



## **T7.2 Inventory of reference exploitation models for short food supply chains**

**WP7**

**NBC**



## Document Identification

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| <b>Responsible Partner</b>          | Nederlands Bakerij Centrum (NBC)  |
| <b>Author (s)</b>                   | F. Janssen, M. Smit-van Hal, M. Laméris (NBC); E. Puertolas, R. Rodriguez, I. Perez (AZTI)  |
| <b>Review &amp; Edit</b>            | J. Casado, C. Winkelmeyer, S. Braun (UHOH); A. Antonelli, D. Petruzzella (IAMB); K. De Luca (LCP); S. Nicola, M. Blandino (UNITO); G. Herrmann, A. Sutter, N. Kuljian (OS); M. Pešić, V. Nedović (UOB); H. Schebesta, K. Purnhagen (WUR); A. Sebők, A. Hegyi, A. Fricz (CBHU); B. Chang (EUFIC); P. Mora McGuinity, R. Barossa, L. Mehauden (Innogestiona Ambiental); C. Torres (EUC); R. Fernandez (FDE) |
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\* Because the 18 case studies contain business-sensitive information, the business models of the case studies are anonymous and business-sensitive information is removed, in order to make the report publicly available.

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## 1. Executive summary

The SMARTCHAIN project aims to foster and accelerate the shift towards collaborative short food supply chains (SFSCs) by linking scientists with practitioners and stakeholders in the agri-food sector. Through specific actions and recommendations, SMARTCHAIN will introduce new robust business models and innovative practical solutions that enhance the competitiveness and sustainability of the European agri-food system. Using bottom-up, demand-driven research, the SMARTCHAIN consortium (43 partners from 11 European countries) performed a multi-perspective analysis of 18 case studies (from 9 project partner countries) of SFSCs in terms of technological, regulatory, social, economic and environmental factors, assessed the linkages and interactions among all stakeholders involved in SFSCs and identified the key parameters that influence sustainable food production and rural development among different regions in Europe. The research work of SMARTCHAIN is split in 10 Work Packages (WPs) that will enable the project objectives to be fulfilled. The main objective of WP7 is to generate a battery of tools as well as business and policy recommendations to implement innovative solutions in SFSCs, (1) improving the competitiveness and sustainability of SFSCs, making them smarter and more equitable, inclusive and sustainable, (2) contributing to the framework necessary to boost the creation of new business opportunities and new SFSCs in the EU and (3) fostering the collaboration among SFSC stakeholders (e.g. farmers, food producers, consumers, research and technology providers, policy makers).

Within WP7, the specific objective of T7.2 has been formulated as: "Development of initial and final reference exploitation models in SFSCs based on business model approach.", the subject of the present deliverable.

First, the business models of 18 case studies of SMARTCHAIN are critically examined, to analyse how each SFSC applies ongoing innovation and how they create, deliver, and capture value, considering their particular context (economic, social, cultural) and the relation between farmers, food producers and consumers. Canvas methodology is used as a basis. The necessary data about the case studies were provided by WP 2-5. The following information and parameters were collected: infrastructure (key activities, key resources, partner network), product value (value proposition of the offered goods and related services), consumers/market (market segments, sales channels, consumer agri-food actors relationships), finances (cost structure, revenue streams), resources (economic, government support) and ongoing innovations (technological, non-technological and social). After that, confluence points between the 18 cases were determined in order to identify the initial reference exploitation models (T7.2.1).

Secondly, the initial reference models have been questioned and strategically examined based on the environment in which the models function and based on the innovative solutions and recommendations obtained in WPs 2-5. Resulting in the final inventory of five reference exploitation models for SFSCs (T7.2.2) presented in this deliverable: Cooperative of producers

1. Cooperative of producers
2. Individual producers
3. Community supported agriculture

4. Marketplace online and offline
5. Promotion of on farm selling

This inventory of reference exploitation models and the inventory of successful cases on the application of innovative solutions in SFSCs (T7.1) will be used as input for the Best Practice Guide for the implementation of innovative solutions in SFSCs (T7.3).

## 2. Initial reference exploitation models (T7.2.1)

### 2.1 Case study characteristics using Canvas Methodology

SFSCs are very varied in nature and practice throughout Europe. The functioning and success of these SFSCs are dependent upon different territorial conditions such as culture, climate, resources, governing structures, available infrastructure, market access and market conditions. Within the SMARTCHAIN project, 18 SFSCs have been selected as case studies in 7 EU and 2 associated countries.

We critically examined the 18 case studies, analysing how each SFSC applies ongoing innovation and how they capture value, considering their particular context (economic, social, cultural) and the relation between farmers, food producers and consumers. Canvas methodology was used as a basis (See Annex I for more information on The Business Model Canvas). The necessary data about the study cases were provided by WP 2-5. This information was collected in a PowerPoint format (about 50 slides for each case study).

The following information and parameters were collected:

- infrastructure (key activities, key resources, partner network);
- product value (value proposition of the offered goods and related services);
- consumers/market (market segments, sales channels, consumer and agri-food chain actors relationships);
- finances (cost structure, revenue streams);
- resources (economic, government support);
- ongoing innovations (technological, non-technological and social).

Finally, each case study was summarized for this deliverable in a one-page business canvas as presented in Annex II. (Please note: because the 18 case studies contain business-sensitive information, the business models of the case studies are anonymous and business-sensitive information is removed, in order to make the report publicly available.)

### 2.2 Initial reference exploitation models


Based on the confluence points between the 18 case studies, we identified five different initial reference exploitation models outlining possible ways and new directions for SFSCs:

1. Cooperative of producers
2. Individual producers
3. Community supported agriculture
4. Online and offline marketplace
5. Promotion of on farm selling

The reference models focus on illuminating particular aspects of the model that stands out vs. other models. Each of the exploitation models have unique characteristics including pros and cons and are best suited to

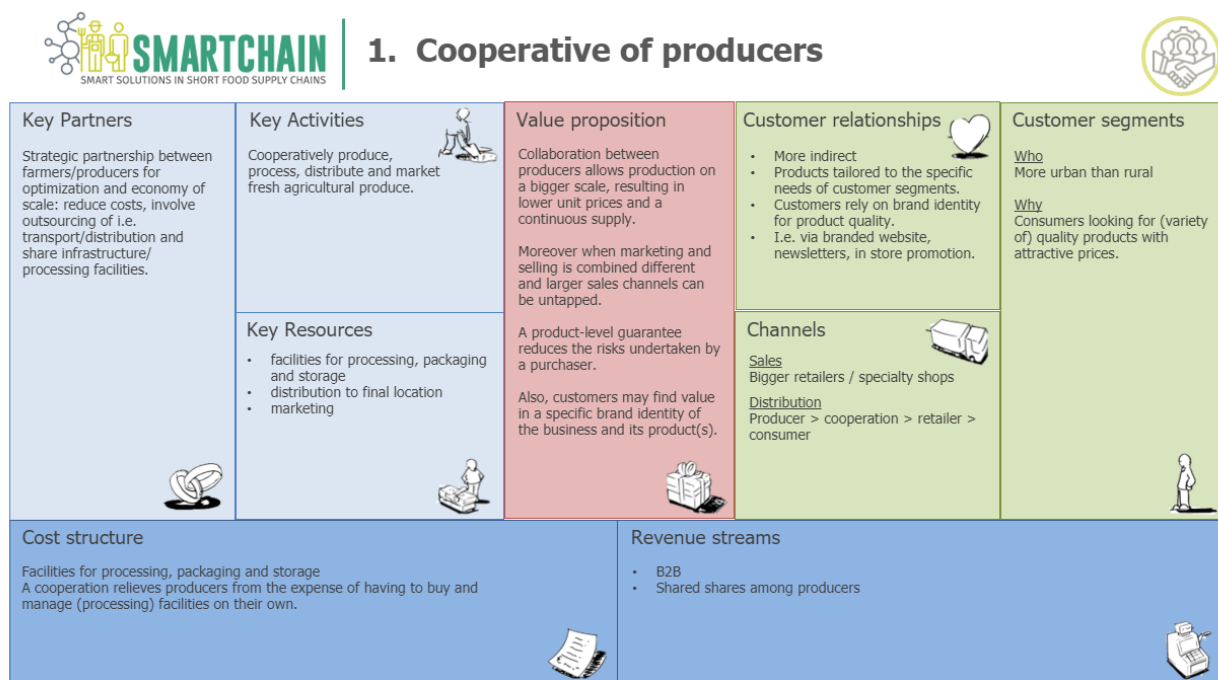
apply ongoing innovation and capture value considering their particular context (economic, social, cultural) and the relation between farmers, food producers and consumers. This section of the report describes the unique characteristics, presents the generic scheme per exploitation model and illustrates them with 1-2 typical case study examples to bring them to life. In Annex III an overview is presented on how all 18 case study examples will best fit into the reference exploitation models.

### 2.2.1 Cooperative of producers



A **cooperative of producers** allows its members, who produce the same or similar products, to produce, process, distribute, market and sell the products cooperatively. Typically, this model is chosen when production and processing is relatively expensive and can be difficult to source as an individual. Moreover, when marketing and selling is combined, it is possible to develop more and different sales channels.

#### Generic scheme - Cooperative of producers



#### Typical case study example 1 - BioFruits I Switzerland

BioFruits is an enterprise that is involved in the production and commercialisation of around 2000 tonnes of organic fruits and vegetables per year. In 2004, four producers decided to found BioFruits in order to join forces and create a modern tool for organic farming in Valais. BioFruits produces more than 34 different varieties of organic apples and pears on 170 hectares. The enterprise opened a shop for direct sales in 2005 with fruit and vegetables as well as other products, organic or regional, to highlight the



agricultural resources of the soil of Valais. In 2011, in order to promote fruits that do not fit the aesthetic standards of the distribution, BioFruits established a press, dedicated to the creation of juices and nectars. By also offering a customised service to other companies, local producers can also benefit from the creation of their own drinks.

### **Typical case study example 2 - Couleurs Paysannes | France**

Couleurs Paysannes finds its roots in the city of Valensol (in the region Provence Alpes, Côte d'Azur). In 2012, around 40 local farmers, decided to open a supermarket (350 square meters) in order to start directly selling their products. Meat, cheese, fruits and vegetables and all kind of other products can be found in this supermarket. Everything works as in a conventional supermarket, except that the prices are decided by the farmers only and they have to give a little bit of their time to work in the shop. Since 2012, two other shops have open in Manosque (a small city shop, 60 square meters) and in Aix-en-Provence (250 square meters). In the original shop in Valensol, a kitchen will open soon in order to be able to prepare and sell ready-to-eat meals made from products of the shop. Today, the cooperative has grown to +/- 60 farmers and sells 800 tons of regional produce per year.

#### **2.2.2 Individual producers**

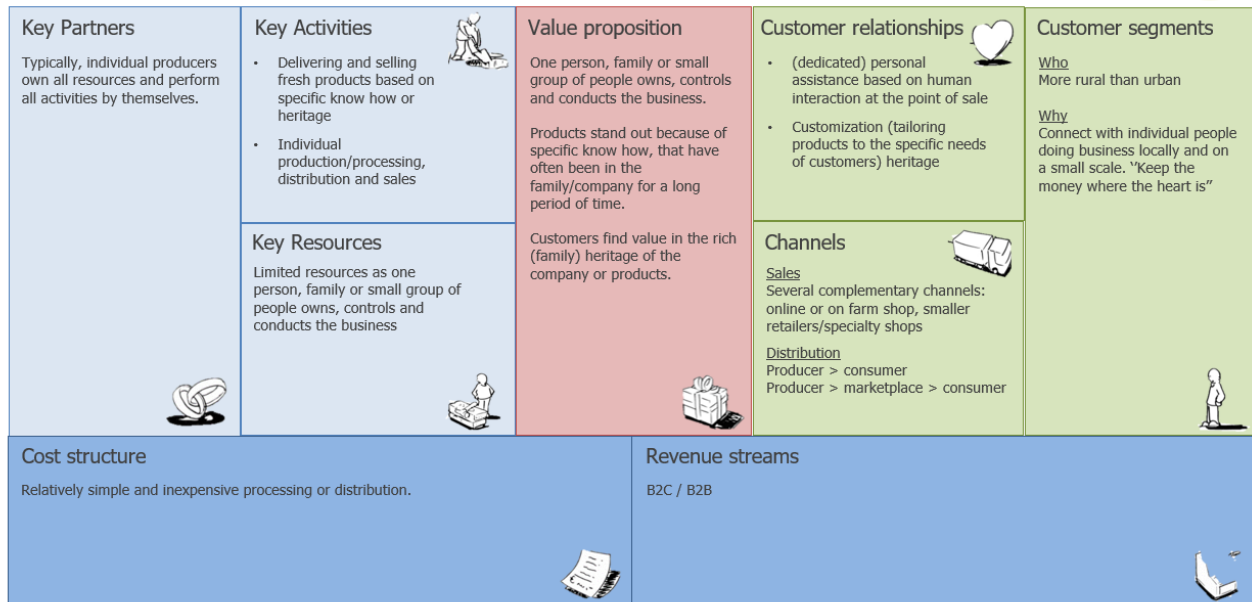


Many farms operate as individually owned businesses. The individually owned business is probably the oldest and most common form. One person, family or small group of people owns, controls and conducts the business. Individual producers typically have a rich (family) heritage, and relatively simple (inexpensive) processing or distribution is required. Sales channels are typically an online or onsite farm shop.

## Generic scheme – Individual producers



### 2. Individual producers – initial version



The SMARTCHAIN project has received funding from the European Union's Horizon 2020 research and innovation programme under grant agreement No. 773785

### Typical case study example 1 - Chèvrement bon | Switzerland

Chèvrement bon is a family-owned small enterprise, with four different activities: goat farming, cheese making, pig farming and green energy. In 1981, the family began with a herd of 35 goats. In 1987, with the increase in market opportunities, the herd expanded and has currently 100 dairy goats (producing 100.000l milk/year). In 2010, one of the sons joined the farm to become the manager of the cheese factory. In 2013, a new cheese factory with a shop for the sale of farm products was built.


Chèvrement bon responds to customer demand by offering quality products and bringing innovation and a complete range of cheeses (e.g. direct sales or market with 15 different cheeses based on 2 different processing techniques). A website and social media are used to communicate about different news and events the enterprise participates in or is developing. Some events are organized by the enterprise like visits of the farm to see goats, pigs and chickens or small on farm markets bringing local producers of different products (e.g. meat, bread).

### Typical case study example 2 – Natuurlijk Vleespakket B.V. | The Netherlands

Natuurlijk Vleespakket B.V. provides natural, grass-fed meats, sourced from cows, bulls and sheep that roam in nature parks in the Netherlands, and sells directly to consumers and restaurants in the Almere region (in the province of Flevoland), through the brand Vleesch & Co. As indicated by its Owner, Bauke van der Veen: "The animals have grazed in natural parks all their lives and are owned by a foundation that primarily focuses

on natural grazing, in order to prevent overgrows". Bauke van der Veen is also chairman of the short chain initiative 'Flevofood Association'. The versatile members of this association are active in agriculture, processing, logistics, trade, catering and retail. Together they form a powerful regional food chain by working closely together and seeking partnerships with a large number of partners, such as governments, financial and knowledge institutions.

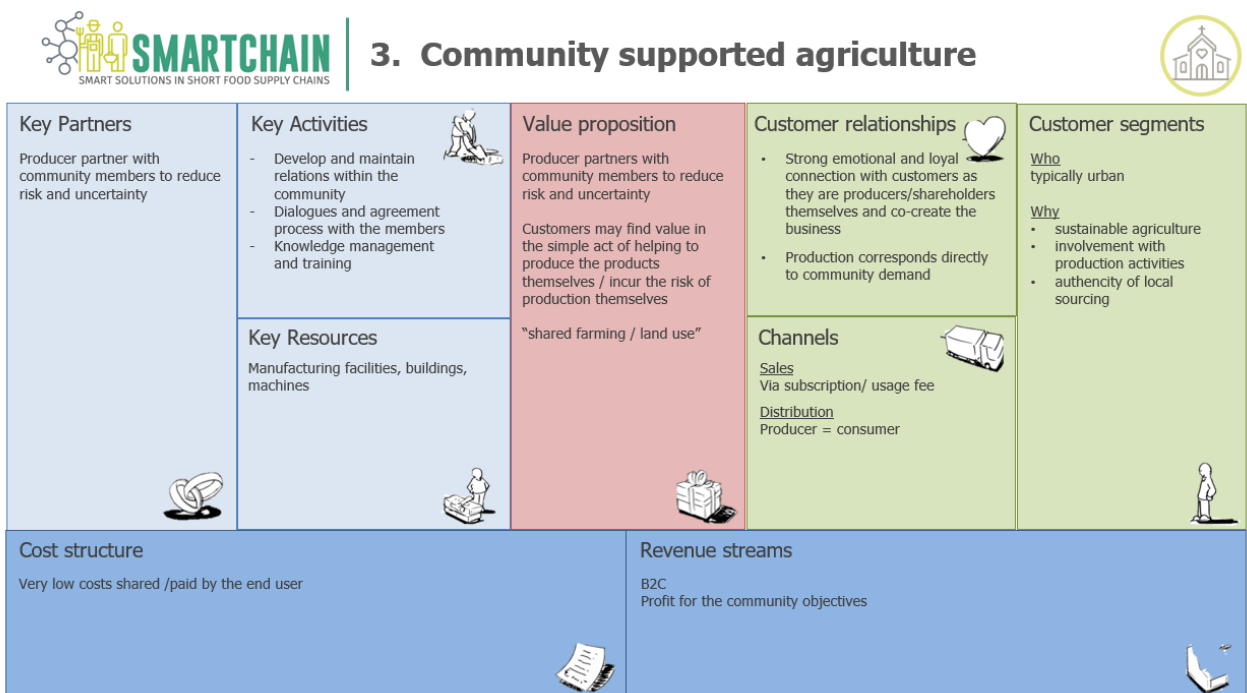
### 2.2.3 Community supported agriculture



The Community Supported Agriculture model has been in place for many farms for some time now. The traditional model placed substantial emphasis on sustainable agriculture, shared production risk, consumer involvement with production activities, and authenticity of local sourcing. Over the years, different types of Community supported agriculture have evolved:

- Subscription model: subscription-based contract for the produce from the land
- Shareholder model: buy shares and produce from the land
- Community model: invest and operate farm/land and share the produce with the community

