SMART SOLUTIONS IN SHORT FOOD SUPPLY CHAINS

# D4.1. Report on consumer focus group discussions

## Work Package 4

## EUFIC

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| **Responsible Partner** | EUFIC |
| **Author (s)** | Betty Chang, Malou Reipurth, Camila Massri, Sophie Hieke (EUFIC), Eugenia Petropoulou, Theo Benos, Irini Theodorakopoulou, Constantine Iliopoulos (UOC), Verena Hüttl-Maack, Dennis Gawlik (UHOH), Katalin Kujáni, Ágnes Major (KIS), Adrienn Hegyi, Ágnes Szegedyné Fricz (CBHU), Camille Aouinaït (WBF), Elena Santa Cruz, Débora Campos, Begoña Alfaro (AZTI), Frank Janssen (NBC) |
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# Executive Summary

This report presents the results of 8 consumer focus groups that examine consumer attitudes, values, expectations and preferences in relation to food purchase and short food supply chains (SFSC). The focus groups were conducted in four EU countries (Germany, Greece, Hungary and Spain) with one urban and one rural focus group per country. Although most participants had positive perceptions of local food and agreed with many of the values SFSC represented, practical barriers prevented many from purchasing SFSC products on a regular basis.

Convenience and price were prioritised when shopping for groceries. The main criteria for convenience are a proximal location and being able to purchase a wide range of produce in one place. Participants from Hungary were not willing to pay a higher price for SFSC products compared to food of a comparable quality from a longer chain. Food quality in terms of taste, freshness, and organic production were also taken into account, and there appears to be a greater focus on health rather than the environmental implications of organic production, although the environmental aspects are also appreciated. Some participants also like the idea of supporting their local community through purchasing from local producers and/retailers.

It was believed that small-scale production and SFSC result in better quality food, but participants had less confidence in the hygiene and food safety standards of SFSC compared to longer chains. They seek information about the quality of food through various methods: physically inspecting the food, receiving information from specialised retailers or producers, consulting food labels, and visiting production facilities. However, participants thought more was needed to ensure consumer confidence in the standards of SFSC, including tighter regulation of SFSC and more transparency about which standards have been met.

Participants also expressed some divergent views in terms of their understanding and preferences in relation to the food value chain. For example, some participants did not understand why organic production/traditional farming methods should increase the cost of food. Some participants liked having a relationship with a producer/vendor, whereas others preferred the relative anonymity of supermarket or online shopping. There were participants who preferred to have their groceries delivered in order to save time, whereas others wished to select their own produce.

Other obstacles to participants purchasing food from SFSC included difficulty in identifying local food and locating local producers. It was believed that more consumers would purchase local food if they could more easily access a variety of local food in one place, such as through supermarkets, cooperatives, and farmers shops, markets, or an online platform that aggregates producers. Many participants preferred to learn about SFSC initiatives/local products from non-print sources, such as such as social media, online newsletters, and email. It was felt that receiving notifications about the availability of local products would help to incite purchase behavior.

Participants also considered that consumers in general needed to be better informed about the implications of SFSC in order to be motivated enough to seek out their produce, and that awareness about the health, environmental and social benefits of local products could be improved. They indicated that schools had a role in educating children, and by consequence families, about the impact of food production. It was also felt that governments should do more to support SFSC through training, subsidies, and public procurement policies. Ultimately however, participants generally felt that increasing the convenience of purchasing local food was a prerequisite for them to buy such products.

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# 1. Introduction

The aim of work package 4 is to investigate the social and economic factors that underlie consumers' choices and purchase decisions across different types of short- and long- food supply chains, focusing predominantly on short food supply chains (SFSC). In this context, SFSC are defined as consisting of a minimal number of intermediaries between the producer and the consumer, whereas long food supply chains involve more intermediaries. As part of the multi-actor approach, the consumer perspective has been recommended as the point of departure when designing local food supply chain strategies.[1]

As part of the work package, a series of focus groups were conducted with consumers in Germany, Spain, Hungary and Greece in order to better understand consumer views regarding short food supply chains, their attitudes and value perceptions as well as the risks and benefits they perceive from buying products through these supply chains. The results of these focus groups will feed into: a) the subsequent work package 4 task of the consumer online study, and b) the business and policy recommendations of work package 7.

# 2. Method

## 2.1 Study design and participants

Eight focus groups were conducted across the target countries of Germany, Spain, Hungary and Greece, with two focus groups per country. One of the focus groups in each country consisted of participants from an urban region, and the other consisted of participants from a rural region (with < 5,000 inhabitants). This rural/urban distinction was made because it was felt that how consumers shop for food could vary considerably between these two types of regions, as producers are normally more concentrated in rural areas, and long chain retailers are normally more concentrated in urban areas. The urban vs. rural regions for each of the countries were:

a) **Germany** (urban: the city of Stuttgart vs. rural: communities in the greater Stuttgart area),

b) **Spain** (urban: the city of Bilbao vs. rural: communities in the greater Bilbao area),

c) **Hungary** (urban: Budapest vs. rural: Győr),

d) **Greece** (urban: Corinth vs. rural: communities in the greater Chania area)

Participants in Spain and Hungary were recruited by local agencies. In Germany, participants were recruited via a mix of convenience sampling (through personal contacts) and advertisements. The study was advertised via the e-mail newsletter and the Facebook page of the University of Hohenheim. Flyers were also placed in the surrounding supermarkets and farm shops, as well as a digital flyer being distributed by local associations. In Greece, participants were recruited by producer cooperatives who were the two Greek case studies of the SMARTCHAIN project: Allotropon (in Conrinth), and Gaia (in Chania). Participants in the urban focus group of Corinth were recruited by snowballing, and those in the rural focus group of Chania used a convenience sample from the client database of the cooperative. As such, the participants in these focus groups were generally affiliated with the respective cooperatives that they were recruited by, and thus can be considered to purchase from SFSC more regularly than the average consumer (as can be seen in Table 1). Hence, the composition of the two Greek focus groups are qualitatively different from that of the average consumer population, and thus the results from these groups should be interpreted in the context of consumers who are particularly engaged with SFSC.

Potential participants were either contacted by recruiters or responded to advertisements of the study. They were then emailed a screening questionnaire that asked them their demographic information, whether they

[1] https://enrd.ec.europa.eu/sites/enrd/files/s1_scra_factsheet-final.pdf

were (one of) the main food purchaser(s) in their household, their frequency of shopping from various SFSC channels, and the extent to which various factors (e.g., the environment, health, convenience, animal welfare, etc.) affect their purchase decisions. A subset of these potential participants were then contacted and invited to participate in the study. These candidates were selected based on the results of the screening questionnaire, in order to ensure that the focus group participants were the (or one of the) primary purchasers of food for their household, and that there was a mixed distribution of participant age and level of education within each focus group. There tended to be a greater proportion of female participants, as females are typically the ones who purchase groceries for the household. The frequency with which participants purchased from SFSC was also varied within the focus groups, with the exception of those in Greece, where most participants purchased from SFSC at least once a week. A breakdown of the participants' demographics can be found in Table 1 below. Participants were paid between 30-40€, except for those in the Greek focus groups, who were compensated by having their travel expenses reimbursed and were provided with refreshments.

**Table 1.** Participant characteristics per focus group

| Country | Focus group | Gender & age distribution | Number of participants per education level | Frequency of buying from farmers' markets/farm shops/ farm |
|---|---|---|---|---|
| Germany | Urban (n=8) | 5 females (53, 22, 56, 25, 58 years old)<br>3 males (22, 26, 33 years old) | Upper secondary education: 2<br>Post-secondary non-tertiary education: 4<br>Bachelor or equivalent: 2 | Less than once every 3 months: 3<br>At least once every 3 months:1<br>At least once a week: 2<br>Never: 2 |
| | Rural (n=11) | 7 females (26, 22, 57, 30, 51, 57, 29 years old)<br>4 males (33, 80, 36, 32 years old) | Upper secondary education: 3<br>Post-secondary non-tertiary education: 2<br>Bachelor or equivalent: 2<br>Master or equivalent: 3<br>Doctor or equivalent: 1 | Less than once every 3 months: 7<br>At least once every 3 months:<br>At least once a month: 1<br>At least once a week: 1<br>Never: 2 |
| Spain | Urban (n=9) | 6 females (51, 26, 46, 64, 42, 38 years old)<br>3 males (54, 43, 36 years old) | Upper secondary education: 3<br>Bachelor or equivalent: 5<br>Master or equivalent: 2 | Less than once every 3 months: 3<br>At least once every 3 months: 2<br>At least once a week: 4 |
| | Rural (n=9) | females (51, 35, 44, 24, 65, 57 years old)<br>males (34, 62, 51 years old) | Lower secondary education: 1<br>Upper secondary education: 1<br>Post-secondary non-tertiary education: 1<br>Bachelor or equivalent: 6 | At least once every 3 months: 4<br>At least once a month: 2<br>At least once a week: 3 |
| Hungary | Urban (n=11) | 7 females (54, 56, 43, 36, 34, 38, 36 years old)<br>4 males (49, 54, 37, 38 years old) | Lower secondary education: 2<br>Upper secondary education: 4<br>Master or equivalent: 6 | Less than once every 3 months: 2<br>At least once every 3 months: 3<br>At least once a week: 6 |
| | Rural (n=11) | 7 females (63, 38, 29, 49, 28, 49, 56 years old)<br>4 males (43, 44, 32, 61 years old) | Lower secondary education: 1<br>Upper secondary education: 2<br>Post-secondary non-tertiary education: 1<br>Bachelor or equivalent: 3 | Less than once every 3 months: 3<br>At least once every 3 months: 2<br>At least once a month: 2<br>At least once a week: 4 |

| | | | | |
|---|---|---|---|---|
| | | | Master or equivalent: 3 | |
| Greece | Urban<br>(n=10) | 8 females (55, 64, 53, 68, 57, 56, 63, 39 years old)<br>2 males (68, 48 years old) | Lower secondary education: 1<br>Upper secondary education: 3<br>Post-secondary non-tertiary education: 2<br>Bachelor or equivalent: 2<br>Master or equivalent: 2 | At least once a month: 4<br>At least once a week: 6 |
| | Rural (n=9) | females (43, 43, 46, 63, 56, 65, 82 years old)<br>males (48, 68 years old) | Upper secondary education: 1<br>Post-secondary non-tertiary education: 5<br>Bachelor or equivalent: 1<br>Master or equivalent: 1<br>Other: 1 | At least once a month: 2<br>At least once a week: 7 |

