

Barriers and Facilitators of Purchasing from Short Food Supply Chains in Europe: Insights from a Stakeholder Perspective

CAMILLE AOUINAÏT^{a*}, DANILLO CHRISTEN^a, CHRISTOPH CARLEN^a, CAMILA MASSRI^b, MALOU REIPURTH^b, SOPHIE HIEKE^b, ADRIENN HEGYI^c, KATALIN KUJÁNI^d, ÁGNES MAJOR^d, ÁGNES SZEGEDYNÉ FRICZ^c, VERENA HÜTTL-MAACK^e, DENNIS GAWLIK^e, EUGENIA PETROPOULOU^f, BEGOÑA ALFARO^g, ELENA SANTA CRUZ^g, MARIEKE LAMERIS^h, ASPER KUITEMS^h, FRANK JANSSEN^h, SUSANNE BRAUNⁱ, AND BETTY CHANG^b

^a Fruit Crops in the Alpine Region Group, Research Division Plant-Production Systems, Agroscope, Route des Eterpys 18, 1964 Conthey, Switzerland

^b European Food Information Council (EUFIC), Rue des Deux Églises 14, 1000 Brussel, Belgium

^c Campden BRI Magyarország Nonprofit Kft., 1096 Budapest, Haller u. 2., Hungary

^d Association of the National Interest Representation of Small-Scale Product Manufacturers and Service Providers (KIS), 2162 Órbottyán, Kossuth Lajos u. 23., Hungary

^e Department of Marketing and Management, University of Hohenheim, Fruwirthstrasse 32, 70599 Stuttgart, Germany

^f Department of Sociology, University of Crete, Gallos Campus, Rethymnon 74100

^g AZTI, Bizkaiko Zientzia eta Teknologia Parkea, Astondo Bidea E609. 48160 Derio (Bizkaia), Spain

^h Nederlands Bakkerij Centrum, Agro Business Park 75-83, 6708 PV Wageningen, Postbus 360, 6700 AJ Wageningen, The Netherlands

ⁱ University of Hohenheim, Research Center for Bioeconomy, Wollgrasweg 43 70599, Stuttgart, Germany

*Corresponding author, camille.aouinait@gmail.com, Tel: +33-689-822-771

Received: 2 November 2020; Published online: 18 July 2022



Abstract

Thirty-two expert stakeholder (e.g., consumer advice center, state parliament at regional level, European Network for Rural Development, university and research center, chamber of tourism, rural development association, and social cooperative enterprise) interviews were conducted to examine consumer attitudes, values and preferences in relation to short food supply chains. These stakeholders have expertise in policy, consumer behaviour, the tourism sector and regulation. The interviewees represented the views of consumers, producers, and other actors who work with or within short food supply in seven European countries (Belgium, Germany, Greece, Hungary, the Netherlands, Spain, and Switzerland).

Consumers were generally perceived to be aware of the environmental impact of food production. In terms of preferences, consumers would like to shop for local food the way they shop at the supermarket: having variety of products, accessibility, and availability. The relative lack of convenience and high prices associated with short food supply chains products were seen as the major barriers to their purchase. Consumers were thought to buy the products because of health and environmental benefits, a desire to support their local community, and a preference for tradition. However, relatively few consumers purchase products regularly from SFSC. The main segments are people who believe in short food supply chains values, middle class families with young children and elderly people. More can be done to educate and engage consumers regarding these chains, and market research is needed to inform which strategy is likely to be most effective in specific contexts such as the regional level.

Keywords: Consumer awareness; Consumer behaviour; Environmental impact; Short food chains; Sustainable consumption; Stakeholder interviews

1 Introduction

Recent rapid evolution of the agri-food system has been shaped by new challenges like demographic evolution, leading to an increasing diversity of cultural, political, economic, and social practices. The dominance of the long food chain is progressively moving towards a diversification of the food supply system. Diverse range of food products are available like organic, ready-to-eat, and local products. Alternative food chains like short food supply chains (SFSC) are rising. Although there is no single definition of what constitutes a SFSC we benefit from a definition at the European level. According to the European rural development regulation (1305/2013), SFSC relate to supply chains “involving a limited number of economic operators, committed to co-operation, local economic development, and close geographical and social relations between producers, processors and consumers”. Giampietri et al. (2016) describe SFSC as

face-to-face interactions between producers and consumers who thus can easily interact and share information on the product origin and its production process, so that consumers can make their own value-judgements.

The rising interest for these chains is driven by the evolution of consumer awareness of several subjects, including awareness of the environmental implications of food production, health aspects of local products, support of the local community, consumer activism and awareness of social impact of food production and trust (Baumann et al., 2015).