### Generic scheme – Community supported agriculture



### Typical case study example – Solidarische Landwirtschaft (SoLaWi) | Germany

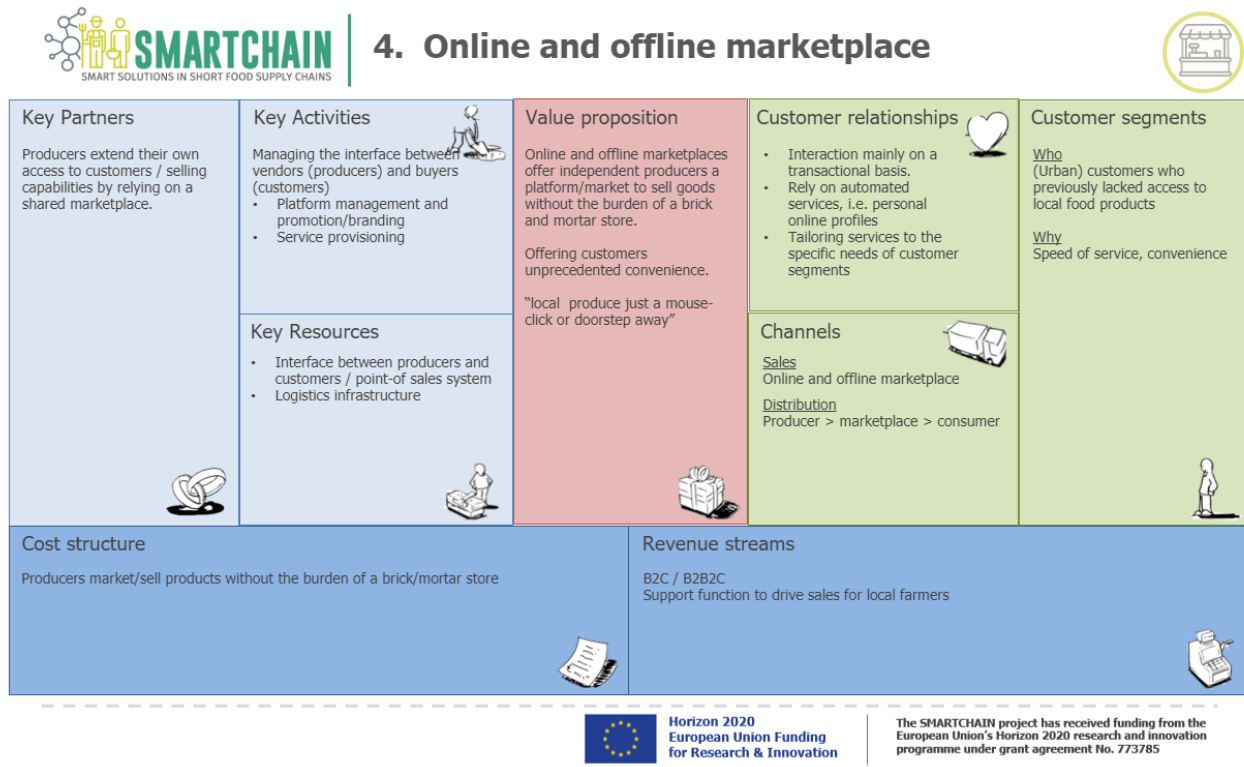
SoLaWi is a network of people with an agricultural background (farmers, gardeners, producers) and consumers (private households) who are committed to the promotion of community-supported agriculture. Producers and consumers form an economic and social community that is tailored to people's needs and takes the natural environment into account. On the basis of the estimated annual costs of agricultural production, this group undertakes to pay a fixed (usually monthly) amount to the SoLaWi farm each year in advance. This enables the producer to devote themselves to good agricultural practice regardless of market constraints, to keep the soil fertile and to manage it in a needs-oriented manner. In return, the buyers receive a part of the entire harvest as well as processed products such as bread, cheese, etc. - if the SoLaWi company produces them. The personal relationship makes the parties aware of their mutual responsibility. Consumers learn how their food choices shape the cultural landscape, enable social interaction, nature conservation and (species) diversity, and how sustainable agriculture can take place.

#### 2.2.4 Online and offline marketplace



Online retail is still growing fast, although online marketplaces in fresh food remain significantly behind general retail. However, some promising traction for short food supply systems is observed. Online benefits of selling your local products 24/7 to an increasing group of potential customers who buy online are evident. Marketplaces offer independent producers a platform/market to sell goods without the burden of a brick-and-mortar store.

## Generic scheme – Online and offline marketplace



### Typical case study example 1 – Foodhub.hu Non-profit Ltd. | Hungary


FoodHub.hu provides a platform of fresh, organic, farm-sourced products and makes them available for anyone living in the city of Budapest. With the „farm to table” and „farm to fork” concept in mind, FoodHub.hu was brought to life in 2016 when the online marketplace - AzÉnPiacom.hu (MyFarmersMarket) was launched – with a special assortment of farmer’s products being offered with a home delivery service for busy moms, families. In order to expand and scale FoodHub, the founders formed a strategic alliance with an online farmers’ marketplace, Supp.li. Supp.li is a digital platform that focuses on scaling, digitizing and automating food ordering, payment, invoicing and logistics between farmers and HoReCa, but it lacks the capabilities of long-term farmer collaborations. On Supp.li’s platform, farmers can advertise their fresh and processed products, which then can be ordered by restaurants and chefs. In addition to developing the platform, Supp.li checks the quality of the advertised food and provides full logistical services. The company is currently serving restaurants in Central Europe, and its long-term goal is to reform the restaurant-supply chain across Europe. The alliance with such an automated solution allows both parties to merge their benefits under one roof while successfully handling flows in their scalability.

### Typical case study example 2 – Local2Local I The Netherlands

Local2Local is a SFSC in the Utrecht region, initiated by Amped Concepts BV and about 20 local farmers. Established in 2013, this partnership has grown to over 50 farmers and has regional cooperation with other

supply chains. Its goal is to connect the city with locally produced food, via physical pick-up points and an online retail platform. A wide range of affordable, fresh, local products matches the sustainable lifestyle of the consumer and is available almost all year round. Consumers directly order from the farmer and get a fresher and tastier product, whilst Local2Local takes care of the in-store and outdoor marketing. Together with farmers, they also develop new products based on the UN's sustainable development goals. In this way, Local2local focuses on removing obstacles on both sides of the short food chain: marketing an abundance of local food and increasing accessibility and services for customers. Today Amped is building validated chains of trust within SFSC, by facilitating collaboration and value creation among stakeholders locally, regionally, nationally and internationally, focused on ecological, social and economic impact.

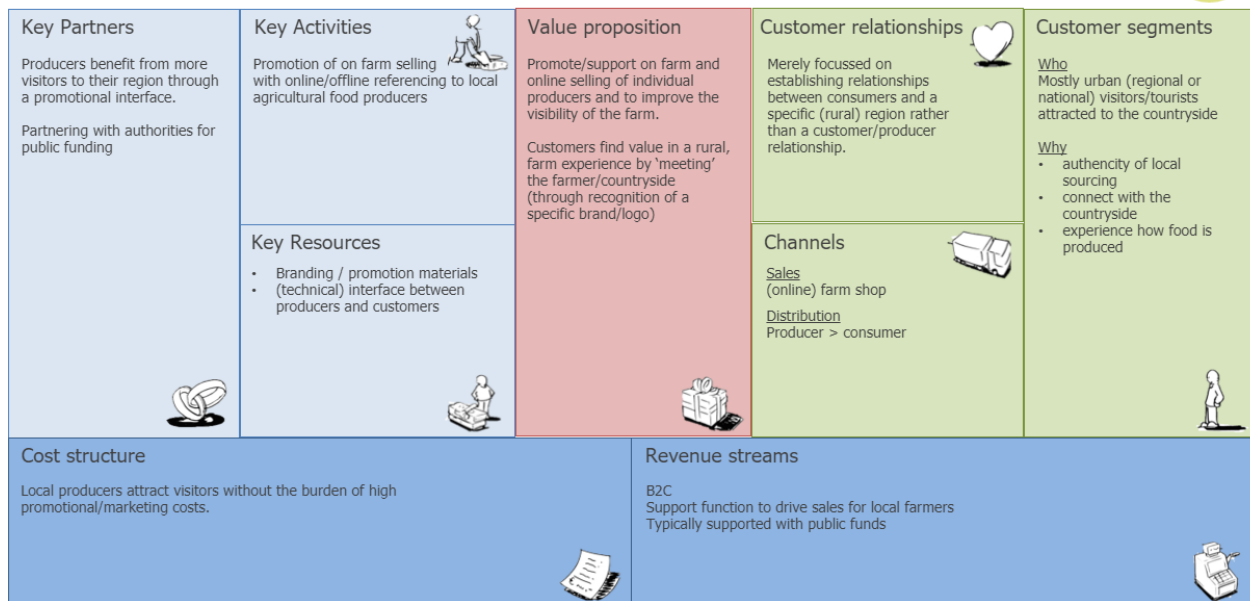
### 2.2.5 Promotion of on farm selling



This model has the primary objective to promote/support on farm and online selling of individual producers and to improve the visibility of the farm. This is conducted at the local as well as regional and national level. These organizations are typically supported with public funds.

### Generic scheme – Promotion of on farm selling

## 5. Promotion of on farm selling



### **Typical case study example 1 – Einkaufen auf dem Bauernhof | Germany**

Einkaufen auf dem Bauernhof (Shopping at the farm) represents the interests of direct marketers in Germany and is a support community for directly marketed agricultural products. The community is organized via several farmer associations and the agricultural chambers of federal states. It is the largest union for agricultural direct marketing in Germany. At times when small businesses are increasingly being driven out of the market by large corporations, the ability of self-marketing becomes a key skill to ensure competitiveness and the maintenance of operations. The community "Einkaufen auf dem Bauernhof" directly supports marketing agricultural businesses by creating a striking unique profile through advertising and public relations.

### **Typical case study example 2 – Zala Valley Open Farms | Hungary**

Zala Valley Open Farms is created by the Zala Termálvölgye LAG based on supporting local producers and tourism services (through LEADER), combined with SFSC knowledge and resources brought in by consultants in 2 trans disciplinary research projects. It is a network of producers of high added value food products opening their farm and food processing plant for customers to visit on a regular, transparent basis.

The SFSC provides:

- a common marketing image (logo, roll-ups, signs, image films, etc.);
- a well-designed internet platform + smart phone app. including push notifications and social media platforms where producers can market their products, give information about their opening times, special events, offers;
- special, larger scale events for wider marketing of the system;
- a quality assurance system (with internal governance and decision making) for creating an adequate environment at the farm to be able to accept visitors (toilets, hygiene, aesthetics, etc.);
- possibility for social learning, networking, building local/regional identity for producers.

Visitors can come to visit and buy products not only by appointment, but also during the regular opening times and at special organised events. Thus, customers can actually see how and where the local products are produced.

### 3. Final reference exploitation models (T7.2.2)

#### 3.1 Re-interpreting strategy through the lens of the Business Model Canvas

Chapter 2 presents the language for describing, discussing and designing business models and describes five initial reference exploitation models for SFSC businesses. This chapter is about re-interpreting strategy through the lens of the Business Model Canvas. The initial reference models will be questioned and strategically examined based on the environment in which the models function.

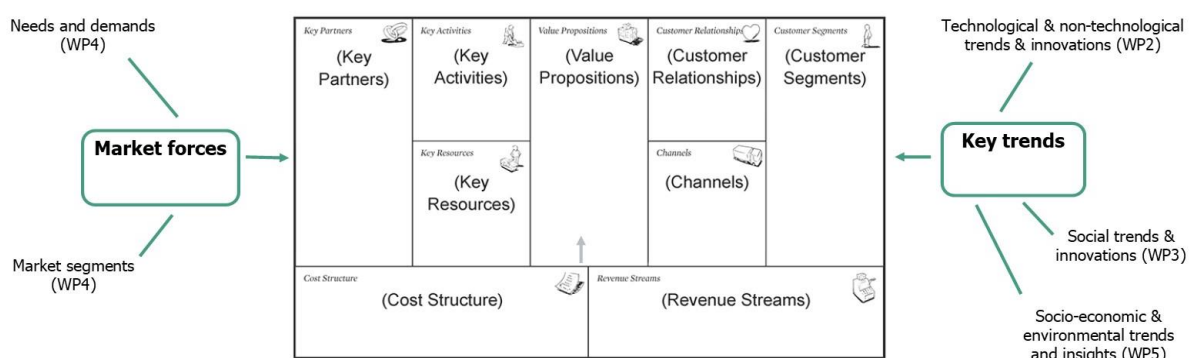
##### 3.1.1 Method: Checking the Business Model Environment

Business models are designed and executed in specific environments. A good understanding of the environment in which the business models operate helps to conceive stronger, more competitive business models. The COVID-19 pandemic shows that continuous environmental scanning is more important than ever because of greater uncertainty (e.g. technological innovations) and severe market disruptions (e.g. economic turmoil, disruptive new Value Propositions).

Understanding changes in the environment helps to adapt a business model more effectively to shifting external forces. Annex IV describes these key external forces and categorizes them in four main areas:

1. Key trends
2. Market forces
3. Industry forces
4. Macroeconomic forces

(A. Osterwalder & Y. Pigneur, **Business Model Generation**, (2010) Business Model Environment p 200-2011)



Within WP7, we analysed the innovation solutions and recommendations obtained in WP 2, 3, 4, and 5 and projected them on 1) the key trends and 2) market forces components of the business model environment tool.



**Key trends** gave us information about topics which were analysed in WP 2, 3 and 5 of the SMARTCHAIN project:

1. Technology trends: Technological and non-technological innovations (WP2)
2. Societal and cultural trends: Social Innovations (WP3)
3. Socioeconomic trends: Socioeconomic and environmental aspects (WP5)

**Market forces** are about insights of the customer. WP4 provides consumer and stakeholder insights. This information gave us relevant insights to re-design or improve the initial reference exploitation models. It views the business models through customers' eyes, can lead to the discovery of completely new opportunities.

## 3.2 Summary of key trends and market forces

### 3.2.1 Technology trends

This paragraph looks at the information generated in D2.2, which provides an inventory of 129 technological and non-technological innovations. These innovations have been structured following the subtasks of SFSC and include typical problems, barriers and needs and are relevant for individual SFCS actors and SFSC as a whole. See Annex V for an overview of these components. These components are used as inputs for the description of the SFSC landscape.

Most innovations were identified on the subtask "Transport, logistics and storage", accessibility of the product and short food chain channels, followed by the food preservation and other "processing and packaging" technologies. "Marketing" and innovations that use ICT/ digital technology are also identified in the inventory. Most of these innovations are obtained from sources other than the 18 SMARTCHAIN case studies. Few innovations are identified for food safety, hygiene aspects and regulatory issues.

D2.2 also reported conclusions which are relevant for the actual SFSC landscape:

- A low willingness of the chain members for collaboration;
- Limited (use) of marketing knowledge;
- Digital solutions can provide significant support for improving the performance of SFSC.

In table 1, information obtained in D2.2 is crossed with elements of a business model. It also shows the key take-aways on how technological trends and innovations could affect an exploitation model:

**Table 1: How key trends from a technological perspective could affect business model**

| Key trends               | Main Questions   | SFSC landscape based on D 2.2  | Key take-aways (technological and non-technological)<br>How could it affect a reference exploitation model and lead to an e.g. added Value Proposition, new Channels, new key-activities, new revenues.  |
|--------------------------|--|--|--|
| <b>Technology trends</b> | What are the major technology and non-technological trends in the Food market? | New farming and primary productions methodologies  | Introducing new farming methods or specific crops e.g. Organic <ul style="list-style-type: none"> <li>- Extra food quality, which results in an added Value Proposition</li> <li>- Introducing new key activities and key resources</li> <li>- Makes higher revenues possible and a new pricing mechanism: "Product feature depended": price depends on the number or quality of Value Propositions features.</li> </ul>   |
|                          | Which technologies represent important opportunities or disruptive threats?    | Many innovations on logistics, accessibility of the product. Home delivery is still expensive            | Pick your self-systems, vending machines, appropriate cooling systems/ transport and personalized home-delivery "boxes". <ul style="list-style-type: none"> <li>- Introducing new channels makes food from SFSC more accessible</li> <li>- More convenience for consumers will improve the Value Proposition</li> <li>- New ways of Customer Relations by introducing "co-creation" like "self-service methods" (pick your own &amp; vending machines) to engage the customers.</li> <li>- It will reduce cost on transport/ distribution</li> </ul> |
|                          | Which emerging technologies are (peripheral) customers adopting?               | Many innovations on processing technologies including preservation and packaging                         | Smart packaging and processing methods will prove advantageous when food safety, food quality and environmental issues are more and more important for consumers.<br><br>New packaging methods (biodegradable packaging with smart technologies which indicates freshness etc.) makes longer shelf live possible, less waste and it will affect revenue streams.<br><br>It will also improve the Value Proposition ass well by offering a more diverse supply (fruit juice/ jam and fresh fruit).  |
|                          |  | Many new marketing strategies & communication tools.   | New Value Proposition: offer knowledge on food and engage consumers direct with producers<br><br>Education & food tours: Add new key activities: Education and (touristic) food tours, cooking classes as a new activity besides the production of food.   |
|                          |  | Limited (use of) marketing knowledge   | New way of Customer Relations: Participatory Guarantee systems (PSG) – locally quality assurance systems will involve your consumers more direct "community"<br><br>New pricing mechanism: Product feature-depended: price depends on the number or quality of Value Propositions features   |
|                          |  | Major advances in Digitalization in the Food Chain: Smart farming, Blockchain. Limited knowledge on ICT. | New sales channels: online marketplaces will become more common.<br><br>New way of Customer Relations: Self-service for producers and consumers.<br><br>Reduces costs, optimize the operation. It depends on which scale innovations become profitable. Until now – less knowledge is available on these digital solutions and the assumption is that most innovations are too expensive to implement for SFSC. Cost structure will change. Less/ other qualified workers and higher cost for smart technology                                       |
|                          |  | Few innovations on food safety, hygiene and regulatory issues  | Innovations on Food safety and Hygiene could not only improve the quality of food trust of consumers and therefore improve the Value Proposition and justify a higher price. It could also reduce food waste (so less costs of food not sold).   |

Based on table 1, several adjustments can be made in the business reference exploitation models:

- **NEW VALUE PROPOSITION:** Specific crops, better quality and new ways for producers to engage the customer makes it possible to have higher revenues and a new pricing mechanism: **“Product feature depended”**: price depends on the number or quality of Value Propositions features.
- **NEW CHANNELS: Online selling and buying** will increase and is relevant for every exploitation model. New or advanced online channels will be available. It will become easier and cheaper to conduct business online. It addresses an added Value Proposition: It will become more convenience online to shop from SFSCs, which becomes relevant during COVID-19 when safety is key and there are restrictions on travelling.
  - *Illustrated example:*  
Hermeneus Marketplace (see innovation inventory at [www.Smartchain-platform.eu](http://www.Smartchain-platform.eu))  
Online marketplace Hermeneus is just like ‘AirBnB’ a free and responsible consumption community, in which sellers and buyers contact directly to buy and sell products.