## 2.2 Structure of the focus group discussion

The design of the focus group discussion guideline was informed by two sources. Firstly, insights gained from the 18 short food supply chain case studies of the SMARTCHAIN project were used to identify the type of information producers would like to learn about consumers, including information about consumer segments, consumer behaviour, and the preferred channels through which consumers would like to purchase and be informed about SFSC products.

Secondly, the results of *Deliverable 4.2: Report on the expert stakeholder interviews* also fed into the interview guide for the present study. This report examined how consumers relate to SFSC through interviews with 32 experts representing the views of consumers, producers, and other actors who work with or within SFSC (e.g., HoReCa, and certifiers) in six EU countries (DE, NL CH, HU, ES, EL), one EU region in Belgium (Ghent), and at the EU level. These interviews identified certain topics that were considered to be worth further exploration in the focus groups, namely: a) consumer trust in food supply chains, b) what consumers value about their shopping experience, c) their perceptions of food quality, d) the types of attributes they would pay more for, and e) whether they understand the reasons for the price difference between long- and short- food supply chain products. Thus, these issues were incorporated into the interview guide as potential points for discussion.

A funnel approach was adopted for the discussion guideline that started with a broad focus on how participants shopped for food, progressively narrowing into more specific focus on what participants thought about particular issues related to SFSC. Participants in the focus groups were asked the following questions:

1. Where do they shop for food and why?
2. What is important to them when shopping for food?
3. Have they ever bought food directly from the producer (e.g. farmers' markets, from a farm, farm shops). Under what circumstances and how often? What do they buy in these cases and why? If participants do not buy directly from producers, what are some of the reasons for this?

Following this, participants were introduced to the concept of SFSC via a Powerpoint presentation. They were presented with examples of SFSC, including 1. Farmers shops, 2. (Farmers) markets, 3. Agritourism, 4. restaurants using local products, 5. Community supported agriculture, 6. Public institutions/public procurement. Participants were then asked:

4. What are their knowledge and expectations related to SFSC?

5. Would they consider buying from a SFSC? If yes, under what circumstances? If not, what is the reason/s for this?
6. What could SFSC do to make participants more likely to buy from them?
7. Where would participants prefer to buy products from SFSC (e.g. what format/channels – e.g. farmers' markets, their regular supermarket, at the producer, having it delivered to their home, etc.)?
8. How are participants informed or how would they like to be informed about new SFSC initiatives/local products in their region (e.g. social media, newspapers, events)

The discussion guide also included additional discussion points that could be raised depending on whether they were relevant to the course of the focus group discussions. These related to:

- Differences in price between long and SFSC
- Whether participants look at food labels
- Shopping experience (e.g., is the experience of going to a market/buying at a farm an added value?)
- Relationship with producer
- What type of products or product attributes would participants pay more for (if any?)

Moderators were giving additional guidelines for how to respond to certain issues that were raised. Namely:

- If trust is mentioned, ask what participants mean by this. What do they trust and why?
- If the quality of the food is mentioned, ask participants what they mean by this?

## 2.3 Focus group procedure

Each partner conducted the focus groups of their own country in the local language. Participants were provided with an information sheet about the study and a consent form, with which they gave their informed consent, and were told that they would withdraw from the focus group at any time. See section 6 for a template of the information sheet and consent form.

The focus groups were conducted between October and November 2019. The number of participants ranged from 8-11, with between 1-2 moderators per group. Each interview took up to two hours to complete. All the interviews were audio-recorded with the consent of the interviewees. English translations of the transcripts were sent to the task leader (EUFIC) for analysis, with the participants' contributions anonymised.

# 3. Key findings by country/region

This section presents a summary of the key findings from each focus group. The analysis of these results, the main themes identified and the regional differences across the focus groups are further elaborated on in the following section.

## 3.1 Germany - Urban focus group

- Time and price were reported to be the most important factors when it comes to food purchases.
- Quality produce was linked to seasonality, better taste, and freshness. Good quality was not always associated with a higher price, as some foods from cheaper brands were considered to be of sufficient quality.
- Participants had mixed views about organic products. Some saw their added value, others did not feel that the organic claim was credible.
- Participants held positive perceptions of SFSC. They associated them with food that was freshly harvested, fair payment to the producer, and seasonal or unique products. Participants thought that producers were more knowledgeable, but not necessarily more trustworthy than supermarkets.
- Despite the positive perception of SFSC, participants tended not to shop from SFSC due to practical reasons, such as limited opening hours and far locations. They tended to only buy specialty products from SFSC, or only buy local food if they are on holidays. Participants stated that they would only buy from a SFSC if it was conveniently located, and some participants are not willing to pay more for local food.
- Participants wanted more transparency through being able to see how the farm operates (e.g. via visits, videos).
- Participants would like to buy local food in supermarkets and be able to identify these products easily such as there being a local product section, regionality of food clearly marked, improved marketing and clearer communication of the benefits of SFSC products.
- Some participants liked the physical shopping experience, others preferred the convenience of delivery. Some were concerned that they could not personally select SFSC products that were delivered, and thus would receive inferior versions of the products ordered (e.g., for fresh produce).
- Participants preferred to find out about SFSC products and initiatives mainly from non-print sources.

## 3.2 Germany - Rural focus group

- Most participants reported shopping mainly at large supermarkets due to the stores being convenient on several fronts:  long opening hours, relatively close in proximity, and offer almost everything in the one store. Some participants also shopped at discount supermarkets, markets (including farmers' markets, and organic markets), organic stores or organic supermarkets.

- Participants reported to abstain from SFSC because:
  - The food was not thought to be fresh (perhaps due to the shorter shelf life of organic fruits and vegetables)
  - Opening hours are too limited
  - Products are more expensive
  - There is a limited product range
  - The logistics of buying from SFSC are too difficult

- Participants reported taking into account whether the produced is organic, seasonal, who the producer is and the quality of the products.

- Organic labels were felt to be too broad, and not informative about standards. Some participants would like more information about organic standards, others did not feel that more information was necessary. Some participants felt that there were too many labels and that there should be a standardised organic label.

- Some participants were unclear about the added values of SFSC in terms of supporting farmers.

- The preferred retail channels for SFSC were quite varied, but preferences were generally based on convenience. Suggestions included:
  - 24-hour sales, such as purchasing local products via vending machines or open stands with self-service cash registers.
  - Having a farm shop or local food stand directly at the supermarket to make it easier for most people who already shop there
  - A mobile phone app for purchasing SFSC products
  - Purchase groups, where a group of friends or neighbours come together to place a joint order with the same producer
  - Collective pick-up point for deliveries
  - Cooperatives of producers

- Participants had different preferences about being informed about SFSC initiatives/products (community newsletters/newspapers, social media/online platform, point of sale communication), but they were mostly against letterbox brochures for environmental reasons.

### 3.3 Spain – Urban focus group

- Most participants reported purchasing all or most of their food at supermarkets or hypermarkets due to convenience, opening hours, accessible parking and their close location. For some participants, smaller local stores are more convenient because they are closer in proximity than supermarkets.

- Some participants visit smaller local stores alongside shopping at the supermarket. Participants had the impression that in the specialised stores the owner is more knowledgeable about the traceability of the product, in contrast to supermarkets, which are felt as being more impersonal. The human factor fostered trust in Spanish consumers.

- Participants reported paying attention to food quality and/or sustainability labels.

- Only a few participants reported purchasing from SFSC, primarily at markets, on site at farms, farm stores, local stores, and in rural areas. From these they purchase primarily vegetables, olive oil, eggs and honey.

- When purchasing from SFSC, participants reported taking into account whether the produce is organic, seasonal, who the producer is and the quality of the products. Some buy from SFSC because they think it is cheaper.

- Participants had mixed perceptions of SFSC. Some participants like being informed about the origin and traceability of the products directly from the producer, instead of having to read this information on product labels at the supermarket. Others are not sure whether direct selling is sufficiently regulated. Some initially believed that SFSC were incompatible with supermarkets, but discussions during the focus group persuaded them otherwise.

- Some participants thought that food from SFSC is generally more expensive, whereas others did not perceive such a clear distinction. Although reasons for price differences were discussed, some participants admitted that knowing about the differences between large and short food supply chains would not necessarily influence their purchase behaviour. One suggestion that emerged is that consumers should be informed about the percentage of profit that goes to the producer and intermediaries.

