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LOCAL FOOD SYSTEMS FORMATION

The potential of local food initiatives
in the Baltic Sea Region

Anna Berlina, Asli Tepecik Diş and Leneisja Jungsberg (eds.)

NORDREGIO WORKING PAPER 2017:7

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Preface

This working paper describes the state of play of local food initiatives in the Baltic Sea Region (BSR) by examining EU and national policy contexts and by highlighting good practices of local food initiatives in Latvia, Lithuania, Poland, Sweden and Belarus. The working paper investigates the key drivers and factors impeding the development of these initiatives. The working paper is based on desk studies, input received during meetings with stakeholders and researchers from the BSR, and interviews with good practice initiators in 2016–17.

This working paper is one output of the *Local food: Formation of local food markets* project financed by the Swedish Institute between August 2016 and August 2017. The overall aim of the project was to strengthen co-operation and to build

knowledge of local food system formation by various actors working on rural development issues in the Baltic Sea Region (BSR). Another objective of the project was to investigate and share good practices in building, shaping, reproducing and promoting alternative food networks and markets over time and space in the BSR countries (Sweden, Latvia, Lithuania, Poland and Belarus).

Nordregio was the lead partner of the project. Other partners included the Lithuanian Institute of Agrarian Economics, the Centre for Programme Leaders in Lithuania, the University of Latvia, the Institute of Agricultural and Food Economics in Poland, the *Zielone Sqsiedztwo* Local Action Group in Poland and the Institute of System Research in the Agro-industrial Complex in Belarus.

Executive summary

In recent years, there has been growing interest in 'alternative' and 'local' food supply chains as a way to reduce externalities associated with mainstream food systems. 'Alternative' food chains are often built on values opposed to conventional industrial agriculture. They are small in scale, do not use pesticides, are close to consumers and have a distinctive place of origin. There are many different forms of alternative food systems. Common to these practices is the intention to reconnect producers and consumers, to increase transparency, to relocalize agricultural and food production, and to build trust among actors in the food system.

This working paper aims to describe the state of play of local food initiatives in the Baltic Sea Region (BSR) by examining the EU and national-level policy context and by highlighting good practices of local food initiatives in Latvia, Lithuania, Poland, Sweden and Belarus. The working paper investigates the key drivers of, and impediments to, the development of these initiatives. The paper is based on desk studies, input from meetings with stakeholders and researchers from the BSR, and interviews with good practice initiators in 2016–17. This working paper is one of the outputs of the *Local food: Formation of local food market* project financed by the Swedish Institute between August 2016 and August 2017.

Although one can argue about the capacity of local food initiatives to create larger structural changes in the agri-food sector, the examples in this study show that local food initiatives can be a good and environmentally sustainable alternative to mainstream food systems. These cases illustrate the economic viability of local food systems and demonstrate that they can provide fresh, nutritious and seasonal food.

Local food systems support social and environmental sustainability goals that mainstream food systems rarely value and often neglect. For many small-scale farmers, local food initiatives have provided opportunities to diversify their sales channels and to obtain a better price for their products. The social aspects of local food systems

are no less important than their environmental, nutritional and health benefits. Local food initiatives cultivate mutual trust, encourage social contact and co-operation among actors, and improve neighbourhood ties and people-to-people contact, thus positively contributing to local development.

It may be observed from the case studies that both producer- and consumer-driven local food initiatives are common. Therefore, the development of local food initiatives in the BSR is driven by both supply and demand. Many successful local food initiatives are engaged in the production of niche products or oriented towards specific groups of customers willing to pay extra for quality and local origin.

Local food initiatives tend to appeal primarily to environmentally and socially conscious customers concerned about health issues and nutrition, the origin of the food and its environmental impact. Moreover, local food appeals to tourists and visitors, for whom tasting local food constitutes part of their experience of visiting a place.

The majority of good practice cases gathered in this working paper represent direct sales and are organized in a 'neo-traditional' way, meaning that they are based on complex collaborative networks. These types of initiatives have flourished largely thanks to the development of digital technologies and social media.

From the initiatives studied, one can see that the creation of a local food system is a complex social process that calls for innovations in marketing, management and social areas, in addition to the farmers' tacit knowledge and experience. Future opportunities within local food systems are based on an understanding of the shift from quantity-driven through quality-driven to value-added production.

The working paper concludes by presenting some key opportunities and challenges to the development of the local food systems highlighted in the case studies. It concludes with key messages on how to support the development of local food initiatives aimed at groups of actors who develop local food systems or would like to do so.

1. Introduction

In recent years, there has been growing interest in 'alternative' and 'local' food supply chains as a way to reduce externalities associated with mainstream food systems. Alternative food chains are often built on values opposed to conventional industrial agriculture. They are small in scale, do not use pesticides, are close to consumers and have a distinctive place of origin.

Some of the common forms of alternative food systems are short supply chains, alternative food networks, local food systems and direct sales (Kneafsey et al. 2013) (see boxes 1 and 2). Alternative food systems utilize various interfaces between producers and consumers, ranging from off-farm schemes (traditional farmers' markets, box delivery schemes), on-farm sales, and Community-Supported Agriculture (CSA) to farm-based hospitality or producer and consumer co-operatives (European Commission 2013b).

BOX 1. A LOCAL FOOD SYSTEM (LFS)

is 'a food system in which foods are produced, processed and retailed within a defined geographical area' (Kneafsey et al. 2013) (the interpretations could vary within an approximate radius of 20 to 100 km). LFSs also aim to use more direct marketing, leading to fewer intermediaries between a farmer and a consumer (European Parliament 2016).

Local food systems (LFSs) and short food supply chains (SFSCs) offer numerous advantages for both producers and consumers. For producers, selling agricultural products directly to consumers enables them to retain a greater share of a product's final sales price. For consumers, local products are associated with higher quality and access to fresh and seasonal local food produce, and to more environmentally friendly production methods. Alternative food systems are more transparent, as the producer shares information on the origins of the food and the production methods (European Parliament 2016).

Alternative food systems are associated with a stronger sense of trust and social connectedness

BOX 2. SHORT FOOD SUPPLY CHAINS (SFSCS)

refer to 'food chains in which foods involved are identified by, and traceable to, a farmer and for which the number of intermediaries between farmer and consumer should be minimal or ideally nil' (Kneafsey et al. 2013). Although SFSCs do not necessarily imply a reduced geographical distance from farm to fork, it often becomes a guiding principle.

between actors because of the reduced number of intermediaries between producers and consumers, local scale and short supply chains (Dubois 2017; European Parliament 2016). Thus, local food systems have been advocated to revitalize a community and to strengthen social cohesion and community development at the local level (European Parliament 2016). Moreover, developing LFSs may lead to behavioural changes; e.g., in eating habits and purchasing decisions (European Commission 2013a).

The development of LFSs has a multiplication effect on the local community by generating and diversifying employment opportunities in agriculture and food production through developing processing, distribution and retail activities (e.g., producing artisan or craft foods) (European Commission 2013a; Melece & Krievina 2015). Furthermore, LFSs encourage rural tourism by strengthening the cultural identity of an area based on its food products (European Parliament 2016). These issues are particularly important for peripheral and disadvantaged regions and have gained even greater importance in the aftermath of the economic crisis.

The weaknesses of local food systems are associated with rather limited production volumes and seasonality of the produce, which make it difficult for the individual farmer to compete with other conventional farmers and to meet the demand from larger customers, such as the public sector. Among other weaknesses are higher costs of production, processing and transport, as well as limited human resources for efficient marketing and communication. Local products may be diffi-

BOX 3. HOW LOCAL IS LOCAL?

There is no single definition of the term 'local area' at the EU level and no overarching agreement on the geographical distance between the point of production and the point of sale (European Parliament 2016).

The term 'local' food may vary depending on the specificity of the area, such as the density of population, accessibility, and whether it is in an urban or rural setting (European Parliament 2016). Geographical proximity is not the only component of the definition of 'local'. Locality may also be associated with methods of production (Melece & Krievina 2015) and acknowledgement of the genuineness and authenticity of the product (Dubois 2017).

cult to identify because there is little information on where to buy them and because of their low visibility in general. All these factors limit the ability of SFSCs to expand beyond local markets (European Parliament 2016).

The development of SFSCs and LFSs may be hampered by farmers' insufficient knowledge and lack of the skills required for establishing a local food system. These difficulties can be partly attributed to a lack of entrepreneurial culture and training. Other barriers are associated with limited access to bank loans and difficulty in finding appropriate sales facilities, as well as the administrative burden associated with direct sales, which are closely linked to food hygiene requirements (European Parliament 2016).

1.1 Aim and scope

The aim of this working paper is to provide an overview and a state of play of the local food initiatives in the BSR by considering the EU and national policy contexts and by collecting and studying various practical examples of local food initiatives. The working paper aims to shed light on the following questions.

- What are the state of play and trends with regard to local food initiatives in the BSR countries?
- How are local food issues addressed in the EU and in the national policy discourses in Latvia, Lithuania, Poland and Sweden?
- What are the drivers of and barriers to the development of local food initiatives? How can the development of local food initiatives be stimulated?