*NB The transport part of online shopping in SFSC is still a struggle because of low volume and fresh produce. Homedelivery makes shopping from SFSC often more expensive. Alternatives which also add value could be the use of extra pick-up points, vending machines or pick-your-self concepts.*

- **NEW KEY RESOURCES, PARTNERS, ACTIVITIES: Implementing smart technologies** for farming, processing, preservation and packaging food could optimize the business operation and also improve trust, safety and hygienic challenges in SFSC. It depends on which scale investments become profitable.
- **NEW KEY RESOURCES, PARTNERS, ACTIVITIES: Knowledge and investments** on ICT, online marketing and logistics are necessary. E.g. (Online) storytelling about the benefits for the local community, environment, economy will become more relevant to justify a higher price and maybe less convenience when buying (non-SFSC) food online from regular supermarkets.

### 3.2.2 Societal and cultural trends

This paragraph contains information obtained from D3.1, D3.2 and D3.3 on societal and cultural trends, interpreted as ‘social innovations’. The findings are crossed with the five initial reference models.

#### Definition of Social Innovation

Social Innovations (SI) are processes that change SFSC systems by altering the collective perspective of the actors involved and their corresponding action mode, thus leading to the achievement of, primarily, social goals that benefit all SFSC participants in sustainable ways.

This definition highlights the social goals pursued by the groups co-creating SIs. At the same time, it maintains the need for these innovations to generate benefits in sustainable ways; sustainability, thus, remains a key ingredient of SIs. Both the co-creative process that leads to the SI, as well as the SI outcome itself, should be sustainable in the long run.

## Best practices on Social Innovations

Best practices are based on re-localizing food systems and shortening the geographical/physical distance. Some exemplary practices according to the literature review were the following:

- Enriching “ground rules” with “communing” tools (i.e., the process of making common’) such as acts of mutual support, negotiation, experimentation etc. with memberships programs or (online) meetings.
- The active involvement of multiple players who have traditionally not worked together.
- The collaboration between multiple actors should be based not only on formal agreements (e.g. contracts), but also on strong informal rules, social values and shared beliefs.
- Common cognitive frames, rules, norms and material infrastructures (e.g. an outlet, a meeting venue) should be in place.
- Practices that activate social links with other network members (e.g., regular meetings).
- Practices that enhance social and cognitive proximity (showcasing the living environment of local producers to consumers).

**Concluding remarks on social innovations**, based on the validation process of 12 Community of Practices:

- **Cooperation and communication** among SFSC members emerge as important factors for success that drive SI engagement and therefore SI success.
- Building **long and trusted relationships** is also a prerequisite for successful SFSCs as well as SIs. Trust is the most basic ingredient of success in SFSCs, including the generation of SIs. Without trust, any collective endeavour is doomed to fail. At the same time, trust is both an input and an outcome in SFSCs, where more trust leads to more trust.
- SI could be generated to improve conditions in existing systems providing **changes in mental models** and allowing changes to happen.
- In many countries where the farming sector is dominated by older farmers, **established mental models** and attitudes make the change at any level difficult.
- SI is in the mind of most stakeholders, **primarily about achieving social goals**; economic outputs seem to be the means rather than the ultimate goals of SIs. But the achievement of economic sustainable goals is also crucial for all organizations. These should not be neglected. Every business should be economically profitable, otherwise it’s not a business.

In table 2 the information obtained in WP3 is crossed with elements of a business model and it also identifies if and how societal could affect an exploitation model.

**Table 2: How key trends from a societal and cultural perspective could affect business models**

| Key trends                   | Main Questions   | SFSC landscape (WP3)  | Key take-aways WP3 (Social Innovations)<br>How could it affect a reference exploitation model and lead to an e.g. added Value Proposition, new Channels, new key-activities, new revenues.   |
|------------------------------|--|---|--|
| Societal and cultural trends | Which shifts in cultural or societal values affect the business model? | <p><b>Main elements of SI among SFSC members and consumers:</b></p> <p>Communication and cooperation</p> <p>Building long &amp; trusted relationships</p> <p>Co-creation</p> <p>Co-responsibility</p> <p>SI could be used for changing mental models</p>  | <p>Adapting SI <b>during the process of defining</b> a specific Business Model:</p> <ol style="list-style-type: none"> <li>1. Defining or improving a Business Model in SFSC should be a process in which all stakeholders in the particular SFSC are involved. Strong leaders or a small group of "initiators" are necessary in the early stages. All SFSC stakeholders can work on long and trusted relationships and everybody will feel responsible for the exploitation as well.</li> <li>2. Cooperation and communication among SFSC members (horizontal and vertical) are key during defining and operating the business model. It creates mutual understanding and shared responsibility for running the best business to achieve mutual goals.</li> <li>3. Invest in knowledge of how to facilitate processes of cooperation among all SFSC members.</li> </ol>   |
|                              | Which trends might influence buyer behaviour?                          | <p><b>Typical SFSC members:</b></p> <p>Often dominated by older farmers with established mental models.</p> <p>Lack of cooperation among SFSC members</p> <p>Lack of knowledge on how to (facilitate) cooperation in the SFSC.</p> <p>SI (in the mind of stakeholders) is about achieving social goals) but economic goals are crucial as well and should not be neglected.</p> | <p><b>Adapting SI in elements of the Business Model</b></p> <ol style="list-style-type: none"> <li>1. Value Proposition: Add new values (and develop new Key Activities with (new) Key Partners) on farms &amp; organisations who are active in SFSC.<br/>It offers new revenue opportunities. E.g. <ul style="list-style-type: none"> <li>- Potential place to learn about food production, nature.</li> <li>- Employing people with a distance to the labour market.</li> </ul> </li> <li>2. Customer relationships, channels and customer segments: <ul style="list-style-type: none"> <li>- Communication, cooperation and co-creation is always relevant: it gives you better understanding of the needs and struggles of customers, key partners and provides insights on how to improve the value proposition, which channels to use and how to work on customer relationships.</li> <li>- New ways of doing business (focus on social &amp; environmental goals) instead of only on economic goals will attract new customers and new ways to keep in touch with each other.</li> <li>- Enhancing trust is possible to directly involve consumers in the oversight of producers that are delivering products by introducing Participatory Guarantee Systems (locally focused quality assurance systems). Customers become co-creators and add value.</li> <li>- The use of formal agreements and informal rules may affect the way consumers feel engaged to the suppliers of SFSC.</li> </ul> </li> <li>3. Key activities, key resources and key partners: <ul style="list-style-type: none"> <li>- Co-creation and co-responsibility will engage SFSC members, Co-operation will get the SFSC going. It creates mutual understanding and shared responsibility for running the business in the best possible way.</li> <li>- The use of formal agreements and informal rules may affect the way SFSC members co-operate and feel responsible for the process, services and products.</li> <li>- SI could be used to keep the chain open and allow changes to happen.</li> </ul> </li> <li>4. Cost structure:<br/>Shared spaces and (IT/ Technology/ HR etc.) resources will reduce costs (even with the wider community – e.g. consumers) and creates more commitment among SFSC members and customers.</li> </ol> |
|                              |  | <p>The role of the <b>Government</b> is important; there is a need for local administrators to be more actively involved and take initiatives to facilitate cooperation</p>   |  |
|                              |  | <p>Social goals &amp; social enterprise companies are more common.</p>  |  |

Based on table 2, several adjustments can be made to the business reference exploitation models:

- **Implementing SI during the process of defining a business model and operating the business** will optimize the business and make the business work and have positive effects on all elements of a business model. Knowledge and money are necessary for facilitating the process.
- **Involving customers** (co-creation) will affect how Customer relationships are organized and new customer segments could be interested in buying from SFSC, especially those, who have concerns about place of origin, social and environmental issues.
- **Co-creation** among SFSC members or with customers might not only reduce costs, but also creates more commitment.
  - *Illustrated example: Participatory Guarantee System (PGS)*  
<https://www.ifoam.bio/our-work/how/standards-certification/participatory-guarantee-systems>  
 PGS are locally focused quality assurance systems. They certify producers based on active participation of stakeholders and are built on a foundation of trust, social networks and knowledge exchange. PGS directly involve consumers into the oversight of producers that are delivering products. A PGS enhances transparency in that producers, processors and others adhere to commonly agreed rules. Trust will add value for the products and services and may offer higher revenue streams and less cost for other certification models.

### 3.2.3 Socioeconomic trends

In this paragraph we crosslink generated knowledge in D5.1 on socio-economic and environmental insights. At the moment, research is being carried out in WP5 on how these elements are related to the 18 case studies in SMARTCHAIN, so there are no examples available according to these identified elements. Even though it is possible to crosslink these elements with the blocks of the business model and define the main questions on how they will affect a reference business model.

**Table 3: How key trends from socioeconomic perspective could affect business models**

| Key trends            | Main Questions  | SFSC landscape  | Key take-aways WP5 (socioeconomic and environmental)<br>How could it affect a reference exploitation model and leads to added Value Proposition, new Channels, new key-activities, new revenues.  |
|-----------------------|---|---|---|
| Socio-economic trends | What are the major socio economic and environmental trends<br><br>Which elements may affect the reference | Many consumers value local food for their health and freshness<br><br>Customers and Producers increasingly conscious of how FSC contributes to global warming and sustainability issues.<br><br>Growing social consciousness among consumers. | Value Proposition (VP) :<br>Address the (positive) impact you make on the environment and social community when you're buying from SFSC or conduct business in SFSC.<br><br>Address the issue of a higher price by being transparent about (extra) costs regarding environmental and sustainability measures.<br><br>New relationships might be possible and new customer segments might be attracted when addressing a more environmental and sustainable SFSC in the way how to approach or cooperate with your customers. Possible (new) ways: |

|                  |   |  |
|------------------|---|--|
| business models? | <p><b>Socio-economic &amp; environmental impact categories identified in WP5:</b></p> <ol style="list-style-type: none"> <li>1. Environmental impact categories (13) like: <i>Climate change, water stress and</i></li> <li>2. Sustainability impact categories like: <i>Workers, value chain actors, social impact on consumers &amp; SFSC-actors &amp; local community</i></li> </ol> | <ul style="list-style-type: none"> <li>- (dedicated) Personal assistance</li> <li>- self-service/ automated services</li> <li>- Communities</li> <li>- Co-creation</li> </ul> <p>Rethink which key resources are needed to be developed considering the ongoing shift to a more sustainable SFSC.</p> <p>The convergence to (more) environmentally friendly and sustainable SFSC might lead to other or new key activities.</p> <p>New revenue opportunities can be untapped by the shift to more environmental and sustainable SFSC. E.g.:</p> <ul style="list-style-type: none"> <li>- Subscription fees</li> <li>- Lending/ renting/leasing fees</li> <li>- Licensing fees</li> <li>- Donation</li> </ul> |
|------------------|---|--|

Based on table 3, several adjustments can be made in the business reference exploitation models:

- Elements which prove a product, service or company contributes to socioeconomic and environmental impact should be part of the Value Proposition (and clearly explained why). It justifies a higher (true) price.
- New ways of creating revenue streams and engaging customers: Subscription fee, lending, renting, leasing fees, licensing fees, donation.
  - *Illustrated example: Graangeluk.nl*  
A journalist starts as a nature farmer and cultivates old cereals that have disappeared from the landscape at the expense of maize. Cereal waste restores the landscape and biodiversity. Local herds of sheep graze the land. A regional baker bakes high quality bread from these grains and a local brewery brews prize-winning beer (Gold at the Brussels Beer Challenge 2020). The slogan of 'Graangeluk' is: save nature, order beer. It makes consumers understand they pay extra in order to contribute to reduce the environmental impact support economic impact on the local community.

### 3.2.4 Market segments, needs and demands

In this paragraph we crosslink the knowledge generated in D4.2 on customer insights. It provides relevant market insights regarding the needs and demands of customers and analyses how well they are served. It also identifies the main customer segments. D4.3 is about examining consumer attitudes, values, expectations and preferences in relation to SFSC.

WP4 identified the main concerns of consumers which prevented them from regularly buying from SFSC and presented possible solutions.

As described in WP4, it is recommended, when designing or redefining a business model, to conduct your own research into the needs of all SFSC members, your potential customers and the context of the product and region in order to better understand what the end-customer is truly willing to pay for or which partners you need in a specific business model. Understanding the customer is key when building or redefining a business

model. Adopting the customer perspective is a guiding principle for the entire business model with a better Value Proposition according Osterwalder & Pigneur in their book *Business Model Generation, 2010*.

In table 4, the findings of customer behaviour are crossed with main the elements of the business models. All elements are in their own way relevant for the five identified reference business models. It can be used as a checklist when a reference model is used to develop a specific business model.

**Table 4: How market forces (consumer insights) could affect business models**

| Market Forces   | Main Questions  | SFSC landscape  | Key take-aways WP4 (customer segments, needs & demands)<br>How could it affect a reference exploitation model and lead to an e.g. added Value Proposition, new Channels, new key-activities, new revenues.   |
|-----------------|---|---|--|
| Market Segments | <p><b>What are the most important Customer Segments?</b></p>  | <p><b>Main Customer Segments who buy from SFSC:</b></p> <ol style="list-style-type: none"> <li>SFSC Advocates: Purchasers to support local community &amp; Tourists.</li> <li>Families with young kids</li> <li>Elderly</li> </ol> <p><i>(2&amp;3: Main socio demographically defined consumer groups)</i></p> <p>And:</p> <ol style="list-style-type: none"> <li>Consumers who do not buy from SFSC</li> </ol>   | <ol style="list-style-type: none"> <li>Value Proposition: Address the Gains in your Value Proposition and your products &amp; services: <ul style="list-style-type: none"> <li>Taste, Freshness and Naturalness</li> <li>High quality food because of distinguished taste and or nutritional value</li> <li>Social and Economic benefits of SFSC on a local/ regional/ national level</li> <li>Environmental impact because of e.g. less transport</li> </ul> </li> <li>Value Proposition: Increasing the range of products (and diversification) at SFSC retail outlets would help. E.g. Organic/ pesticide free products will add quality (at least in the mind of consumers) and will justify a higher price.</li> <li>Value Proposition and new key activities: Education. Product- and region specific communication and marketing strategies would help if they address the specific needs of consumers: what they want to know about which products. This information could help consumers to understand the higher price of SFSC products and could help in building trust (Food safety and Place of origin). Also targeting behaviour change to make purchasing local food more feasible.</li> </ol>  |
| Needs & demands | <p><b>What are the Gains &amp; Pains of customers?</b></p> <p>What do customers need?</p> <p>For what value(s) are customers truly willing to pay?</p> <p>What are the biggest unsatisfied customer needs?</p> <p>How do our customers prefer to be addressed, how do SFSCs fit in their daily routine?</p> | <p><b>Gains &amp; Pains of customers</b><br/><i>Consumer preferences depend on the context and the specific region</i></p> <p>GAINS – needs, wants</p> <ol style="list-style-type: none"> <li>Healthy Food – because of freshness and naturalness of food</li> <li>Quality</li> <li>Social and Economic benefits of SFSC on a regional/ national level</li> <li>Environmental impacts</li> </ol> <p>PAINS : fears, obstacles</p> <ol style="list-style-type: none"> <li>(In)Convenience: accessibility</li> <li>Higher price</li> <li>Quality: Concerns about food safety</li> <li>Trust: place of origin / authenticity</li> </ol> | <ol style="list-style-type: none"> <li>Channels: an increasing number of point of sales (online and offline) and making local food more available in restaurants could encourage consumers to buy more from SFSC.</li> <li>Customer relationships: for those consumers who are interested in supporting farmers, local and regional economy and social and environmental impact, communicate about these issues and highlight how consumers can help.</li> <li>Communicate with your customers to improve confidences on issues (price, quality, safety and authenticity) of local food. Information campaigns and on- the-pack information could address doubts about these issues and certification and regulation can reassure consumers and can help to expand the market for SFSC producers.</li> <li>Key activities: continuing research in understanding your customers and continued communication with your key partners/ relevant SFSC members and end consumers about the benefits and concerns of buying from SFSC is essential and should be a standard activity.</li> <li>Key resources: Certification and regulation could help to address the concerns of consumers.</li> <li>Key partners: partners with knowledge of marketing, regulations, certification and governmental organisations could help to “translate” or bridge the gap between SFSC member and consumer.</li> </ol> |



|  |  |  |   |
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|  |  | Consumers have limited knowledge about local food. | <p>10. New Revenue streams: Introducing public procurement could lower the price by e.g. selective taxation between long and short food supply chain products (potential new revenue streams).</p> <p>11. Certification costs for specific labels and marketing expenses to understand your customer may enable higher product prices and increase revenue.</p> |
|--|--|--|---|

Based on table 4, several adjustments can be made in the business reference exploitation models:

- Customer insights are the guidance and the start of (re)defining a Business Model. All elements are in their own way relevant for the five identified reference business models.
- Consumer preferences are context- and region- specific. Research should be part of every business.
- In general these values are important to consumers when buying food from SFSCs.
  - Taste, Freshness and Naturalness
  - High quality food because of distinguished taste and or nutritional value
  - Socio-economic benefits of SFSC on a local/ regional/ national level
  - Environmental impact because of e.g. less transport
- Convenience and (a fair) price, quality and trust are important when buying food. When more convenience is offered (better accessibility and lower price) and consumers have more knowledge of food and their producers, food from SFSC will reach a larger (middle class) group.

*Generated example (in WP4): Public Procurement tools, e.g. eliminating VAT*

One potential solution could be to implement a tax that takes into account the hidden costs of food in terms of its environmental and/or health impact. This could be in the form of true pricing (Sustainable Food Trust, 2017) or a scheme that decreases the rate of tax for labour, but increases it for the cost of resources and pollution (The Ex'tax Project). Whether the cost of food from SFSC should be exempt from VAT, or the cost of food from longer chains should be increased may depend on current rates of VAT and the percentage of income that is spent on food, which varies considerably between countries (e.g. the VAT is 27% in Hungary, 7% in Germany) (Eurostat, 2017).

### 3.2.5 Summary of key trends, market forces and key take-aways

This paragraph summarizes key trends, market forces and innovation solutions and recommendations obtained from WP 2-5 in relation to the business model environment tool.