- Some participants believed that increasing knowledge about product seasonality and information about SFSC among consumers could encourage consumers to purchase more SFSC products.

- Participants thought that increasing the accessibility of SFSC products would facilitate their purchase. Participants would like SFSC products to be sold through local stores or online platforms and related information about the products published online.

### 3.4 Spain - Rural focus group

- Most participants reported shopping at smaller-local stores for fresh produce (including meat and fish) and specialty products. Many choose local stores and markets because it allows them to have a more personal relationship with the retail staff, which entails a more knowledgeable service regarding the products and helps to facilitate trust.

- Some claimed to be interested in sustainable products, while others did not take this aspect into account when shopping. It was felt that healthier and more natural produce tends to be more accessible to wealthier consumers.

- When participants did buy from SFSC, the most common products they purchased were olive oil, eggs, cheese, bread, dairy products, wine and homemade sweets. Markets are a popular place for SFSC products, as consumers are able to buy several types of products from different farmers. Cooperatives, online shopping and consumer purchase groups are also used to buy directly from producers.

- Participants placed greater trust in SFSC than in longer chains, feeling that the former leads to better quality products, reduces environmental impact, and fairer prices for producers. They considered SFSC products to be superior to supermarket products, in terms of quality and traceability. They perceived SFSC products to be fresher, or to undergo more traditional production methods, which they associated with a better taste. However, it was also pointed out the SFSC products are less available than those from long food chains.

- Many participants favoured purchasing from SFSC but feel that this option was not accessible enough to lead to habitual behaviour. They considered that there are few distribution channels for such products, and those that are available are difficult and time-consuming to purchase from. One suggestion was that producers should form cooperatives and associations with high-quality products, and that these should have a greater presence at markets and through an online platform.

- Local products were perceived to be more expensive. Many participants thought that it is because larger producers apply fertilisers and pesticides to increase production rates and volumes, thereby reducing production costs, whereas traditional production methods take more time.

- Participants believed that greater access to information about SFSC would make consumers more likely to buy products from SFSC.

## 3.5 Hungary - Urban focus group

- Most participants reported shopping at conventional markets[2] that are close to their residence where they can purchase everything they need, as convenience is an important factor.
- The products most commonly bought at markets were fruits and vegetables, and a few also bought honey, pickles, meat, dairy products, and jam.
- Participants sometimes felt that they could not trust the provenance of products sold at the conventional markets (e.g., that products that are claimed to be home grown/organic may not be).
- Many participants expected quality products from SFSC at a good price and are not ready to pay more for a product that is of comparable quality (in terms of appearance, taste, and organic status) to that from a longer chain.
- Participants agreed that time, money, and convenience are their priorities when purchasing food, and that the attributes of SFSC products should be compatible with this in order for them to purchase such products.
- Some liked the convenience of home delivery, whereas others preferred an interaction with the producer and being able to select their own products.
- Pick-your-own initiatives were valued for providing better quality food, but were also seen by others as being impractical and not good value for money.
- The most popular preferred channels for purchasing SFSC cited were farm shops or farmers' markets, followed by home delivery (including delivery from supermarkets).
- Participants generally felt that the information provided by the National Food Safety Authority was more relevant for them than organic certification.
- Although some participants preferred products to be national, others prioritised the quality rather than the nationality of the product.

[2] These markets consists mostly of intermediaries/retailers – producers are a minority at these markets.

### 3.6 Hungary - Rural focus group

- Most participants bought food from multinational supermarket chains, followed by conventional markets, and many bought from both.

- Price and food safety were also priorities for many participants. In this regard, many were concerned that the low income of some consumer segments meant that they cannot afford to value healthiness, and so they are driven to buying cheaper food from supermarket chains.

- Although some would prefer to buy from SFSC, they felt that it was not convenient nor affordable enough for them to do so. It was argued that SFSC were not easily accessible in terms of location and opening hours and had limited product availability and assortment.

- The goods of traditional small-scale producers were considered to be of better quality than those from large supermarkets. Quality was judged in terms of appearance, taste, indications of freshness such as smell, and level of chemical residues.

- About half the group had bought from SFSC, primarily fruit and vegetables, cheese, honey, meat, pickles.

- Many participants doubted the quality of organic products, with one arguing that there is better control of such products at the multichain supermarkets than SFSC.

- Participants said that addressing the issues of price, convenience (in terms of proximity), and controls would encourage them to buy from SFSC. In addition, they want more tasting opportunities and onsite visits to farms and production facilities (although it was acknowledged that such visits were also associated with shortcomings).

- When asked where they would prefer to purchase local food from, the most popular channel was farm shops, followed by farmers' markets, community supported agriculture or box schemes with delivery to a collection point.

## 3.7 Greece - Urban focus group

- Participants typically bought food from cooperatives because they can find a range of SFSC products to cover their needs. They also shopped from open-air markets but mainly bought organic food, and also bought directly from producers, depending on product availability. Fruits and vegetables are the most commonly purchased foods through these channels. Most participants sporadically bought food from supermarkets only when they couldn't find the same product elsewhere.

- Taste, freshness, and price were considered to be the most important factors when shopping food; although price is less important where organic products are concerned.

- Organic production and a trusted outlet source/retailer are also important criteria.

- Locally- or at least nationally- produced food is generally preferred. There exists some slight confusion between organic food and local production.

- Most participants were aware of environmental and social responsibility issues. Small-scale and local producers were preferred because their agricultural and labour practices can be checked by consumers themselves and are less likely to involve any kind of exploitation.

- Local production was also favoured as a way of supporting the local economy. However, participants accepted products of distant origins if they are guaranteed that they meet the minimum standards (in terms of ethical and production practices) by a trusted retailer.

- Most participants value having a rapport with a producer. The care farmers exhibited towards their land was largely appreciated when participants visited a local farm, and was considered to contribute to food quality.

- Participants felt that trust could be gained by meeting with the producer (or traders) or visiting production facilities. Trust could also be built if consumers can try a product before the purchase or are given information about the product by a trusted source.

- The most common obstacle preventing participants from buying directly from producers is time constraints, followed by the limited variety of products on offer. Reluctance to make direct contact with the producer was also mentioned as an obstacle.

- Participants received information about new SFSC initiatives either through the internet or through direct contact with producers. The introduction of new and seasonal products from cooperatives was usually communicated to the customers in the form of special announcements in store, which helps to trigger their purchase behavior.

- Participants thought that SFSC products deserve a higher price compared to conventional products but felt that this may prevent them from being sold. The idea to serve organic food in public institutions, such as hospitals and schools, was also widely accepted. Participants also felt it was important to educate students and teachers on issues related to SFSC.

- Other barriers to supporting SFSC that were mentioned concerned:
  - the "price war" between long and short food supply chains,
  - the failure of producers to collectively organise their production through cooperatives, and the ignorance and indifference of the youngest generation with respect to climate change.

## 3.8 Greece – Rural focus group

- All participants favour organic food and buy it from a co-operative. They also buy food from open-air markets, and mainly from the stands of organic growers. Supermarkets were visited occasionally, particularly to buy certain items that cannot be found elsewhere.

- Participants rarely buy from producers onsite, but when they do, they usually contact the producer to learn what has been just harvested/produced. Rather, their need for quality food and trustworthiness is satisfied by buying from a cooperative or a producer who sells their products in the open-air market.

- In addition to organic production, taste, freshness and seasonality were important criteria when buying food, although participants disagreed about whether organic food tastes better compared to non-organic food.

- Consumers did not purchasers from producers mainly due to time constraints. Other reasons given was the limited offer available, and difficulties in contacting the producer.

- Participants felt that ethical production methods were important. It was thought that consumer trust in these aspects could be achieved via:
  - Small-scale production
  - Consumers having direct contact with the producer
  - Consumers visiting production facilities
  - Certification

- Participants agree that SFSC products deserve a higher price compared to conventional ones, especially if they are organic. Thus, they are willing to pay the higher price, while they economise on quantity.

- Early school education on food quality was considered to be important in the adoption of healthy eating habits and informed consumer choices.

- Participants felt that the success of SFSC was undermined by the inability of producers to cooperate and join forces.

- They also felt that environmental cross-contamination (i.e., pesticide drift from nearby local farms) was a barrier to trusting local SFSC.

# 4. Thematic analysis

This section presents the main themes that emerged across the eight focus groups. It first describes the most important factors participants report taking into account when purchasing food. This is followed by an examination of the extent to which participants shop from SFSC, participant perceptions of SFSC, and an analysis of the factors that prevent participants from purchasing SFSC products. Consumer trust in SFSC and their products will also be explored, followed by recommendations on how to increase sales of SFSC products to consumers.

## 4.1 What do participants care about when shopping for food?

### 4.1.1 Convenience

Convenience and saving time guide how participants shop for food. For many participants, this means shopping at large supermarkets. Large supermarkets have long opening hours, offer a wide assortment of products covering consumers' needs, are located many participants live and have easy parking.

Other ways to save time were mentioned, including always going to the same store because participants were used to the same layout, shopping online or on the way home. Participants in the Spanish urban group also found it convenient to shop at more local, specialised stores alongside shopping at the supermarket.