Local food was studied by Renting et al. (2003), Venn et al. (2006) and numerous authors. Zepeda and Leviten-Reid (2004) found that local food is defined differently by food shoppers. Some of them defined local food in terms of distance in driving time, while others focused on political boundaries and qualitative characteristics. Consumers are increasingly searching for local food for reasons related to higher quality (i.e., freshness, taste), health-related aspects, guarantee of the provenance, environmental impact of food consumption and for economic reasons, such as better market access for producers, higher

value distribution along the chain and reduction of consumers' final price (Belletti et al., 2012; United Nations Industrial Development Organization, 2020). The direct relationships that are created between producers and consumers is one important motivation for SFSC use (Belletti et al., 2012; Benedek et al., 2020). The connection is established through on-farm sales and off-farm sales like traditional open-air markets that facilitate contact between producers and consumers (Chiffolleau et al., 2019). In this context, SFSC are those that consist of a minimal number of intermediaries between the producer and the consumer, whereas long food supply chains (LFSC) are those that involve more intermediaries. This study focuses on interviews conducted with diverse SFSC experts.

The objectives are to examine, from a stakeholder point of view, a) the extent to which consumers are aware of the social and environmental impact of food production; b) consumer understanding, expectations, willingness to pay and concerns related to SFSC; c) consumer profiles that are more likely to purchase SFSC products; and d) uncover obstacles that prevent consumers from purchasing SFSC products.

2 Materials and Methods

2.1 Presentation of the participating countries

This research was conducted using a qualitative research design. A series of interviews were conducted with experts in Europe representing the perspectives of consumers from the point of view of producers, policy makers/policy analysts, and other actors in SFSC such as regulatory authorities, organizers of producers' markets and entities from the Hotel Restaurants and Catering (HoReCa) sector. Twenty-nine interviews were performed in six EU countries: five in Germany, six in the Netherlands, three in Switzerland, eight in Hungary, three in Spain, and four in Greece. In addition, two interviews were conducted at the EU level (EU), and one was conducted within the municipality of Ghent in Belgium (BE). Suitable organisations and interviewees were identified from desk research and joint

network searches.

2.2 Interview procedure

Potential stakeholders were contacted via email for participation in the interviews. Those that participated in the study are listed in Table 1. They received the open interview questions in advance (see Figure 1), allowing them the opportunity to prepare their answers.

The stakeholders were interviewed in their local language except for the EU and BE stakeholders, who were interviewed in English. The interviews took place between June and September in 2019. Each interview took between 17 and 120 minutes. Of a total of 32 interviews, 17 were conducted face-to-face, 12 were conducted via telephone, and three interviewees answered via email. Except for the interviews conducted by email, all the interviews were audio-recorded with the consent of the interviewee, transcribed in the original language, and then translated into English for consistent content analysis. Two independent researchers coded the responses for thematic analysis. Using several data collection methods (i.e., face-to-face interviews, telephone calls and emails) can strengthen the study and foster analysis (Yin, 2011). A guide was used to conduct the study, hence comparison between countries can reveal significant similarities or differences. Even if southern EU countries are underrepresented, the study remains valid through the collection of responses from independent experts coming from different national contexts and having diverse knowledge. Moreover, Yin (2011) claimed the strength of the guide's use in the way that interviewees can reveal elements that would not be revealed in a more informal discussion.

2.3 Data analysis

A database with all the translated interviews was created in Microsoft Excel. A first coding process was performed in order to identify the main themes. Some of the themes were based on the questions themselves (e.g., consumer awareness of the environmental and social impact of food production), and other topics emerged indirectly

from the interview responses (e.g., specific consumer segments).

3 Results and Discussion

The findings of the study include the awareness of consumers about social and economic impact of food production. There are divergences about these topics with an opposition between northern and southern European countries. Consumer understanding of SFSC is tied to the concept of local food, with some confusion around the definition of SFSC, local and organic. Expectations of consumers include similar services to those in longer food chains (i.e., availability, diversity of products, affordability). Authenticity, food hygiene, and origin represent concerns that some consumers may have. Consumers are willing to pay more for better taste, quality, and health benefits. Three consumer profiles were identified in the study. These findings are summarized in Table 2 and described in the next sections.