**Table 5 : Summary of key trends, market forces, SFSC landscape and key take-aways**

| Trends               | Elements   | Main Questions  | SFSC landscape   | Key take-aways  |
|----------------------|--|---|--|---|
| <b>Key trends</b>    | <p><b>Technology</b><br/>Technological and non-technological innovations (WP2)</p> <p>Identification of technological and non-technological innovations that could threaten the initial reference exploitation models – or enable them to evolve or improve.</p> | <p>What are the major technology trends in the Food market?<br/>Which technologies represent important opportunities or disruptive threats?<br/>Which emerging technologies are (peripheral) customers adopting</p> | <ul style="list-style-type: none"> <li>Major advances in using technology for food preservation, processing, and packaging</li> <li>Digital solutions available for all functions in SFSC.</li> <li>Increasing need for safety and hygiene tools</li> </ul>  | <ul style="list-style-type: none"> <li>Specific crops/ products will add extra Value. New pricing mechanism: “product feature depended”</li> <li>Online marketplaces &amp; digitalization is key: new channels, better customer relationships, extra revenues</li> <li>Implementing smart technology in SFSC (e.g. packaging, preserving) could optimize the business and add food safety, extra quality and less environmental impact</li> </ul>       |
|                      | <p><b>Societal and cultural</b><br/>Social innovations (WP3)</p> <p>Identification of major social innovations that may influence the initial reference exploitation models</p>  | <p>What are the key insights on social innovations? How may they affect the reference business models?</p>  | <ul style="list-style-type: none"> <li>Co-creation/co-operation/co-responsibility is key among a growing group of consumers and SFSC members</li> <li>Aging community of farmers with established mental models</li> </ul>   | <ul style="list-style-type: none"> <li>Implementing SI during the process of defining and operating the business will optimize the model and make the business work.</li> <li>Involving customers will affect the way customer relationships are organized and new customer segments could be interested in buying from SFSC.</li> <li>Co-creation among SFSC members or with customers might reduce cost, but also ensures more commitment.</li> </ul> |
|                      | <p><b>Socioeconomic</b><br/>Socio-economic and environmental trends (WP5)</p> <p>Outline of major socioeconomic and environmental trends relevant for the initial reference exploitation models</p>  | <p>What are the major socio economic and environmental insights and or trends? Which trends may affect the reference business models?</p>   | <ul style="list-style-type: none"> <li>Consumers and producers increasingly consciousness about sustainable issues.</li> <li>Growing social consciousness among consumers</li> <li>Gap between food from SFSC and regular food regarding convenience (accessibility) and price</li> <li>Growing middleclass which can afford higher prices for food</li> </ul>       | <ul style="list-style-type: none"> <li>New ways of creating revenue streams (usage fee, subscription, renting, lending etc.)</li> <li>How you create socioeconomic and environmental impact should be part of the Value Proposition. It justifies a higher price and may lead to new customer segments.</li> </ul>  |
| <b>Market forces</b> | <p><b>Needs &amp; Demands</b> (WP4)</p> <p>Outline of market needs and analysing how well they are served</p>  | <p>What do customers need? Where are the biggest unsatisfied customer needs? What do customers really want to get done? Where is demand increasing/declining?</p>   | <ul style="list-style-type: none"> <li>Convenience, fair price and trust are key</li> <li>Taste, quality, social &amp; environmental impact are the main benefits when buying from SFSC.</li> <li>Since COVID-19: more attention has been paid to food from SFSC. Who is producing it, where does it come from, how is it growing, what about food safety</li> </ul> | <ul style="list-style-type: none"> <li>Customer insights are key. Research should be part of every business model. Consumer preferences are context and region specific.</li> <li>Responding to consumer needs may add extra Value, attract new customer segments and new revenue streams.</li> <li>Sharing knowledge on the growing and producing part is key: e.g. education programmes, food tours, storytelling.</li> </ul>                         |
|                      | <p><b>Market segments</b> (WP4)</p> <p>Identification of the major market</p>  | <p>What are the most important customer segments? Where is the biggest growth potential? Which</p>  | <ul style="list-style-type: none"> <li>Advocates, Family with kids &amp; Elderly</li> <li>Growing middle class</li> </ul>  | <ul style="list-style-type: none"> <li>When more convenience is offered (better accessibility and lower price) and consumers have more knowledge of food and their producers, food from SFSC will</li> </ul>  |

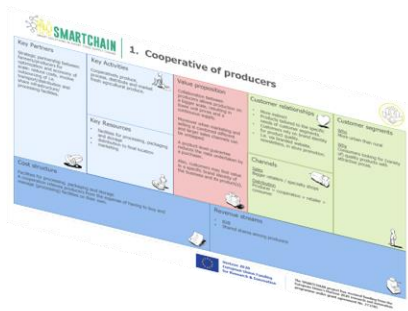
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|  | segments, describing their attractiveness, and seeking to spot new segments. | segments are declining or deserve attention? |  | reach a larger (middle class) group.<br><ul style="list-style-type: none"> <li>Public procurement tools might offer new revenue streams.</li> </ul> |
|--|--|--|--|---|

### 3.3 Final reference exploitation models

In the next paragraphs relevant key trends, innovation solutions and recommendations obtained in WP 2-5 will be crossed with each initial reference business models in order to provide the “final” models. Please note: competitive reference business models of today could be outdated tomorrow.

As we have seen since the start of COVID-19 the hygiene and safety part of food became more relevant and the importance of doing business online increased. There is also a growing awareness among customers and members of SFSC of the social and environmental impact SFSC could make; SFSC are a great place to educate and engage the community about healthy food and the environment. All these innovative solutions and recommendations still fit in the five reference exploitation models, only some adjustments were necessary, and a new model was not needed.

#### 3.3.1 Cooperative of producers



[initial model]

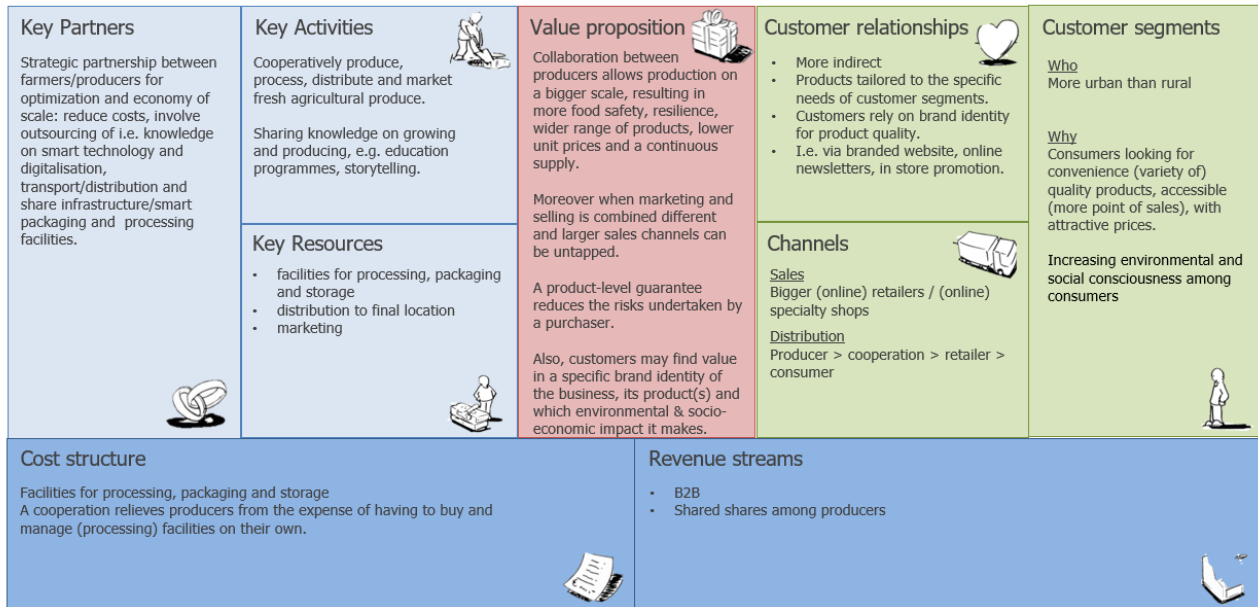
#### Relevant trends, key insights and market forces

- Major advances in technologies for environmental friendly and smart packaging provides less waste, longer shelf-life, and a more attractive look & feel of products in the shops which addresses the concerns of consumers: quality, food safety and sustainability. Proper packaging becomes increasingly necessary when online selling grows and food will be sold via (combined) boxes.
- As investments and knowledge in smart technology and digitalization are often high, collaboration in a cooperative of producers is more relevant than ever.
- Since online shopping is increasing, sales of the bigger retailers and specialty shops will have their own online shops as well. In their online shops and online strategy, they will probably implement more education and storytelling elements: e.g. short movies about ‘who is the farmer, where is it growing’. This will add more value because food from SFSC is more accessible and consumers are better informed. It is to be expected that a new customer segment the “middle-class” will be reached.

## Adjusted reference exploitation model:



### 1. Cooperative of producers - final



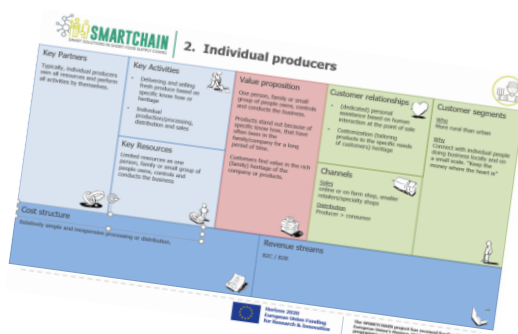
Horizon 2020  
European Union Funding  
for Research & Innovation

The SMARTCHAIN project has received funding from the European Union's Horizon 2020 research and innovation programme under grant agreement No. 773785



**A cooperative of producers**, allows its members, who produce the same or similar products, to cooperatively produce, process, distribute, market and sell the products. Typically, this model is chosen when production and processing is relatively expensive and can be difficult to source as an individual. Moreover, when marketing and selling are combined, it is possible to develop more and different sales channels.

### 3.3.2 Individual producers



(initial model)








### Relevant trends, key insights and market forces:

- Sharing knowledge, storytelling meets a growing need of consumers to understand more about where their food comes from. Education programmes and food tours (online and offline) could be excellent and personalised ways to fit these needs. Especially if producers have a long heritage. If producers are not able to organise these education programmes themselves, they could cooperate with new partners to facilitate or organise this education activities and/ or food tours. It will be an extra key activity, creates new revenues and attracts new customers.
- While customers and society are increasingly consciousness about social and environmental issues, new key activities could be implemented: e.g. a place to learn about food for schools and tourists or enabling social workplaces. These activities create new revenue streams and engage customers and the local community. When using Social Innovation tools as co-creation and co-responsibility (such as customers becoming tour guides or volunteer ), it will not only reduce costs, but will engage the social community as well.



## 2. Individual producers – final version

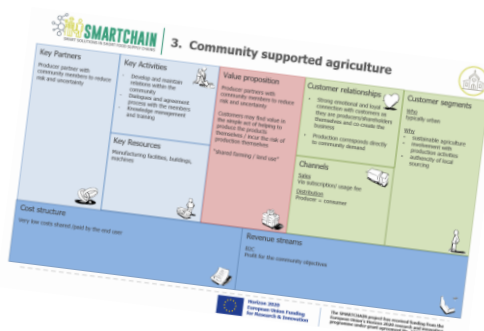


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| <p><b>Key Partners</b></p> <p>Typically, individual producers own all resources and perform all activities by themselves</p> <p>Education/ Tour organiser or facilitator for offline and online programmes</p> <p>Care institutions / facilitators in case of employing underprivileged people and/or disadvantaged people</p>  | <p><b>Key Activities</b></p> <ul style="list-style-type: none"> <li>Delivering and selling fresh produce based on specific know how or heritage</li> <li>Individual production/processing, distribution and sales</li> <li>Education/tours</li> <li>Employing underprivileged and/or disadvantaged people</li> </ul> <p><b>Key Resources</b></p> <p>Limited resources as one person, family or small group of people owns, controls and conducts the business</p>  | <p><b>Value proposition</b></p> <p>One person, family or small group of people owns, controls and conducts the business.</p> <p>Products stand out because of specific know how, that have often been in the family/company for a long period of time.</p> <p>Customers find value in the rich (family) heritage of the company or products.</p> <p>A place to learn about food</p> <p>A safe place to work or learn for underprivileged people and /or disadvantaged people</p>  | <p><b>Customer relationships</b></p> <ul style="list-style-type: none"> <li>(dedicated) personal assistance based on human interaction at the point of sale</li> <li>Customization (tailoring products to the specific needs of customers) heritage</li> <li>(new) Customers could become co-workers/ facilitators</li> </ul> <p><b>Channels</b></p> <p><u>Sales</u><br/>online or on farm shop, smaller retailers/specialty shops</p> <p><u>Distribution</u><br/>Producer &gt; consumer</p>  | <p><b>Customer segments</b></p> <p><u>Who</u><br/>More rural than urban</p> <p><u>Why</u><br/>Connect with individual people doing business locally and on a small scale. "Keep the money where the heart is"</p> <p>Education and tour programmes will bring (young) students and tourists</p>  |
| <p><b>Cost structure</b></p> <p>Relatively simple and inexpensive processing, distribution, education facilities</p> <p>In case of employing underprivileged people other facilitating costs will be added</p>    |   | <p><b>Revenue streams</b></p> <p>B2C / B2B for products and services e.g. education, touristic tours and revenue streams from government for employing underprivileged people and/or disadvantaged people</p>   |  |   |



Many farms operated as individually owned businesses. The individually owned business is probably the oldest and most common form. One person, family or small group of people owns, controls and conducts the business. Individual producers typically have a rich (family) heritage, and relatively simple (inexpensive) processing or distribution is required. Sales channels are typically an online or onsite farm shop. Besides farming, new activities as 'a place to educate' and employing underprivileged or disabled people, lead to more engagement from the social community and new revenue streams.

### 3.3.3 Community supported agriculture



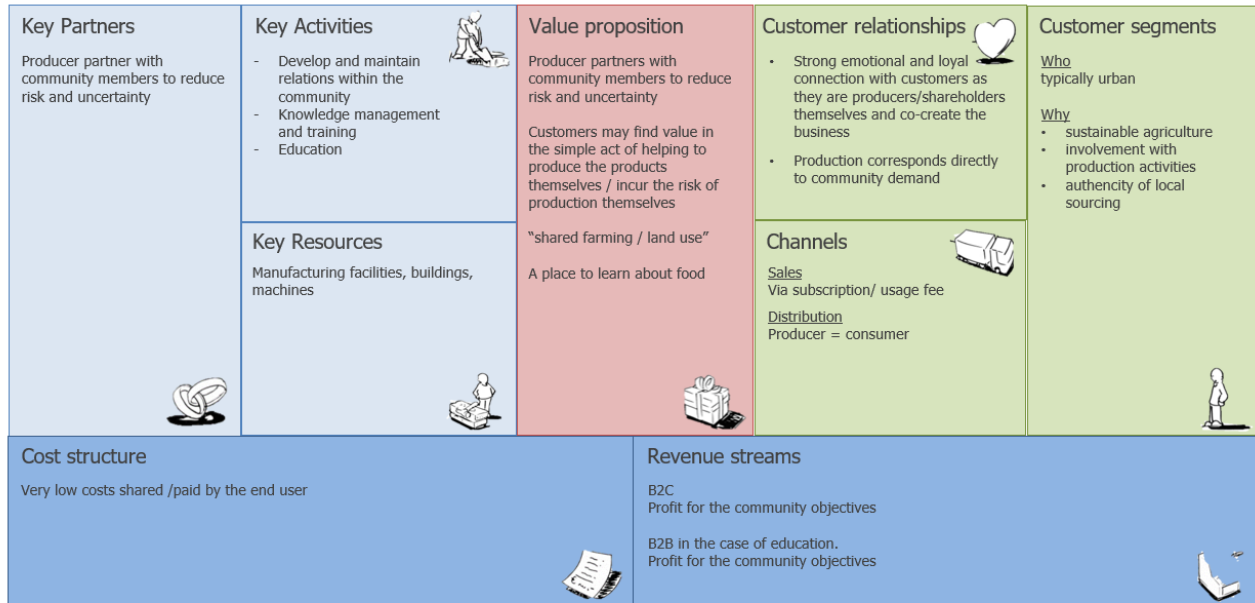
(initial model)

#### Relevant trends, key insights and market forces:

- Major advances in using technology for food preservation, processing, and packaging increase food safety, add extra quality and lessen environmental impact. Co-creation and financing among SFSC members or with customers might reduce cost, makes investments feasible but also ensure more commitment.
- Co-creation/co-operation/co-responsibility is key among a growing group of consumers and SFSC members. Participating in a CSA is a 'natural' place for fulfilling the needs of a growing group of consumers and will attract new customers. Implementing SI (with knowledge of how to facilitate SI) during the process of defining and operating the business will optimize the model and make the business more effective.
- While customers and society are increasingly conscious about food and the associated social and environmental issues, a new key activity could be implemented: Education on the farm; 'a place to learn about food'. Teachers and facilitators can be members of CSA. It creates new revenue streams for the community.