In contrast to relying on supermarkets, most participants in urban Hungary bought their groceries predominantly at conventional markets, although not specifically from producers. Participants emphasised that they visited markets that were close to where they lived, and that they could buy almost all the food they needed there; thus this option fulfilled the same convenience criteria that led participants in other focus groups to shop at supermarkets.

### 4.1.2 Price

Price was also an important factor across all focus groups that was taken into account when grocery shopping. There was no clear consensus on which retail outlets (e.g., supermarkets, markets) offered cheaper products; participants often shopped around to find the cheapest price. It was felt that price differences also depended on other factors, such as product type, and rural/urban location of the retail channel.

Price was often discussed in relation to quality. In Germany and Spain participants expressed more concern about the price/quality ratio of products, whereas those in Hungary prioritised price over quality because they felt that they had little disposable income to spend on food. Those in the Greek urban focus group also prioritized price, although the participants of both the Greek focus groups felt that it was worth paying more for organic products. Better quality was generally associated with a higher price. However, it was acknowledged that there were a few exceptions to this rule (e.g., in the urban German group some retailers felt that some foods from cheaper brands were also of sufficient quality). Similarly, there was a perception in Germany, Spain and Hungary that local products tend to be more expensive than those from large supermarkets.

Some participants from the urban Hungarian and rural Spanish focus groups wondered why products from smaller producers should be more expensive. They had the perception that small-scale production was less resource intensive and felt that this should actually reduce costs. Similarly, they also wonder why organic products tend to be more expensive than non-organic products. Their reasoning is that since organic farmers do not have to pay for pesticides and chemical fertilisers, then their products should not cost more. They also base this perception on anecdotal experiences of growing food, e.g. "*one can grow potatoes very cheaply*", (*urban HU*) and some others on their knowledge that food cultivated traditionally cost less in the past, but that this is no longer the case. By contrast, other participants believe that organic production may increase the costs of SFSC products due to the cost of organic certification, or the fact that organic food has a shorter shelf-life[3] (and so may incur expenses related to its storage conditions – e.g., needing to be stored at certain temperatures).

When it came to explain the higher prices of SFSC, some participants in Spain and Hungary felt that this may be due to a lower volume of production and/or a slower rate of production compared to longer chains. For example, many participants in rural Spain felt that larger producers apply fertilisers and pesticides to increase production rates and volumes, thereby reducing production costs relative to the volume produced in a set amount of time, whereas traditional production methods take more time for a smaller yield. However, it was also believed that such traditional methods have a less negative impact on the environment and animal welfare.

In urban Hungary it was argued that small producers could not offer products for the same price as those from large retailers, because the higher cost of their products takes into account the financial reserve that is needed for smaller producers during the winter months when they sell less produce. Another in urban Spain mentioned that producers from longer supply chains may employ workers at very low wages, which reduces the costs of the products at the expense of the workers.

Some participants disagreed with the view that products from SFSC are more expensive. Whereas the foregoing arguments are based on the comparison that SFSC products are more expensive than those typically bought in long food supply chains, those who disagreed based their arguments on the idea that it is cheaper to buy a comparable quality product from a SFSC than from a long food supply chain. Some participants even contended that natural, fresh products can cost more if they are bought at the supermarket, compared to if they are sourced directly from the farmer, from local stores in rural areas, from retailers specialising in fresh natural foods, or markets. It was argued that local products tend to be more expensive when the retailer also belongs to a longer supply chain, as such retailers increase the price of the products even further. Thus one important challenge for SFSC involves being able to justify the often higher price of local food to consumers.

Participants across all the countries bar Hungary discussed that producers benefited more financially from SFSC, as intermediaries in longer chains take a larger share of sales revenues. In rural Germany it was proposed that the supply chain regulations for Fairtrade products that ensure a fair price for producers could also apply to local products. In urban Spain it was suggested that pricing information for consumers should make explicit the percentage of profit that goes to the producer and intermediaries, in order to increase transparency in the food value chain. Another proposed that legislation could help to set minimum prices for local producers and their products "They should promote/establish a minimum value that is paid to the producers/local farmers. As well as establishing a minimum value of such products in accessible local stores."

Yet, fair prices for producers were not always a priority for participants. For example, in urban Spain some participants felt that information about the differences in production costs associated with long versus short food supply chains would only influence their behaviour if they had the financial means to purchase the more expensive product. It was generally felt that groups that struggle financially, such as families and Hungarians,[4] are particularly price sensitive, and thus cannot afford to prioritise other considerations such as health and

[3] Related to this, a participant in the Greek urban focus group related how they bought non-organic tomatoes and grapes that were tasteless but surprisingly enough retained their initial appearance for several weeks.

[4] Consumers in Hungary spent 18.1% of their household expenditure on food and non-alcoholic beverages in 2018, whereas for Germans it was 10.8%. http://appsso.eurostat.ec.europa.eu/nui/show.do?query=BOOKMARK_DS-423035_QID_674B0D1C_UID_-3F171EB0&layout=COICOP,L,X,0;GEO,L,Y,0;UNIT,L,Z,0;TIME,C,Z,1;INDICATORS,C,Z,2;&zSelection=DS-423035INDICATORS,OBS_FLAG;DS-423035UNIT,PC_TOT;DS-423035TIME,2017;&rankName1=UNIT_1_2_-1_2&rankName2=INDICATORS_1_2_-1_2&rankName3=TIME_1_0_1_0&rankName4=COICOP_1_2_0_0&rankName5=GEO_1_2_0_1&rStp=&cStp=&rDCh=&cDCh=&rDM=true&cDM=true&footnes=false&empty=false&wai=false&time_mode=ROLLING&time_most_recent=false&lang=EN&cfo=%23%23%23%2C%23%23%23.%23%23%23

food quality over financial concerns. In the Hungarian focus groups, it was explained that "… a lot more people would be more attentive [to health] if average salaries weren't that shameful. Surely there are people who don't care about prices, but the majority of the old and young generations care about prices and money." Many participants in Hungary were unwilling to pay more for a product from a short chain that was of comparable quality (in terms of how ripe and tasty it is, how it looks, and whether it is organic or not) to that from a longer chain, in contrast to participants from the other focus group countries.

### 4.1.3 Quality

Although participants across the focus groups reported taking quality into account when shopping for produce, this concept had multiple subjective representations, and was applied in a selective way. Across all countries, quality was most strongly associated with the taste and freshness of a product, and also whether it was organic or environmentally sustainable. The motivations of buying organic food were referred to mainly in terms of health/food safety, with less emphasis on environmental implications, and only one participant across the focus groups mentioned implications related to animal welfare. It is interesting to note that the values of health, taste and freshness have also been expressed by consumers who regularly purchase food from SFSC.[5]

However, participants in the Hungarian focus groups placed less emphasis on whether a product was organic, perhaps because many were suspicious about the authenticity of their production method, and could not understand why organic products should cost more (as they used less pesticides, chemical fertilisers, etc.). The Hungarian participants also mentioned that the appearance of the product was important, whereas those in urban Germany and Greece explicitly did not consider appearance to reflect quality.

Participants – particularly those in the German urban focus group – expressed that the importance of quality, freshness and organic production also depended on other contextual factors. For example, quality was important for some foods (e.g., meat), but not others (e.g., salt). The value of freshness was balanced against other factors, such as how buying large quantities of produce is more economical but compromises freshness because it requires longer term storage, and how more effort is required to obtain fresher food, such as shopping more regularly, and going to the supermarket earlier in the day before fresh produce is sold out and fresh produce tending to be less available from supermarkets in the evening. Organic production was seen as being more important for some foods than others – e.g., it is particularly relevant for foods consumed raw, those that accumulate more pesticides (e.g. lemon peel), and those that are consumed by young children. In all the countries except Hungary participants expressed concerned about the seasonality of products, although it was not clear whether consumers valued seasonality because seasonal products have a reduced environmental impact, or because seasonal products taste better.

### 4.1.4 Origin

In all countries some participants also expressed a preference for products that were regional/national. In the Greek focus group this was because participants wished to support the local economy, although some mentioned that they trusted the quality standards of local products more than those from overseas. As one participant remarked "The local part is very important, because organic ... but now if we take organic from China, e.g. nuts, which I know have other aggravating factors, it may not be the residual of pesticides, but they are other issues, which are not detected, or are not controlled regarding the issues of fungi or other aggravating factors, so it doesn't tell me anything to get it from China just because it's organic. I want it to be as close to the local market as possible..." (*urban Greece*).

However, the origin of products was not always a priority, and sometimes other aspects, such as whether a food is organic, or whether it guarantees ethical employment was enough to satisfy participants, e.g. "For

[5] Vannoppen, J., Verbeke, W., Huylenbroeck, G. V., & Viaene, J. (2001). Consumer valuation of short market channels for fresh food through laddering. *Journal of International Food & Agribusiness Marketing*, 12(1), 41-69.

me, it does not depend where a product is produced, but how it is produced. Production quality for me is what matters." (*urban Spain*).

In the specific case of Hungary, it is interesting to note that although some participants in the urban focus group preferred national products, there were also those that felt that Hungarian products were of a worse quality than foreign products. In fact, some who preferred to buy Hungarian products admitted that such products were not of a premium quality, suggesting that they may have purchased them for other reasons (e.g. to support the local economy, to reduce food miles).