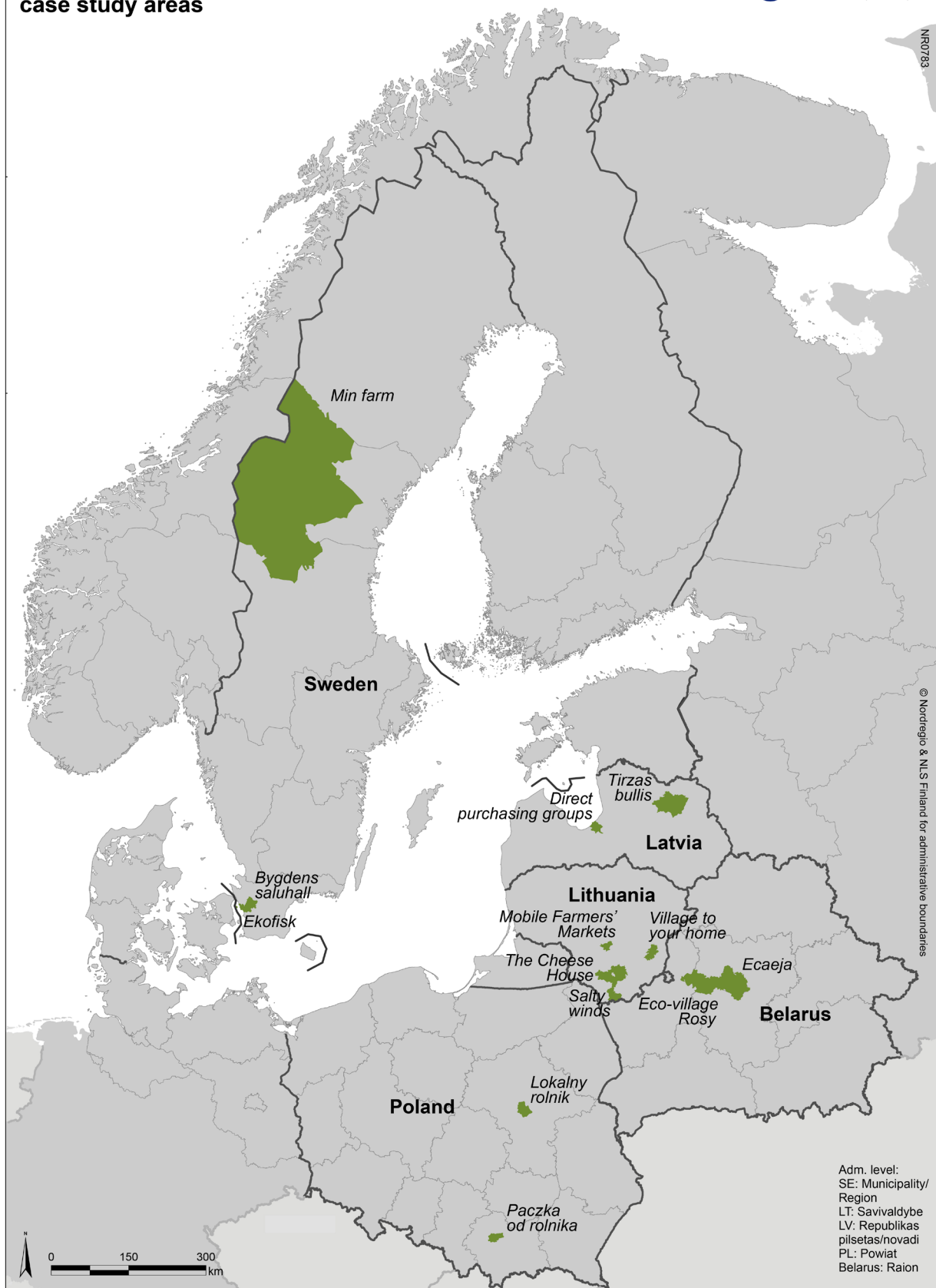
The first two questions are based on desk research. The third question is based on 13 empirical case studies in the BSR. The case studies describe the key elements of the local food initiatives and their development process, identify enablers and barriers for the development, and provide some recommendations on how to support implementing a similar initiative elsewhere.

Finally, the lessons learned from the case studies are summarized and presented as a series of 'key messages' aimed at local/regional authorities, food producers or other types of actors who work with, or would like to work with, the creation of a local food system.

The case studies in Belarus, Latvia, Lithuania, Poland and Sweden were chosen in collaboration with the project partners (see Map 1). The aim was to include a rich selection of cases representing examples of LFSs and SFSCs that are both consumer- and producer-driven. The majority of good practice cases in this working paper represent direct sales and are organized in a 'neo-traditional' way, meaning that they are based on complex collaborative networks. The following criteria were used to select the case studies.

- The initiative produces or sells high-quality food products that are produced using organic or sustainable farming methods.
- The initiative strengthens social relations between producers and consumers.
- The initiative contributes to sustainable rural development.

Local food case study areas



Map 1. Local food case study areas. Map by Shinan Wang.

2. Local food initiatives in the BSR – current trends and policies

Although not exhaustive, this chapter presents an overview of the status of, and policy support for, local food initiatives at the international (EU) level and at national level (several BSR countries). The overview is primarily based on desk research.

2.1 European Union

While SFSCs enabled 15% of farmers in the EU to sell half of their products in 2015 (European Parliament 2016), the definition of short food supply chains was only featured for the first time in the Common Agricultural Policy (2014–2020 edition) in 2014. In particular, the CAP reform in 2013 has made SFSCs an explicit element of EU rural development policy.

The measures taken within the framework of the Rural Development Program support the overall objective of shortening the supply chain and support direct sales of agricultural raw materials and processed foodstuffs by farmers (Priority 3). Focus Area 3A is designed to improve the competitiveness of primary producers by better integrating them in the agri-food supply chain through quality schemes, adding value to agricultural products, promotion in local markets and short supply circuits, producer groups and organisations and inter-branch organisations'. This is expected to lead to the entry of agricultural producers into the next phases of the food chain, such as small-scale processing and direct sales to the consumer. This will allow farmers to take over the processing and retail margins. Priority 3 covers 10% of all EU rural development programme expenditure, with 75% of these funds devoted to Focus Area 3A.

Hence, the EU rural development policy, with funding from the European Agricultural Fund for Rural Development (EAFRD), has offered assistance in establishing and developing SFSCs through support for investment, training, the LEADER approach and organization of producers.

The European Parliament has also voiced its support for local food systems and SFSCs in its

resolution on unfair trading practices in the food supply chain (2015/2065 (INI)).

In 2013, the European Commission produced a report exploring the possibility of launching a new local farming and direct sales labelling scheme (COM (2013) 866 final). However, no specific action was taken after the report was released.

It is estimated that about 300,000 farmers should receive support to participate in quality schemes and to develop local markets and short supply chains through the national rural development programmes in the EU (European Parliament 2016).

2.2 Belarus

Agriculture is an important economic sector in Belarus, accounting for about 7% of the national GDP and employing approximately 314,000 people or 3.3% of the population. Among the dominant agricultural products are flax fibre, potatoes, milk and sugar beet.

Formations of food markets in Belarus are primarily driven by large agricultural companies, which account for about 77% of the gross agricultural output (2015) (Figure 1). The average farm size is approximately 5,500 ha. These companies are often involved throughout the value chain, from raw material production to processing, marketing and sales. There are tacit regional restrictions that apply to large agricultural companies, prohibiting them from selling their products in other regions. These restrictions do not apply to smaller farm units.

Smaller management units include commercial and household farms. Commercial farm units are less developed in Belarus, accounting for approximately 2,500 farms with an average size of 75 ha.

There are more than 1 million such household farms in the country, consisting of private subsidiary farming by the rural and urban population, collective farming, allotment holders' co-operatives, dacha co-operatives and many other types. In

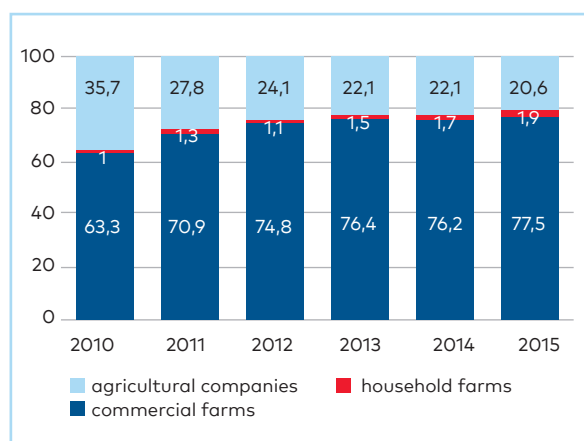


Figure 1. Structure of agricultural output by types of farms in Belarus 2010–2015. Source: *The Institute of System Research in Agro-industrial Complex 2016.*

2015, household farming accounted for about 21% of the gross agricultural production of Belarus. Only a small number of household farms are involved in entrepreneurial activity. Most of them sell a small part of their surplus production at local markets and fairs.

Among the measures introduced by the state to support rural development and to address the urbanization trend in Belarus was the establishment of a new type of rural settlement, so-called ‘organized agro-towns’. Agro-towns provide the population with a range of social services that are not inferior to urban ones in terms of quality. During the implementation phase of the project from 2005 to 2012, about 60,000 housing units were built. Some 2.2 million people live in approximately 1,000 agro-towns in Belarus today.

The development of information technologies and online stores offers new possibilities for the realization of bio and organic production in Belarus. There are only a handful of such initiatives in Belarus today owing to a rather low supply of, and demand for, organic production. Low demand for organic products can be explained by the relatively low purchasing power of the population and the fact that a large proportion of the population is already involved in household farming activities that often exclude herbicides, pesticides and inorganic fertilizers, or has access to such products through their relatives or friends.

A lack of legislative support and organic labelling standards in Belarus are also among the barriers to developing organic agriculture. A lack of clear requirements concerning what constitutes

an environmentally friendly or organic product has pushed the organizations selling the organic products, such as EcaEja, to develop their own requirements.

In the Republic of Belarus, support for the agro-industrial complex is provided by national, regional and district budgets. These funds are distributed in accordance with various state programmes. The state programme for the development of the agricultural business in Belarus 2016–2020 is the main guiding document. It is intended to increase labour productivity, export potential and output of agricultural products, as well as to improve the financial performance of agricultural enterprises. The state programme has 11 subprogrammes, among which are the development of smaller farm units (commercial farm units and household farms) and facilitation of the development of local food processing industries and secondary processing of food products.

In 2015, direct budgetary support amounted to 1.1 billion US dollars, or 131.7 dollars per hectare of farmland. Despite a high level of support, small agricultural businesses received no more than 20% of the total amount of state support in 2014–2015, as the majority of these funds were directed to large agricultural producers.

However, smaller management units have other benefits. For example, they have simplified procedures for the registration and liquidation of farms and some benefits when it comes to lending and leasing. The household farms are entirely exempted from paying taxes and deductions. This also applies to commercial farm units during the first three years after their establishment.