### 3. Community supported agriculture – final version



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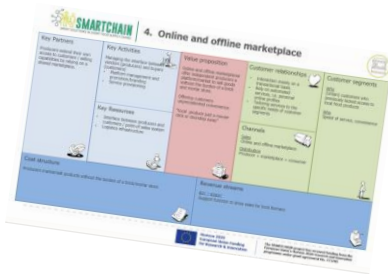
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The community supported agriculture model has been in place for many farms for some time now. The traditional model placed substantial emphasis on sustainable agriculture, shared production risk, consumer involvement with production activities, and authenticity of local sourcing. Over the years, different types of community supported agriculture have evolved:

- Subscription model: subscription-based contract for the produce from the land
- Shareholder model: buy shares and produce from the land
- Community model: invest and operate farm/land and share the produce with the community

### 3.3.4 Online and offline marketplace



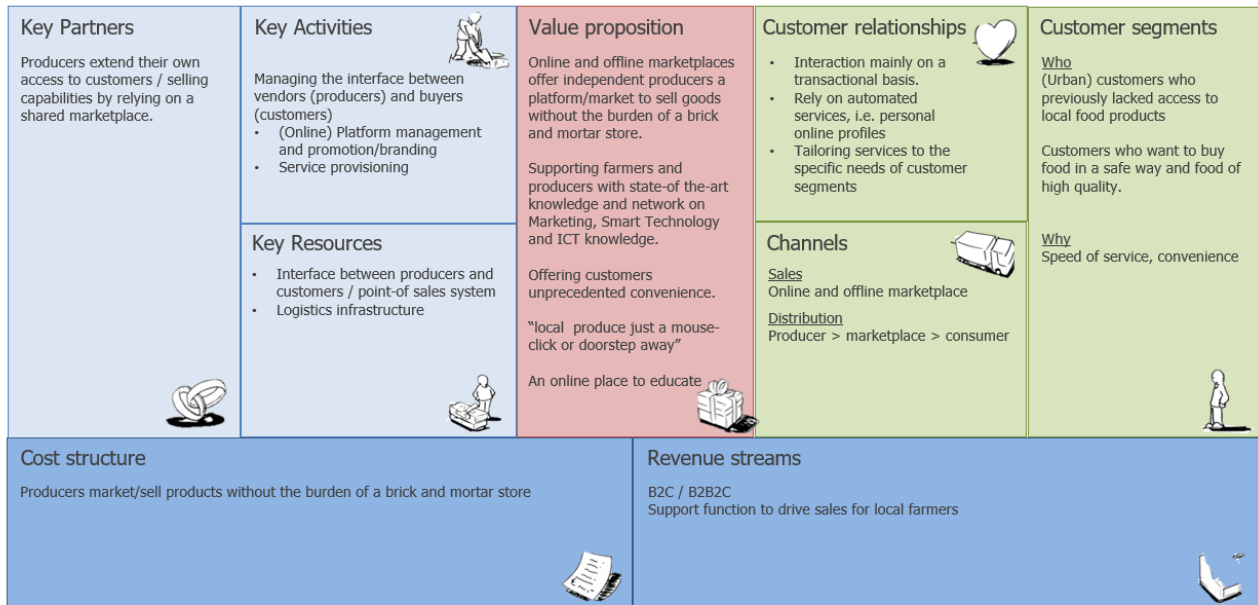
(initial model)

#### Relevant trends, key insights and market forces:

- Digitalization solutions are more widely available and lower priced. Since the COVID-19 pandemic online shopping and selling increased. Almost every producer has their own online services or an online shop and at least every off-line marketplace invested in online services like organizing home-delivery to meet the customers' needs of safe shopping and more convenience.
- Major advances in using technology for food packaging increase food safety and food quality and lessen environmental impact. Attractive and proper packaging becomes more relevant since home-delivery has increased.
- There is a lack of knowledge among SFSC members about smart technology, ICT and if and these elements will be relevant. A new activity for these marketplaces could be facilitating these forms Technological and ICT knowledge: such as through a knowledge bank.
- Customers are increasingly conscious about sustainable (social and environmental) issues. Implementing education /storytelling about the benefits of buying from SFSC through online platforms will add extra value and justify a higher price and less convenience compared to buying from longer chains.



## 4. Online and offline marketplace – final version



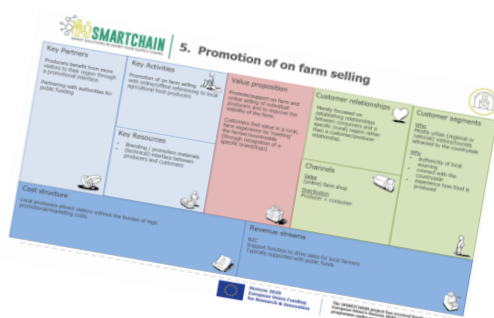
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Online retail is still growing fast, although online market places in fresh food remain behind general retail. Since COVID-19 promising traction for short food supply systems is observed. Online benefits of selling your local products 24/7 to an increasing group of potential customers who buy online are evident. Marketplaces offer independent producers a platform/market and marketing knowledge to sell goods without the burden of a brick-and-mortar store.

### 3.3.5 Promotion of on farm selling



(initial model)








### Relevant trends, key insights and market forces:

- Customer insights should be used to guide a Business Model. Consumer preferences are context and region specific. Research and sharing this (digital) marketing knowledge with participating producers will add value for SFSC members.
- Customers are increasingly conscious about sustainable (social and environmental) issues. Implementing education /storytelling on the (online) promotion activities about the benefits of buying from SFSC will add extra value by offering a place to learn.
- Implementing social innovation tools like co-creation and co-operation might not only reduces costs, but also add additional value and will result in more consumer commitment: Involving customers as online and offline ambassadors of SFSC and providing them marketing knowledge as well.



### 5. Promotion of on farm selling - final



|   |   |   |   |   |
|---|---|---|---|---|
| <p><b>Key Partners</b></p> <p>Producers benefit from more visitors to their region through a promotional interface.</p> <p>Partnering with marketing and ICT partners</p> <p>Partnering with authorities for public funding, public procurement and facilitating social innovation processes.</p>  | <p><b>Key Activities</b></p> <p>Promotion of on farm selling with online/offline referencing to local agricultural food producers</p> <p>Knowledge bank: facilitating and sharing knowledge on marketing and customer insights for food producers and ambassadors (consumers)</p> <p><b>Key Resources</b></p> <ul style="list-style-type: none"> <li>• Branding / promotion materials</li> <li>• (technical) interface between producers and customers</li> </ul>  | <p><b>Value proposition</b></p> <p>Promote/support:</p> <ul style="list-style-type: none"> <li>- on farm and online selling of individual producers</li> <li>- education by individual farmers or facilitated by the promotion organisation</li> <li>- improve the visibility of the farm.</li> </ul> <p>Customers find (through recognition of a specific brand/logo) value in a rural, farm experience by 'meeting' the farmer/countryside:</p> <ul style="list-style-type: none"> <li>- a place to learn e.g. environmentally/ social friendly way of producing</li> <li>- a place to co-create (e.g. pick-your self)</li> <li>- be an ambassador</li> </ul>  | <p><b>Customer relationships</b></p> <p>Merely focussed on establishing relationships between consumers and a specific (rural) region rather than a customer/producer relationship.</p> <p>Consumers as ambassadors</p> <p><b>Channels</b></p> <p><u>Sales</u><br/>(online) farm shop</p> <p><u>Distribution</u><br/>Producer &gt; consumer</p>  | <p><b>Customer segments</b></p> <p><u>Who</u><br/>Mostly urban (regional or national) visitors/tourists attracted to the countryside</p> <p><u>Why</u></p> <ul style="list-style-type: none"> <li>• authenticity of local sourcing</li> <li>• connect with the countryside</li> <li>• experience how food is produced</li> <li>• A place to learn (family with kids)</li> </ul>  |
| <p><b>Cost structure</b></p> <p>Local producers attract visitors without the burden of high promotional/marketing costs</p>    |   | <p><b>Revenue streams</b></p> <p>B2C<br/>Support function to drive sales for local farmers<br/>Typically supported with public funds</p>   |   |   |



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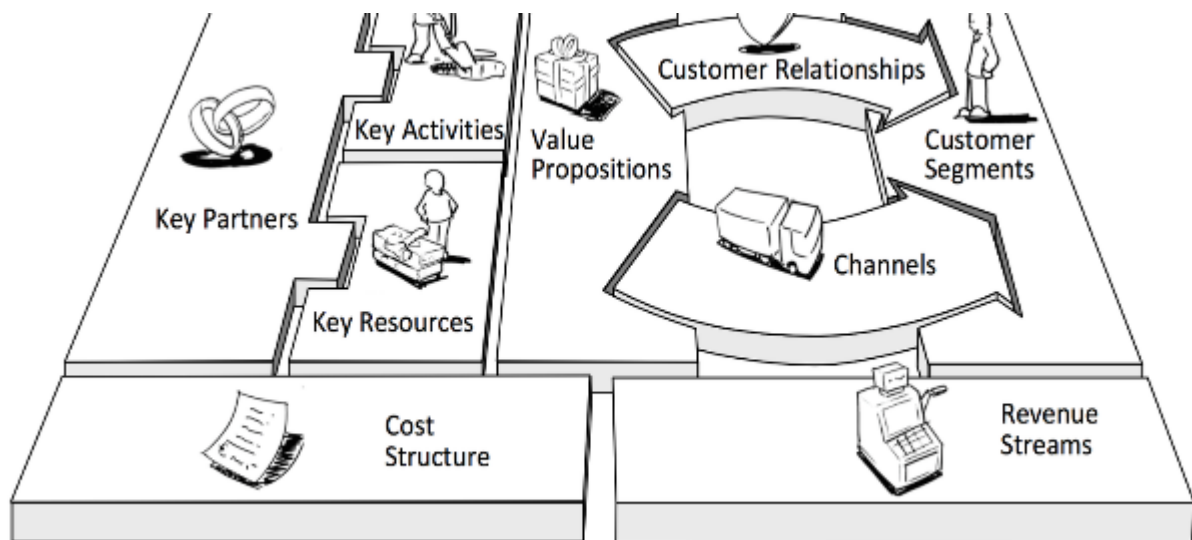
**Promotion of on farm selling:** This model has the primary objective to promote/support on farm and online selling of individual producers and to improve the visibility of the farm. Conducting marketing research on consumer behavior and sharing marketing knowledge with individual producers and ambassadors will add additional value. This is conducted at the local as well as regional and national level. These organizations are typically supported with public funds.

## Annex I Business Model Canvas vs. reference exploitation models

The **Business Model Canvas** is a shared language for describing, visualizing, assessing and changing business models. It describes the rationale of how an organization creates, delivers and captures value.

(A. Osterwalder, Y. Pigneur, **Business Model Generation**, (2010), Definition, The 9 building blocks, The Business Model Canvas pp 14-51)

The Business Model Canvas is separated into 9 portions, or blocks. Each block focuses on a different factor that a (start-up) business needs to consider. The canvas will help keep the entrepreneur's thoughts and ideas straight and focused. It is important to remember that these blocks are highly interrelated, and a hypothesis were to change in one block, the hypotheses of the other blocks may also be affected and require revision.



### *Business Model Canvas blocks*

- 1 **Value proposition:** The products and services a business offers. Quoting Osterwalder (2004), a value proposition "is an overall view of products and services that together represent value for a specific customer segment. It describes the way a firm differentiates itself from its competitors and is the reason why customers buy from a certain firm and not from another."
- 2 **Customer segments:** The target audience for a business' products and services.
- 3 **Channels:** The means by which a company delivers products and services to customers. This includes the company's marketing and distribution strategy.
- 4 **Customer relationship:** The links a company establishes between itself and its different customer segments. The process of managing customer relationships is referred to as customer relationship management.
- 5 **Key partners:** The business alliances that complement other aspects of the business model.

- 6 **Key activities:** The activities necessary to execute a company's business model.
- 7 **Key resources:** The resources necessary to create value for the customer.
- 8 **Cost structure:** The monetary consequences of the means employed in the business model.
- 9 **Revenue streams:** The way a company makes money through a variety of revenue flows. A company's income.

### **Business Model Canvas Methodology used as a basis for Reference Exploitation Models**

- 1.1. With the conventional use of the business model canvas methodology, the business model is focused on a **specific business**, identifying the pattern of how an organization creates, delivers and captures value. This approach was carried out for each case study (18) in Task 7.2.1.
- 1.2. Based on the confluence points between the 18 case studies, we identified five different initial reference exploitation models outlining possible ways and new directions for doing business in SFSCs. Canvas methodology is used as a basis.

**Reference exploitation models** focus on illuminating particular aspects of the model that stand out vs. other models. Each of the exploitation models have unique characteristics including pros and cons and are best suited to apply ongoing innovation and capture value considering their particular context (economic, social, cultural) and the relation between farmers, food producers and consumers.

**The reference exploitation models** outlining possible ways and new directions for SFSCs. It is important to understand that a Reference Exploitation model is not necessarily a rough picture of what a specific business model will actually look like. Rather it is a thinking tool that guides the exploration of the different directions that a business could be taken in regarding SFSCs". A method based on "Prototyping Business models". (A. Osterwalder, Y. Pigneur, **Business Model Generation**, (2010) Prototyping p 166-167).

## Annex II Case studies using Business Model Canvas

We used The Business Model Canvas as a visual chart to document the key aspects of the 18 existing SFSC businesses/case studies. We collected information under the nine areas critical to an organization or product's success – addressing value proposition, customers, infrastructure, and finances \*:

- **Value proposition:** Enables the description of products and services that add a certain value – what are the competitive advantages and what are the differentiate value – Information displayed in red colour;
- **Customers:** Enables the description of who is your consumer(s) and the market that your consumer(s) are – Information displayed in green colour;
- **Infrastructure:** Enables the description of the key connections of the business idea, 3 main pillars, partners, activities and resources – displayed in light blue;
- **Finances:** Description of costs and revenues of the business – information displayed in blue.

\*Because the 18 case studies contain business-sensitive information, the business models of the case studies are anonymous and business-sensitive information is removed, in order to make the report publicly available.

## Case study 1: Cooperative of producers - Organic fruit

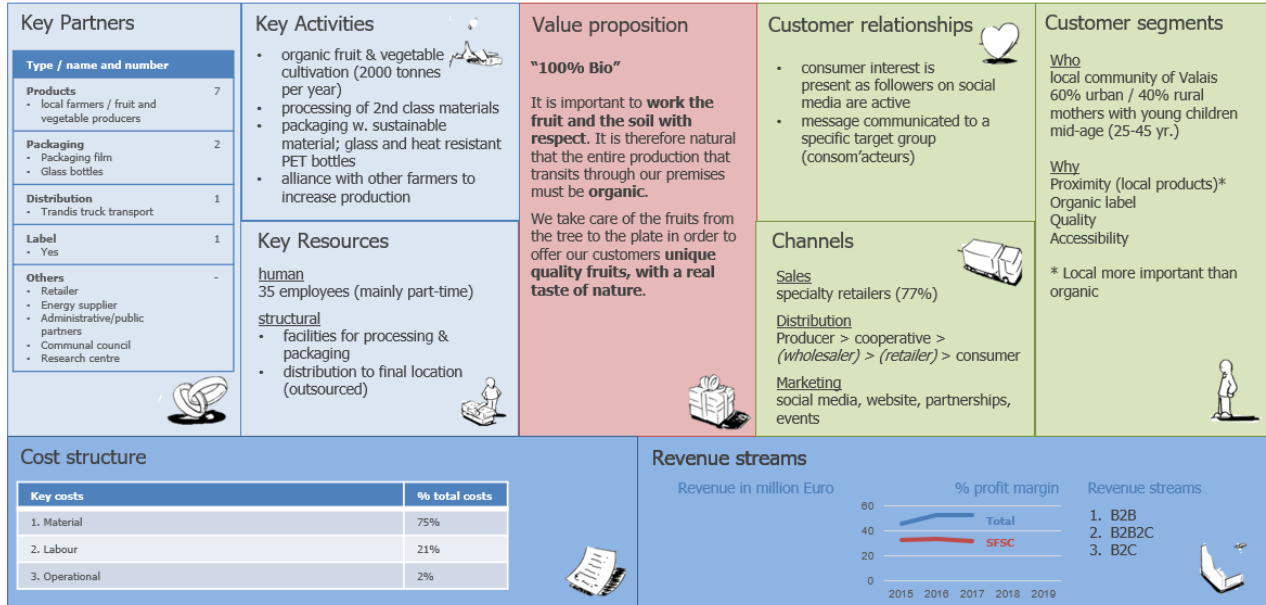


### CASE study 1

#### Organic Fruit

#### Cooperative of producers

Type: collective direct sales



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## Case study 2: Cooperative of producers – Marketplace of fresh and local produce

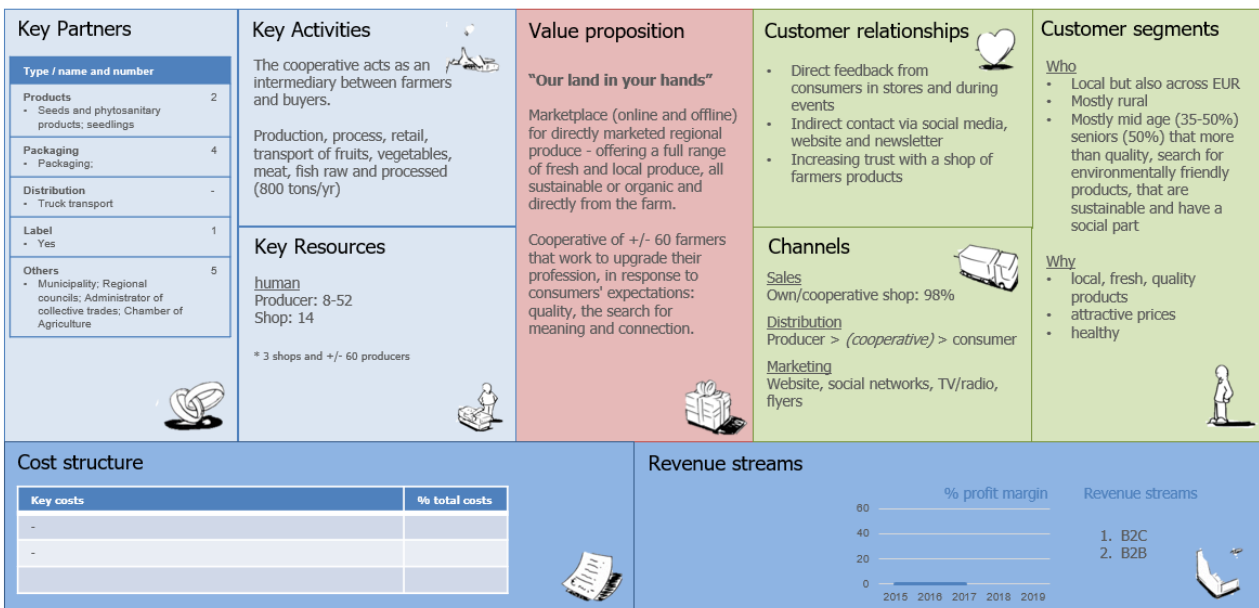


### CASE study 2

#### Marketplace of fresh and local produce

#### Cooperative of producers

Type: individual & collective direct sales



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### Case study 3: Cooperative of producers – Truffles