### 4.1.5 Personal relationships: The "human factor"

Many participants across the focus groups also mention that they value having a personal relationship/interaction with the people that buy their food from, whether it is producers, store owners, or retail staff. This sentiment is particularly expressed in the focus groups whose participants tend to frequent smaller retailers. The Spanish rural group felt that specialised retailers provide consumers with more knowledgeable service regarding the products which helps to facilitate trust. Similarly, in the German rural group some participants mentioned that they would pay more for good service and specialised knowledge of product experts, and these benefits were felt to encourage customer loyalty. There was also a participant in urban Hungary who simply enjoyed the social aspect of these interactions and did not particularly seek more information about products. As will be discussed in section 4.3.2 on Food information, participants also felt that having a personal relationship with the vendor was an important way of building trust.

It should also be noted that other participants wished to avoid social interactions altogether, and preferred the anonymity of shopping at large supermarkets or online - although it was mentioned that it is also possible to have personal interactions with producers online, and with retail staff at supermarkets that have specialised departments. However, one participant from rural Germany pointed out: "If you only buy online or in the supermarket, the number of small producers decreases: butchers, bakers etc. die out, rural farms die out, because there are not enough buyers nearby…." This awareness is consistent with the theme of customer loyalty that was mentioned by several participants in rural Germany and could explain why consumers in this focus group tended to source different products at a greater variety of specialised stores compared to their urban counterparts.

## 4.2 Purchasing from short food supply chains

Across all focus groups, most participants said that they would only buy from a SFSC if it was conveniently located – although participants' standards ranged from this distance being no further than their local supermarket (in urban Germany) to 30km from where they lived (in rural Hungary). In the German urban focus group it was pointed out that driving long distances to purchase from SFSC would defeat the point of SFSC being more environmentally sustainable. As such it would make more sense from an environmental point of view for there to be few trips between the producer and the consumer, but with large quantities each time, such as in a truck. This point is consistent with research suggesting that the distance travelled by consumers to purchase products from producers contributes to much of the food miles and carbon footprint impact of SFSC.[6]

Many participants across the countries said that they did not buy directly from producers for practical reasons such as limited opening hours, limited selection of products, greater effort needed to travel to SFSC and engage with the producer, and lack of knowledge about where to find direct sellers.

[6] Malak-Rawlikowska A. et al., (2019). *Quantitative assessment of economic, social and environmental sustainability of short food supply chains and impact on rural territories.* Retrieved 1/12/2019. https://www.strength2food.eu/2019/02/28/quantitative-assessment-of-economic-social-and-environmental-sustainability-of-short-food-supply-chains-and-impact-on-rural-territories/

In Germany, one way of obviating some of the perceived inconveniences of purchasing from SFSC is to buy local food from vending machines. Indeed, half the urban German focus group already engaged in this practice to purchase products such as eggs, apples, cabbage, potatoes, milk, meat and even specialty products such as Swabian Maultaschen (a type of large meat and spinach-filled ravioli). It was mentioned that the products are particularly fresh, and farmers supply the vending machines a few times a week. Products from vending machines are generally more expensive, and so this channel tends to be used only when the usual retail outlet used was closed. When participants in this group did buy directly from a producer it tended to be for specialty products, or if they were on holiday. In the rural German focus group, the discussion of whether participants engaged with SFSC centered mainly on the barriers that prevented them from doing so.

In the Spanish urban focus group, only a few participants purchased from SFSC, primarily at markets, on site at farms, farm stores, local stores, and in rural areas. From these they purchased mainly vegetables, olive oil, eggs and honey. Some also bought fruit, teas, and medicinal herbs. Participants tended to purchase SFSC products through channels most proximal/convenient for them, whether it was at weekly markets, or supermarkets. A couple of participants bought directly from producers because it was cheaper but found the processing of the food to be comparable to that of large retail chains. Thus, they felt that the difference in price was due to paying for the brand and label at the supermarket. Another participant liked to be able to financially support local producers, as they knew that producers receive more revenue through direct purchases.

When participants in the Spanish rural focus group did buy from SFSC, the products tended to be olive oil, eggs, cheese, bread, dairy products, wine and homemade sweets. Markets were a popular SFSC outlet, as consumers can purchase several types of products from different farmers, making this channel more convenient than single-producer outlets. Cooperatives were also visited for homemade wine or dairy products. Participants also bought specialty products from the internet. They also purchased vegetable baskets directly from producers through collective consumer groups via WhatsApp.

Although the participants in the Greek focus groups were customers of producer cooperatives, most of them also bought organic fruit and vegetables from producers in open-air markets, often on a weekly basis. Some also sourced onsite from producers directly, but less frequently, and tended to do this for meat and dairy products.

Participants in the Hungarian urban focus group appeared to be relatively uninformed about SFSC compared to the other focus groups, and did not tend to seek them out. Although most participants in the Hungarian urban focus group shopped for food at conventional markets, they confessed that they could not distinguish between direct sellers and intermediaries at markets. In the Hungarian rural focus group, participants felt that small producers could be distinguished by having less produce on offer (as SFSC were associated with a lower volume of production), having fresher and higher quality products or specialty products, and showing greater personal pride in their products.

## 4.3 Perceptions of short food supply chains

Participants across the focus groups tended to have positive perceptions of local food. They thought that such food was seasonal, freshly harvested, and more natural (e.g., not artificially ripened with chemicals, and having fewer chemical residues). Some also understood SFSC to be more environmentally sustainable, although many assumed that SFSC products are organic.

SFSC were also associated with small scale, traditional production, although some participants in the German urban focus group countered that it is possible to have larger producers follow the SFSC principle of having short delivery routes, and that this principle was more environmentally sustainable. The rural Spanish and Greek focus groups also felt that products from SFSC were more traceable and placed greater trust in shorter than longer supply chains.

However, there was also some confusion about what constituted SFSC. For example, near the beginning of the Spanish urban focus group discussion, some participants had the impression that fresh SFSC products could not be found at large chain supermarkets because such places stock food that is harvested at an unripened stage, whereas local producers harvest their products daily, offering products at their peak quality. Other participants pointed out that the difference in product quality between long- and short- food supply chains may vary depending on how perishable the product is, and the location of the supermarket. After discussing this issue, it was concluded that supermarkets could also be part of SFSC, if the products sold originate from the same region.

Some participants understood that producers receive a greater percentage of the revenue through SFSC than through longer chains, and they found this aspect quite motivating. In the Greek urban focus group participants were particularly concerned about the social implications of SFSC. For example, some of them noted that they prefer to buy directly from producers because in this way they can inspect whether the workers are exploited.

## 4.4 Obstacles to purchasing from short food supply chains

Although many participants favoured purchasing from SFSC, they felt that this channel was not accessible or convenient enough to lead to habitual behaviour. They felt that there are few distribution channels for such products, and those that are available are difficult to purchase from, and require more time to do so. Difficulties in purchasing that were cited included limited opening hours of SFSC retailers and the greater time and organisation involved in arranging meetings with producers in order to visit facilities (e.g., for pick-your-own initiatives or other on-site purchasing). Furthermore, the limited product range of products from SFSC – including not enough out-of-season products – also discouraged participants, particularly those with children, who have less time to shop at multiple places and need to accommodate a wider range of needs. Lastly, participants felt that the relatively high price of SFSC products was a barrier to their purchase.

For participants in Hungary, a further obstacle was that SFSC were perceived to be less regulated and controlled than the large retail chains. There were complaints that market vendors sometimes cheated their customers in a way that was less likely to occur in supermarkets (e.g., products that are claimed to be home grown are not, products sold as being organic when they are not, sellers rounding-up prices). Some participants in the Hungarian rural focus group also lacked confidence in the hygiene of some markets, with one remarking, "… nobody could ever sell me meat there [at the market]. What's out there … dust, coughing, sneezing, gasoline vapor… not covered, not cooled even in summer ...". Similarly, a participant in the German urban focus group lacked confidence in the food hygiene rules of SFSC. "It is not transparent at the farmer's store which hygiene rules have been observed, as the control standards are different. The risk is much higher, especially for milk." However, others in Hungary trusted the food safety of SFSC, with one from the urban focus group remarking "…all the products must be controlled by the NÉBIH [National Food Safety Authority of Hungary], even the products from old farmer ladies."

## 4.5 Trust

In addition to the issues raised above of fraud and lack of transparency in regulatory standards, other issues of trust participants raised were related to food quality, food information, and the handling of complaints.

### 4.5.1 Food quality

As discussed previously in section 4.1.3 on Quality, participants often conceptualised food quality in terms of taste and freshness. They explained that information about taste and freshness is primarily sensory: based on how the product looks, smells, feels and tastes, and they base their purchase decisions on this information. Thus, when discussions turned to the option of the delivery of SFSC products to people's homes or pick-up points (which many participants were in favour of), some participants said that they would not adopt such an option as they preferred to select their own produce, and did not trust others to select the best quality products for them. However, those who had previously received home deliveries (e.g. participants from the urban Hungarian focus group) were in favour of this channel because they felt that they had received good quality products. Thus, we see that previous experience helps to develop trust. Indeed, another participant in the Spanish urban focus group felt that just having one experience with a producer, local store, or new product or brand can be enough for the consumer to decide whether to continue purchasing the same way. Consistent with this, some participants across focus groups mentioned that having the chance to try the product before they buy it (e.g., via free samples) would help to increase their trust in a product.

The tastiness of a product was sometimes associated with its authenticity, or whether it could be trusted. For example, in the Hungarian urban focus group one participant refused to buy tomatoes at a large chain because they felt that they were tasteless as they were harvested unripe and artificially ripened with chemicals. Another did not buy chicken from a particular chain of discount supermarkets because it had a "strange" taste.