2.3 Latvia

Agriculture has been a traditional activity in Latvia for centuries, although its importance in the economy decreased during the 1990s and 2000s. Today, the share of agriculture in Latvia accounts for about 5% of GDP and 2.1% of GVA. The agriculture, forestry and fishery sector employs about 8% of the population (2014). Milk and cereals are the major products, respectively comprising 22.4 and 26.6% of total agricultural output. Latvian agriculture is characterized by a fragmented small-scale farming structure, which is among the main reasons for the low agricultural productivity of Latvia (among the lowest in the EU). The average utilized agricultural area per holding was 20.7 ha in 2013, and up to 90% of farms in Latvia are con-

sidered to be small. Food production is the largest processing industry in Latvia, and 70% of produce is sold in the local market (Tisenkopfs et al. 2015a).

Similar to other Eastern European countries, there is a strong tradition of informal food production and self-provisioning in Latvia, covering activities such as foraging, fishing, allotment gardening and food distribution to relatives and friends. According to Tisenkopfs et al. (2015a), up to 82% of Latvian households practise food self-provisioning and stocking activities. These habits are rooted in strong cultural traditions but also provide food for many low-income families.

New food retail channels have emerged during recent years, such as farmers' markets, small eco-food shops, roadside selling and direct selling on farms (Tisenkopfs et al. 2015a). There are more than 15 direct purchase groups in Latvia today that have over 2,000 consumers co-operating with more than 70 organic farmers, including home-made food producers (Melece & Krievina 2015).

There is no coherent food policy in Latvia. Food policy has been split between policy areas and institutions. The main themes addressed in the policy documents on food issues in Latvia are related to food quality and safety, registration and control, and healthy and nutritious food. Multi-functional land use and short food supply chains in most cases are poorly covered by mainstream policies. There is weak institutional support for small agricultural producers. It is difficult for small producers to receive bank loans and to start their own businesses. Many alternative food initiatives are conducted on a project basis and are developed in a bottom-up way by civil society groups (Tisenkopfs et al. 2015b). The Local Action Groups (LAGs) under the EU's LEADER programme have also actively worked on these initiatives (Melece & Krievina 2015).

The regional and local levels have some influence on food policy formation through activities such as the public procurement of food, territory planning, funding of farmers and home producers' co-operatives, and educational activities in schools. However, there is great diversity in the involvement of Latvian municipalities in shaping local food systems (Tisenkopfs et al. 2015b).

Development of local food systems has been encouraged through several initiatives in Latvia in recent years, including developing and branding of local identity products and consumer-driven initiatives. For example, the Local Identity Product (LIP)

brand was created and assigned to products associated with an area where the product is made and that meet certain criteria of quality and taste. Until now, 14 products in 14 municipalities in Latvia have been awarded the right to use the 'Local Identity Product' brand (Melece 2014). Another brand called 'Country Goodies' was created to promote rural tourism and recreation in Latvia, including farm visits, food and culinary experiences (Melece & Krievina 2015).

At the regional level, the Zemgale Planning Region has promoted rural entrepreneurship and the improvement of the competitiveness of local products in the framework of the EU's "Local Product Development in the Mid-Baltics" Interreg project (2012–2014). Moreover, several associations and co-operatives have been established in Latvia to support the marketing, selling and popularization of local food products.

2.4 Lithuania

Lithuania is traditionally a land of livestock farming, where livestock sector products account for half of all agricultural production (2007–2011) (Butiene et al. 2013). Agriculture employs about 6.7% of the population and accounts for about 3% of GDP.

Agricultural development in Lithuania has been driven by the European Union and national budget support. The Lithuanian agricultural sector has experienced rapid structural changes in terms of decline of grasslands and number of animals, increase in arable land and average farm size with a decrease in the number of farms and farmers. The decrease in the demand for labour, emigration of young people, abandoned farmland and declining employment opportunities in low-productivity farmland areas have had negative impacts on the countryside. These recent developments proved the need to evaluate the challenges and opportunities to seek new and alternative ways of developing the sector (Butiene et al. 2013).

According to Butiene et al. (2013), Lithuanian agriculture and food producers maintain a strong position in the domestic market. The number of small Lithuanian food processing companies and farmers' workshops has increased in recent years. The markets where the traditional products are sold to small producers have provided an opportunity for small-scale farmers to enter the market. Lithuanian markets are referred to as the most common direct marketing tool, but mobile and

weekend farmers' markets where users can directly buy food produced by the farmers have become more popular. There is generally strong consumer interest in buying local food and a high level of trust in food that is claimed to be local (Butiene et al. 2013).

Some threats to the recent trends in the agricultural sector are foreseen by Butiene et al. (2013), such as the increasing number of environmental laws and regulations that could negatively affect farmers' profitability. Additionally, the EU's direct support, decoupled from production and crop production, has become more economically viable than livestock farming. Based on their level of income and consumer trends in the field of nutrition, Lithuanians' preference for organic, high-quality locally sourced products makes it more than likely that the consumption of these products will increase. Butiene et al. (2013) found that taxes were high for those selling local products and urged both the government and market owners to reduce taxes for small-scale farmers.

Small-scale producers face several barriers to expanding their businesses. Family farms are rather small, and producers feel that their efforts will not bring sufficient profit. They report that it is difficult to link their products to supermarkets because the farms are unable to ensure a steady and adequate supply of products. Small and medium-sized farms do not have sufficient financial resources to invest in modernization of farms and new technologies, and they are unable to compete with large farms in land acquisition and thus cannot expand. Furthermore, small and medium-sized farms are not in a position to obtain funds for investment through co-financing support. There is a lack of co-operative development.

2.5 Poland

Poland has a strong agri-food economy and is among the leaders in Eastern Europe. Of the 14.5 million ha of utilized agricultural area, 74.7% is arable land and 22.4% is permanent grassland and meadows. The total population of Poland is 38.5 million, and approximately 39% of the population live in rural areas (European Commission 2014).

Approximately 2 million people are employed in farming activities in Poland.

The changing role of agriculture in economic development is reflected in the continued decline of the sector's contribution to Gross Domestic Product (GDP). Agriculture currently makes up approximately 3% of Poland's GDP. Despite this decline, agriculture is not marginalized. It remains invariably one of the key economic sectors that provides food, as well as many other goods and services important to society, including public goods.

An analysis of farms by size confirms the tendency for small holdings to disappear in favour of larger ones. From 2003 to 2010, the number of holdings with fewer than 30 ha of utilized agricultural area decreased, while the number with 30 or more ha increased (Eurostat 2012; CSO 2012, 2015). Despite this, holdings of up to 10 ha remain the largest group (about 75%), operating on about 35% of the land.

Structural changes in agriculture also highlight changes in employment. Almost half of the members of agricultural families supplement their agricultural income with work outside the farm. Further, on farms where the production does not exceed EUR 25,000, the annual income per full-time person is below the national average annual salary. It is worth noting, that in 2014 the expenditure incurred by households from rural areas was reported to be about 28% lower than in urban households (Chmielinski & Karwat-Woźniak 2015).

At the same time, growing affluence within society has seen food expenditure go down relative to income. This increases the potential market for "healthy" food produced in an ecological way and delivered directly from the producer to the consumer. Between 2002 and 2015, the number of ecological farms in Poland increased more than tenfold and amounted to 22.2 thousand farms. According to Eurostat data, in 2012 Poland held 3rd place in the European Union in terms of the number of organic holdings. In addition, the area used for organic farming increased eleven-fold between 2002 and 2015, amounting to 580.1 thousand ha (Table 3) (CSO, 2014; Chmielinski et al. 2017).

Table 1. Number of organic farms

Organic farms		2002	2010	2015
<i>With certificate</i>				
Number of farms		882	12 901	19 813
Agricultural area in ha		20 862	308 095	501 925
<i>In transformation to organic farms</i>				
Number of farms		1 095	7 681	2 464
Agricultural area in ha		22 966	210 974	78 805
<i>Total</i>				
Number of farms in % of total farms		1 977 0.1	20 582 1.36	22 277 1.58
Agricultural area in ha in % of total agricultural land		43 828 0.25	519 069 3.49	580 730 3.99

Source: Chmielinski et al., 2017, Calculation on the CSO 2007, 2016

Several local food initiatives seem to have been initiated for those with higher income levels whose demand for, and willingness to pay more for, good-quality, locally produced products is greater. New forms of organization within short food chains are being initiated from the bottom up, by farmers and consumers. It is a social innovation that transforms the traditional direct sales system (usually at marketplaces) into new forms of interaction with the consumer, within a trust-based network. Research by Chmieliński et al. (2017) indicates that just over a third of the surveyed vendors around the sales platforms have organic food certificates, while other farmers and processors report using traditional production techniques. Given the reputation of traditional foods among consumers, confirmation of the authenticity of the production process and the product quality provides an important reassurance for potential buyers. Thus, the consumer-producer relationship is of a trust-based nature, with the network organiser often taking on the role of the certification body, guaranteeing production technology and product quality. The organizer conducts individual supplier audits by setting up network access criteria, reviewing customer evaluations (e.g. exchanging comments and evaluating products on the online forum), reporting new ideas and demand for goods and acting as a controller.

In Poland, a strategy for the sustainable development of rural areas, agriculture and fisheries is integrated in the National Reform Programme for the implementation of the Europe 2020 Strategy.

The government also supports formation of local food markets under the Rural Development Program 2014–2020 (Priority 3).

2.6 Sweden

Following its adoption of the National Food Strategy for Sweden 2016, the country demonstrated its confidence in the ability of Swedish rural communities to produce more food. As stated in the strategy, the government believes that food production and the food supply chain in Sweden are well placed to contribute to society in the form of employment, sustainable growth and public goods. The 2030 vision contains three objectives for strategic areas, two of which mention that a competitive, sustainable and innovative food supply chain is a key prerequisite for overall success. It is also envisioned that a value chain will be created to cover all stages from primary production to the consumer. It is stated in the strategy that appropriate taxes and charges, regulatory simplification, a reduced administrative burden and other measures are to be implemented to create a truly competitive and sustainable food chain (Government Offices of Sweden 2016).

On a regional level, an important implication of such policy is public procurement of foodstuffs. Although definitions of 'local food' may vary, the majority focus on promoting shortened value chains (Zurek 2013). The primary goals for including local food strategies in public procurement systems are (a) to support local farmers, especially those who produce organic products; (b) to

reduce the environmental impact of transport and other elements of a product supply chain, and (c) to increase public awareness of local food production routines; e.g., by providing seasonal fruits and vegetables for public schools and day care centres (Zurek 2013).