3.1 Consumer awareness of the social and environmental impact of food production

Stakeholder opinions were divided on how aware consumers are about environmental issues related to food production, although there was a consensus that such awareness is increasing. On the other hand, the social impact of food production was barely discussed. This suggests either that stakeholder awareness of the environmental impact of food production overshadows their awareness of the social impact, or that stakeholders perceive that consumer awareness of environmental impact is greater than awareness of social impact. This may partly be because environmental impact is universally applicable and cause - effect relationships are relatively straightforward. Many initiatives and projects at different scales promote healthy and sustainable diets like the Mediterranean diet. This diet was recognised by UNESCO in 2010 as an intangible cultural heritage. Hence, many projects promote and support its diffusion (ENPICBCMED, 2012; Phull, 2015). The European Union funded a project, MedDiet that aims at raising consumer

Table 1: Stakeholder organisations interviewed

Region	Interviewed stakeholders	Stakeholders' type represented
European Union	European Network for Rural Development (ENRD)	Policy
	Slow Food International	Producer, consumer, retailers, HoReCa
Germany	Consumer Advice Center Baden-Württemberg e.V.	Consumer
	State Parliament of Baden-Württemberg	Policy
	State Parliament of Hessen (Bündnis 90/Die Grüne party)	Policy
	Kaemena Farm Regionalfenster (Regional window) GmbH	Producer, service Certifier
The Netherlands	Organic Farm Landzicht	Producer, consumer
	Philips Fruit Garden	Producer, retailer
	Sustainable Agriculture team from Province South-Holland	Policy
	Wageningen University & Research (WUR)	Policy
	The Premonstratensian Monastery Mariënwaerdt Province Utrecht	Producer, HoReCa Policy
Switzerland	Slow Food Switzerland	Producer, consumer, retailer
	University of Neuchâtel	Policy
	French Federation of Contractual Agriculture of Proximity	Producer, consumer
Hungary	Csoroszlya Farm Kft.	Producer
	Chamber of Tourism	Producer
	Calvary Farm	Producer
	Cooperating Balaton Upland	Service
	Upper-Heathland Rural Development Association	Service
	National Food Chain Safety Authority, Food and Feed Safety Directorate	Regulatory authority
	Pannon Helyi Termék Nonprofit Kft. Research Institute of Agricultural Economics, Office Budapest	Service Policy
Greece	BIOZO	Consumer
	Ecotourism Greece	Service
	GENISEA Social Cooperative Enterprise	Producer
	Hellenic Agricultural Organisation-Demeter/ Ministry of Rural Development and Food	Policy/regulatory authority
Spain	(ENEK) Basque Council for Ecological Agriculture and Food	Regulatory authority
	European Coordination Vía Campesina	Producer
	AUSOLAN	HoReCa
Belgium	Ghent Environment and Climate Bureau (Ghent Municipality)	Policy maker

Table 2: Summary of the main findings

Topics	Summary of findings
Consumer awareness of social and environmental impact of food production	Varied understanding of the environmental impact of food production - Greater understanding of environmental and social issues tied to food production in northern European countries - Concerns about traditional, local specialties in southern Europe Underdeveloped consumer understanding of the social impact of food production
Consumer understanding of SFSC	- Tied to the concept of local food - Focuses on the food origin, the direct connection with the producer, the small scale of food production, and traditional local specialties - Primarily positive, sometimes confused with associated concepts (e.g., organic, 0km) - Need to educate consumers about SFSC
Consumer expectations and concerns of shopping for SFSC products	Consumers: - want a similar price of SFSC than that of the mainstream offer - want a wide range of SFSC product types - expect a reliable supply of SFSC products - expect SFSC produce to be presented in the same way as mainstream products Often confusion between local and organic food Generally positive view of local products Some concerns about the authenticity/origin of the product (particularly in HU, EL, ES) Concern about food hygiene safety, from Hotel Restaurant Catering and consumers
Consumer demand and willingness to pay for SFSC products	Demand is variable and depends on region, product type, and purchase context Need to increase points of sale Having a direct relationship with the producer increases trust and transparency Value supporting the local economy/farmers through purchasing SFSC products Willing to pay more for taste, quality, and health benefits particularly if they are associated with awards/certification
Consumer profiles	Motivations for purchasing SFSC products include health and environment concerns, traditional nature of products, support of the local community The main segments are: - People who believe in SFSC values (SFSC advocates) - Middle class families with young children - Elderly people



Figure 1: Flow chart of the method with interview questions

awareness about the importance of the Mediterranean Diet. This ecological sustainable model has a significantly reduced environmental footprint and health positive impact (Lăcătușu et al., 2019). A non-exhaustive list of projects promoting this diet includes MD.net, the international network of Mediterranean diet communities, ECOSAFIMED aiming at ecosystem conservation and sustainable artisanal fisheries in the Mediterranean basin, or ECOPLANTMED targeting the ecological use of native plants for environmental restoration and sustainable development in the Mediterranean region (EN-PICBCMED, 2012).