### 4.5.2 Food information

In addition to obtaining information through sensory means, participants also sought information about food from producers, retail staff, food labels, and visiting production facilities.

#### 4.5.2.1 Producers & local retailers

Some participants liked being informed about the origin and traceability of the products directly from the producer/local retailer, more so than having to read about this information on product labels at the supermarket. Such participants valued receiving "expert" knowledge about the products, and it was felt that SFSC and specialised local retailers were stronger than supermarkets in this respect. Some participants felt that the transmission of this knowledge through direct contact helps to facilitate trust. This may occur in two ways. Firstly, if the producer/retailer is perceived to be knowledgeable, it is assumed that the information they provide will be accurate, and therefore trustworthy. Secondly, producers/local store owners were considered, at least in the Spanish and Greek focus groups, to be more honest in their interactions with customers than larger retailers, making them seem more trustworthy. "...the producers or local commerce, they must contact directly with us, so, they have to be sincere, they have to be responsible." (rural ES). Another participant contrasted this with the perception that supermarkets try to manipulate consumers." There is more trust in the SFSC than the large chains. Because, when we go to the local producers it is because we want to, while the large chains can make marketing that creates certain behaviours in the mass population." (rural ES). However, it must be noted that other participants did not share this perception: "The supermarkets are more impersonal, but I still trust the people that are selling to me." (rural ES).

#### 4.5.2.2 Labels & certification

There were also participants who reported paying close attention to food labels. They expected that the information that is presented on the product should be truthful, and as such, felt that these labels formed the basis of trust. Thus, violations of this assumption were noteworthy, such as when participants in Germany and Hungary pointed out that they had observed a vendor swapping the label of origin on products. Participants in the Hungarian focus groups perceived origin labels to be more trustworthy at the supermarket than at markets, because it was felt that there were stricter controls at supermarkets the former. However, it was pointed out that supermarkets have also been associated with origin mislabeling scandals.

Some considered food labels to have a particularly important function at the supermarket. This may because it is more difficult to ask for information about the products, and/or perhaps because they felt that labels at supermarkets are more trustworthy. There are those who seek particular information from food labels, such as the barn management associated with eggs (e.g. free-range), or whether a product complies with their dietary restrictions. Some participants in the German urban focus group said they were more likely to purchase products marked as Fairtrade or GMO-free (i.e., free from genetically modified organisms)[7], compared to their label-free counterparts. Similarly, some in the Greek rural group felt that certification (e.g. organic certification) was an effective measure to gain consumer trust.

By contrast, other participants in both German focus groups did not trust food quality labels. One reason given for not trusting labels was lack of transparency of what the label stands for (including Fairtrade and sustainable fishing). Other participants felt that organic labels are similarly problematic. Not only are they uninformative because they do not indicate what their standards are, but there can also be substantial differences between organic products and organic labels – as such it was claimed that a product with an organic label is not always really organic. Furthermore, some participants across the focus groups felt that organic products were not credible because they "know how farmers operate." Relatedly, in the Greek urban focus group a participant mentioned that they had difficulty trusting organic food from non-EU countries, even if they have an official certification, as certain standards are not met in such countries (e.g., certain inspections on organic production are never performed). Although participants in the Hungarian focus groups spoke at length about organic products, there was little mention of organic certification.

There were mixed views on how participants would like to be informed about organic standards. A participant suggested that legislators should set minimum requirements so that a product can only carry a label if it is above these requirements, "otherwise it leads to a situation where every product can carry an organic label." (*rural DE*). One participant claimed that they would like clearer/more detailed information about the origin and composition of the organic label. Another pointed out that they did not have the time to process information at this level of detail, their main aim was just to buy food, and so they treated the organic labels at face value – i.e., as indicating that the food is organic. Thus, organic production was perceived by some as operating on a continuum, whereas others evaluated it more categorically when deciding what food to purchase.

Yet another participant countered that "transparency of information is not important for consumers if they cannot influence this aspect" (rural DE), which may mean that there is little point for consumers to seek information about organic standards if they have no control over such standards. This participant pointed out that organic products may also have some less sustainable environmental consequences that are not indicated on the label, such as coming from long supply chains. It was argued that a more effective way for consumers is for producers to source local food, as the distance products travel between the producer and consumer is something the consumer can control. Thus, we see that participants have mixed views about the relevance and utility of food quality certification and labels in informing consumer decisions. Although the concept of organic production was favoured across the focus groups, many participants expressed distrust of products labeled as organic, particularly in the German and Hungarian focus groups. Furthermore, some participants seem to perceive organic food on a spectrum of differing organic standards, whereas others seem to evaluate the organic status of products more categorically – i.e., whether they are organic or not.

In rural Germany, a similar discussion about label standards was applied to the subject of animal welfare schemes. One participant argued that animal welfare standards should be provided on all animal products, and another argued that there should be a standardised label, otherwise companies can make their own labels with individual standards. Although one participant pointed out that there was already a animal welfare label with a scale of differing standards (https://initiative-tierwohl.de/), another argued that the state, as a neutral institution, should be responsible for communicating such information instead. Yet another participant claimed that they trusted the producer to provide information about their product.

[7] It is worth noting that under the Commission Regulation (EC) 1830/2003 all food produced from genetically modified organisms are required to indicate this on their label. Thus, claims related to GMO-free do not add value because products bearing this claim cannot be distinguished from products that do not carry such claims.

#### 4.5.2.3 Visiting production sites

Another channel through which consumers can obtain information about their food is by visiting production facilities, which is sometimes permitted in SFSC. Although participants across the focus groups felt that this option laid a solid foundation for building trust through transparency, it was also seen as time and labour intensive, making it inconvenient for many. Furthermore, some participants felt incapable of arranging such visits, as they found it difficult to locate producers, and did not know how they could be contacted. For example, a participant in the Greek urban group explained that they would arrange visits with producers if they were shown how to do it.

#### 4.5.2.4 Consumer protection

Some participants felt that having a clear avenue for complaints was an important element of trust. However, there was no consensus on which food distribution channels handled this issue the best. There were those that felt that it was easier to complain directly to the owner of a local store than at larger retail chains, whereas others felt that the retail chains are more transparent than SFSC in this respect "In the supermarket you are compensated and can complain. The farmer would rather give you an extra pear" (urban DE). Given that there is a perception that SFSC may be less well regulated and controlled than longer chains, participants may feel more confidence in purchasing from such channels if they understood that their complaints would be handled in the same way as those directed at larger retailers.

## 4.6 How to encourage consumers to purchase from short food supply chains

Participants across the focus groups generally agreed that time, money, and convenience were their priorities when purchasing food, and that the quality of SFSC products should be compatible with this in order for them to purchase such products. Trust in SFSC also needed to be strengthened, via tighter regulation and controls, as well as through increasing knowledge and exposure to SFSC. It was felt that information about SFSC initiatives and issues should be made more accessible, and that public institutions had an important role to play in supporting SFSC and educating citizens about them.

### 4.6.1 Aggregate producers

In order to make it more convenient for participants to shop at SFSC, participants recommended that producers should band together to offer a wider range of products to consumers. In Germany and Spain, it was suggested that producers should join forces in market halls, as they felt that consumers are more likely to go to markets than to farm shops. Participants in Greece argued that producers should create more cooperatives, and that the difficulty that some producers have in cooperating with others is an obstacle to their success.

Participants in Spain and Germany also wanted to be able to purchase from a range of producers via an online platform, as this would reduce the burden on consumers to source local products. In Spain it was suggested that this could either be in the form of a cooperative or association of producers selling high-quality products, and that these should have a greater presence at markets and through an online platform. Some wanted to have a webpage that allowed them to identify different types of products nearest to their location. It was proposed such a platform that this could be bundled with information on direct distributors, combined with a home delivery service (similar to Uber Eats or Deliveroo). However, it was also argued that producers would have no time nor resources to keep the platform updated.

In Hungary, most participants said that they would prefer to buy SFSC products from farm shops or markets, followed by home delivery (including delivery from supermarkets). It was suggested that producers could be present at farmers' shops so customers could interact with the producer and learn about the products offered.

One mentioned that they would be more likely to buy from a SFSC if the products were continuously available, which is more likely to be the case when producers are aggregated.

### 4.6.2 Increase accessibility

Participants wanted SFSC producers to be geographically closer to consumers. Some were unwilling to travel more than a few hundred metres or no further than their local supermarket to purchase food, whereas others would travel for up to 30km. One way to increase the geographical proximity of SFSC that participants were in favour of was to offer local products through local stores and supermarkets. Participants in Germany felt that the ease of identifying local food should be improved. They suggested that this could include road signs indicating the locations of SFSC producers, having a local product section at supermarkets, and clearly marking the regionality of food. In the Spanish urban focus group, it was suggested that having markets that are open on more days and for longer hours would facilitate the purchase of local food.

In Germany, one way to increase the accessibility of local food is to sell them through vending machines, particularly at locations that are much frequented, such as central train stations. Alternatively, some also favoured the convenience and time-saving aspect of home delivery. One felt that home delivery was more sustainable than travelling to the producer to purchase food, whereas others felt that extensive home deliveries would incur an environmental cost. Workarounds were suggested, such as customers picking up produce from collection points (e.g., workplaces), and having specific zones for regional deliveries. It was also suggested that home deliveries could be reserved for those who would benefit from them the most, such as senior citizens who are less mobile.