It should be mentioned that public procurement in Sweden accounts for almost 20% of national GDP, with a large part of these funds managed by local authorities. Public sector purchases of food and catering are estimated to make up 4% of total food consumption in Sweden (Zurek 2013). Local procurement systems are based on the Swedish Public Procurement Act.

It is important to mention that the absence of a generally recognized definition of 'local food' often limits the use of the concept merely to the geography of food production, so there is a lack of regulations that would provide an element of bonding between the producer and the consumer based on trust and long-term co-operation.

Another opportunity for promotion of shorter food supply chains is digitalization, as mentioned in the National Food Strategy for Sweden. In particular, it has been suggested that consumers should be enabled to check the geographical origin of a product by scanning it using a mobile app, or that digital subscriptions to food box delivery services should be allowed. On 25 February 2016, the government mandated the Swedish Board of

Agriculture to work closely with the Swedish National Food Agency to promote digital innovation by making information on the food supply chain available for purposes such as highlighting sustainability issues and increasing competition within the sector, with this work expected to continue throughout 2017 and 2018.

Kalmar County was the first region in Sweden to develop a regional food strategy. Although Growing Value—the Food Strategy for Kalmar County 2016–2025 does not explicitly promote SFSCs and LFSs, it is intended to unleash opportunities for local food producers by fostering competitiveness, innovativeness and productivity of the food industry in the region, and promoting the production of higher value added and innovative products (RegionFörbundet Kalmar 2015).

Meanwhile, a number of Swedish municipalities have now adopted elements of community-supported agriculture (CSA) through co-operation with grass-roots initiatives. Movements such as Mykorrhiza provide good examples of neo-traditional short food supply chains based on local non-profit collaborative networks. Other examples include urban agriculture initiatives such as Odla i Stan in Malmö. The initiative has operated since 2009 in several peripheral housing areas of Malmö (Seved, Lindängen, Rosengård) and actively promotes self-sufficiency. It also co-operates with local schools and kindergartens.

3 Case studies in the Baltic Sea Region

Material for the cases was collected through desk research and interviews with the actors involved in the initiatives. The initiatives are at different stages of maturity and implementation, so the content and level of detail may vary. The cases were provided by the project partners, and the list of contributing authors is presented on the cover page.

Figure 2 below illustrates the case studies, grouped according to the types of short distribution channels. The case studies in this working paper are presented in alphabetical order.

3.1 Bygdens Saluhall, Sweden

Bygdens Saluhall is a member-driven digital platform connecting small-scale local farmers with consumers in southern Sweden. The digital prototype platform was initiated in a response to increasing consumer demand and as an incentive to strengthen the local economy by localizing the cash flow as

much as possible and by shortening the food supply chain and excluding intermediaries.

Initial stage of local food system creation



There has been an increasing interest in locally produced food in Sweden in recent years, coupled with increased environmental awareness among consumers and willingness to have closer contact with producers and food.

Bygdens Saluhall was developed as an outcome of a research project—*Small-Scale Consumer-Supported Food Production*—financed by a social innovation programme at Vinnova, Sweden's Innovation Agency. The study investigated how to bridge the gap between local producers and consumers without the involvement of intermediaries. Albin Ponnert was a key person behind the initiative at its initial stage. He was employed as a project

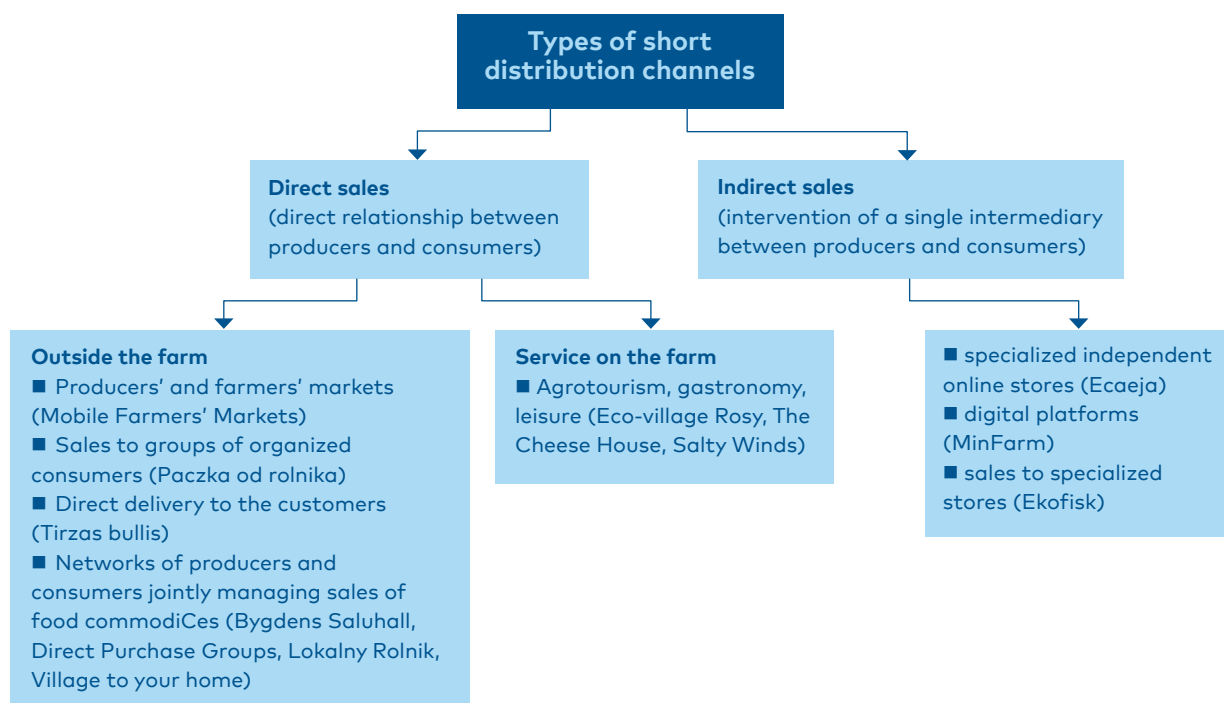


Figure 2. The classification of case studies by type of distribution channel.



Picture 1. Albin Ponnert and Viktor Zaunders telling a story about Bygdens Saluhall in Röstånga village. Photo by Anna Berlina.

leader by the All Sweden Shall Live organization to carry out the study in 2015. The project activities included several workshops with consumers and small-scale producers around Sweden to identify their support needs, challenges and interests. The study was completed in May 2016.

In addition to its research-based outputs, the study resulted in practical outcomes. The Bygdens Saluhall online prototype platform was developed with the help of Viktor Zaunders to improve access to locally produced food in Sweden. The professional qualifications and personal interests of Albin and Viktor played an important role in the conduct of the project. Albin has hands-on experience as a small-scale farmer and good communications skills owing to his background as a filmmaker. Viktor's IT background has been crucial in developing and administering the platform.

Bygdens Saluhall was initiated not only as a response to increasing consumer demand but also as an incentive to strengthen the local economy by localizing the cash flow as much as possible and by shortening the food supply chain and excluding intermediaries. The point of departure was an interest in developing a system that would reduce economic losses to the farmers associated

with the involvement of intermediaries in the food chain. This would enhance the economic viability of small-scale farmers.

Furthermore, the initiators were interested in increasing awareness among the consumers about food production in general and organizing it to have a positive effect on the environment and the local economy.

Key elements of the project

The Bygdens Saluhall digital prototype platform was first established in Röstånga village in southern Sweden, where it has run as a pilot project since June 2016. Röstånga is a vibrant rural area of Sweden, with a rather high population density for Sweden and a well-developed agricultural sector. The location was chosen because of its strong local network and the initiators' knowledge of the local context, as they live nearby.

Bygdens Saluhall is a member-driven digital service. The producers provide Albin and Viktor with information on the products that they would like to sell, convenient delivery dates and prices of the products. The initiators put the information on the website. The food products can be ordered online and picked up once a week at a local food

node. The order goes directly to the producer, so that the initiators avoid involvement in any financial transactions. Because the key element of the solution relates to providing a selling platform without intermediary services, the cash flow is organized only between a producer and a consumer. On a delivery date, the customers pick up their orders at a specific time. The pick-up points are usually organized in public spaces; e.g., outside local stores or a brewery, or in a parking lot.

The development and implementation process

The producers who are involved in the initiative are small-scale local farmers from the nearby area. Different channels have been used by the initiators to reach out to producers; namely, social media, newsletters, personal networks and municipal authorities. Among other advantages for the producers is that orders are placed in advance, which makes it easier to plan production volume and investments, and helps to avoid unnecessary risks.

At the initial stage, the project was driven by one actor (Albin Ponnert). During the development of the platform and the follow-up activities, support was also provided by Viktor Zaunders. With the upscaling of the activities to other areas in Sweden, the local actors have been involved in initiating local food nodes.

The initiators have run and administered the online platform and have actively sought other sources of funding to develop a comprehensive version of the digital platform. Moreover, the initiators put considerable effort into outreach activities, and media interest in the project has been high.

The platform was developed as a consumer service. Currently, the online platform is financed through a voluntary annual membership fee. Only members can use the online platform. It is up to each member to decide on the amount of the membership contributions.

Interest among local community members has been high. Today, there are about 100 paying members, and the average fee is approximately 300 SEK per member/year. The initiators have also received expressions of interest from actors who would like to become members or to start local food nodes in other parts of Sweden.

There are about 10–15 producers linked to the Röstånga pilot. The majority provide non-processed food (eggs, meat, milk, and vegetables), and about 20% is processed food such as maple

syrup, beer and jam. The service is currently available in seven places in Sweden. There are several local nodes in Skåne, as well as in Söderhamn, Sorsele and Gotland.

The high level of interest in the initiative has inspired and encouraged the team to continue their work and to seek funding for follow-up activities. At the current stage of project development, the initiators are attempting to expand their activities and to implement more pilot projects in Sweden, as well as to strengthen the online platform. They have had dialogue with the Swedish Agricultural University and have applied for more funding from Vinnova.

The initiators are currently developing a platform called Local Food Nodes, which is a continuation of the Vinnova-financed study. The idea behind Local Food Nodes is to create an open platform 'without borders', so that as many local producers as possible benefit from the service by selling their food products directly to consumers, without intermediaries. The platform will enable every user, irrespective of country of origin, to set up a local food node. The initiative is not intended to pursue economic profit.