In contrast, social implications of food production can vary greatly. These are different for different stakeholder groups, thus consumers may not receive clear and consistent messages about social issues.

Consumers in north-western European countries such as Germany, the Netherlands and Switzerland were perceived to have a greater under-

standing of social and environmental issues than those in southern Europe, where fair trade and organic food was increasingly popular in the former. In Switzerland, consumers may be more aware of issues surrounding food production because two referendums were introduced in 2018, calling for constitutional changes ensuring that Swiss consumers have greater access to locally produced, healthy and organic food, and fair wages for people working in the agricultural sector. This is supported by Gregory-Smith et al. (2017) who found that in North-West EU countries, environmentally friendly products have a more established position in the market.

It is perceived that consumers in southern countries such as Spain and Greece are more concerned about whether products are seasonal, locally produced, and specific to their geographical area, as exemplified by traditional products such as those carrying the labels of Protected Designation of Origin (PDO) or Protected Geographical Indication (PGI). The weight of geograph-

ical indications is particularly important in the Mediterranean basin (14.5% in France, 9.5% in Greece, and 5.7% in Spain) (Chever, 2015). This may have its origins in the Mediterranean diet emphasizing traditional food, production methods, agricultural practices, and seasonality (UNESCO, 2012).

3.2 Consumer understanding of short food supply chains

According to the stakeholders, consumers generally have little understanding of the concept of SFSC, including it into local food. Although there is no standard understanding among consumers of what local food is, the image they have is generally centred on the product origin and buying directly from the producer, ensuring transparency and authenticity of food. A stakeholder from Sustainable Agriculture team from Province South-Holland affirmed that

... When distribution is well organised, more people are reached and stimulated to buy local foods. This makes it easier to change behaviour, which creates more demand.

Furthermore, consumer understanding of local food may differ depending on the product type (e.g., fresh produce vs. processed food) and the region (an urban vs. rural area).

SFSC and local food concepts share many values. One distinction between local food and SFSC that consumers appear to be generally unaware of is that local food is geographically proximal, whereas some products from SFSC may be sourced relatively far away, but still respect the SFSC definition of few intermediaries (e.g., producers selling their products to consumers online, or a restaurant in the Basque Country sourcing oranges from Valencia or bananas from the Canary Islands).

The consumer concept of local food is bound more by regional or national borders, rather than in terms of geographical distance. Local food is perceived as that which comes from one's country, region, or even village. For example, approximately 60% of Flemish people consider regional products and/or Belgian products to

be local, whereas only 13% of Flemish people consider European products to be local (EMF, 2017). The geographic distance associated with SFSC is relative and can depend on where the consumer lives. A stakeholder in Spain suggested that up to 150km may be considered local, whereas in Hungary SFSC cannot exceed 40km by law outside the area of Budapest. Another stakeholder in Switzerland pointed out that because of the size of the country and the geography, food supply chains are often even shorter, on the scale of "very local". This entails that SFSC products are relatively prevalent in Switzerland (compared to other countries) making this concept more salient in the mind of Swiss consumers.

In Hungary, Switzerland, and Greece the consumer idea of local food is thought to reflect food that can be directly purchased from the producer (e.g., farmers' market or agricultural community). There is an increasing trend to put the farmer's name and contact information on the private labels of large supermarket chains (Greece), or the face of the producer on the product packaging (Germany and Spain).

Finally, stakeholders agreed that knowledge about SFSC is increasing, prompted by awareness-raising initiatives. These initiatives range from in-store marketing highlighting local products, documentaries about the financial struggles of local farmers shown on public television sparking public debate on local media (Flanders), to a Hungarian national campaign promoting the Year of Local Food (2015) <http://www.helyboljobb.hu/>. It was noted, however, that awareness and interest are likely to vary according to socioeconomic status. Stakeholders mentioned that consumers who struggle to afford healthy food, and/or who shop at discount supermarkets are less likely to be aware of SFSC or their implications.

3.3 Consumer expectations and concerns

How consumers perceive local food and/or SFSC was felt to be greatly influenced by the mainstream alternative of shopping at supermarkets. When purchasing local food, stakeholders

thought that consumers would like to have the same services offered in supermarkets: availability year-round, having a large range of products in one place, and being able to choose from aesthetically flawless products. The superficial attributes (i.e., flawless appearance) can influence willingness to pay (Grewal et al., 2019). Thus, education campaigns for consumers could be developed to inform them that aesthetically imperfect products are still good quality, leading supermarkets to reject 10-16% of farm crops and causing farmers to overproduce as a result (FEED-BACK, 2018).