One common concern participants had about deliveries is that they cannot personally select their own SFSC products, and thus might receive products of inferior quality. However, there are several ways that consumer trust might be gained on this issue. These could involve: a) offering first-time promotional offers that encourage consumers to try the service so they can be assured that they receive good quality products, b) publishing reviews/ratings of the delivery service, c) allowing consumers to specify their desired best before dates for fresh products, and d) allowing consumers to refuse/return products with the possibility for an exchange or reimbursement.

### 4.6.3 Justify the price

The discussion in section 4.1.2 on Price reveals two sources of price differences of food from long and short supply chains: one at the production level (where small scale production is more expensive), and one at the retail level (where longer food chains are more expensive for the same product). Based on the focus group responses, it appears that consumers are willing to pay more for differences in the production stage, because they are willing to pay more: a) for better quality, and b) if they know that the producer/small, local retailer will directly benefit from their purchase. However, consumers are unwilling to pay more for products at large supermarkets if the price increase is due to a greater number of intermediaries in the food chain. Thus, consumers need to be informed about how when they purchase from SFSC, they are buying a better-quality product that will benefit the local community more directly. Furthermore, the results of the focus groups showed that many consumers – particularly those in Hungary – do not understand why small-scale production or organic production is more expensive than large-scale or non-organic production. Thus, consumers also need to be better informed about the greater costs associated with these types of production, in order for them to feel that the higher price of SFSC products is justified. However, some participants felt that consumers should not bear the ultimate cost of increased prices of SFSC products, suggesting that participants felt that other actors in the food chain should shoulder at least some of the responsibility of the price discrepancy of products between long and short chains.

### 4.6.4 Increase trust

The previous discussion in section 4.3.2 about Food information illustrates that being informed about the attributes and production of food products is an important pillar of trust. Indeed, many participants from Hungary and Germany wanted to find out more about the operations of their local producer and to have a relationship with them, such as through visiting their farm or production facilities, or learning about them through social media or videos. As an example, it was mentioned that the rapport between the customer and the farmer in southern Germany was particularly well fostered.[8] Participants also felt that children should have the opportunity to visit farms, with their families or schools, so that they have a better understanding of where their food comes.

However, some participants in Hungary pointed out that farm visits cannot be spontaneous, as planning is required to ensure the safety of visitors, thus decreasing their convenience. Furthermore, this lack of spontaneity and the necessity of arranging the farm to be appropriate for visitors may entail that the experience visitors receive may not reflect the reality of the farm operations.

In a similar vein, some participants in Hungary were interested in visiting more pick-your-own initiatives on farms, feeling that the quality of the produce was better (in terms of being more fresh, ripe and natural), and that they were more directly supporting farmers. However, another participant pointed out that there are some practical difficulties associated with such initiatives, such as the farms being far, and certain produce (e.g. strawberries) being more perishable and thus difficult to store in large quantities. It was also argued that pick-your-own initiatives were not cost effective, as engaging in them would be more expensive than buying a comparable product from a closer store, in addition to the cost of driving to the farm to pick the produce oneself. This discussion neatly illustrates the difficulties of balancing the everyday priorities of price and convenience of many consumers against the emphasis on food quality and social implications represented by SFSC.

As many participants also expressed concern about the food safety and regulation of SFSC, ensuring greater regulation and transparency of standards would help to foster consumer trust in these products. Hungarian participants expressed confidence in NÉBIH, the National Food Safety Authority of Hungary, and felt that food safety certifications were more relevant for them than organic certification. Thus, greater input from national authorities regarding SFSC, and more public communications about how these food chains are regulated, along with clearer consumer protection standards may help to increase confidence in SFSC.

### 4.6.5 Disseminate information

Participants across the focus groups believed that consumers would be more likely to buy products from SFSC if they had greater access to relevant information. For example, those in rural Spain felt that consumers in general did not tend to buy from SFSC because they were uninformed about matters of food quality, and out of touch with traditional food production methods. In the German focus groups, it was proposed that there should be improved marketing and clearer communication of the benefits of SFSC products. Relatedly, it was also felt in urban Spain that the consumption of more seasonal products should be promoted among consumers.

Many participants across the countries suggested that schools have a role in educating students and parents about the environmental and social implications of food production, particularly those from urban areas. They suggested that *special educational programs* could attract the attention of young children, especially if they contain practical components, like vegetable gardens at schools. Participants acknowledged that teachers had an instrumental role in transmitting curiosity and enthusiasm on this topic.

[8] For example, in the region of Baden-Württemberg the ministry encourages producers to open their farms to the public one day a week.

Some participants in the urban Greek focus group perceived that young adults were less interested in the environmental/social implications of food production. It was suggested that SFSCs could organise special events to attract this target audience, such as concerts or earth festivals. However, other participants were cynical about the effectiveness of such initiatives to engage the younger generation.

Many participants (particularly those in Germany) preferred to learn about SFSC initiatives/local products from non-print sources, such as such as social media, online newsletters, and email; with many preferring to receive this information via mobile phones. Some also favoured outdoor poster advertising, such as those at bus-stops. Those in rural areas also appreciated regional media outlets such local TV, radio, and community newsletters/newspapers. Some also valued personal recommendations (e.g. via word-of-mouth), whereas others wanted to learn about SFSC initiatives/local products at events such as exhibitions or village festivals. Several participants in urban Spain wished to see local stores and products promoted on social media, and to receive reminders about these stores and products, whereas some in Germany wanted to receive weekly promotions. Customers of the producer cooperative in urban Greece noted that they typically received information about SFSC online or contacted the producers by phone directly. They also added that the members of the producer cooperative they frequent post special announcements when a seasonal product is available or when something is added to the assortment (e.g., when a product has just been harvested or produced). The participants felt that these measures encouraged their purchase behaviour.

### 4.6.6 Strengthen government support

Some participants in Spain and Greece felt that it was the responsibility of governments (e.g., local municipalities) to create a legal and administrative framework to support SFSC. They suggested that this could be done by providing training and subsidies to encourage small producers to adopt organic production. It was proposed local governments should also create initiatives to support public procurement with local or organic products prepared onsite, as many institutions currently outsourced their food production. One suggestion was that recommendations and policy communications on current topics related to SFSC should also be disseminated to the public, and that these should be made available even before relying on scientific support that may take too long to be conclusive.

## 5. Discussion

Across all focus groups, convenience (including saving time) and price were the primary considerations of participants when shopping for food. In particular, convenience influenced which retail channels participants frequented. Although supermarkets tended to satisfy this criterion for many, those living in areas with greater access to markets or smaller local stores relied less on supermarkets. Thus, integrating local products into these established networks would make it easier for consumers to purchase such products more regularly. Other channels participants favoured for their convenience included online shopping and delivery. However, to facilitate uptake through these channels trust in product quality must first be established.

Price was another priority for many participants, however they were not always aware of what influences the price of food. Although no retail outlet was clearly seen to be cheaper than another, local food was generally seen as being more expensive, due primarily to its small-scale production. Interestingly, many participants were unaware of this relationship, and some thought the relationship should be reversed. Price was often taken into account by weighing it alongside food quality, although there was much variation in the trade-off between price and quality that participants were willing to make. On one end of the spectrum, some participants (particularly those in the Greek focus groups affiliated with producer cooperatives) were willing to pay a higher price for organic produce. On the other end of the spectrum, in Hungary participants' discussions placed more emphasis on price as a deciding factor.

Local food was generally seen to be seasonal, freshly harvested, more natural, more supportive of the local community, and more environmentally friendly in terms of reduced food miles. It appears that the more natural aspect of local food was more consistently valued across focus groups, followed by the aspect of supporting local producers. However, participants also fulfilled the motivation to support the local community by shopping at local stores, and did not express concern whether the local stores stocked local produce. Thus, although SFSC fulfil multiple criteria that consumers value (such as supporting the local community, being environmentally sustainable), participants also found other ways to fulfill these criteria (such as shopping at local stores, purchasing organic produce that may come from longer chains).

Although participants generally had positive perceptions of local food and the social implications of SFSC, in many cases they exhibited some distrust of SFSC compared to longer supply chains. This distrust centered on issues of food safety, regulations, and controls. Whereas some issues of trust may be overcome by receiving information about products from producers/retailers, food labels and visiting production sites, such information pertains to individual products and so offer little reassurance about whole chain issues that can be generalised to other SFSC. Given that participants in Germany and Hungary expressed trust in government authorities to certify food standards, it appears that governments can exert a greater influence in helping to build consumer trust concerning SFSC.

Participants across the focus groups called for more regulation of SFSC and felt that greater public education about SFSC would increase consumer engagement with them. However, most participants admitted – either implicitly or explicitly – that these measures alone would not be enough to motivate them to buy from SFSC. Convenience was considered to be a prerequisite that influenced how feasible participants felt it was for them to purchase SFSC products.

## 5.1 The Theory of Planned Behaviour

The overarching themes emerging across the focus groups – that of i) positive attitudes about SFSC and their products, ii) distrust of SFSC, and iii) the perceived feasibility of purchasing of SFSC – can be considered within the framework of the Theory of Planned Behaviour (Ajzen, 1985, see Figure 1).[9] This theory describes how people's behaviour and their intentions to perform that behaviour are influenced by their a) attitudes, b) how capable they feel of performing the behaviour (perceived behavioural control), and c) the extent to which they perceive others to perform and/or approve of the behaviour (subjective norm). Although this last aspect was not explicitly discussed, one could argue that there was an implicit perception across the groups that they believed that the general public did not purchase much from SFSC, given that the participants felt that there would be more engagement with SFSC if people were better informed about them.

