



TRUEFOOD

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Summary report including comparison between member states

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Summary

This summary report is produced within the work package 5 of the Truefood project for selected traditional food supply chains in Belgium, Hungary and Italy. Supply chains of the dairy, meat, beverage and vegetable sectors are described.

The bottlenecks and success factors in the traditional food sector are investigated focusing on supply chain resources and marketing capabilities of traditional food producers. In addition, bottlenecks and success factors of the traditional firm's innovativeness are explored. Supply chain resources are analysed regarding networking, collaboration in the supply chain, balance of satisfaction and power, resources and institutions were investigated. Within the marketing management capabilities the aspects of market information, market segmentation, marketing objectives, marketing strategy, marketing mix, marketing budget and marketing evaluation were analysed.

At this step of the research there are three main bottlenecks identified both related to the resources of a traditional food producer and his innovativeness: the lack of understanding the importance of certain activities, the lack of knowledge of appropriate methods and skills, and the lack of financial and physical resources. In consequence the reduction or elimination of these main bottlenecks would improve the resources of a traditional food producers as well as his innovativeness.

There are subsequent bottlenecks specific to the different selected traditional food supply chains, which will be investigated in future research steps, namely focus groups and survey.

1. Introduction

The European food sector produces numerous traditional food products (TFP). Studies on food types such as 'healthy' food, 'functional' food, GMO-food and organic food already exists (e.g. Bech-Larsen and Grunert, 2003; Giraud, 2004; Magnusson and Koivisto Hursti, 2002). However, few published studies are related to TFP and even less to innovations in those food production systems.

TRUEFOOD aims to improve quality and safety of traditional food products, to support the marketing and supply chain development of traditional food products and to introduce innovation into traditional European food production systems, through research, demonstration, dissemination and training activities.

Work package 5 (WP5) is a part of the TRUEFOOD-project. The aim of WP5 is to develop strategies to improve marketing and supply chain organisation methods for traditional food products. Therefore WP5 is divided into four subtasks:

- Subtask 5.1** Determinants of bottlenecks and success factors of traditional food producers (i - iii)
- Subtask 5.2** Benchmark for evaluating marketing management capabilities of traditional food producers (iv - v)
- Subtask 5.3** Indicators of overall traditional food supply chain performance (vi)
- Subtask 5.4** Innovative distribution strategies for traditional food products' (vii)

Within work package 5 traditional products are defined as followed:

1. **Production:** the key steps of production must be local (national/regional/local). Once firms start to produce in other countries, the food is no longer considered as traditional.
2. **Authentic:** the product has to fulfil at least one of the following steps: authentic recipe (mix of ingredients) and/or authentic origin of raw material and/or authentic production process
3. **Commercially available** for the public for at least 50 years (= 1950 and before) in stores or restaurants; it may happen that during that period the food product disappeared from the market, but it was on market at least 50 years ago.
4. **Gastronomic heritage:** the product must have a story which is -or can be- written down in 2-3 pages

This report is part of subtask 5.1 and deals with the description of selected traditional food supply chains in Belgium, Hungary and Italy and the investigation of bottlenecks and success factors of traditional food producers.

The report is structured as followed. In the next chapter the conceptual framework for investigation of bottlenecks and success factors is presented. Then, the selected food supply chains are described. Following, bottlenecks and success factors in the traditional food sector and of innovations are investigated. Finally, conclusions are drawn.

2. Conceptual framework

This chapter describes the research framework for bottlenecks and success factors of traditional food producers investigated under subtask 5.1. Since the objective of WP5 is to improve marketing and food supply chain organisation methods for traditional food products, the focus is on those bottlenecks and success factors which are hampering or stimulating marketing and supply chain capabilities of traditional food producers. This research consists of two steps. First bottlenecks and

success factors in the traditional food sector and second bottlenecks and success factors of innovation are investigated.

Bottlenecks and success factors in the traditional food sector

In the frame of this research marketing and supply chain capabilities are considered as internal and external resources of a firm (see figure 1). Marketing capabilities stand for selecting, targeting and positioning the product and for increasing the efficiency and effectiveness of the use of marketing management tools (Kohli and Jaworski, 1990). Supply chain resources comprise supplier-buyer relations and relations with third actors, and increase their efficiency and effectiveness. That needs organisational structures and measures as well as flows of information, skills, materials and financial resources (Sawhney et al., 2006).

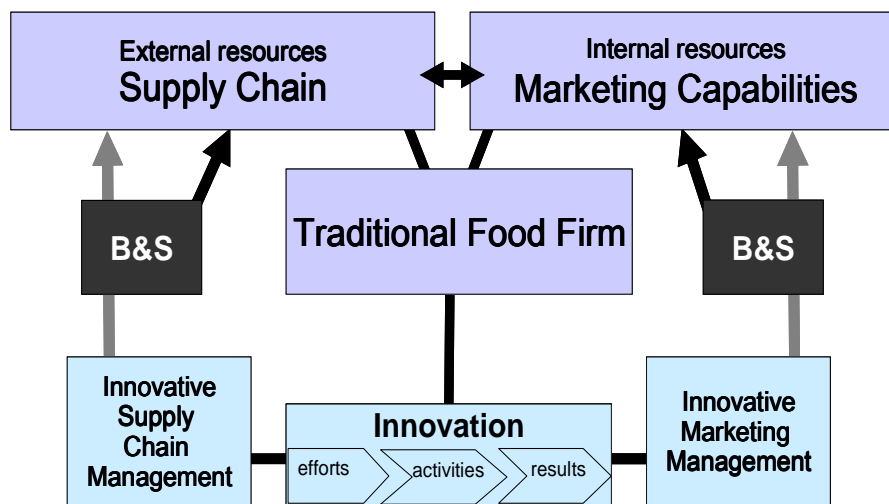


Figure 1: Bottlenecks and success factors (B&S) integrated in an innovation concept, adapted from Gellynck, Vermeire & Viaene, 2006.

The combined transformation of internal and external resources leads to innovation, which results in a new product, process, way of organisation or market choice (Gellynck et al., 2006). The innovation process contains three steps:

- efforts: such as R&D, processing
- activities: such as implementing innovations
- results: such as output.

The innovation process of a firm is determined by the optimal use of both internal and external resources which help the firm to achieve competitive advantage (Barney, 1991; Cassiman and Veugelers, 2002; Lengnick-Hall, 1992). Therefore in the first part of our research bottlenecks and success factors of marketing capabilities and supply chain resources of traditional food firms are investigated. Figure 1 illustrates where bottlenecks and success factors intervene both in relation to external and internal resources.

Bottlenecks and success factors are defined as insufficiencies/facilities blocking/stimulating the effective use of external and internal resources of a traditional food supply chain member for improving market access and marketability of their products and the generation, uptake and introduction of innovations to upgrade these.

Bottlenecks and success factors of innovation

In the second part of this research the objective is to explore which aspects are hampering or stimulating a traditional food firm to be innovative. The first step is therefore the identification of the innovative use of supply chain resources and marketing capabilities in the conventional food

and drink sector (see figure 2). Existing innovative solutions used in specific traditional food supply chains will be considered as well. In our project innovation is defined as a scientific, administrative, technical, financial or commercial activity, including the investment into the generation of new knowledge, which results in reality or by intention the development and implementation of new products, processes, services, organisation exploitation of new raw materials and purchasing sources, new markets and applications. (Expended from Hungarian Act 2003 XC, 2003; and OECD, 2002).

Thus, there are four types of innovation: product, process, market and organisational innovation (Lundvall, 1995). Changes in marketing and supply chain management are part of organisational innovation, therefore in our project we focus on this kind of innovation (Avermaete et al., 2003; OECD, 2005).

In the second step of identifying solutions we explore how supply chain management and marketing management are able to adapt the identified innovations from the conventional food sector to the traditional food sector. Supply chain management can improve the supply chain resource through streamlining information flows, optimizing chain structure and enhancing collaboration (Sawhney et al., 2006). Furthermore, the integration of suppliers and customers in food supply chain has positive impacts. Suppliers help identifying improvements and contribute with their expertise. Understanding customers needs is important in order to know market potential and identify problems (Pittaway et al., 2004). Marketing management leads to new marketing orientations through high priority to customers, focus on competitors, dissemination of information and responsiveness to the market (Kohli and Jaworski, 1990).

However, the adoption of innovations in supply chain management and marketing management can be difficult due to bottlenecks or easy based on success factors. Consequently the third and fourth step is to explore these bottlenecks and success factors and their determinants Figure 2. During these steps it is specified which innovative forms of supply chain resources and marketing capabilities are necessary to introduce in the traditional food sector.

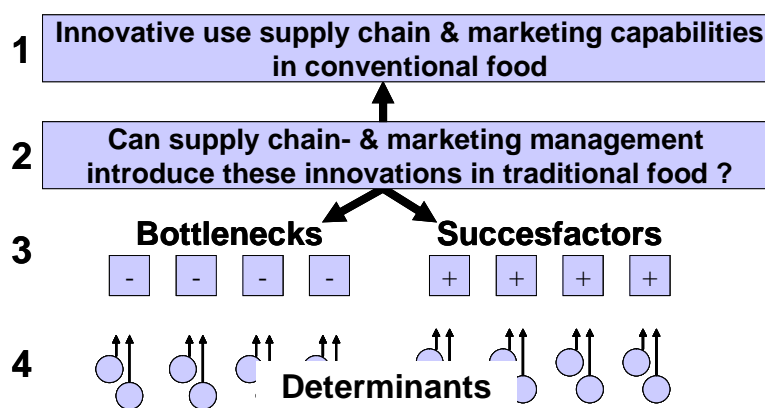


Figure 2: Detailed research plan for identification of determinants for bottlenecks and success factors of innovative use of supply chain resources and marketing capabilities

The investigation of bottlenecks and success factors and their determinants is conducted first by literature review, expert interviews and experiences with SMEs in the selected sectors in Belgium, Hungary and Italy. This forms the base for subsequent qualitative and quantitative analysis, namely focus groups and a survey.

3. Description of selected supply chains

In this chapter graphs of the selected supply chains in Belgium, Hungary and Italy are presented. An overview of the selected supply chains is given in Table 1.

Table 1: Selected supply chain within the work package 5.1 of the TRUEFOOD-project

Sector	Belgium	Hungary	Italy
Dairy	Cheese		Cheese
Meat		Dry sausage	Dry ham
Beverages	Beer		
Vegetable		Processed Paprika	

Product specification is based on the European classification system PRODCOM (EUROSTAT, 2005).

3.1. Belgium

3.1.1. The cheese supply chain

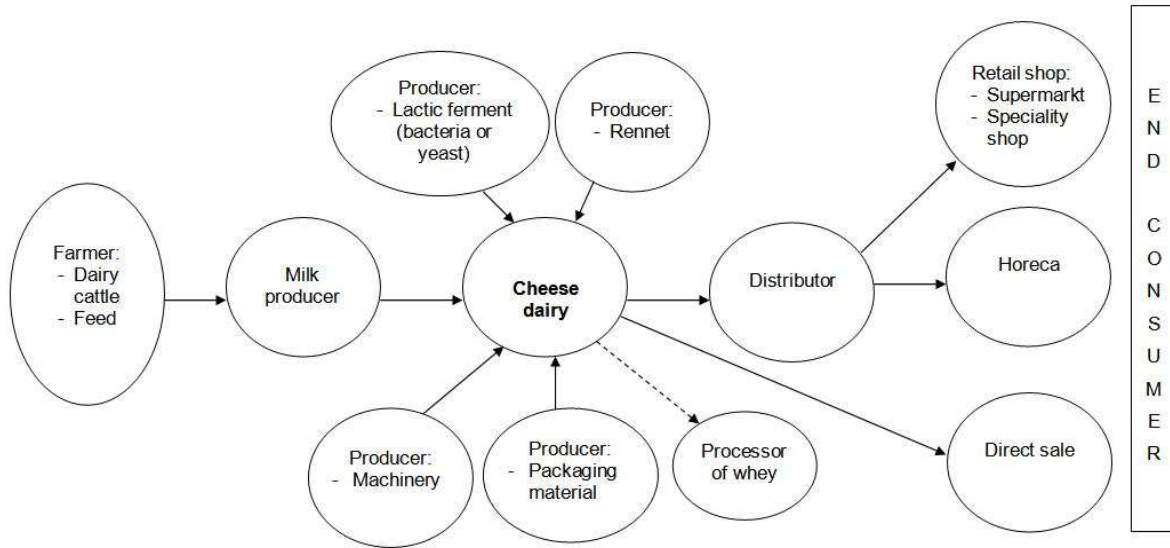


Figure 3: Graph description of the Belgian cheese supply chain

3.1.2. The beer supply chain

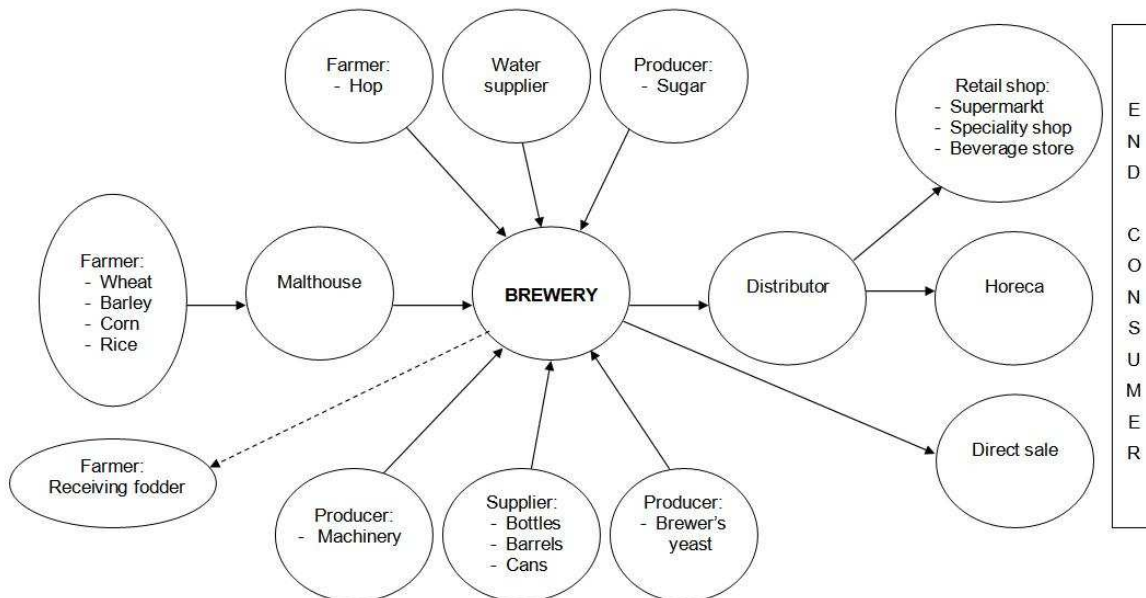


Figure 4: Graph description of the Belgian beer supply chain

3.2. Hungary

3.2.1. The air dried, smoked sausages supply chain

Graph description see next page (Figure 5).

3.2.2. The supply chain of processed white (yellow) pepper products

Graph description see Figure 6.

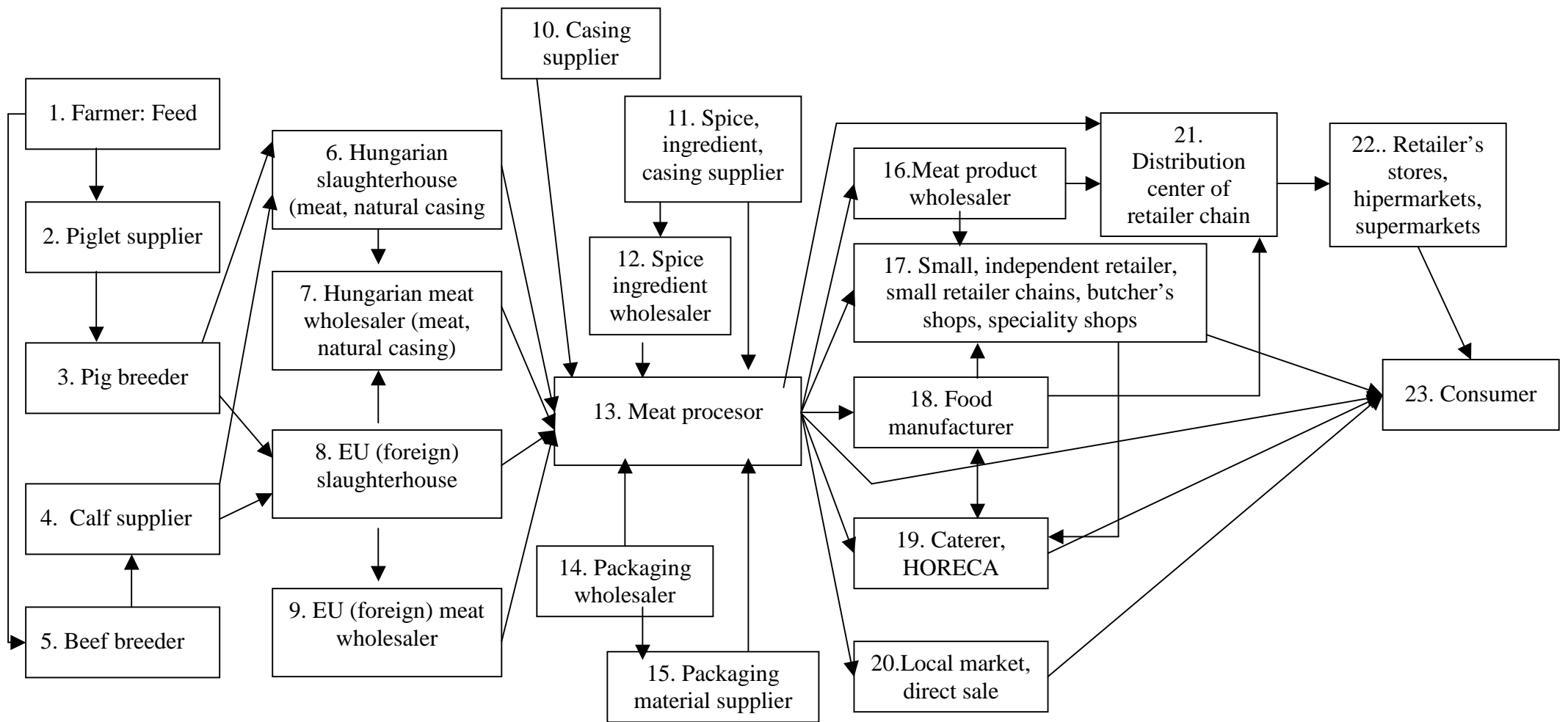


Figure 5: Graph description of the Hungarian air dried, fermented, smoked sausage / salami supply chain

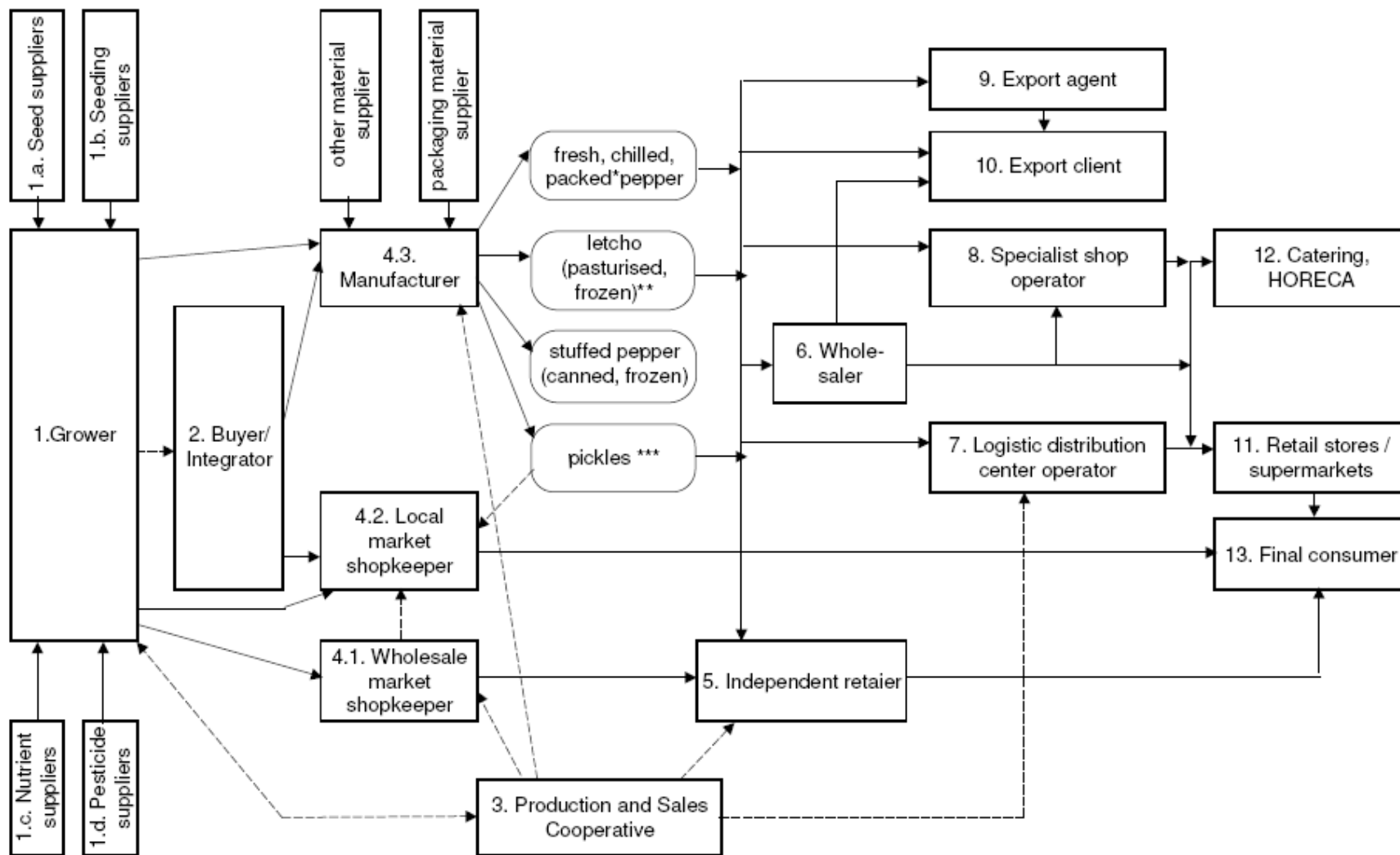


Figure 6: Graph description of the of the Hungarian white pepper supply chain

3.3. Italy

3.3.1. The cheese supply chain

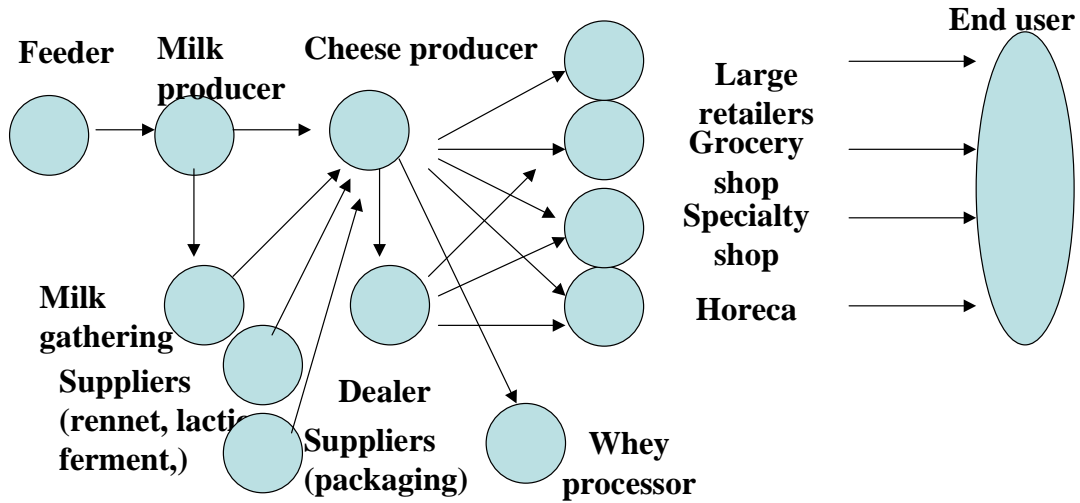
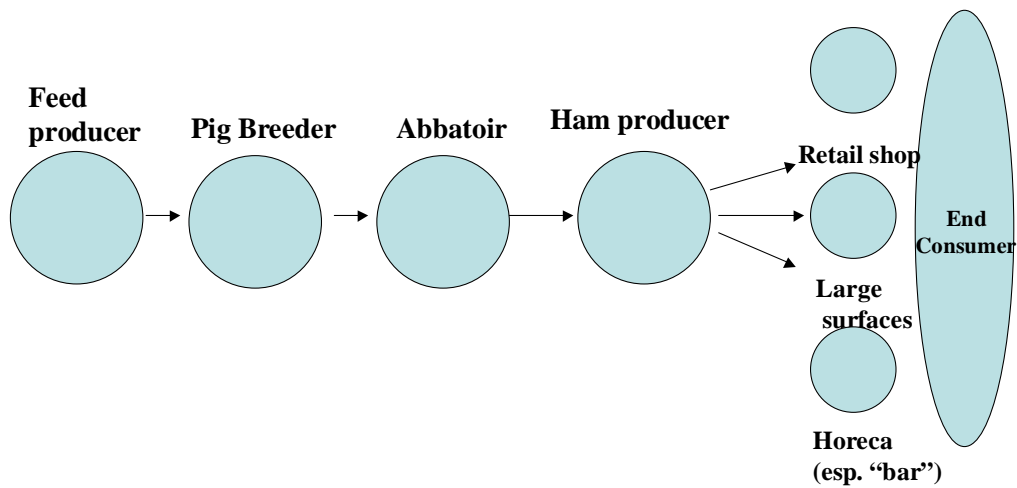


Figure 7: Graph description of the Italian cheese supply chain

3.3.2. The Italian dry ham supply chain



4. Bottlenecks and success factors

4.1. Bottlenecks and success factors in the traditional food sector

The aim of this project is to identify the bottlenecks and success factors of SMEs in the traditional food sector. In the first step of this research an overview on bottlenecks and success factors is produced, both for supply chain resources and marketing capabilities. These are identified through literature review and from experiences with traditional food producers in Hungary, Italy and Belgium.

The explored bottlenecks and success factors in the traditional food sector are basically similar for the different investigated supply chains in Belgium, Hungary and Italy. The main bottlenecks for traditional food producers are the lack of financial and human resources, the lack of knowledge and the lack of understanding the importance and benefits of improving supply chain and marketing resources.

Only few success factors are obtained in the traditional food sector. Exemplary for supply chain resources stand collaboration in the supply chain on food safety, quality and traceability, developing joint strategies, performing joint product development with suppliers and/or retailers and backward integration to raw material supply. Regarding the marketing resources especially the product assortment based on the specific, distinguishable properties of the product, strong differentiation and branding opportunities of the product plays an important role for the success of the SME.

4.2. Bottlenecks and success factors of innovation

This chapter is divided into three sections all regarded to innovation. The first section outlines the innovative use of supply chain- and marketing resources in the conventional sector and in traditional food supply chains. The second section shows general ways to adapt these innovations to the traditional food sector. And in the last section bottlenecks and success factors of introducing innovations but also of the innovation process itself are listed.

4.2.1. Innovative use of supply chain- and marketing resources

In the conventional food sector several innovative uses of supply chain and marketing resources are explored. Some practical examples for innovative supply chain resources are the formation of innovation networks by national governments, the formation of membership based research associations of peers, collaborations for integrated full chain safety and quality management (e.g. Assured British Beef), joint supply of major clients in the Hungarian vegetable sector, technical assistance of ingredient suppliers, back- and forward integration, and continuous effort for innovation by the food producer. Examples for innovative marketing resources are joint promotion of product attributes or country specifications, offer of assortments of small quantities or ready-to-snack, and supply delicatessen/speciality shops.

4.2.2. Ways to adapt these innovations to the traditional food sector in general

Adaptation of innovations to the traditional food sector requires the ability of traditional SMEs to innovate. Scozzi and Garavelli (2005) propose a three phase process which supports and improves the innovation development process in SMEs. The three phases are planning,

development and learning. Moris and Strubbe (2006) and Sebok and Hegyi (2006) present a more practically approach where at the one hand the members of the food supply chain are convinced of the necessity of innovations for the long-term existence of his/her firm. On the other hand are SMEs supported through training opportunities, easier access to financial support and formation of an environment for networking and collaboration with easy access to research centers and stakeholders for improving and maintaining an innovation culture in SMEs.

4.2.3. Bottlenecks and success factors of introducing innovations to the traditional food sector

Innovation is mainly introduced by SMEs to improve quality and marketing properties of a product, to reduce costs and to improve the production process (Scozzi et al., 2005). Innovative SMEs are open-minded towards innovation and have managed to achieve a high proportion of qualified technical staff and are also willingly to invest in improving the knowledge and experiences of their staff (Avermaete et al., 2004).

The main barriers of introducing innovations are:

- lack of understanding the importance and benefits of innovation activities
- lack of knowledge of appropriate methods and skills
- lack of financial and physical resources
- lack of trust in peers, chain members and institutions

These main barriers are listed in the order of importance for the introduction of innovations to the traditional food sector, achieved from a statistical analysis by Sebok and Hegyi (2006). These main barriers are valid likewise for supply chain resources and for marketing resources.

Through training and education on supply chain and marketing management subjects, collecting and demonstrating of successful examples, setting up of proper management structures and developing additional activities and services of institution these barriers can be accomplished.

5. Conclusions and further research

This first investigation of bottlenecks and success factors in the traditional food sector and of introduction of innovation to this sector show that the bottlenecks are mainly similar.

The main bottlenecks are the lack of understanding, the lack of knowledge and the lack of financial and physical resources. The first two bottlenecks are primarily related to the first two steps of the innovation process: efforts (E) and building of new knowledge (B). Efforts relate to creating awareness of importance and benefits, and to the generation of trust. Building of new knowledge includes learning of appropriate methods and training of staff. The lack of financial and physical resources is mainly a hinder in the implementation phase of the innovation process.

The reduction or elimination of these barriers would consequently lead to improvement of both the supply chain and marketing resources and the innovativeness of traditional food producers. These barriers can be eliminated or at least reduced by raising the awareness of the traditional food producers through demonstrating successful examples to the SMEs,

organising them into networks, or introducing innovative methods identified on the conventional food sector. Furthermore, traditional food producers should be supported from government, research centers and other institutions regarding financial, organisational and technical aspects, and trained to achieve sufficient knowledge of adequate and reasonable methods.

In the next research steps specifications of bottlenecks and success factors of the chosen traditional food supply chains in Belgium, Hungary and Italy are investigated through group interviews and survey.

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