The most influential point of comparison between products from long and short food supply chains may be the price. Stakeholders in Hungary, Spain and Greece point out that most consumers do not want to pay more to buy from SFSC. However, the number of consumers who are conscious about the value of local food is increasing. One potential solution could be to lower the price of SFSC products by eliminating value-added tax (VAT) for direct selling or common (direct) selling in the case of small producers who produce marginal quantity. Another alternative is to implement a tax that considers the hidden costs of food in terms of environmental and/or health impact. This could be in the form of true pricing (Sustainable Food Trust, 2017) or a scheme that decreases the rate of tax for labour but increases it for the cost of resources and pollution (Ex'tax Project Foundation, n.d.).

Stakeholders generally felt that consumers have a positive opinion of such products, in terms of quality and production standards. However, the issue of fraud in SFSC was raised as a particular concern of consumers in Hungary, Greece, and Spain (and to a lesser extent, Germany and the Netherlands), where products from longer supply chains are sometimes sold as local products. Consumers may be confused by what is meant by local or by short food supply chains. In the study, SFSC relates to the chain where there is a minimum of intermediaries, while local food refers to food produced and that originates from a close geographical territory. In this regard, many local products are sold through SFSC, however there can be food products that come from outside the geographical boundaries but still be considered as sold via SFSC because there are a few inter-

mediaries.

As there is no certification system and lack of monitoring to safeguard consumers against deceptive practices, one solution suggested is to have a certified quality label or scheme for local food, and regulations. However, too much certification may confuse the consumers. Some countries have a multitude of regional labels, like in Germany, implying much variability between credible seals, untrustworthy seals, and marketing seals, leading to consumer confusion (European Commission, 2019).

Furthermore, one major concern that consumers were thought to have was food hygiene and safety. The products of the long supply chains may be more reliable, because of accreditation and control of products at checkpoints. By contrast, there is often no information like that regarding products of short food supply chains. This presents an obstacle particularly for Hotels, Restaurants and Catering (HoReCa), who are legally bound to comply with food safety standards.

3.4 Consumer demand and willingness to pay for SFSC products

Stakeholders across countries generally agreed that the demand for products from SFSC is much less than that of the mainstream offer. Many stakeholders claim that demand is greater than the existing supply (Germany, Spain, Switzerland, Hungary), although this observation is sometimes specific to a region or to a type of product. For example, some producer stakeholders in Hungary mentioned that the demand for local food is greater in Budapest than in rural areas, and one mentioned that there is not enough local meat supplied. Thus, further research is needed to obtain a more comprehensive picture of the extent to which consumer demand is being met, for which types of products, and in which areas.

Stakeholders suggested that more points of sale are needed to drive consumer demand like Ghent Environment and Climate Bureau. This is particularly the case for supermarkets, and to a lesser extent, restaurants.

Product type plays an important role in influencing consumer demand. Stakeholders emphasised that consumers tend to be more interested in products such as regional specialties (e.g., asparagus from Valais in Switzerland), and quality “gourmet” products (e.g., wine, preserves), rather than ordinary products. Some consumers are conscious that local supply chains can support the maintenance of atypical products and specialties (such as “forgotten” or heirloom vegetables). In restaurants, the variety of the product also matters. As one stakeholder in Hungary pointed out

Demand and supply often don't meet. The producer starts to produce any kind of potato, but there is no demand in a restaurant.

Thus, producers need to identify what the consumer wants, and/or what type of consumer is more likely to buy their products.

There was a strong consensus across countries that consumers are willing to pay more for better taste and quality. Local products are also considered to be fresher (because they have travelled a shorter distance and are sold sooner after harvest). Natural products that are minimally processed are also valued. For Flemish consumers the most important criteria for purchasing food, in addition to price, are the regional, seasonal, and natural character of the food (Coart, 2017). For processed products, it was claimed that consumers value traditional production methods (particularly in Greece and Hungary) and are more willing to pay for products with a taste award. It was highlighted that a greater willingness to pay tended to be a characteristic of more middle-class consumers.

Lastly, stakeholders suggested that some consumers would be willing to pay more for products with certificates of authenticity related to the attributes and production methods, and that they value trust that is established through the direct relationship with the producer. It was felt that consumers are increasingly interested in knowing where their food comes from.