#### CASE study 3

**Truffles** | **Cooperative of producers**  
Type: collective direct sales

| <b>Key Partners</b><br><table border="1"> <thead> <tr> <th>Type / name and number</th> <th></th> </tr> </thead> <tbody> <tr> <td>Products</td> <td>1</td> </tr> <tr> <td>• Seed of black truffle</td> <td></td> </tr> <tr> <td>Packaging</td> <td>1</td> </tr> <tr> <td>• Packaging supplier</td> <td></td> </tr> <tr> <td>Distribution</td> <td>2</td> </tr> <tr> <td>• Delivery from cooperative to client</td> <td></td> </tr> <tr> <td>Label</td> <td>1</td> </tr> <tr> <td>-</td> <td></td> </tr> <tr> <td>Others</td> <td>3</td> </tr> <tr> <td>• Consultancy of economic-financial management</td> <td></td> </tr> </tbody> </table> | Type / name and number |               | Products | 1   | • Seed of black truffle |     | Packaging | 1   | • Packaging supplier  |  | Distribution | 2 | • Delivery from cooperative to client |  | Label | 1 | - |  | Others | 3 | • Consultancy of economic-financial management |  | <b>Key Activities</b><br><p>The cooperative acts as an intermediary between farmers and buyers (responsible for classification, cleaning and shipping &amp; marketing)</p> <p>Production, distribution and sales of natural, ecological and unique truffles</p> | <b>Value proposition</b><br><p><b>"A harmonious balance between the three elements earth, water and air, give origin to the black truffle"</b></p> <p>It is a very specific niche and very high-cost product for specific clients that cannot easily find another supplier.</p> <p>De cooperation was born with the aim of guaranteeing the quality of the truffles collected and professionalizing the sector.</p> | <b>Customer relationships</b><br><ul style="list-style-type: none"> <li>naturally occurring relationships with regular customers</li> <li>building trust by delivering high quality products.</li> <li>direct contact with customer (face to face, telephone, email) or restaurant</li> </ul> | <b>Customer segments</b><br><p><u>Who</u></p> <ul style="list-style-type: none"> <li>Regional</li> <li>90% urban / 10% rural</li> <li>high purchasing power</li> <li>environmentally conscious, with healthy lifestyles</li> </ul> <p><u>Why</u></p> <ul style="list-style-type: none"> <li>high quality niche product</li> <li>100% local</li> </ul> |
|---|------------------------|---------------|----------|-----|-------------------------|-----|-----------|-----|---|--|--------------|---|---------------------------------------|--|-------|---|---|--|--------|---|--|--|---|---|---|---|
| Type / name and number  |                        |               |          |     |                         |     |           |     |   |  |              |   |                                       |  |       |   |   |  |        |   |  |  |   |   |   |   |
| Products  | 1                      |               |          |     |                         |     |           |     |   |  |              |   |                                       |  |       |   |   |  |        |   |  |  |   |   |   |   |
| • Seed of black truffle   |                        |               |          |     |                         |     |           |     |   |  |              |   |                                       |  |       |   |   |  |        |   |  |  |   |   |   |   |
| Packaging   | 1                      |               |          |     |                         |     |           |     |   |  |              |   |                                       |  |       |   |   |  |        |   |  |  |   |   |   |   |
| • Packaging supplier  |                        |               |          |     |                         |     |           |     |   |  |              |   |                                       |  |       |   |   |  |        |   |  |  |   |   |   |   |
| Distribution  | 2                      |               |          |     |                         |     |           |     |   |  |              |   |                                       |  |       |   |   |  |        |   |  |  |   |   |   |   |
| • Delivery from cooperative to client   |                        |               |          |     |                         |     |           |     |   |  |              |   |                                       |  |       |   |   |  |        |   |  |  |   |   |   |   |
| Label   | 1                      |               |          |     |                         |     |           |     |   |  |              |   |                                       |  |       |   |   |  |        |   |  |  |   |   |   |   |
| -   |                        |               |          |     |                         |     |           |     |   |  |              |   |                                       |  |       |   |   |  |        |   |  |  |   |   |   |   |
| Others  | 3                      |               |          |     |                         |     |           |     |   |  |              |   |                                       |  |       |   |   |  |        |   |  |  |   |   |   |   |
| • Consultancy of economic-financial management  |                        |               |          |     |                         |     |           |     |   |  |              |   |                                       |  |       |   |   |  |        |   |  |  |   |   |   |   |
| <b>Cost structure</b><br><table border="1"> <thead> <tr> <th>Key costs</th> <th>% total costs</th> </tr> </thead> <tbody> <tr> <td>Labour</td> <td>48%</td> </tr> <tr> <td>Marketing</td> <td>18%</td> </tr> <tr> <td>Material</td> <td>14%</td> </tr> </tbody> </table>  | Key costs              | % total costs | Labour   | 48% | Marketing               | 18% | Material  | 14% | <b>Revenue streams</b><br><p><b>Revenue streams</b></p> <ol style="list-style-type: none"> <li>B2C</li> <li>B2B2C</li> <li>B2B</li> </ol> |  |              |   |                                       |  |       |   |   |  |        |   |  |  |   |   |   |   |
| Key costs   | % total costs          |               |          |     |                         |     |           |     |   |  |              |   |                                       |  |       |   |   |  |        |   |  |  |   |   |   |   |
| Labour  | 48%                    |               |          |     |                         |     |           |     |   |  |              |   |                                       |  |       |   |   |  |        |   |  |  |   |   |   |   |
| Marketing   | 18%                    |               |          |     |                         |     |           |     |   |  |              |   |                                       |  |       |   |   |  |        |   |  |  |   |   |   |   |
| Material  | 14%                    |               |          |     |                         |     |           |     |   |  |              |   |                                       |  |       |   |   |  |        |   |  |  |   |   |   |   |

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### Case study 4: Cooperative of producers – Organic fresh fruits and vegetables



#### CASE study 4

**Organic fresh fruits & vegetables** | **Cooperative of producers**  
Type: collective direct sales

| <b>Key Partners</b><br><table border="1"> <thead> <tr> <th>Type / name and number</th> <th></th> </tr> </thead> <tbody> <tr> <td>Products</td> <td>-</td> </tr> <tr> <td>-</td> <td></td> </tr> <tr> <td>Packaging</td> <td>-</td> </tr> <tr> <td>-</td> <td></td> </tr> <tr> <td>Distribution</td> <td>-</td> </tr> <tr> <td>-</td> <td></td> </tr> <tr> <td>Label</td> <td>-</td> </tr> <tr> <td>-</td> <td></td> </tr> <tr> <td>Others</td> <td>-</td> </tr> <tr> <td>-</td> <td></td> </tr> </tbody> </table> | Type / name and number |               | Products | - | - |  | Packaging | - | -                          |  | Distribution | - | - |  | Label | - | - |  | Others | - | - |  | <b>Key Activities</b><br><p>Production, process, retail of organic fresh fruits and vegetables (6000 ha, 4.4 tons/yr)</p> | <b>Value proposition</b><br><p><b>Organic farmers since 1978</b></p> <p>A story of change, responsibility and innovation.</p> <p><b>"We work for what is good, clean and fair"</b></p> <p>Cooperative enterprise of farmers, beekeepers and processors who have, since the 1970s, striven both within the country and farther afield to produce delicious, healthy, and nourishing food that comes from agriculture that respects the land.</p> | <b>Customer relationships</b><br><ul style="list-style-type: none"> <li>Measure consumer engagement via company specific tools</li> <li>Building trust by always heading in the direction of healthy nutrition and ongoing interactions with consumers</li> </ul> | <b>Customer segments</b><br><p><u>Who</u></p> <ul style="list-style-type: none"> <li>Hospitalised people</li> <li>Conscious parents interested in baby food</li> </ul> <p><u>Why</u></p> <ul style="list-style-type: none"> <li>Frailty of hospitalised people</li> <li>Special attention to baby nutrition for conscious parents</li> </ul> |
|---|------------------------|---------------|----------|---|---|--|-----------|---|----------------------------|--|--------------|---|---|--|-------|---|---|--|--------|---|---|--|---|---|---|--|
| Type / name and number  |                        |               |          |   |   |  |           |   |                            |  |              |   |   |  |       |   |   |  |        |   |   |  |   |   |   |  |
| Products  | -                      |               |          |   |   |  |           |   |                            |  |              |   |   |  |       |   |   |  |        |   |   |  |   |   |   |  |
| -   |                        |               |          |   |   |  |           |   |                            |  |              |   |   |  |       |   |   |  |        |   |   |  |   |   |   |  |
| Packaging   | -                      |               |          |   |   |  |           |   |                            |  |              |   |   |  |       |   |   |  |        |   |   |  |   |   |   |  |
| -   |                        |               |          |   |   |  |           |   |                            |  |              |   |   |  |       |   |   |  |        |   |   |  |   |   |   |  |
| Distribution  | -                      |               |          |   |   |  |           |   |                            |  |              |   |   |  |       |   |   |  |        |   |   |  |   |   |   |  |
| -   |                        |               |          |   |   |  |           |   |                            |  |              |   |   |  |       |   |   |  |        |   |   |  |   |   |   |  |
| Label   | -                      |               |          |   |   |  |           |   |                            |  |              |   |   |  |       |   |   |  |        |   |   |  |   |   |   |  |
| -   |                        |               |          |   |   |  |           |   |                            |  |              |   |   |  |       |   |   |  |        |   |   |  |   |   |   |  |
| Others  | -                      |               |          |   |   |  |           |   |                            |  |              |   |   |  |       |   |   |  |        |   |   |  |   |   |   |  |
| -   |                        |               |          |   |   |  |           |   |                            |  |              |   |   |  |       |   |   |  |        |   |   |  |   |   |   |  |
| <b>Cost structure</b><br><table border="1"> <thead> <tr> <th>Key costs</th> <th>% total costs</th> </tr> </thead> <tbody> <tr> <td>-</td> <td></td> </tr> <tr> <td>-</td> <td></td> </tr> <tr> <td>-</td> <td></td> </tr> </tbody> </table>   | Key costs              | % total costs | -        |   | - |  | -         |   | <b>Revenue streams</b><br> |  |              |   |   |  |       |   |   |  |        |   |   |  |   |   |   |  |
| Key costs   | % total costs          |               |          |   |   |  |           |   |                            |  |              |   |   |  |       |   |   |  |        |   |   |  |   |   |   |  |
| -   |                        |               |          |   |   |  |           |   |                            |  |              |   |   |  |       |   |   |  |        |   |   |  |   |   |   |  |
| -   |                        |               |          |   |   |  |           |   |                            |  |              |   |   |  |       |   |   |  |        |   |   |  |   |   |   |  |
| -   |                        |               |          |   |   |  |           |   |                            |  |              |   |   |  |       |   |   |  |        |   |   |  |   |   |   |  |

**Horizon 2020 European Union Funding for Research & Innovation**

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## Case study 5: Cooperative of producers – Foie Gras

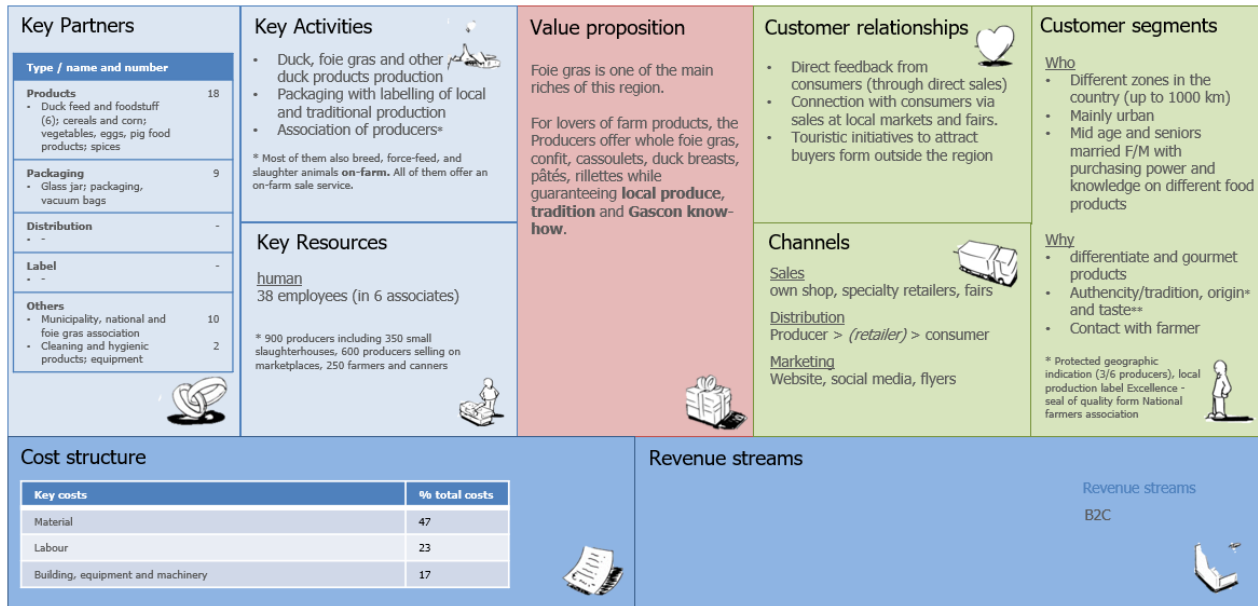


### CASE study 5

Foie Gras

Cooperative of producers

Type: partnership



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## Case study 6: Cooperative of producers – processing of fruit and vegetables

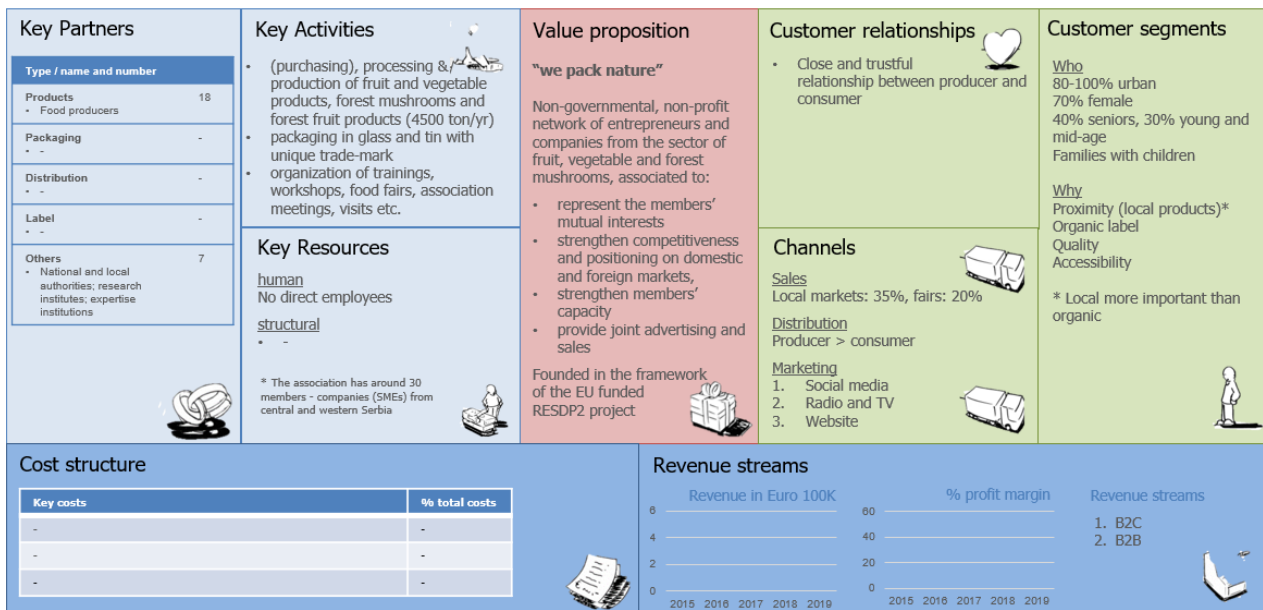


### CASE study 6

processing of fruit & vegetables

Cooperative of producers

Type: Collective direct sales



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## Case study 7: Individual Producers – vinegar and acetic acid

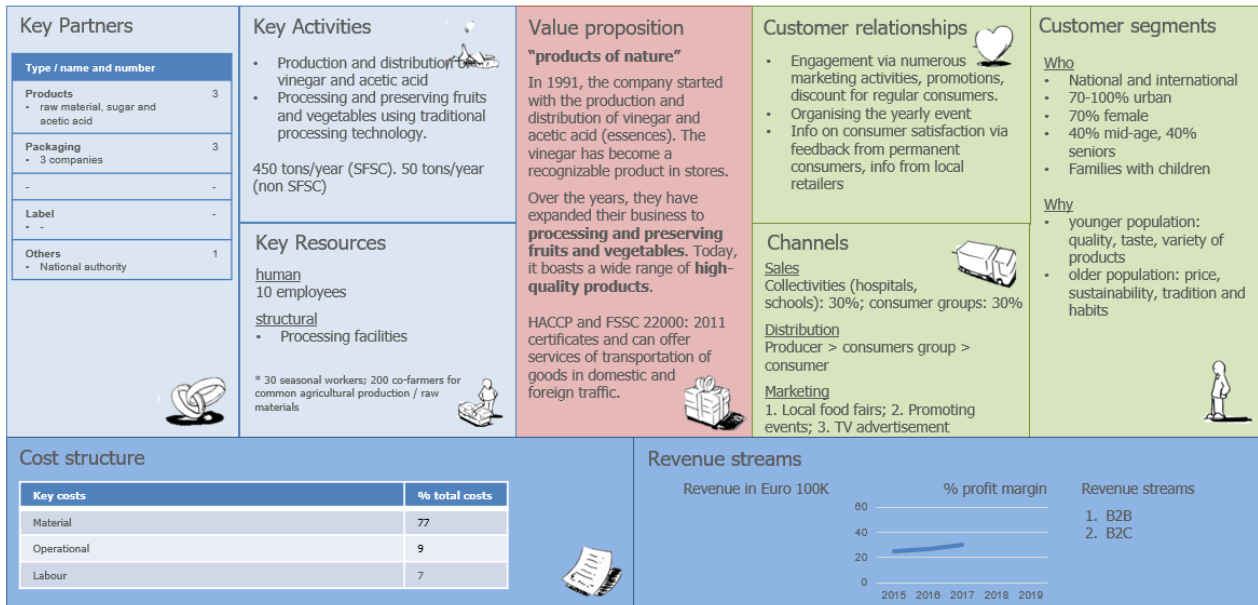


### CASE study 7

**vinegar and acetic acid**

**Individual Producers**

Type: Individual direct sales



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## Case study 8: Individual Producers – Natural free-range grass-fed meat