The primary aim of Local Food Nodes is to make local food more widely accessible to consumers and to enable the producers to maximize profit by avoiding intermediaries. The further purpose is to contribute to a liveable countryside, as local food production is seen as an opportunity to enhance rural development.

Enablers and barriers

Among the strengths of the Bygdens Salluhall platform is that it allows the initiators to avoid becoming distributors or intermediaries. This way, the initiators do not have to deal with regulations. At the moment, all food-related regulations are the responsibility of the producers. Therefore, establishing a local food node is easy because no local initiator is responsible for financial flow or product quality. Thus, the model could be easily transferred to other areas and countries.

There are some territorial and spatial challenges of such a platform. The low population density and a sparse settlement structure of some Nordic regions may limit local producers, as there might be little demand for the product in such a small market. In the north, producers may have to travel longer distances to reach consumers. To address

these challenges, the initiators wish to make the platform sufficiently flexible to suit different circumstances. They decline to limit themselves to a narrow definition of 'local', which may vary depending on the specific geographic conditions and the distance that each producer is willing to travel. Furthermore, there may be possibilities for co-operation by producers in the organization of deliveries.

Current consumer patterns also act as barriers. The main bottleneck is that consumers have too easy access to food. In theory, they would like to buy local food from the farmers, but often choose to go to a conventional food store, as it is much easier. The key opportunity is to find a practical way for people to buy local food on an everyday basis.

Another bottleneck is the insufficient technical development of the platform itself, so that the initiators currently do too much manual work. This challenge is to be resolved in the near future with development of the Local Food Nodes platform.

A small local store in Röstånga has expressed interest in co-operating with Bygdens Saluhall by becoming the delivery point for local food. Although the store would not receive any direct financial gains, it might benefit indirectly by attracting consumers to buy other things in the store.

Lessons learned and recommendations

Communication and outreach activities to potential customers and producers are conducted via local and national media channels and social media. Personal and professional networks have also played an important role in drawing attention to the project. Visibility in the media has played a role in attracting further funding.

Strengthening linkages with other companies and service providers is key to the success of similar initiatives. Among the possibilities could be strengthening co-operation between producers regarding timing of deliveries of goods.

In northern Sweden, large food chains, such as COOP and ICA, have been positive about sharing their infrastructure and organizing delivery points outside the stores. There is potential for other stores in rural areas in Sweden to follow their example.

3.2 Direct purchase groups, Latvia



DRAUDZĪBA. BRĪVPRĀTĪBA. BIEDRĪBA

The key principle of direct purchase groups is that consumers purchase local food directly from farmers by placing weekly online orders. Thereafter, the farmers supply organic food products to the agreed location, where the products are distributed to baskets and picked up by group members.

Initial stage of local food system creation

The main initiator of the direct buying club in Latvia was Zane Ruģēna. She started it in 2010, with her husband and some friends, and had no idea that such local food chains were very popular all around the world. At the time, none of them imagined that this initiative would also become so large and popular in Latvia.

She started visiting farmers to obtain fresh organic food for her family and children. After a short while, she understood that the demand was so high that they could organize the farmers to come to them.

Key elements of the project

Direct purchase groups go beyond direct selling and marketing activities operated and initiated by producers, because consumers are the main initiators. The consumers form local consumer purchasing groups or direct purchase groups that are in most cases based on geographical proximity. Initiating and running a direct purchase group does not require financial contributions, merely time. Customers who obtain goods from direct purchase groups use their volunteer labour to manage and operate the groups. For example, volunteer labour is used for sorting and distributing the orders in boxes. Each group is organized on an individual basis; on average, these tasks take approximately four hours every one or two months for each member. Most groups co-operate with producers that have organic certification.

The development and implementation process

Various locations are used for delivering and sorting the orders, from restaurant stores to school buildings and kindergartens, depending on the mem-

bers' arrangements. For some consumer purchasing groups, co-financing is part of the arrangement; e.g., when the group decides to rent a place for sorting and distributing food, or buys boxes for the goods. The process of running the direct purchase group is as follows.

- Information about the farmers, their weekly assortment of products and other details is gathered by the group members (volunteers) and made available on the website.
- The direct purchase group members place online orders once a week.
- The farmer receives information about the orders from all direct purchase club members.
- The farmers deliver the orders to the direct purchase group's premises.
- Group members (usually two) sort the products and place them according to the orders in boxes.
- The group members come to pay for the order and take the boxes.
- The farmers receive payment the following week when they bring new orders.

The core members of the direct purchase group usually play an active role in sharing information about the group in their personal network to attract new members. Social media and the Internet are also widely used for attracting new members.

Impact and outcomes

Direct purchase groups are particularly popular among families with children, especially those with food intolerances or allergies. Women are generally more active members of the groups than men.

Among the key motivations for consumers to join a direct purchase group is the desire to receive high-quality seasonal food at significantly cheaper prices than at the supermarkets or eco-stores. Other motivations include environmental considerations, as purchasing local organic food is seen as a way to reduce environmental pollution by simplifying logistics and eating seasonal products. Supporting local farmers and expanding social networks were also reported as important motivations for being part of the groups.

The producers benefit from the co-operation with the direct purchase groups as they obtain an additional sales channel for their production. Moreover, the process is time and cost efficient, as the products are delivered once a week.

Enablers and barriers

The local food system is based on mutual trust. Despite organic certification, it cannot be guaranteed that the products supplied by the farmers are fully organic. This is seen as a major weakness of the initiative.

Commitment of the direct purchase group members to investing time in the activities is crucial for running the initiative. Volunteer involvement is seen as a challenge for some members. At the same time, voluntary work helps to strengthen social relations between consumers and producers, and these small duties become embedded in members' routines and part of their green behaviour.

The farmers reflect input and output in their turn-over balances and pay taxes according to the law, which is seen as a strength of the initiative. Website development has been an important enabler. At first, information about products and orders was exchanged by phone and recorded in an Excel file. Gradually, an online platform was created that significantly facilitates and accelerates the process.

Lessons learned and recommendations for policymakers

Green awareness does not necessarily result in green behaviour. Direct purchase groups represent a good practice that should be further encouraged and promoted.

Agricultural extension services, such as Rural Support Service in Latvia, play an important role in supporting direct purchase groups. There is a need to make direct purchasing more accessible and convenient in everyday life.

Scaling up such initiatives is problematic. The size of a direct purchase group is usually limited, and the formation of new groups depends on extra effort by the core team. Second, organic farming labels may appeal to 'free-riders' as a way to use the system in a harmful way and to sell conventionally produced food instead. Third, there may be lobbying pressure from conventional producers and other sellers when direct purchasing is scaled up. Solutions may include policy-making oriented towards justice and equality principles as well as enhancing common and public good principles. Solutions at the operational level in direct purchase groups would be for members to visit farmers to meet them face to face and to ensure that they practise organic farming.

Read more: <http://www.tiesapirksana.lv>

3.3 EcaEja—an online store for organic food, Belarus



EcaEja is an online store for local food and organic products originating in Belarus or the EU. The project provides opportunities for local farmers

who use sustainable cultivation and production methods to sell their products, and for the residents of the Minsk region to have access to high-quality food products.

Initial stage of local food system creation

The project was initiated by a young family from the capital city of Minsk, who became interested in environmentally friendly and high-quality food products. The initiators have an IT education and no previous experience of agriculture or farming. The couple soon found that bio and organic products are absent from the Belarusian market. At the same time, an increasing number of people are considering their health and the quality of food products that they consume.

The initiators contacted representatives of farmers' organizations and retailers and found that information about products is not always accurate. This is how the idea of working directly with producers was born.

Key elements of the project

The initiators established an online store in 2012 to sell environmentally friendly products from local farmers (dairy products, meat, honey, eggs and vegetables). The idea for the online store was to gather high-quality, mostly organic products from the local farmers and to provide detailed information about their origin and quality. The farmers in Belarus were carefully selected by the initiators. A year later, the initiators also started importing additional organic and bio products from abroad (chocolate, coffee, flour, cereals, oils, etc.). The consumers can place their own online orders at a physical location in Minsk during the weekdays, or they can select the home delivery option for an additional fee.

The development and implementation process

Finding suppliers in Belarus has not been easy, as there are only a handful of farmers practising organic or sustainable cultivation and production methods today. The initiators sought organic producers through businesses directories and direct

contact with the producers by phone, and by calling the tax authorities in search of organic producers. Owing to the lack of clear regulations in the Republic of Belarus regarding organic food, the initiators developed their own requirements for the suppliers.

- A farmer should not use herbicides, pesticides or inorganic fertilizers.
- A farmer should not use fodder purchased from outside the farm.

The initiators visit the farms personally to establish direct contact with the producers and to inspect the cultivation and production processes.

The project was initiated with quite a modest amount of capital. A website was created as a trading platform for the project (www.ecaeja.by). The initiators also rented the premises. Initially, the initiative was run by the family members, but as the project grew, another 1.5 jobs were created.

The main target group is the middle and upper-middle income residents of the Minsk capital region who are particularly mindful about their health, as well as young mothers and pregnant women. The majority of customers are found by means of so-called 'word of mouth' advertising, or more precisely through the 'sandbox', as many customers have small children. Social networks and the Internet are also widely used to reach out to customers. Approximately 23–30 farmers are engaged in the online platform today, and the initiators are actively seeking new suppliers.

Impact and outcomes

Because of the small size of the market for the environmentally friendly products in Belarus, it would be challenging for the farmers to find customers if they were not part of the online platform. Other benefits for the producers include having a direct sales channel and receiving a fair price for their products. All costs for the delivery of products and control of the production process are integrated in the final price of the product and thus paid by the customer. Moreover, the products sold through the online platform receive an unofficial 'green' label. Other intangible benefits include being part of the 'eco' community, which involves communicating with like-minded people and exchanging and gaining knowledge.

Among the benefits for the consumers is access to healthy and high-quality food products



Picture 2. EcaEja orders are waiting to be delivered or picked-up; and the founder of the initiative. Pictures by Nadzeya Sabaleuskaya.

and openness. Details about the farmers and their products are provided on the website, and the farmers can be contacted directly if additional questions arise. In case of dissatisfaction with the product, customers can request a refund. In addition, the products may be delivered to the door, which is convenient for families with small children. The project indirectly supports the development and popularization of bio and organic products among the producers and consumers, thereby promoting healthy lifestyles in Belarus.

Enablers and barriers

In the initial stage, the initiators struggled with bureaucratic problems. It was a challenge to find a suitable rental space because of strict sanitary regulations and other requirements, such as the requirement for a particular wall surface that is suitable for cleaning and disinfection, and a certain number of doors. The initiators claim that if they had not been fortunate to find a cheap rental space in the beginning, it would have been impossible for them to develop and run the business.

In the current stage of project development, there are two main challenges: selection of suppliers and finding customers. They are still unable to find suppliers of pork, although pork is a crucial part of the Belarusian diet. Wide dispersion of the suppliers leads to high transport costs, which are also a challenge. As for finding the customers, the client base is developing quite slowly. Only a handful of people are prepared to pay more for 'green'

and organic products in Belarus today. Moreover, the low frequency of deliveries (weekly) is among the constraints on attracting more customers.

There has been no state support for the project development so far. However, it is worth noting that the state has expressed interest in supporting organic farming.

Lessons learned and recommendations

The initiators claim that it is crucial to have a well-functioning link and communication between consumers and producers of green-labelled products, if the community is not sufficiently mature to pay more for organic products. Another important precondition for success is to have a committed initiative group that would be ready for a zero-profit period or even negative financial results in the initial phase of the development. Moreover, it is important to determine what tools will be used to market and sell the products; e.g., an online platform, direct sales at farmers' markets or in specialized shops. Finally, it is necessary to have good information and communication support about the initiative, including information about the benefits of organic products on the website and in the media, and to remain in constant contact with existing and potential customers through social media and other channels. The initiators published a large number of articles about the project and the benefits of healthy diets in the media.

Read more: www.ecaeja.by

3.4 Eco-Village of the Kin Estates Rosy, Belarus

Eco-Village of the Kin Estates Rosy is an eco-village in Belarus that is organized according to the principles of the Kin Estate movement. Among the principles of the kin estate concept are private ownership of land with a vision of creating long-term settlements in the countryside to be passed to the next generations and management of the land according to permaculture ethics and design principles. The residents of the eco-village sell local food and crafts to the visitors.

Initial stage of local food system creation

Rosy, an eco-village of the kin estates, was founded by two young enthusiasts from the capital city of Minsk, Matruhovich Alexander and Igor Krutko, in 2003. The idea for establishing the eco-village was born in 1999, inspired by the literature and online sources on natural living, rural lifestyle, eco-villages and permaculture. Both young men have

always been attracted to living in the countryside and experiencing a qualitatively different way of the life. The initiators reached out to other interested people, and two months later, they formed an interest group consisting of 70 enthusiasts who supported the idea of establishing an eco-village.

The knowledge and experiences of creating eco-villages in other countries was carefully studied and applied during each stage of the creation and development of the eco-village Rosy. Several study visits to Poland, Ukraine and Russia were organized to gain more knowledge. The experience of permaculture farmers in Austria, Poland and Germany was studied in a great detail.

Key elements of the project

The eco-village is located in the Volozhin district of Belarus, which is about 50 km from the capital city of Minsk. Currently there are 42 families (about 160 people) living in the settlement, about 20 of whom live there permanently all year round. The



Picture 3. The eco-village of the kin estates Rosy – a photo collage. Source: www.rosy.by.

average age of the residents is between 30 and 35 years, but younger and retired people can also be found among the residents.

The majority of residents receive their income from doing regular jobs outside the eco-village. Only a handful of families live off the proceeds of selling goods produced in the eco-village. The goods produced and sold by the residents of the eco-village include herbal tea mixes, homemade sourdough bread, traditional Russian tea (made from fermented fireweed leaves), various organic cosmetics and handicraft products, such as traditional Russian handicraft dolls, wooden artefacts and furniture (Rosy 2017). The goods manufactured on the kin estate are not taxed.

The goods are primarily consumed within the settlement, and only a small proportion are sold to external consumers. The products are based on local and natural resources, and are produced in an environmentally friendly way without the use of chemical fertilizers or genetically modified seeds. Predominantly local and old varieties of seeds are used.

The primary target consumer group for the goods produced and sold in the eco-village is women. Local food and beauty products tend to be more appealing to women in modern Belarusian society.

Each family in the eco-village owns 1–2 ha (2.5–5 acres) of land, which, according to the initiators,

is the minimum needed to create a self-sufficient family homestead. The initiators define a 'kin estate' as a self-sufficient eco-system of 1–2 ha of land that includes forest land (50–75% of the territory), a pond (2–5% of the territory), an orchard and a vegetable garden, which are surrounded by a living fence. Many villagers keep chickens and goats, and some breed dogs and decorative pond fish.

Among the key principles is first that the land is managed according to permaculture ethics and design principles. Chemical fertilizers, herbicides or pesticides are not used by the villagers, and the residents cultivate environmentally friendly produce. The second key principle of the organization of the kin estate is the private ownership of land allocated to it. Ownership of a kin estate and the land that belongs to it can be inherited. However, the owner of the kin estate has no legal right to sell the kin estate or the land.

There are 30 housing units in the settlement today, which are built using ecologically benign materials such as straw blocks, light and heavy hand-formed bricks, vertical beams and light-frame construction (a mixture of clay, sand, straw and water). Moreover, about 30 ponds were built on the territory of the settlement (Rosy 2017).

Although there are no specific rules of conduct in the community, trust, good neighbour relations, mutual help, engagement in public activities and



BOX 4. PERMACULTURE makes use of the patterns of a landscape, considering plants and animals in all their functions rather than treating any area as a single-product system, by placing them in such a way that these elements provide maximum benefit to the local environment. It applies to agricultural systems, construction, architecture, design and other areas. Permaculture design seeks to minimize waste, human labour and energy input by building systems, and maximizes benefits between elements in the eco-system to achieve a greater level of synergy (Heathcote 2017; Permaculture 2017).

Picture 4. Summer celebration at the eco-village of the Kin Estataes Rosy. Source: www.rosy.by

co-creation have been among the key principles of co-living in the community. Shared attitudes about healthy lifestyle are among the key values of the community (i.e., avoiding alcohol and smoking, and often choosing a vegetarian diet) (Rosy 2017).

The development and implementation process

The kin estate concept has adopted some elements of the permaculture philosophy, which emphasizes working with rather than against nature, and simulating or utilizing the patterns and features observed in natural eco-systems (see Box 1). By practising natural farming and applying the elements of permaculture design at the kin estates, it has been possible to save costs on energy-intensive technology, human labour and chemical nutrients. Agricultural products grown in the permaculture are generally of a higher quality than industrial products owing to the use of more holistic and sustainable cultivation methods. In contrast to the mono-culture garden, where the same plants compete for the same micronutrients and light, in the permaculture design, the polyculture and diversity of beneficial species enable the creation of a productive, stable and resilient system.

Impact and outcomes

Interest in the activities of the eco-village is growing among urban dwellers. The eco-village has nearly 2000 followers in social media, and many regularly participate in various events organized in the eco-village.

The eco-village philosophy implies close ties and social contacts among the residents in the community. Moreover, in eco-village Rosy, frequent events, fairs and festivals are organized to target the external audience where the villagers have the opportunity to sell their products. These events help to establish and maintain good relationships between consumers and producers. Moreover, these events promote and raise awareness of healthy lifestyles and sustainable food choices among the population.

Enablers and barriers

Human resources have been among the most important enabling factors for establishing the eco-village and an 'engine' for their development. Hav-

ing a group of leaders who could unite like-minded people and put the ideas into practice was key to its success.

The main difficulties in establishing the eco-village are related to organizational, bureaucratic and legal issues. It has been challenging to obtain a legal consolidation of the status of the kin estates. Fortunately, this is not a barrier to small producers selling their goods.

The local administration and the local population were sceptical of the idea of the eco-village in the beginning, but friendly relations were eventually established with both the local administration and the local inhabitants. In addition, an agreement was reached with the local authorities regarding the construction and repair of roads in the eco-village, although the money has not yet been allocated. Public support was provided through the allocation of land in private ownership and electrification.

Access to land has been a crucial facilitating factor. In eco-village Rosy, the land was leased by the state with private property rights, which, according to the initiators, is a rather exceptional case for Belarus. Private ownership allows the residents of the eco-village a lifelong lease of the land and its inheritable use, which is a key feature of the kin estate concept.

Lessons learned and recommendations

The number of kin estate eco-villages is gradually increasing in Russia, Ukraine, Azerbaijan and other countries. Today, there are several economically feasible and legally adopted individual components of the kin estate concept, which are often fragmented and therefore ineffective. According to the initiators, it is crucial to have national legislative support for kin estate development, which incorporates such principles as allocation to a family of a minimum 1 ha of land that would not be subject to taxation. The land should be allocated for lifetime use without the right to sell it but with the right for it to be inherited.

The initiators of the eco-village also highlight the power of intentions and the fact that it is crucial to have a strong will but also an idea and plan on how to reach the desired goal.

Read more: www.rosy.by; <http://www.ecoby.info/>

3.5 Ekofisk, Sweden



Ekofisk is a fish farm that uses excess heat from the industry for growing Tilapia fish. It makes use of existing resources, fodder and energy in the most efficient way under a controlled system, called a 'Recirculating Aquaculture System' (RAS).

Initial stage of local food system creation

The main initiator of Ekofisk was Boliden Bergsö, which is one of Europe's largest recyclers of used lead batteries. Boliden Bergsö has large unused premises in Landskrona, a logistical set-up and staff working 24/7. The company produces excess heat of approximately 20 GWh annually, part of which is used by the municipality.

The combination of excess heat and excess land made the management at Boliden Bergsö consider various opportunities to use the resources in a circular way. Several opportunities, such as building a greenhouse for growing vegetables or an indoor golf club, were considered before the decision to establish a fish farm was made.

Key elements of the project

The fish farm was built in 2014, and all its water is recycled. Unlike many other fish farms, no toxins or antibiotics are used, and there is no unhealthy

impact on the natural habitat of the fish. Overall, the RAS is safe and effective for fish farming. Water exchange is limited, and mechanical filtration and bio-filtration are used to filter the water and to reduce ammonia toxicity. The benefits include a reduced need for fresh and clean water while maintaining a healthy environment for the Tilapia fish to grow in clean containers.