3.5 Consumer profiles

SFSC advocates (“locavores”)

The segment of consumers who believe in the principles of SFSC is seen as being relatively small. This segment is embodied by the “conscientious, responsible consumer, who gives value to the sustainable product from a social, economic and environmental point of view, committed to the producer receiving a fair price for his product. He is also concerned about healthy food.” (stakeholder from Switzerland). They are essentially “locavores” who support local food because they believe it is superior in taste and quality. They are opposed to long food supply chains, and support local communities (Reich et al., 2018). These types of consumers were more likely to maintain their engagement with SFSC initiatives that require more commitment, like Community Supported Agriculture (CSA). As one producer of a CSA initiative in the Netherlands explains, “They give us unconditional support and let our land determine their menu. They don't ask themselves if our products fit their wishes.”

SFSC purchasers to support local community

Supporting the local community was an important motivation for buying SFSC products. This applies not only to purchasing directly from producers, but also from intermediaries like local butchers or grocers. As one EU-level stakeholder noted, “it's about the sentiment, the emotion, about helping someone locally rather than giving money to something that has come 14 steps in the supply chain.” This value was not associated with a particular demographic segment.

Main socio-demographically defined consumer groups

The two main consumer groups that were identified across several countries as being the main purchasers of SFSC products are families with young children and the elderly. Consumer research in Flanders shows that in terms of families, it is particularly those of a higher social and

economic status (SES) and those with young children, who traditionally vote for the green party and/or are more interested in environmental initiatives (VLAM, 2018). The aim of this study was to provide an overview of sales through farm shops and farmers' markets in Flanders, by monitoring the market evolution in Flanders, and the purchasing behavior of 2,750 Flemish households for home consumption. Profiles of consumers and types of food they purchase were identified. Therefore, this study's findings support our findings. This is comparable to research showing that those who buy organic foods tend to have higher education levels and belong to married households or households with young children (Dimitri & Dettmann, 2012). The fact that these families tend to be of a higher SES suggests that the level of education and/or affluence may be underlying their motivation. This can be contrasted with a point mentioned by a stakeholder in Spain that, due to the economic crisis, families with lower-middle income give more importance to price than SFSC values when purchasing groceries.

Families were thought to be interested in SFSC because such chains can offer attractive and educational experiences to their children. In Switzerland, families often take their children to local markets and farms where the public can pick their own produce. It was suggested by many stakeholders in different countries that parents would be willing to pay more to have their children fed from SFSC in nurseries and schools. A stakeholder in Greece observed that health-conscious consumers who can afford to pay something extra are those who buy SFSC products on a regular basis. Another reason could be that children are increasingly being taught about the environment in schools, which may have a spillover effect onto their family. Specific food environment policies can be implemented at the school level to educate children about the environment. This was found to bring improvement of targeted dietary behaviors and habits (Micha et al., 2018). These habits can be balanced by the family environment, in which parents play a gatekeeper role for home food availability and choice. Parents and children have a positive effect on each other (Hebestreit et al., 2017). In contrast, elderly people were thought to have

quite different motivations for buying products from SFSC (in Spain, however it is expected to be similar in other countries). Their engagement appears to be supported by their lifestyle. They have the tradition of buying directly from the producer. They have more time to visit multiple producers, and to prepare meals with local products that are usually raw ingredients. In Hungary, it was mentioned that this segment (elderly but with higher pension) seeks products that are traditional in taste and production methods, and that their motivation stems from a sentimentalism about local products.

Consumers who do not buy local products

Most consumers do not regularly buy products from SFSC. It seems that these consumers are aware of some of the benefits of SFSC products like health benefits. However, their purchase decisions are more often driven by price and/or convenience. Products from SFSC tend to be less convenient than those from longer supply chains for many reasons. We assess that they are less available all year round due to their seasonality, and so require more consideration in terms of meal-planning. They are more often sold as raw ingredients requiring more effort to prepare. Such products are available in fewer retail outlets and there is a limited range of products, which means consumers need to spend more effort to source all their products. As one stakeholder of Philips Fruit Garden, in the Netherlands, asserted:

You have to differentiate in order to attract a wide audience. It is not enough to make people drive all the way here to get apples. You must be able to offer more.

Thus, it appears that SFSC products are not as compatible with consumers' modern lifestyles as products from longer supply chains are. Urban versus sub-urban and rural lifestyles differ in terms of food supply, connection to nature and ways of consumption. The convenience of shopping at long food chains like in supermarkets is in contradiction with buying food at different farms

and short food sales points. This suggests that education about the benefits and price reductions of SFSC products can only have a limited effect on consumer behaviour if the convenience of buying and using SFSC products is not improved.

