social participativa. In T.R. Villasante, T. (ed). La investigación social participativa. El Viejo Topo, Barcelona. p65-78

Barham, E. 2003. Translating Terroir: the global challenge of french AOC labeling. Journal of Rural Studies 19(1): 127-138.

Barham, J., Tropp, D., Enterline, K., Farbman, J., Fisk, J. and Kiraly, S. 2012. Regional Food Hub Resource Guide. U.S. Dept. of Agriculture, Agricultural Marketing Service. <http://dx.doi.org/10.9752/MS198.03-2014> (last access: 18th May 2018).Barroso, C. and Martín, E. 1999. Marketing relacional. Esic Editorial, Madrid.

Born, B. and Purcell, M. 2006. Avoiding the local trap scale and food systems in planning research. Journal of Planning Education and Research 26(2): 195-207.

Calle, A., Soler, M., Vara, I. 2012. La desafección al sistema agroalimentario: ciudadanía y redes sociales. Interface 4(2): 459-489.

Chiffoleau, Y. 2009. From politics to co-operation: The dynamics of embeddedness in alternative food supply chains. Sociologia Ruralis 49(3): 218-235.

Cobo, F.B. and González, L. 2007. Las implicaciones estratégicas del marketing relacional: fidelización y mercados ampliados. Anuario Jurídico y Económico Escluriense 40: 543-568.

Cuéllar-Padilla, M., Calle, A. 2011. Can we find solutions with people? Participatory action research with small organic producers In Andalusia. Journal of Rural Studies 27(4): 372-383.

Cuéllar-Padilla, M., Castillo, J. 2015. Mecanismos de revalorización del patrimonio agrario desde lo local: los sistemas de certificación y garantía. In J. Castillo, J and C. Martínez (ed.). El patrimonio agrario. La construcción cultural del territorio a través de la actividad agraria. UNIA, Seville, Spain. p. 121-148.

Day-Farnsworth, L., McCown, B., Miller, M., Pfeiffer, A. 2009. Scaling up: Meeting the demand for local food. University of Wisconsin-Extention Agricultural Innovation Center, University of Wisconsin Center for Integrated Agricultural Systems, Wisconsin.

Diamond, A., Barham, J. 2011. Money and mission: Moving food with value and values. Journal of Agricultures, Food Systems and Community Development 1(4): 101-117.

Dyer, J.H. and Singh, H. 1998. The relational view: cooperative strategy and sources of interorganizational advantage. Academy of Management Review 23(4): 660-679.

European Network for Rural Development (ENRD). 2012. Local food and short supply chains. EU Rural Review 12.

Feagan, R. 2007. The place of food: mapping out the "local" in local food systems. Progress in Human Geography 31(1): 23-42.

Focus Group SFSCM (Short Food Supply Chain Management). 2014. Discussion Paper 1st Meeting. Eip-Agri. https://ec.europa.eu/eip/agriculture/sites/agri-eip/files/fg12_short_food_chains_discussion_paper_2014_en.pdf (last access: 3rd October 2017).

Forti, R., Henrard, M. (ed) 2014. Agriculture, forestry and fishery statistics. Eurostat Statistical book. Publications Office of the European Union, Luxembourg.

García, F., Rivera, M.G. 2007. La revolución del supermercado ¿producir alimentos para quién?. In X. Montagut and E. VivaS(ed.). Supermercados, no gracias: grandes cadenas de distribución: impactos y alternativas. Editorial Icaria, Barcelona. p. 33-46.

González, I., Haro, T., Ramos, E., Renting, H. 2012. Circuitos cortos de comercialización en Andalucía: un análisis exploratorio. Revista Española de Estudios Agrosociales y Pesqueros 232: 193-230.

Guptill, A. and Wilkins, J.L. 2002. Buying into the Food System: Trends in food retailing in the US and implications for local foods. Agriculture and Human Values 19(1): 39-51.

Hendrickson, M.K. and Hefferman, W.D. 2002. Opening spaces through relocalization: locating potential resistance in the weaknesses of the global food system. Sociologia Ruralis 42(4): 347-369.

Ilbery, B., Maye, D. 2005. Food supply chains and sustainability: evidence from specialist food producers in the Scottish/English borders. Land Use Policy 22(4): 331-344.

Ilbery, B., Maye, D. 2006. Retailing local food in the Scottish-English borders: a supply chain perspective. Geoforum 37(3): 352-367.

518 Instituto Nacional de Estadística, 201. Base de datos del Ministerio de Economía y Competitividad.
519 www.ine.es (last access: 27th July 2017)

520 Junta de Andalucía. 2015. Base de datos y estadísticas de censos ganaderos. Consejería de Agricultura,
521 Pesca y Desarrollo Rural.
522 www.juntadeandalucia.es/agriculturaypesca/portal/servicios/estadisticas/estadisticas/ganaderia/ce
523 nsos-ganaderos.html (Last access: 3rd September 2017).

524 Jones, P., Comfort, D., Hillier D. 2004. A case study of local food and its routes to market in the UK.
525 British Food Journal 106(4): 328-335.

526 Karner, S. (ed). 2010. Local food systems in Europe. Case studies from five countries and what they
527 imply for policy and practice. FAAN Report, IFZ Graz, Graz.