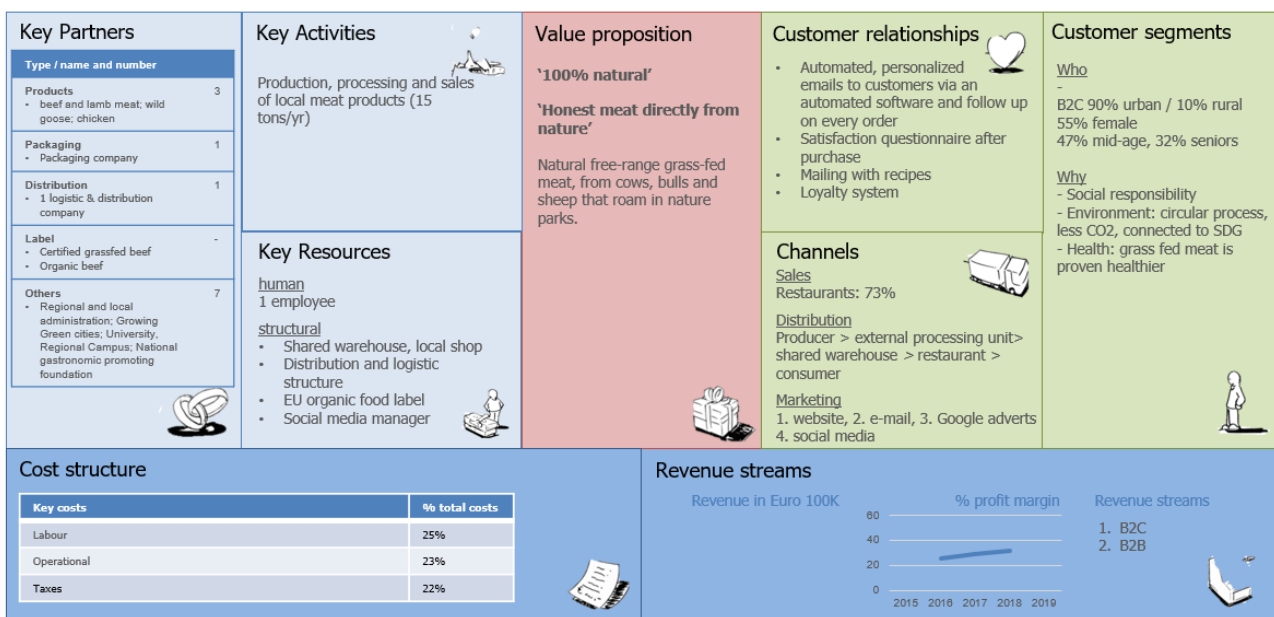


### CASE study 8

**Natural free-range grass-fed meat**

**Individual Producers**

Type: individual direct sales



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## Case study 9: Individual Producers – Goat cheese

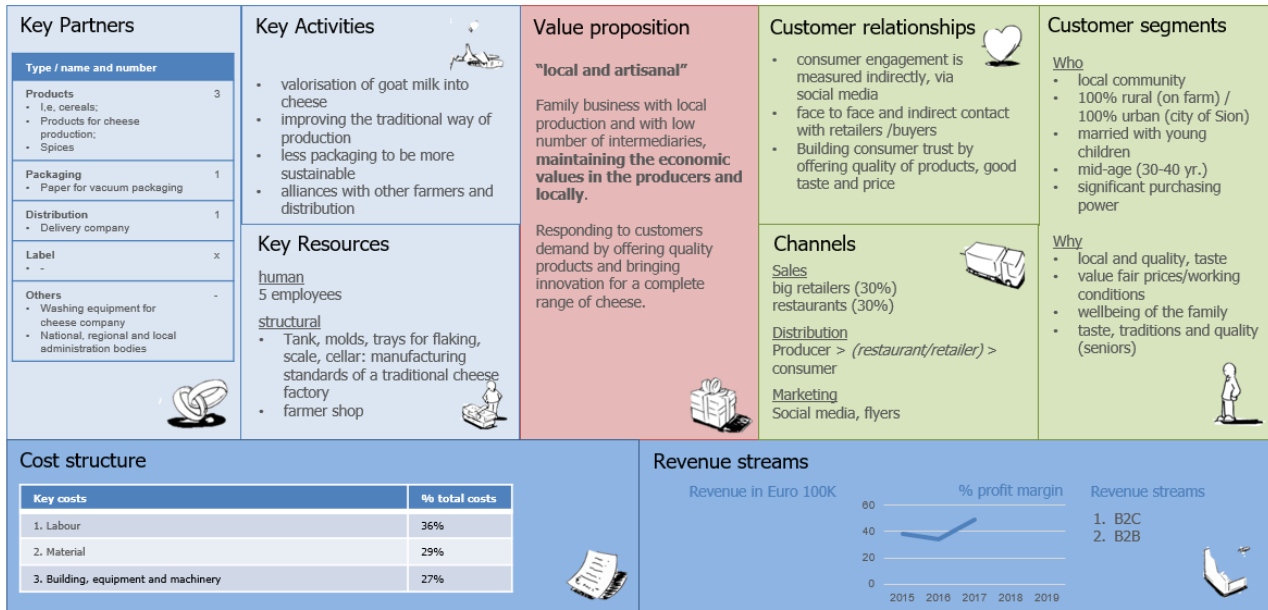


### CASE study 9

Goat cheese

Individual producers

Type: individual direct sales



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## Case study 10: Individual Producers – Organic vegetables & job opportunities

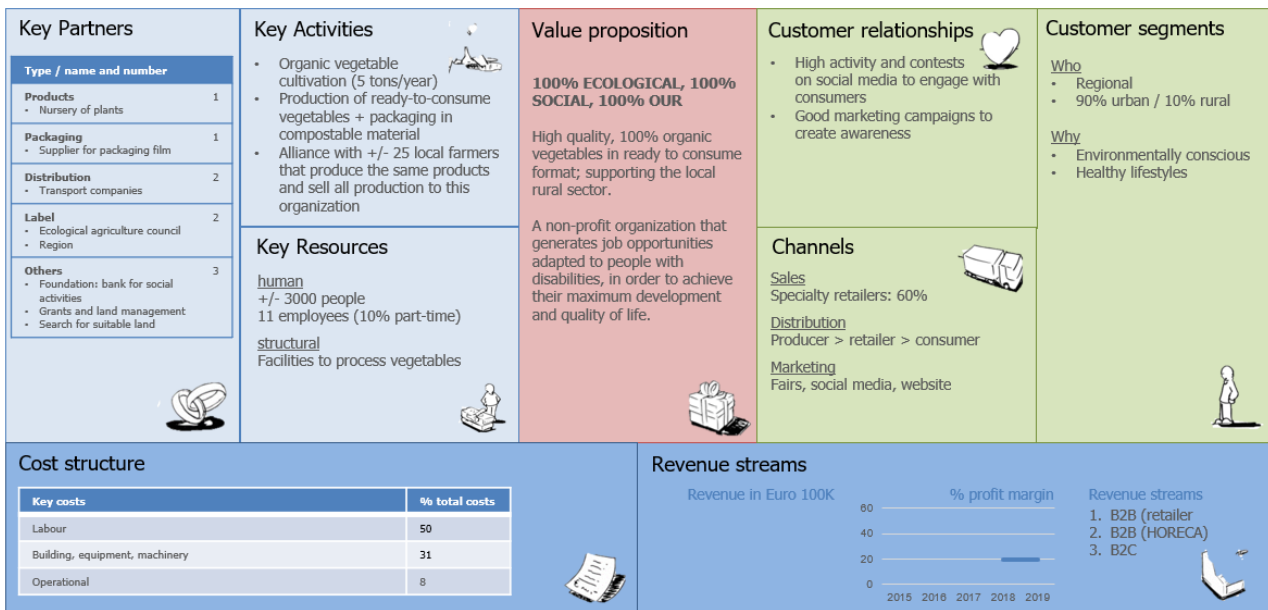


### CASE study 10

Organic vegetables & job opportunities

Individual producers

Type: individual & collective direct sales



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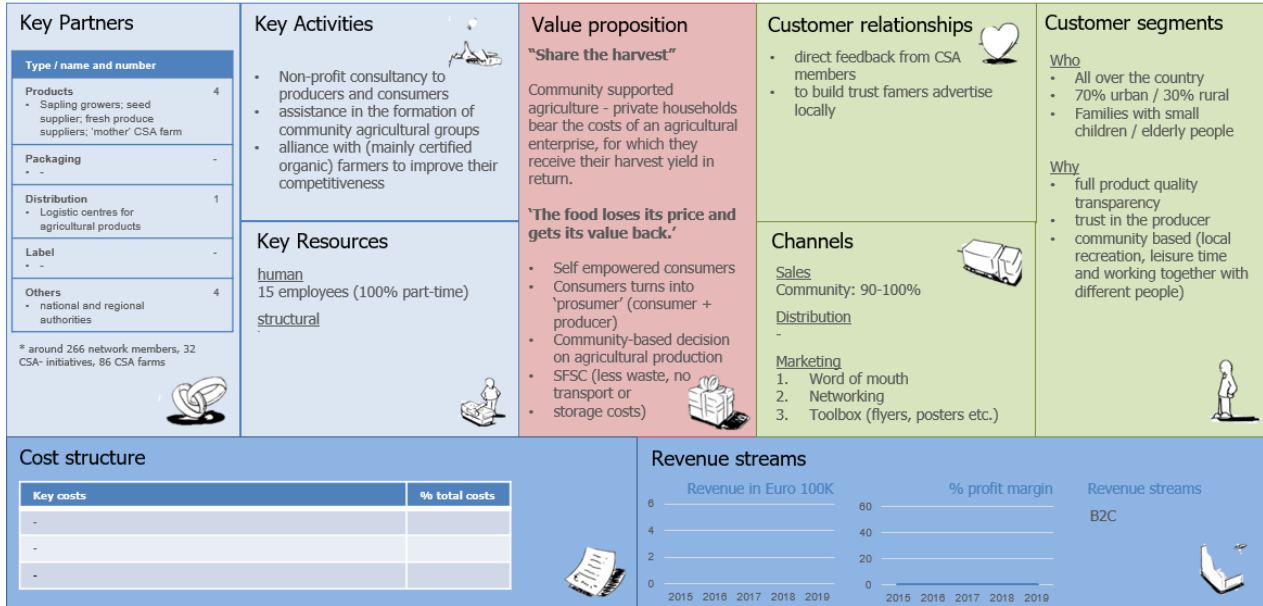
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## Case study 11: Community supported agriculture – National concept



### CASE study 11

**National concept** | **Community supported Agriculture**  
Type: partnership



Horizon 2020 European Union Funding for Research & Innovation

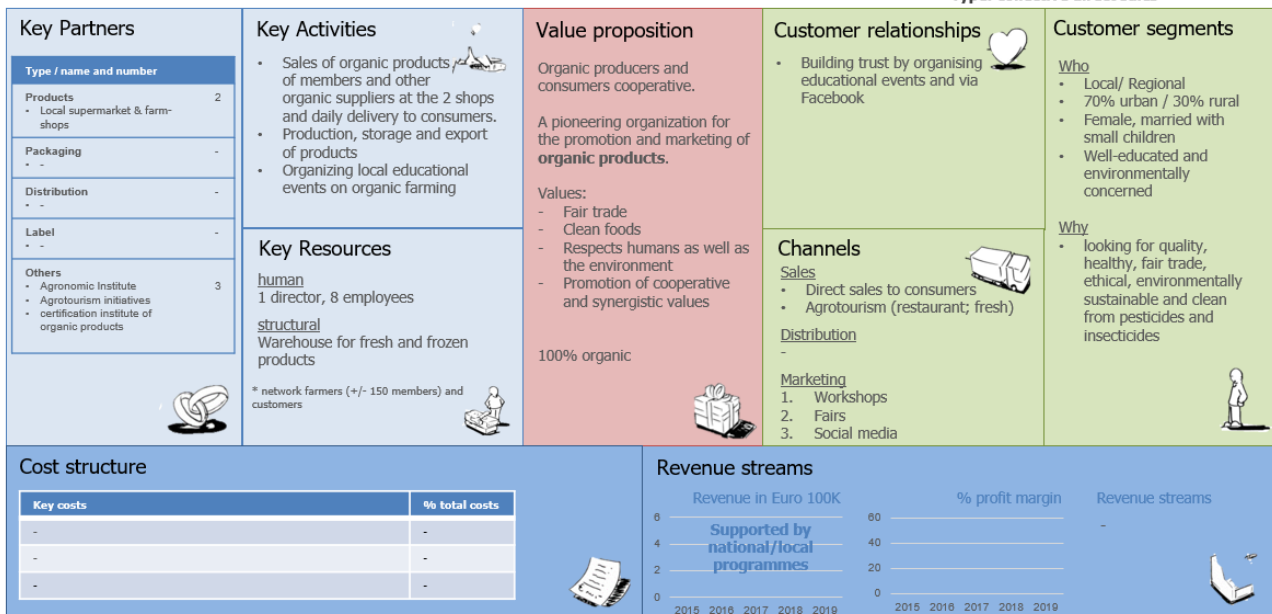
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## Case study 12: Community supported agriculture – local level



### CASE study 12

**Local level** | **Community supported agriculture**  
Type: collective direct sales



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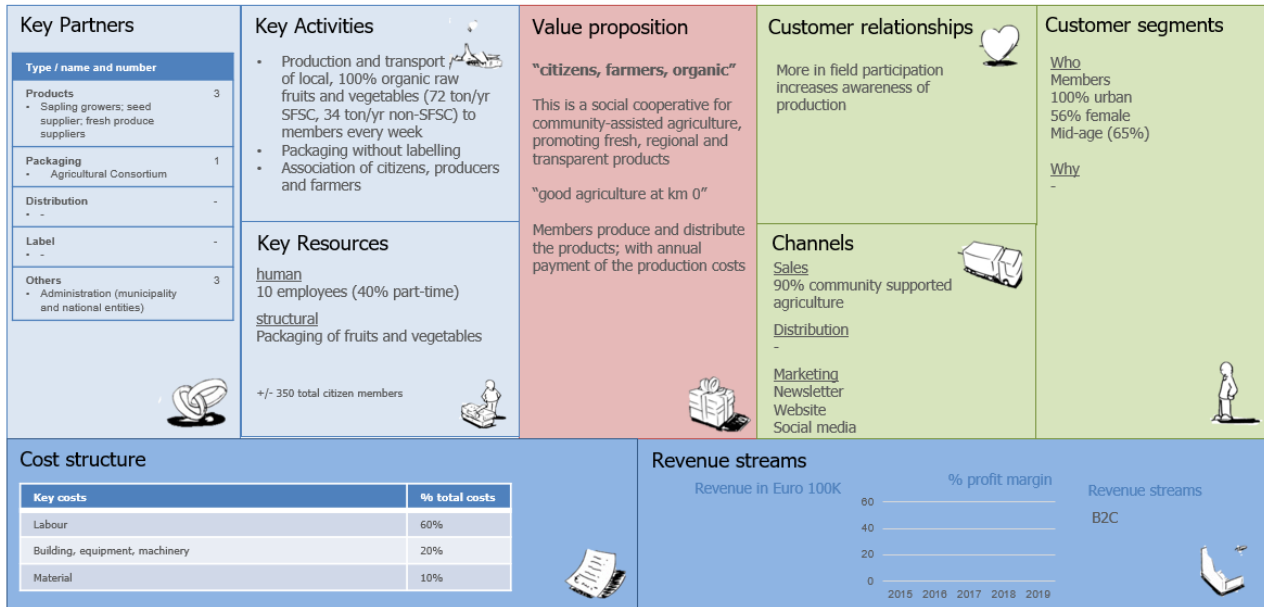
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## Case study 13: Community supported agriculture – local level



### CASE study 13

**Local level** | **Community supported agriculture**  
Type: partnership



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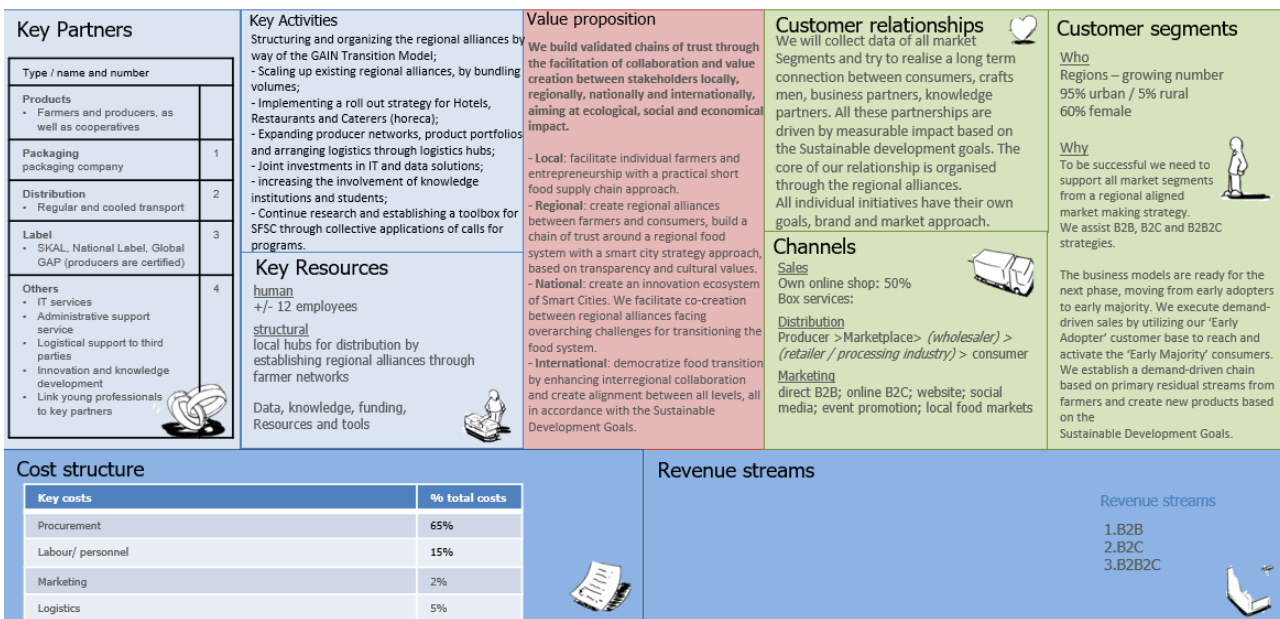
The SMARTCHAIN project has received funding from the European Union's Horizon 2020 research and innovation programme under grant agreement No. 773785

## Case study 14: Marketplace – Building SFSC chains on all levels



### CASE study 14

**Building SFSC chains on all levels** | **Marketplace: online & offline**  
Type: individual & collective direct sales



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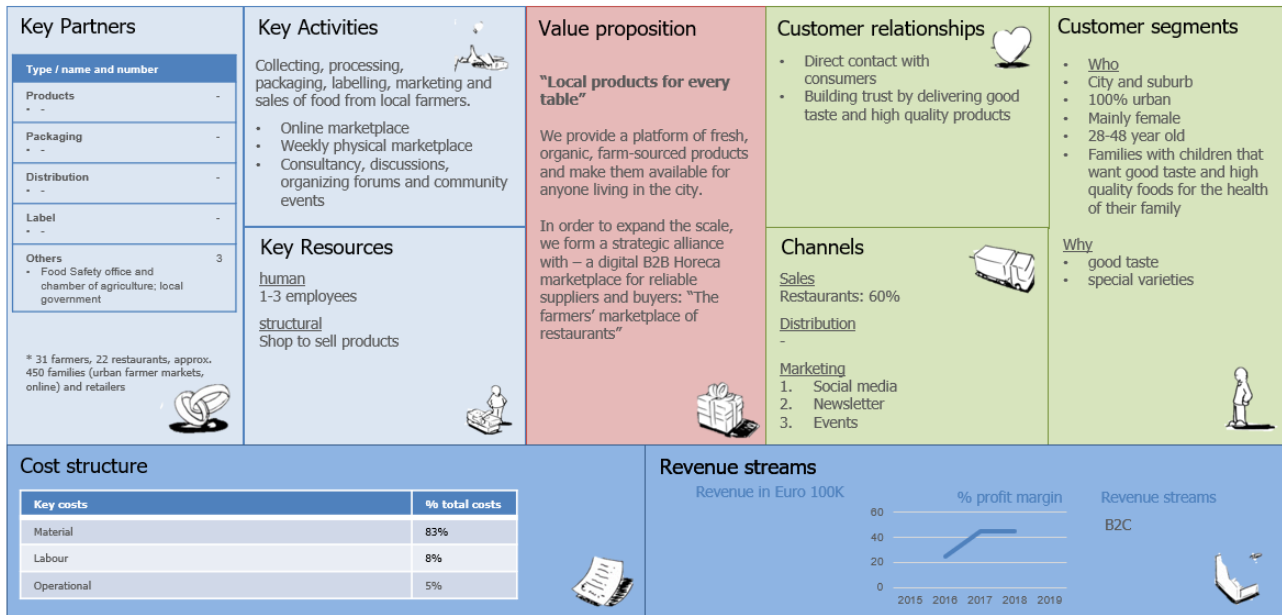
## Case study 15: Marketplace – Fresh organic farm-sourced products



