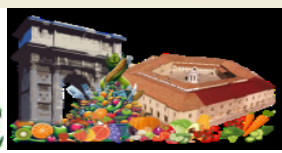




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Innovations in Food Loss and Waste Management


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**SHORT FOOD SUPPLY CHAINS AS DRIVERS OF
SUSTAINABILITY IN RURAL AREAS**

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INTRODUCTION



According to the regional typology of urban and rural areas, half of the territory of the European Union is covered mainly by rural areas and approximately 20% of the population is concentrated in them. The role of rural areas as producers of food and other important tangible and intangible goods is well understood.

The objectives of sustainable rural development is logically linked to the direct marketing systems.

Food is lost or wasted throughout the supply chain, from the initial agricultural production down to final household consumption (Gustavsson et al., 2011).

Agroecology and organic farming are highlighted as one of the sustainable agricultural practices that can help achieve the objectives of the European Green Deal and related Farm to Fork strategies.

Local Food System and Short Food Supply Chain

The location of production and the length of the food supply chain (SFSC) have been and continue to be of interest to many researchers and they have been well studied. LFSs and SFSCs are two different concepts that share some similarities.

Most researchers define "Local Food Systems" as those in which the production, processing, marketing and consumption of food takes place in a limited geographical area with a source radius of about 20 to 100 km.

A key feature of SFSCs is that these are places where the number of intermediaries is kept to a minimum. There are different SFSCs in terms of number of intermediaries. The ideal case is direct contact between producer and the consumer.

The marketing of food through a short supply chain, which business is organized mainly by small and medium-sized organizations without a special marketing unit, is constantly growing.

SFSCs can include a variety of food production methods - organic farming, agroforestry, and permaculture.

Impacts of LFS/SFSC

- ✓ Fairer market structures and contracts for farmers that help support the uncertainty of their trade and reduce food waste and food loss to a greater extent—including on-farm loss.
- ✓ Reducing food loss at the different stages of the supply chain - awareness of the changing food standards and regulations, collaboration and sustainability across the supply chain, formation of communities of practice, developing a resilient supply chain, lean and total quality management - TQM (methods for monitoring the quality of the products, processes, and services).
- ✓ Social impacts – they support and facilitate the connection and interaction between farmers and consumers.



Impacts of LFS/SFSC

- ✓ Economic impacts - there are records that local farming systems and short chains have a higher multiplier effect on local economies than long chains - maintaining local employment, especially in rural areas.
- ✓ Environmental effects - usually the environmental benefits that are cited in the literature and we support are: food miles and carbon footprint for local food, positive impact on (agro) biodiversity and reduce the use of agrochemicals for organic farms.

Case Study

- ▶ *Title of the experience:* Organic farm “Sofina”, Local leadership, adding external support from institutions and policies.
- ▶ *Key words:* SFSC, Marketing competences, Entrepreneurship, Organic products
- ▶ *Location:* village of Lesново near the town of Elin Pelin, just 20 km from Sofia.
- ▶ *Short description of the initiative:* The Sofina family farm has been in existence since the beginning of 2009. About 60-70 different products are grown, each of which during the respective season of the year. The farm products include nuts, hazelnuts, different types of tomatoes, cucumbers, zucchini, peppers, celery, pumpkins, carrots, potatoes, beets, beans, spinach, as well as the non-standard kale and chard, which are extremely unusual for our region.



Case Study

- ▶ *Actors involved:* farmer, farm family, local municipality, Bulgarian Food Safety Agency, Bulgarian Bio-products Association, shop.
- ▶ The proximity of the farm to Sofia allows the products to be picked up a few hours before delivery to be as fresh as possible when they reach customers. No couriers are used, but the products are always delivered in person less than 24 hours ago.
- ▶ *Results and learned lessons:* how food from a farm ends up on our tables; the stages include plant production, processing, food production, distribution; chain includes aspects from processing, distribution, consumer purchase and consumer use.

RESULTS AND DISCUSSIONS



- ▶ Many studies emphasize that trust building is a major component and important advantage of LFS/SFSCs. Our case shows that building consumer-producer relationships is "essential" and provides not only a "unique experience" but also prevents food loss.
- ▶ We also discuss the market in terms of "community" - building a place and improving relationships around food and neighborhood activities. A number of LFS/SFSCs seek to build communities and relationships around food production and consumption.
- ▶ Creation of learning alliances and communities have been proposed as a way to reduce food losses (World Bank, 2006).
- ▶ For example, in our case, the participants in the scheme gain increased knowledge of food and agricultural systems. Increased knowledge related to their daily routine as well as the food consumed can lead to some changes in behavior.



RESULTS AND DISCUSSIONS

- ▶ Many researchers have discussed the reduction of food miles associated with LFSs and SFSCs as an environmental benefit. The concept of food miles, first created in 1992 by Tim Lang, is based on comparisons between food products in terms of carbon emissions in transporting the goods from the producer to the retailer or consumer.

Thank you for attention !

Sofina Farm