528 King, R., Hand, M., Di Giacomo, G., Clancy, K., Gomez, M., Hardesty, S., Lev, L., McLaughlin, E. 2010.
529 Comparing the structure, size and performance of local and mainstream food supply chains. *USDA,*
530 *Economic Research Service, ERR-99.*

531 Kneafsey, M., Venn, L., Schmutz, U., Balázs, B., Trenchard, L., Eyden-Wood, T., Bos, E.,
532 Sutton, G., Blackett. M. 2013. Short food supply chains and local food systems in the EU: a
533 state of play of their socio-economic characteristics. JRC Scientific and Policy Reports,
534 European Commission.

535 López, D. 2011. Canales cortos de comercialización como elemento dinamizador de las agriculturas
536 ecológicas urbana y periurbana. I Congreso Estatal de Agricultura Ecológica Urbana y Periurbana, Elche.

537 López, D., del Valle, J., Velázquez, S. 2015. Híbridas y multicanal. Estrategias alternativas de distribución
538 para el mercado español de alimentos ecológicos hortofrutícolas. Revista Española de Estudios
539 Agrosociales y Pesqueros 241: 49- 80.

540 LYONS, T. S. 2002. Building social capital for rural enterprise development: three case studies in the
541 united states. *Journal of developmental entrepreneurship*, *7*(2), 193

542 MADECA. 2014. Información provincial de Málaga. Observatorio Socioeconómico de la Provincia de
543 Málaga, Diputación de Málaga, Málaga.

544 MAGRAMA. 2006. La alimentación mes a mes. Enero 2006. Ministerio de Medio Ambiente y Medio
545 Rural y Marino, Madrid.

546 MAGRAMA. 2010. La alimentación mes a mes. Enero 2010. Ministerio de Medio Ambiente y Medio
547 Rural y Marino, Madrid.

548 MAGRAMA. 2016. Informe del consumo de alimentación en España 2015. Ministerio de Agricultura,
549 Alimentación y Medioambiente. http://www.mapama.gob.es/es/alimentacion/temas/consumo-y-
550 comercializacion-y-distribucion-alimentaria/informeconsumoalimentacion2015_tcm7-422694.pdf
551 (last access: 3rd September 2017)

552 Marsden, T., Banks, J., Bristow, G. 2000. Food supply chain approaches: exploring their role in rural
553 development. Sociologia Ruralis 40(4): 424-438.

554 Morris, C. and Buller, H. 2003. The local food sector: a preliminary assessment of its form and Impact
555 in Gloucestershire. British Food Journal 105(8): 559-566.

556 Murdoch, J., Marsden, T., Banks, J. 2000. Quality, nature and embeddedness: some theoretical
557 considerations in the context of the food sector. Economic Geography 76(2): 107-125.

558

559 O'Hara, S.U., Stagl, S. 2001. Global food markets and their local alternatives: a socio-ecological
560 economic perspective. Population and Environment 22(6): 533-554.

561 Pérez, D., Vázquez, D. 2008. Alternativas ó sistema agroalimentario capitalista dende o consumo:
562 Experiencias en Andalucía. II Congreso de Agroecología y Agricultura Ecológica de Galicia. Universidad
563 de Vigo.

564 Renting, H., Marsden, T.K., Banks, J. 2003. Understanding alternative food networks: exploring the role
565 of short supply chains in rural development. Environment and Planning A 35(3): 393-412.

566 Renting, H., Oostindie, H., Laurent, C.E., Brunori, G., Barjolle, D., Jervell, A. 2008. Multifuntionality of
567 agricultural activities, changing rural identities and new linkages. International Journal of Agricultural
568 Resources, Governance and Ecology 7(4): 361-385.

569 Reyes, C. 2016. Informe 2016 del sector de la distribución alimentaria por superficie en España.
570 http://www.sir.cat/images/pdf/informe-2016AlimentacionESP.pdf (last access: 3rd September 2017).

571 Segrelles, J.A. 2010. La distribución agroalimentaria y su influencia en la pobreza campesina. Scripta
572 Nova 14 (325): 26p. http://www.ub.edu/geocrit/sn/sn-325.htm (last access: 3rd October 2017).

573 Sevilla, E., Soler, M., Gallar, D., Vara, I., Calle, A. 2012. Canales cortos de Comercialización en Andalucía.
574 Fundación Pública Andaluza Centro de Estudios Andaluces, Consejería de la Presidencia e igualdad,
575 Junta de Andalucía, Sevilla.

576 Soler, M., Calle, A. 2010. Rearticulando desde la alimentación: canales cortos de comercialización en
577 Andalucía. Patrimonio cultural en la nueva ruralidad andaluza, PH CUADERNOS 26: 258-283.

578 TRAGSATEC. 2013. Canales cortos de comercialización en el sector agroalimentario. Observatorio de
579 Precios de los Alimentos, Ministerio de Agricultura, Alimentación y Medio Ambiente, Madrid

580 Venn, L., Kneafsey, M., Holloway, L., Cox, R., Dowler, E., Tuomainen, H. 2006. Researching European
581 "alternative" food networks: some methodological considerations. Area 38(3): 248-258.

582 Winter, M. 2003. Embeddedness, the new food economy and defensive localism. Journal of Rural
583 Studies 19(1): 23–32.

584 Zander, K. and Beske, P. 2014. Happy Growers! Relationship Quality in the German Organic Apple
585 Chain. International Food and Agribusiness Management Review 17(3): 205-224.

586 *Figure 1. Description of SFSCs in the province of Málaga by type of channel implemented.*

587 *Figure 2. Description of SFSCs in the province of Málaga by organisational structure.*