Tilapia fish were chosen for breeding by Ekofisk. It is a warm-water fish in its natural habitat, so the excess heat from Boliden Bergsö can be used to farm it. Tilapia are the third most common breed of farmed fish in the world but are quite unknown in Scandinavia.

The Tilapia breed has high protein content (18–20%), and they are low in fat. They grow rapidly and gain full size after 6–7 months, reaching approximately 600–700 grams. Tilapia are herbivores that can live on a mainly vegetarian diet and adapt easily to RAS farms, which makes them suitable for Boliden Bergsö fish farm. The fish food is about 85% vegetable based, and the rest is from fish origin protein. Ekofisk is considering using alternative fodder and intends to replace the fish protein with insects, mussels or other sources.

The development and implementation process

In some ways, Ekofisk still functions as a pilot project where small ongoing adjustments can be

Picture 5. Visiting Ekofisk with the Local Food project partners in September 2016. Photo by Anna Berlina.



made; e.g., in relation to the fish fodder. Ekofisk is also in the phase of determining the correct price for the fish. Currently, they sell 1 kg for EUR 5 to fishmongers and for EUR 10 directly to consumers.

Currently, Ekofisk has the capacity to produce about eight tonnes of fish a year. In terms of fillets, this is about 20,000 portions, which the management of Ekofisk does not consider to be a large quantity. Given the amount of excess heat and facilities available at Boliden Bergsö, Ekofisk could produce up to 200 tonnes of fish per year. Since May 2017, Ekofisk has had a contract with Bergendahls Food, which is one of the largest grocery stores in Sweden.

Two key personnel now work at the fish farm. One is responsible for marketing and sales of the fish, and the other manages the water and the system for the fish to grow. The main market for Ekofisk today is the region of Skåne in Sweden. In future, all of Sweden and the rest of Scandinavia are potential markets. Tilapia can be eaten as fillets or as whole fish, and they are good for barbecuing.

Enablers and barriers

The manager has been involved in designing and building two other fish farms before. This experience has been crucial for building a system that makes use of existing materials, fodder and energy in the most efficient way under the controlled RAS.

A huge challenge for Ekofisk is conservatism on the part of consumers. Because Tilapia are not a well-known species in Scandinavia, consumers tend to avoid it and choose salmon instead. It is only when the background of the fish and the fish farm are presented that consumers begin to be interested. When people taste Tilapia, the majority agree that it has a good taste, and it appeals to sustainability-aware consumers and restaurant brands.

In consequence, the fishmongers who are the middlemen in the fish market are often hesitant, because they are afraid that they cannot sell Tilapia to their customers. Therefore, successful marketing is an important enabler for entering the market. Providing taste samples is important for attracting new consumers and raising awareness of Tilapia. Moreover, by maintaining contact with restaurants and consumers, Ekofisk learns the attitudes of consumers and the constraints that they need to overcome to become known in the market.

The legislation in the area of 'clean' fish farming is currently underdeveloped in Sweden, although new regulations for clean aquasystems for fish farming are soon to be introduced by the Swedish government. The government has also developed an overall strategy in which sustainable local food change is a focal area. However, the future opportunities in this area for Ekofisk depend on how this strategy is implemented and what kind of tools it can provide. There are different obstacles between the government strategic level, the various authorities and the people living with, and working on, sustainable food production in the regions.

Lessons learned and recommendations

The experience of Ekofisk shows that developing a new local food system requires sufficient time and effort to be invested in proper planning and budgeting. Building an RAS farm is cost intensive. Many factors affect the budget, such as the land conditions, water supply, choice of breed and technology. Moreover, it is important to initiate contact with relevant agencies and authorities at an early stage.

Sales and marketing also need to be initiated early. It is preferable to have a large customer prior to building a fish farm, or to have continuous dialogue and contact with the customer, as it may be beneficial to have different perspectives.

Management of the fish farm is just as important as having the right technology installed. Fish farming in general requires a wide range of competencies from production technology, water technology and management to sales and marketing, and legislation regarding environmental impacts and foodstuffs. For a successful outcome, it is necessary to create a good team or to engage consultants.

If possible, it is preferable to create a business model where revenue can be maximized because of processing. That allows different market segments to be reached with different price tags.

Fish production has a smaller carbon footprint than meat production. It is a sustainable alternative for consumers in Europe if fish are farmed in a sustainable way without negative environment impacts in the local area with the use of existing resources. Therefore, raising awareness of fish production among consumers should not be neglected.

3.6 Lokalny Rolnik (Local Farmer), Poland



Lokalny Rolnik is an online platform connecting consumers with local farmers and food artisans via direct sales in the seven largest cities of Poland.

Initial stage of local food system creation

The idea of developing a local purchasing organization arose from the need for high-quality organic products in a family with a child who was prone to allergies to preservatives, lactose and gluten. The parents started looking for stores where gluten- and chemical-free products could be purchased. However, prices in popular organic food stores were high, and there was no guarantee that products were preservative free, despite claims that they were organic. The couple also visited local fairs and food markets to test various food products at home. The products were initially purchased only for the family's own needs, and from time to time, they supplied other family members and friends. This is how the first group-purchasing initiatives were born.

Together with friends, the initiators created a small food co-operative. Lokalny Rolnik first operated as a Facebook group, and its popularity among members grew rapidly, especially because of its bottom-up approach, which gained the trust of users. The number of local purchase groups began to grow, and Facebook could no longer serve as an effective platform for communication, organization and sales. The initiators decided to develop an online portal.

Key elements of the project

Lokalnyrolnik.pl is an online platform that connects consumers directly to local farmers and food artisans. Its mission is to enable easy and affordable access to locally grown and artisan food products for consumers by shortening the transportation distance between suppliers and consumers, and by decreasing the costs of middlemen.

Customers set up the so-called local purchase group, which orders products directly from local farmers. The products are picked up at a specific date and place, such as local clubhouses, small stores and coffeehouses, and private homes or garages.

Each local purchase group creates such a marketplace, as each of them uses the services of 23–25 producers who provide a large variety of products—

fruit, vegetables, meat, fresh dairy products and unpasteurized milk. The range of goods allows members to opt out of purchases from a local store. Each local purchase group collects its products once a week—always on the same day, at the same place and at the same time.

The mechanism behind the system is more complex; technology is responsible for submitting, registering, paying for and aggregating orders, then sending them to the farmer. Another aspect is the logistics of timely deliveries and product freshness. However, the main element of the project is a group of consumers, a local community and a local farmer.

The development and implementation process

The platform brings together consumers and producers. Producers apply online to be part of the Lokalny Rolnik platform. At present, Lokalny Rolnik co-operates with over 100 manufacturers, who offer more than 2,000 products. The platform is used by over 30,000 Internet users per month. The company uses several warehouses to provide good logistics between farmers, small food processors and local purchase groups. The owners of the platform began to co-operate with foreign producers, obtaining olives and some fruit directly from Greece or Italy. The chain is growing—about 10 new manufacturers per month join the network. It is important that customers know where their food comes from, so there is no anonymity, as there is at stores or at fixed marketplaces. Lokalny Rolnik only co-operates with suppliers that it thoroughly checks and tests.

Lokalny Rolnik started from family cafés, and its main customers today are families with children, kindergartens, schools and fitness clubs. Lokalny Rolnik offers both certified products and uncertified goods of known origin. There are 240 local purchase groups in Poland located in the seven largest cities: Warsaw, Kraków, Łódź, Katowice, Poznań, Gdańsk and Wrocław.

Portal users pay for their purchases via an internal account. Up to two days before their goods are received, the sum is secured on the eco-bazaar's account. Upon receipt of the goods, every customer has two days to file any complaints. Only then is money transferred to the farmer's account. Portal developers believe that payment methods are clear, so producers can be certain that ordered goods will not be wasted and customers know that their goods will be delivered.



Picture 6. The local purchase group in practice. Photo by: Andrej Modic.

Lokalny Rolnik seeks suppliers of natural (but not necessarily certified) food. In addition, it avoids intermediaries. Farmers who sell via Lokalny Rolnik receive 70–80% of the final price. This amount includes VAT and marketing activities. The commission to a co-ordinator of a local purchase group is 10% per order. If customers spend EUR 100, the co-ordinator, who prepares and delivers food parcels, will earn EUR 10. Lokalny Rolnik charges producers 5–15% commission on customer purchases.

Impacts and outcomes

This local food system is a win-win situation for farmers and consumers. There are no stand costs; the farmer fills a specific order and knows how much to produce, so the goods do not spoil and are not wasted. Farmers, small food processors and artisans earn about 70–80% of final market price, compared with about 20–30% from traditional distribution chains. The foodstuffs cost more than in a supermarket but less than in the traditional distribution chains. Moreover, the consumers have a wider selection of products.

The Lokalny Rolnik project also promotes local development through facilitating meetings and social contact among the local people who are members of the local purchase groups.

Enablers and barriers

The portal was a major investment. The project is co-financed by the EU through the European Regional Development Fund under the Operational Programme for Innovative Economy. In February

2015, venture capital investment funds were invested in LokalnyRolnik.pl for the first time. Since then, the company has effectively tripled the scale of its business. The funds decided to co-finance the portal once again. Recently, the company has received another EUR 250,000 from venture capital investment funds for further development. Among other benefits, the money will assist the scheme to enter new markets. In 2017, the company plans to expand to the German market. The plan is also to expand to small towns and rural areas.

Lessons learned and recommendations

It is important to emphasize that the project is mission oriented. On the one hand, it revolutionizes the current model of selling traditional, organic and certified products, and on the other, it goes back to its roots. The mission applies not only to the quality of food, its nutritional and health aspects but also to the philosophy of its consumption, celebration and community. It promotes the development of social trust, thus encouraging co-operation, engagement and informed personal development action. It creates and supports local communities, restores neighbourly ties in the age of universal digitization and enables locals to meet each other and to participate in something more than traditional purchases. In fact, all members of the Lokalny Rolnik group pursue the idea of selling and purchasing as a means to an end, rather than as an end in itself.