### CASE study 15

Fresh, organic farm-sourced products

Marketplace: online & offline  
Type: individual direct sales



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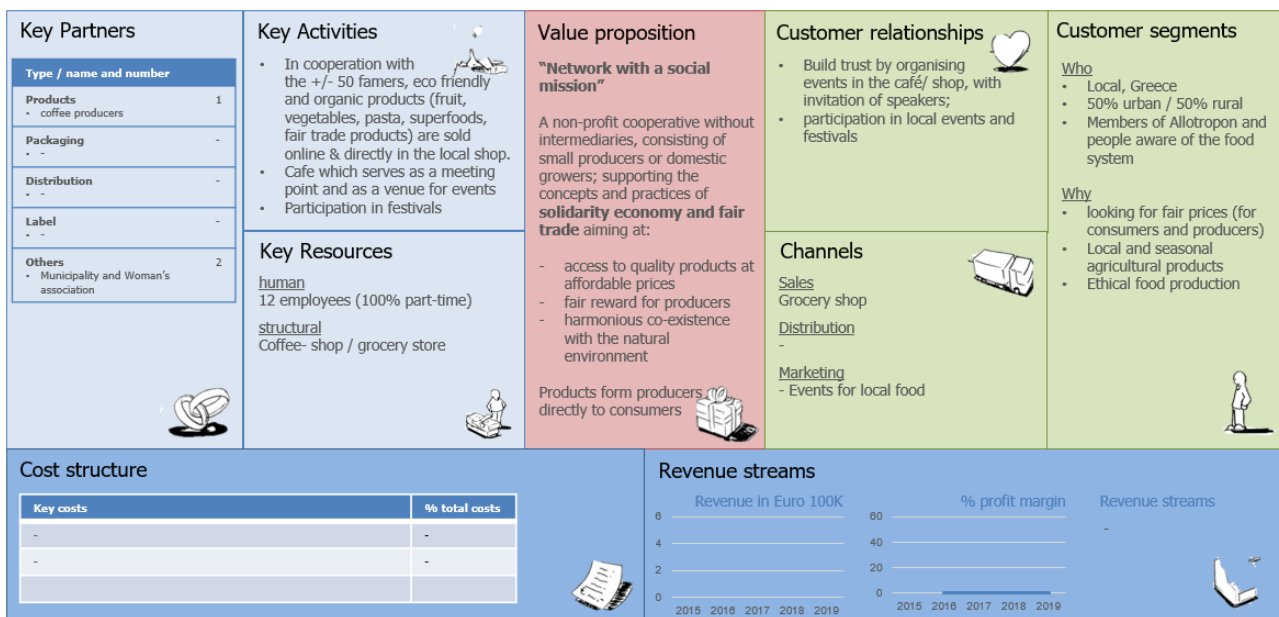
## Case study 16: Marketplace – Network with a social mission



### CASE study 16

Network with a social mission

MARKETPLACE online & offline  
Type: partnership



Horizon 2020 European Union Funding for Research & Innovation

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## Case study 17: Promotion of on farm selling – National level

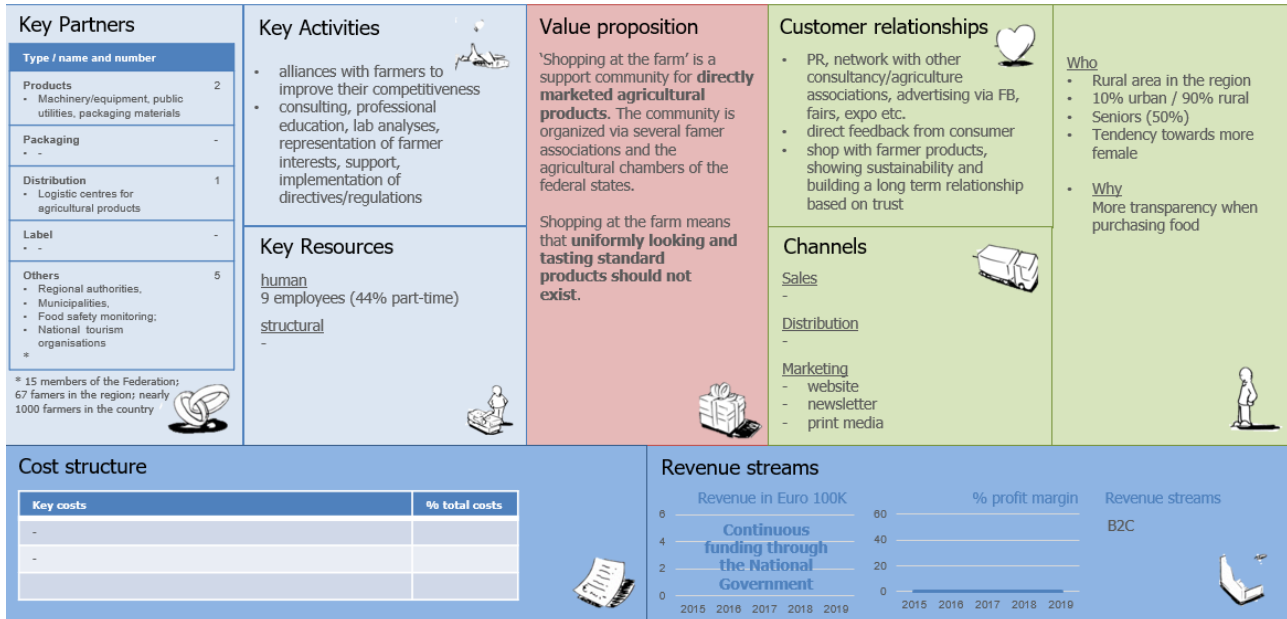


### CASE study 17

National level

Promotion of on farm selling

Type: individual & collective direct sales



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## Case study 18: Promotion of on farm selling – Regional level

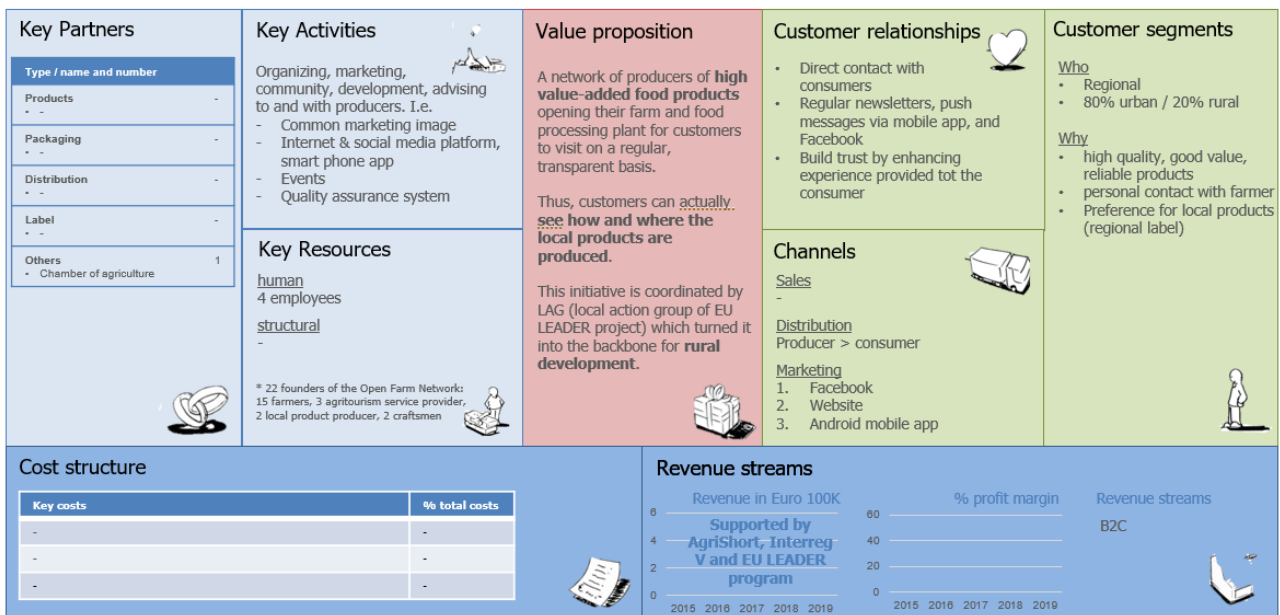


### CASE study 18

Regional level

Promotion of on farm selling

Type: collective direct sales



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## Annex III Characteristics and case study examples per initial reference exploitation model



### reference exploitation models

#### Reference exploitation model

|   |   |
|---|---|
|    | <b>1. Cooperative of producers</b>        |
|    | <b>2. Individual producers</b>            |
|    | <b>3. Community supported agriculture</b> |
|   | <b>4. Online and offline marketplace</b>  |
|  | <b>5. Promotion of on farm selling</b>    |

#### Generic characteristics

- **Cooperation of producers**
  - Shared production, distribution and sales
  - Shared branding and values
- **Individual producers**
  - Individual production/processing, distribution and sales
  - Individual branding and values
- **Community supported/owned production**
  - Shared production, harvest and consumption
  - Profit for the community objectives
- **Online and offline marketplace for agricultural food products**
  - Marketing/promotion, distribution and sales via market place
  - Support function to drive sales for local farmers
- **Promotion of on farm selling with online/offline referencing to local agricultural food producers**
  - Marketing/promotion of local agricultural food producers
  - Support function to drive sales for local farmers

#### Case study examples

- Case study 1 - Organic Fruit
- Case study 2 - marketplace of fresh and local produce
- Case study 3 - Truffles
- Case study 4 - Organic fresh fruits and vegetables
- Case study 5 - Foie Gras
- Case study 6 - Processing of fruit & vegetables
- Case study 7 - Vinegar and acetic acid
- Case study 8 - Natural free-range grass-fed meat
- Case study 9 - Goat cheese
- Case study 10 - Job opportunities
- Case study 11 - CSA on a national level
- Case study 12 - CSA on a local level
- Case study 13 - CSA on a local level
- Case study 14 – Building SFSC chains on all levels
- Case study 15 - Fresh, organic farm-sourced products
- Case study 16 – Network with a social mission
- Case study 17 – National level
- Case study 18 – Regional level

## 5 reference exploitation models

### Reference exploitation model



#### 1. Cooperative of producers

### Generic characteristics

- **Cooperative of producers**
- Shared production, distribution and sales
- Shared branding and values

**A cooperative of producers**, allows its members, who produce the same or similar products, to cooperatively produce, process, distribute, market and sell the products. Typically, this model is chosen when production and processing is relatively expensive and can be difficult to source as an individual. Moreover, when marketing and selling are combined, it is possible to develop more and different sales channels.



#### 2. Individual producers

- **Individual producers**
- Individual production/processing, distribution and sales
- Individual branding and values

Many farms operated as individually owned businesses. The individually owned business is probably the oldest and most common form. One person, family or small group of people owns, controls and conducts the business. Individual producers typically have a rich (family) heritage, and relatively simple (inexpensive) processing or distribution is required. Sales channels are typically an online or onsite farm shop. Besides farming, new activities as 'a place to educate' and employing underprivileged- or disabled people, lead to more engagement from the social community and new revenue streams.



#### 3. Community supported agriculture

- **Community supported/owned production**
- Shared production, harvest and consumption
- Profit for the community objectives

The **community supported agriculture** model has been in place for many farms for some time now. The traditional model placed substantial emphasis on sustainable agriculture, shared production risk, consumer involvement with production activities, and authenticity of local sourcing. Over the years, different types of community supported agriculture have evolved

- Subscription model: subscription-based contract for the produce from the land
- Shareholder model: buy shares and produce from the land
- Community model: invest and operate farm/land and share the produce with the community.



#### 4. Online and offline marketplace

- **Online and offline marketplace for agricultural food products**
- Marketing/promotion, distribution and sales via market place
- Support function to drive sales for local farmers

Online retail is still growing fast, although online marketplaces in fresh food remain behind general retail. Since COVID-19 promising traction for short food supply systems is observed. Online benefits of selling your local products 24/7 to an increasing group of potential customers who buy online are evident. Marketplaces offer independent producers a platform/market and marketing knowledge to sell goods without the burden of a brick-and-mortar store.



#### 5. Promotion of on farm selling

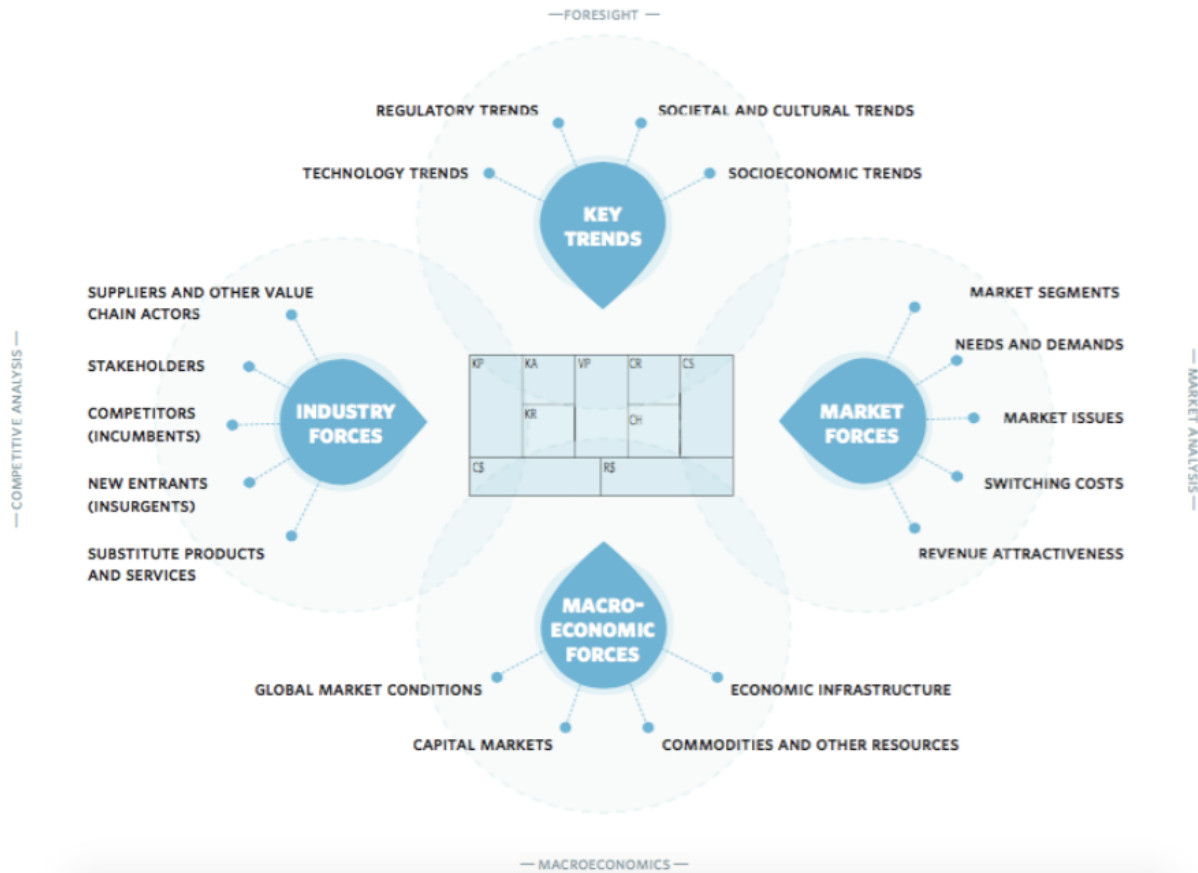
- **Promotion of on farm selling with online/offline referencing to local agricultural food producers**
- Marketing/promotion of local agricultural food producers
- Support function to drive sales for local farmers

Promotion of on farm selling: This model has the primary objective to promote/support on farm and online selling of individual producers and to improve the visibility on the farm. Conducting marketing research on consumer behavior and sharing marketing knowledge with individual producers and ambassadors will add additional value. This is conducted at the local as well as regional and national level. These organizations are typically supported with public funds.



## Annex IV Business Model Environment tool

Business models are designed and executed in specific environments. Environmental scanning is important because of the landscape is changing continuously. The Business Model Environment tool is organised into four areas: Market Forces, Key Trends, Industry Forces and Macro-Economic Trends. These areas surround the Business Model Canvas as they influence the Business Model.



(A. Osterwalder & Y. Pigneur, **Business Model Generation**, (2010), Business Model Environment p 200-211.)

## Annex V                      Subtasks and typical problems, barriers and needs of SFSCs

D.2.2 provides a context and describes the subtasks and typical problems, barriers & needs of the SFSCs. These components are used as input for describing the 'landscape' in the business model environment tool.

### **Subtasks of SFSC:**

- Farming and primary production
- Processing and packaging
- Transport, logistics and storage
- Product integrity, authenticity, transparency and labelling
- Marketing
- Food chain management & networking
- Business Modelling
- Policy
- Environment

### **Typical problems, barriers & needs of the SFSCs:**

- Limited volume
- Perishability of some products
- Limited access to resources (material, infrastructure, technology, technical knowledge, financial)
- Limited availability labour force
- High cost of logistics/product unit
- Poor direct access/links to consumers – low awareness of consumers
- Lack of trust of consumers
- Low negotiating power with retailers, large service providers, large customers, intermediaries, municipal government
- Relatively high price- low adaptation capability to price competition
- Lack of information and knowledge of product development skills, advanced technologies, marketing, awareness of public funding opportunities, understanding of and compliance with legal requirements
- Lack of collaboration with peers, other SFSC members.