To increase the convenience of buying from SFSC, producers could form cooperatives offering a larger range of different product types (fruit, vegetables, fresh meat, delicatessen meat, dairy, and bread). This would allow consumers to satisfy more of their grocery requirements at one place. Offering home delivery or local pick-up points would be another solution. For smaller producers, this option may be more feasible within a cooperative structure. However, the culture of cooperatives varies between countries. A stakeholder pointed out that Italy has strong cooperation culture in producing the same types of crops, whereas it was suggested that in Switzerland producers cannot agree on pricing and opening hours for direct selling. In Hungary, the form of cooperative is not available for small farmers and for direct selling, however smaller collaborative legal forms would be requested by SFSC producers.

In Flanders, even consumers who buy from SFSCs at least once a month tend not to travel more than five kilometres for this (Coart, 2017). This suggests that having more accessible retail channels is key to increasing the sales of SFSC products (e.g. at central locations or at large stations). Similarly, supplying large retailers such as supermarkets with SFSC products would boost the visibility of these products and address the problem that consumers often do not know where they can purchase local products (European Commission, 2013).

4 Conclusions

Many consumers value local food for their health and environmental benefits, the support that it provides to their local community, and a preference for traditional tastes and shopping lifestyle. However, the main barriers of price and inconvenience make it difficult for consumers to purchase local food on a wider scale. Furthermore, the attributes that consumers value about local food can also be found via other means, for example,

by purchasing non-local food that is organic or sold by their local grocer.

Hence, consumer and producer perspectives can be related to policy implications in order to suggest solutions to common goals (e.g., supply and sell local products that reflect a fair price for both consumers and producers, or support hygiene standards for implementation through adequate regulations).

Strategies to minimise the practical barriers to purchasing from SFSC include justifying the price of local products, such as through selective taxation to reduce the price discrepancies between long and short food supply chain products, certification, and explaining the benefits of SFSC to consumers. Inconvenience can be decreased by having a wider range of SFSC products in retail outlets, increasing points of sale, and making local food more available at restaurants. Communication and marketing strategies promoting SFSC products should be based on market research identifying the target audience/s and their values and concerns. Furthermore, attributes that consumers care about, like taste, freshness, and naturalness should be highlighted. Finally, the exploratory nature of the study supported the knowledge shared by experts regarding consumer attitudes towards SFSC. Gathering point of views from different countries allowed assessing the situation in Europe. However, the interview methodology with an overrepresentation of northern EU countries led to limited conclusions. Therefore, future studies that examine consumer behavior towards SFSC in Europe should include more countries in the analysis, widening the sample, and taking into account different points of view.

Acknowledgements

Results presented in this paper have been obtained within the project SMARTCHAIN: "Towards Innovation-driven and Smart Solutions in Short Food Supply Chains." This project has received funding from the European's Union's Horizon 2020 Research and Innovation Programme under Grant Agreement no. 773785. We would like to thank all the stakeholders interviewed, and to Kinga Varsányi, who supported

the data collection.