[9] Ajzen, I. (1985). From intentions to actions: A theory of planned behavior. In J. Kuhl & J. Beckmann (Eds.), Action control: From cognition to behavior. Berlin, Heidelber, New York: Springer-Verlag. (pp. 11-39).

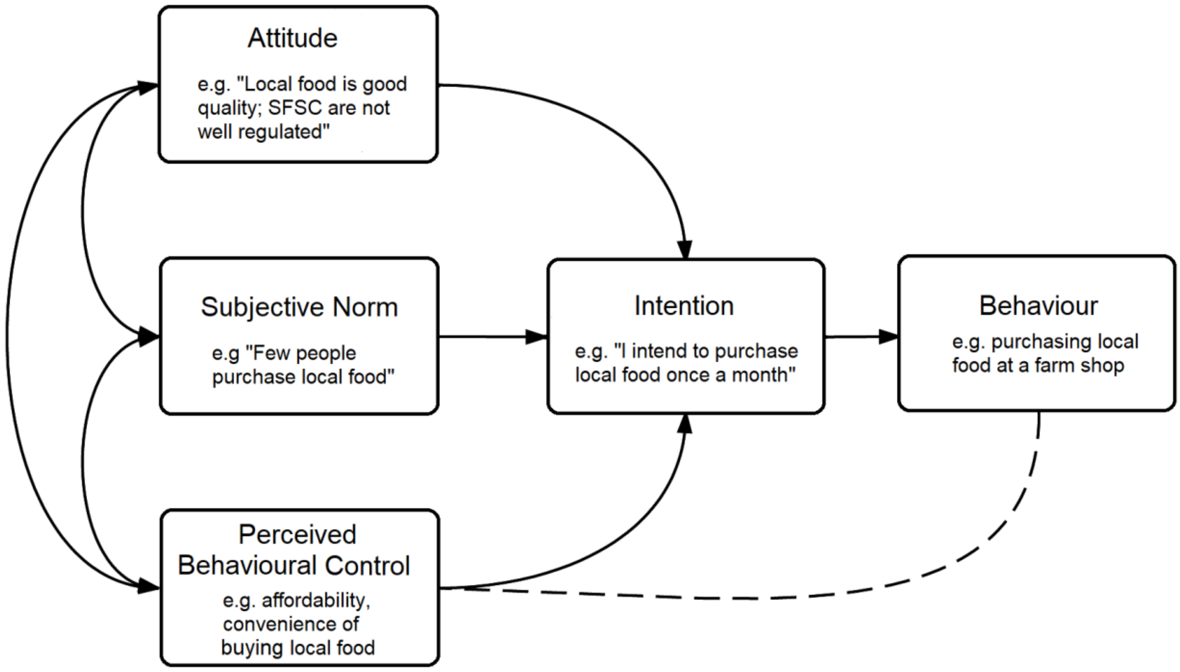


*Figure 1.* The Theory of Planned Behaviour (Ajzen, 1985). Behaviour (in this case, purchasing from SFSC), is thought to be directly influenced by the intention to perform the behaviour and potentially directly influenced by perceived behavioural control (i.e., how feasible participants think it would be for them to purchase SFSC products). The intention to perform the behaviour is thought to be influenced by: a) attitudes related to the behaviour (e.g., positive attitudes about local food, negative attitudes related to SFSC hygiene standards), subjective norms of how others feel about the behaviour/and or the extent to which others perform the behaviour (e.g., if others buy from SFSC), as well as perceived behavioural control. Attitude, subjective norms, and perceived behavioural control may also influence one another.

Consistent with the results of the current focus groups, a recent study[10] has found that the self-reported frequency with which Italians purchase from SFSC is predicted by how feasible they feel the behaviour is for them to perform (e.g., "Purchasing food at SFSCs is easy to me"), but not by their level of trust in SFSC ("I trust in purchasing food at SFSCs"). Perceived feasibility was also the strongest predictor of intentions to purchase from SFSC, followed by trust in SFSC. The effect of trust on behaviour was indirect – levels of trust influenced the strength of intentions, which in turn influenced the frequency of purchase. However, perceived feasibility had a direct influence on both intentions to purchase and frequency of purchasing at SFSC.

Trust is only one of the many attitudes that may influence the purchase of SFSC. A survey among US consumers who visited farmers' markets at least monthly found that perceptions of food quality and willingness to support local foods predicted the extent to which they purchased food at the farmers' market, whereas perceptions of food safety towards farmers' markets did not.[11] It is worth noting that these results pertain only to consumers who shop at farmers' markets with some regularity, and may not reflect the motivations of other types of consumers.

[10] Giampietri, E., Verneau, F., Del Giudice, T., Carfora, V., & Finco, A. (2018). A Theory of Planned behaviour perspective for investigating the role of trust in consumer purchasing decision related to short food supply chains. *Food Quality and Preference*, *64*, 160-166.
[11] Yu, H., Gibson, K. E., Wright, K. G., Neal, J. A., & Sirsat, S. A. (2017). Food safety and food quality perceptions of farmers' market consumers in the United States. *Food Control*, *79*, 266-271.

## 5.2 Future directions

Thus, in order to determine how best to address the factors that influence consumer purchase from SFSC, further research is needed to examine the extent to which consumer attitudes and perceived control related to purchasing from SFSC influences their intentions and behaviour. The pattern of these relationships may also differ for different segments of consumers, such as those who are of a lower SES, those who are advocates of SFSC, and consumers in different countries. The present results already give some indication of the universal concerns of participants across the target countries, and which ones are most likely to affect behaviour.

It is also worth noting that, since this is an exploratory study, it will be important to verify whether these are generalisable to a larger population. Towards this aim, a quantitative study will be conducted with 500 participants in each of the target countries examined, which will constitute the Deliverable 4.4 *Report on the consumer online survey results*. Nevertheless, the present findings suggest that a more fine-grained examination of the factors that may influence the purchase of SFSC products is needed. For example, to what extent is the perceived feasibility of purchasing from SFSC driven by price, and to what extent is it driven by convenience? Of the different attitudes that consumers may hold towards SFSC (both positive and negative), which ones are most predictive of behaviour across different populations? Understanding how these relationships may vary according to contextual factors such as demographic variables and the local SFSC landscape will allow researchers to obtain a more complete picture of the cause and effect of consumer behaviour, and inform more effective tools to promote the uptake of SFSC products.

# 6. Appendix: Project information sheet and informed consent form

**Project Information Sheet**

This interview is part of SMARTCHAIN –Towards innovation-driven and smart solutions in short food supply chains – a European research project funded by the European Union's Horizon 2020 research and innovation programme under Grant Agreement No. 773785.

**Guarantee of privacy and anonymity**

You have the right to withdraw from the interview at any given time, without having to justify your decision. We will ask you to give your consent before we start the interview. The entire interview will be recorded with your permission, but all results will be presented in an anonymous way. Your name will not appear in any written report. Your data will be stored at **[name of partner institution]**, and will only be accessed by **[name of the same institution]**. If you wish to withdraw your consent or exercise any other data protection rights related to the interview, please contact **[name of contact person and their email address]**.

**SMARTCHAIN – the project**

The central objective of this project is to promote participation in collaborative short food supply chains and to introduce new robust business models and practical solutions that enhance the competitiveness and sustainability of the European agri-food system.

**Objective of this interview**

We want to better understand food supply chain mechanisms, the specificities recovered in shortening these, challenges and opportunities for short supply chains and perceived consumer acceptance.

**Background Information**

A short food supply chain involves "a limited number of economic operators, committed to cooperation, local economic development, and close geographical and social relations between food producers, processors and consumers." Source: REGULATION (EC) No 1305/2013. However, consumers may more readily conceive of short food supply chains in terms of supplying 'local food'.

**Informed Consent**

| | |
|---|---|
| Project Name: | SMARTCHAIN - Towards innovation-driven and smart solutions in short food supply chains |
| Grant Agreement no.: | 773785 |
| Start date of the project: | September 2018 |
| End date of the project: | September 2021 |
| Financed by: | EU Horizon 2020 research and innovation programme |
| Website: | http://www.smartchain-h2020.eu/ |

I agree to take part in the above research project. I have had the project explained to me and I am happy with the information provided and have received a project information sheet. I have had the chance to ask questions about the project.

I understand that agreeing to take part means that I am willing to:

- Participate in the SMARTCHAIN project, in the Task 4.1.1.
- Participate in a focus group interview

I understand that any information I provide is confidential and that no information that I disclose will lead to the identification of any individual in the reports on the project, either by the researcher or by any other party. However, I also understand that comments that I make may be quoted anonymously as part of the publications of the project and may state my position in the supply chain (e.g. producer, consumer, processor, retailer, consultant, or researcher).

I understand that my participation is voluntary, that I can choose not to participate in part or all of the project, and that I can withdraw at any stage of the project without being penalized or disadvantaged in any way.

I consent to the processing of my personal information for the purposes of this research study. I understand that such information will be treated as strictly confidential and handled in accordance with the EU General Data Protection Regulation (GDPR).

Name:

Signature:

Date: