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An overview on the supply chain for European organic food market

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Abstract: *European organic food market is very dynamic both due to the consumers' preferences and requests and due to the supply chain members who focus more and more on satisfying the market needs. Organic food has emerged as an important segment of food retailing in recent years. The supply chain management for organic food was first based on the conventional methods, but the products' particular characteristics determined some specific changes. This paper aims to evaluate the supply chain challenges on the European and Romanian organic food market, trying to offer some solutions for the sector' sustainable development.*

Key-words: *organic food, supply chain, distribution channel, Europe*

1. Introduction

Europe has the second largest market for organic food and drink, after North America (FIBL&IFOAM, 2016). The organic food market has not reached its maturity, yet. It is growing and its development shows substantial opportunities. According to the latest data provided by the Research Institute of Organic Agriculture (FiBL), in 2014 European consumers spent about 23.9 billion euros for organic food (Willer, 2016). The analysts predict that the organic food and beverages market in Europe could grow at a compound annual growth rate (CAGR) of around 7% in terms of revenue by 2020 (Technavio, 2016).

The most important reasons to use organic products are: human health and environmental sustainability, in terms of food safety, agricultural practices, pesticide free crops, and animal welfare (Cavaliere et al, 2016). An increasing number of organic brands, certification labels and wider range of organic product categories have been observed in terms of efforts to provide higher food safety and food quality (Hamzaoui-Essoussi and Zahaf, 2012).

The main barrier against the use of such products is related to the problem of trust since consumers are not able to verify if a product is actually produced

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following the organic scheme or not (Krystallis and Chrissohoidis, 2005). The lack of information combined with the high price of the products and high production costs represent the main constraints for the sector development (Baecke et al, 2002).

The organic food industry has steadily moved from niche markets, like small specialty stores, to mainstream markets, like large supermarket chains (Johns et al, 2001). The increasing number of distribution channels is based on an increasing number of supermarkets and food store chains offering and widening their offer of organic foods at very competitive prices. Consumers' tastes dictate what goes on retailers' shelves. Retailers have very close contact with organic products consumers and are the last step in the chain of intermediaries between the producer and the consumer. Many retailers procure organic products through distributors (Ferguson et al, 2005).

Further, with the growth in popularity of organic food products, many wholesalers have entered the organic food supply chain. They have been encouraged by chain stores that need larger quantities at regular delivery times, and have to work through them because of high demand (Hamzaoui-Essoussi and Zahaf, 2012).

The level of competition in this market is expected to intensify by 2020 due to an increase in retailers' number introducing their own private label organic food products. A large number of private label brands are also coming up on the market, which further intensifies the level of competition between them (Technavio, 2016).

2. The dimensions of European and Romanian organic food retail

Germany has the first largest market for organic products in Europe and the second in the world. The French market is the second-largest in Europe, followed by the UK and Italian markets. This quartet comprises about two - thirds of European sales. Other important markets for organic products are Switzerland, Austria, Sweden, Denmark, and the Netherlands (FIBL&IFOAM, 2016).

Central & Eastern Europe (CEE) has a small but growing market for organic products. Important consumer markets are in the Czech Republic, Poland and Hungary. In general, this region is a big producer and exporter of organic primary crops, like cereals and grains, to Western Europe whilst finished organic goods are mainly imported in from the same region (FIBL&IFOAM, 2016). On the other hand, there still is a great need for imported processed products on the shelves in CEE countries. Whereas Czech Republic covers approximately 50% with imports, Romania and Poland import about 60% and Hungary even up to 90% (OMKi, 2014).

From the CEE countries, Slovenia has the biggest organic share in retail sales (1,8%), followed by Romania and Czech Republic (0,7%). Regarding the organic food consumption per capita, Croatia and Slovenia are the leaders with over 20 euro/person and Slovakia and Bulgaria at the lower end with only 1 euro/person. Also, in Romania only 4 euro/person are spent for organic food (FIBL&IFOAM, 2016).

The importance of the various marketing channels differs from country to country. In the past, countries with a strong involvement by general retailers showed a strong growth of their organic markets. It is the case of Austria, Denmark, Switzerland, and the United Kingdom.

Overall, the percentage of organic sales flowing through different retail sectors varies across the continent: in the Scandinavian countries, Britain, Hungary and the Czech Republic, over 60 percent of organic sales were made in supermarkets; in Belgium, Germany, France, Greece, Luxembourg, Ireland, Italy, the Netherlands and Spain, the majority of organic sales were made via direct marketing channels or in specialized shops (Sayre, L. 2016). In Europe, the leading vendors on the organic food market are: Carrefour, Metro, REWE, Tesco. There is also a tendency to increase the role of discount stores in the distribution of organic food, for example the German and Austrian markets.

The Romanian market of organic food and beverage products is still small, but it grows at a rapid pace under the pressure of local buyers. In 2014 the sales of organic products in Romania amounted to about 25-30 million euros and by 2017, it could reach 100 million euros. However, it would need about 10 years to converge with mature markets like Germany where it amounts to 1 billion euros (Romania-Insider, 2015).

An analysis of consumer preferences for organic food purchase in Romania in 2016 showed that consumers buying organic food prefer to purchase directly from producer (31%), followed by supermarkets (25%), specialized stores (23%), pharmacy (20%) and elsewhere (1%) (Vietoris et al, 2016). These results are illustrated in the figure below.

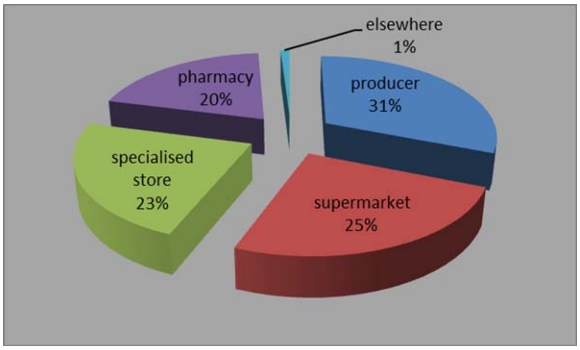

Fig.1 *Sales channels preffered for organic food purchase*

In Romania, supermarkets constantly expand their dedicated areas to organic products, while new retail and HoReCa specialised in organic foods and beverages open in the main cities of Romania. Some examples are Biocorner, Ki-Life, Biostil and Naturalia (FRD Center, 2016).

3. Supply chain challenges on European and Romanian organic market

Discrepancies between market realities, the value chain and the value delivery system are still a challenge for the organic food sector. For organic food we can consider two main distinct distribution systems: long channels, like retail chains, that add value through price and high distribution intensity, and short channels like direct from producers, that add value through their production methods and sustainable practices (Hamzaoui-Essoussi and Zahaf, 2012).

Most studies on organic supply chains report a number of issues concerning their structure and performance: high operating costs, lack of alignment between supply and demand, poor reliability of supply, lack of collaboration among chain members, different values and motivation among different actors in the chain, lack of information flow (IFOAM, 2016).

Other key challenges for organic food supply chain (Cognizant, 2014) include: food origin and mileage, size of farms and collaboration, market volatility. The distance food is transported from the time of its production until it reaches the consumer, gains prime importance in the case of organic food. The origin of organic food possesses both predictive and confidence values. It helps consumers evaluate food origin. The majority of organic farms are small, privately-owned, family enterprises which often struggle with economic scale. Organic food requires more resources, particularly human resources, during production and marketing channels are more difficult to access for smaller producers. Market volatility is explain by the fact that fresh produce markets are characterized by perishable products, seasonal production and a strong dependence of supply on climatic conditions. These characteristics entail high degrees of uncertainty and risk about market prices and quantities, which has traditionally deterred local farmers from negotiating contracts in the produce trade.

Regarding the distribution strategies for organic food, there are two types of sales channels of organic products. The first is the *direct sales and the sales through specialist stores*, while the second is based on *conventional marketing channels*, like supermarkets and hypermarkets (Kazimierczak et al, 2014). Producers have the simplest distribution strategy. Most of these producers use direct channels and they also supply some grocery stores or specialty stores. Specialists have estimated the supermarkets and hypermarkets segment in Europe to account for approximately 43% of the total market share by 2020 (Technavio, 2016). Most conventional channels are increasing their organic sales using conventional marketing strategies for organic food, like offering organic versions of conventional brands.

The supermarkets are the most important sales channel for organic foods. Private labels are prominent; organic products are marketed under private labels of supermarkets, hypermarkets, discount stores, pharmacies, drugstores, and organic food shops. The number of organic food shops continues to grow in Europe (FIBL&IFOAM, 2016). Supermarkets are able to provide consumers with a larger variety, lower prices and convenience, whereas specialty stores differentiate themselves by the quality and the origin of their products.

5. Conclusions

The sale of organic food products through supermarkets and hypermarkets is increasing in Europe, as these stores are increasingly stocking different organic food brands, expanding shelf space for organic food, and launching their own organic food labels (Technavio, 2016).

In order to increase the transparency and communication along the supply chain and reduce the information asymmetry in the market, a strong collaboration among chain agents is required. A more coordinated supply chain can favour an increased availability of information about chain agents and about products, increasing the level of agents' responsibility.

Concerning the market volatility, better risk management and streamlining of the supply chain can help assure farmers of their profits and increase their willingness to trade with the large retailers. The long-term contracts with retailers will also enhance farmers' ability to obtain working capital financing, which has traditionally been a challenge for small farmers. By signing contracts with retailers, farmers gain security that they can gain more favourable terms for loans and financial aid for investing in capital equipment.

For a retailer to minimize the lead time from farm to shelf and thereby increase the shelf life of fresh food, a holistic approach is required to revamp warehouse management, order management and transportation management.

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