References

- Baumann, S., Engman, A., & Johnston, J. (2015). Political consumption, conventional politics, and high cultural capital. *International Journal of Consumer Studies*, 39(5), 413–421. <https://doi.org/10.1111/ijcs.12223>
- Belletti, G., Casabianca, F., & Marescotti, A. (2012). Local food quality and local resources. In F. Arfini, M. Mancini, & M. Donati (Eds.), *Local agrifood systems in a global world: Market, social and environmental challenges* (pp. 71–96). Cambridge Scholars Publishing.
- Benedek, Z., Fertő, I., & Szente, V. (2020). The Multiplier Effects of Food Relocalization: A Systematic Review. *Sustainability*, 12(9), 1–18.
- Chever, T. (2015). Les indications géographiques (IG) au sein de l'Union européenne (UE) : aspects économiques. *Colloque mondial sur les indications géographiques*.
- Chiffolleau, Y., Millet-Amrani, S., & Caard, A. (2019). From Short Food Supply Chains to Sustainable Agriculture in Urban Food Systems: Food Democracy as a Vector of Transition. *Agriculture*, 6(57).
- Coart, J. (2017). Short chain unleashes opportunities [Korte keten ontketent opportuniteiten]. Retrieved November 15, 2020, from <https://www.farmcafe.be/artikel/12872>
- Dimitri, C., & Dettmann, R. L. (2012). Organic food consumers: what do we really know about them? *British Food Journal*, 114(8), 1157–1183.
- EMF. (2017). *Environment Ministry of Flanders* (tech. rep.). https://www.vlam.be/public/uploads/files/feiten-en-cijfers/bistro/korte_keten_2018.pdf
- ENPICBCMED. (2012). ENPICBCMed - Funded projects. <http://www.enpicbcm.eu/projects/running-projects>
- European Commission. (2013). *Report from the Commission to the European Parliament and the Council on the case for a local farming and direct sales labelling scheme* (tech. rep.). European Commission. Brussels. <https://op.europa.eu/en/publication-detail/-/publication/be106719-60e5-11e3-ab0f-01aa75ed71a1>
- European Commission. (2019). *Assessment of voluntary claims on fishery and aquaculture products (FAPS)* (tech. rep.). European Commission. Brussels. <https://op.europa.eu/en/publication-detail/-/publication/78fd2eb2-7b71-11e9-9f05-01aa75ed71a1/language-en/format-PDF/source-97519624>
- FEEDBACK. (2018). *Farmers talk food waste: supermarkets role in crop waste on UK farms* (tech. rep.). https://feedbackglobal.org/wp-content/uploads/2018/08/Farm_waste_report_s.pdf
- Giampietri, E., Finco, A., & Giudice, T. (2016). Exploring consumers' behaviour towards short food supply chains. *British Food Journal*, 118, 618–631.
- Gregory-Smith, D., Manika, D., & Demirel, P. (2017). Green intentions under the blue flag: Exploring differences in EU consumers' willingness to pay more for environmentally-friendly products. *Business Ethics: A European Review*, 26(3), 205–222. <https://doi.org/10.1111/beer.12151>
- Grewal, L., Hmurovic, J., Lambertson, C., & Reczek, R. W. (2019). The self-perception connection: Why consumers devalue unattractive produce. *Journal of Marketing*, 83(1), 89–107.
- Hebestreit, A., Intemann, T., Siani, A., De Henauw, S., Eiben, G., Kourides, Y., Kovacs, E., Moreno, L., Veidebaum, T., Krogh, V., Pala, V., Bogl, L., Hunsberger, M., Börnhorst, C., & Pigeot, I. (2017). Dietary Patterns of European Children and Their Parents in Association with Family Food Environment: Results from the I.Family Study. *Nutrients*, 9(2), 126. <https://doi.org/10.3390/nu9020126>
- Lăcătușu, C.-M., Grigorescu, E.-D., Floria, M., Onofriescu, A., & Mihai, B.-M.

- (2019). The Mediterranean Diet: From an Environment-Driven Food Culture to an Emerging Medical Prescription. *International Journal of Environmental Research and Public Health*, 16(6), 942. <https://doi.org/10.3390/ijerph16060942>
- Micha, R., Karageorgou, D., Bakogianni, I., Trichia, E., Whitsel, L. P., Story, M., Penalvo, J. L., & Mozaffarian, D. (2018). Effectiveness of school food environment policies on children's dietary behaviors: A systematic review and meta-analysis (M. Portero-Otin, Ed.). *PLOS ONE*, 13(3), e0194555. <https://doi.org/10.1371/journal.pone.0194555>
- Phull, S. (2015). The Mediterranean Diet: Socio-cultural Relevance for contemporary Health Promotion. *The Open Public Health Journal*, 8(1). <https://doi.org/10.2174/1874944520150601E001>
- Reich, B. J., Beck, J. T., & Price, J. (2018). Food as ideology: Measurement and Validation of Locavorism. *Journal of Consumer Research*, 45(4), 849–868.
- Renting, H., Marsden, T., & Banks, J. (2003). Understanding alternative food networks: exploring the role of short food supply chains in rural development. *Environment and Planning A*, 35, 393–411.
- Sustainable Food Trust. (2017). *The hidden Cost of UK Food* (tech. rep.). Sustainable Food Trust.
- UNESCO. (2012). Mediterranean diet. Retrieved April 28, 2021, from <https://ich.unesco.org/en/RL/mediterranean-diet-00884>
- United Nations Industrial Development Organization. (2020). *Short Food Supply Chains for promoting Local Food on Local Markets* (tech. rep.). United Nations Industrial Development Organization.
- Venn, L., Kneafsey, M., Holloway, L., Cox, R., Dowler, E., & Tuomainen, H. (2006). Researching European “alternative” food networks: some methodological considerations. *Area*, 38(3), 248–258.
- VLAM. (2018). *Turns short chain in Flanders into the lift* (tech. rep.). https://www.vlam.be/public/uploads/files/feiten_en_cijfers/bistro/korte.keten.2018.pdf
- Yin, R. K. (2011). *Qualitative research from start to finish*. The Guilford Press. <https://in.bgu.ac.il/humsos/politics/Documents/Ethics/Yin%20Qualitative%20Research%20from%20Start%20to%20finish.pdf>
- Zepeda, L., & Leviten-Reid, C. (2004). Consumers' views on local food. *Journal of Food Distribution Research*, 35, 1–6.