Read more: <https://lokalnyrolnik.pl/>

3.7 MinFarm (My Farm), Sweden



MinFarm is an online marketplace bringing together small-scale farmers and customers in Sweden. MinFarm was established to reverse unsustainable development in large-scale industrial farming while providing support for small-scale farmers and consumers who are interested in buying locally produced food.

Initial stage of local food system creation

Anna and Stephen Lynam are the initiators of MinFarm ('My Farm'). Anna was a fresh graduate from the university when she started the MinFarm project. She is a geoscientist and entrepreneur who now runs MinFarm together with her Irish husband Stephen Lynam, who has a background in IT sales and satellite navigational systems. Their interests are agriculture and the whole lifestyle associated with agriculture, animal issues, sustainability, environment, nature and earth science. Anna Lynam wishes MinFarm to start a social change for people seeking alternative ways to consume.

The idea of the MinFarm started when the initiators recognized the demand of consumers for buying food directly from the local producers. However, they also recognized that small farms were closing their businesses owing to financial problems. These vanishing small farms in Sweden meant that many living traditions with roots in the Middle Ages or even earlier times would come to an end.

It is against this background that the MinFarm initiative was born, as an attempt to reverse un-

sustainable trends. The initiators wanted to investigate and understand the core of the problem. The initial findings indicated that one of the main problems was the farmers' limited margin. Within the conventional system, the farmers would receive only about 30% of the revenue, while the rest would go to various intermediaries.

Because the supermarkets can buy food at very low prices from large-scale industrial farming and sell at a high profit, small-scale producers have very little opportunity to negotiate prices. The MinFarm initiators realized that small farms need a new kind of 'self-supermarket': a new local system that can run a very cost-effective business without unnecessary intermediaries.

Key elements of the project

MinFarm founders decided to build the new supermarket for small-scale farmers by setting up an online system. Accordingly, the system would provide additional opportunities to network with active and interested consumers seeking alternative ways of finding locally produced food and a change in the systems of production, distribution and consumption. MinFarm works with small-scale, high-quality producers that often use organic methods of farming, treat animals in an ethical manner or consider the environmental impact on their farms.

The target group is people who have an interest in high-quality food products and who have a certain level of awareness of sustainability issues. Furthermore, the prices of the products are not low, so the products tend to appeal to middle- or high-income customers.

In terms of MinFarm's organizational construction and structure, several steps are followed. When the company sells products through its system, it reports the figures to the farmers, who then deliver the product either to a meeting place or to private homes. MinFarm also works with a warehouse and a transportation company to manage deliveries to customers.

The development and implementation process

The founders launched a pilot MinFarm project in Jämtland in 2013. Eight farms and 10 households participated, and the founders then developed a system whereby consumers received their food in the centre of the city. Prior to 2016, 49 farms in the network sold their products directly to more than 1,300 registered households. MinFarm described its achievements in the autumn of 2016, stating



Picture 7. The farmer is delivering vegetables to a customer. Source: www.minfarm.se

that its network was growing and new services were being developed all the time.

Since 2016 the locally produced products are offered in four regions of Sweden (Jämtland, Västernorrland, Stockholm and Uppsala) and the long-term goal is to operate in all regions of Sweden. This new line of service will make the products even more accessible to customers. Hence, home delivery has been a key improvement that benefits both sides: the farmers do not have to spend so much time delivering the product and can now focus on production and less on delivery. This is also a substantial improvement for the customer; it is more convenient to have the product delivered to their homes.

Customers can become involved and influence the development of the initiative through customer surveys. They are asked about their choices of food packaging, their desired quantities, the types of products they seek and their suggestions for how the products could be improved.

MinFarm's co-operative farmers set their own prices and receive 80% of the payment from a consumer. Moreover, the money is paid in advance. This provides much better opportunities for farms. Producers and breeders alike can plan better, enjoy greater economic security and improve animal husbandry and farming practices accordingly.

Twenty per cent of the money pays for MinFarm's e-commerce site, marketing, logistics and other expenses. The whole system has been developed by a small group of enthusiastic IT and PR

staff; this was largely volunteer work in the beginning, or symbolic compensation was paid. Currently, MinFarm's two full-time employees work in customer service and manage orders, payments, deliveries and more.

The farmers are aged 50 years or older. MinFarm works with a few farms that are exceptions to this demographic trend towards older suppliers, but the general age profile of the farmers is one of middle age or above. In terms of their educational background, some farmers had other jobs related to their university degrees that were not related to farming activities; however, following a lifestyle change, they decided to enter the farming business. The other type of producers may not have university degrees, but there are several generations of farmers who inherited their farms from their families and learned farming while working on the farm.

There are some shared ethical values, because there is a symbiosis between producers and consumers. Both sides care about the environmental impact of food production and about animal welfare, and both sides are willing to make financial sacrifices to live up to these standards. Especially on the producers' side, it is costlier to treat animals properly and to be careful about using the land. The use of land can be very costly, because these producers are very careful not to overexploit it. This is a financial sacrifice by the farmer. On the customers' side, they are willing to pay more for food to be produced in a more sustainable way.

Picture 8. A farm visit is a great opportunity for children to learn about farming and where the food comes from. Source: www.minfarm.se.



Enablers and barriers

IT knowledge has been essential for starting and developing the initiative. Because this is an online marketplace, someone who knows the IT business and can develop an IT platform to manage the sales and the co-ordination has been required. Another major enabler has been the person in charge of communication to market the project and promote it to consumers.

It has been important to find a competent co-ordinator. The co-ordinator must have experience of small-scale farms because this line of work requires substantial personal work contacts and very good personal relationships. The project co-ordinator should be able to manage these complex relations and to co-ordinate the entire project accordingly. Regarding finance, the initiative has required investment capital of around EUR 500,000 (in total).

The project was privately financed by the initiators. Later, the project received support from an EU-funded project that focused on start-up companies. This EU-funded project initially provided subsidized office space for MinFarm as well as assistance with consultation services.

Raising awareness and building confidence were seen as obstacles at the very beginning and as the business expanded, especially concerning food because this is a very personal choice in general. It was also quite costly to communicate the message, to introduce the concept and to gain trust in the market, particularly in larger city markets. Confidence accounts for many of the advantages of local food production and consumption, as does trust in the quality of the farmers' products.

Awareness and consciousness of food production methods are strengths of the project. Furthermore, when people are involved in the process, they gain more insights into the impacts of large-scale industrial farming both on environmental sustainability and on animal farming. Accordingly, there is a movement towards purchasing local food produced in a more sustainable way. This movement helps the company to communicate the advantages of locally produced food when it promotes the business. Many people are engaged in the process and willing to communicate the importance of the company's work, and thus contribute to the success of the project.

The social values of MinFarm and the farms that it co-operates with are similar to those of the customers. Engaged customer groups benefit the

project because buying food is more personal for them than going to a supermarket.

Lessons learned and recommendations

The advice for local food system initiators is to focus on the qualities of the product that correspond with the customers' interests as well as the values of sustainability. Food producers could use alternative channels in addition to the traditional ones to distribute their products.

MinFarm started as a small-scale business, but if this movement in general is taken to a higher level, it could have an impact on the distribution of jobs or move them to the countryside. It would provide more opportunities for the rural areas and would have a positive impact on the rural areas by making them more active and productive. It would also allow people to stay and work in the countryside by giving them opportunities to support themselves as an alternative to moving to cities to find jobs, and could contribute to sustainable growth.

Read more: <https://www.minfarm.se/>

3.8 Mobile Farmers' Markets, Lithuania



The Mobile Farmers Markets have been run by the Lithuanian Agricultural Quality agricultural co-operative since 2009, and they provide an attractive form of sales for small-scale farmers in Lithuania. The agricultural co-operative helps and encourages small farmers to start small-scale processing, thereby supporting them in adding value to their products.

Initial stage of local food system creation

In the aftermath of the economic crisis of 2008, the price of raw agricultural produce dropped, and it was economically challenging for farmers to become involved in food processing activities. Moreover, it has been difficult for farmers in Lithuania to sell their products without intermediaries, as the requirements for food processing have been too complicated to comply with for small-scale farmers. Nevertheless, demand for natural Lithuanian rural products has been high, especially in larger cities.

Step by step, the Chamber of Agriculture of the Republic of Lithuania initiated the development of the Mobile Farmers' Markets. In 2008, the Chamber of Agriculture launched the Promotion of



Picture 9. Mobile Farmer's Market.
Photo by Vilma Eimutienė.

Lithuanian Farmers' Products during Trade Fairs project with financial support from the Ministry of Agriculture. The aim of the project was to encourage and help farmers to process their products and to sell them to the final consumer. The initiators of the project organized a series of meetings with small farmers and regional agricultural producers in rural areas to encourage them to undertake small-scale processing activities.

The Chamber of Agriculture organized study visits to Germany, France, Austria, Latvia and Estonia to become acquainted with good practices in other countries. During the study visits, farms and agricultural co-operatives that have adopted product processing and sales in local markets were visited.

This project laid the foundation for establishing an agricultural co-operative called 'Lietuviško ūkio kokybė' (Lithuanian Agricultural Quality) a year later, and this took over the administration of the Mobile Farmers' Markets in 2009. The agricultural co-operative unites farmers who produce, process and sell food products in Lithuania. It aims to help farmers to create agricultural and food products of greater value by increasing processing. Another aim of the co-operative is to raise awareness among the city residents of Lithuanian villages of Lithuanian agricultural quality, popularizing natural food products and strengthening urban–rural linkages and relationships between consumers and producers (e.g., organizing events where Lithuanian products are promoted).

Key elements of the project

The Mobile Farmers' Markets were established with a 'bottom-up' approach. The founders of the

Mobile Farmers' Markets were farmers, the Chamber of Agriculture of the Republic of Lithuania in partnership with the Ministry of Agriculture, the State Food and Veterinary Service, Vilnius and Kaunas municipalities, and the National Consumer Federation. Mobile Farmers' Markets have some elements of traditional farmers' markets and yard sales.

The members of the agricultural co-operative are farmers who sell their own products; gardeners who sell their fruit, berries and vegetables; beekeepers; certified organic farmers selling their products; and sellers of products of national heritage who have been issued a national heritage certificate.

The development and implementation process

Currently around 40 Mobile Farmers' Markets are held each week in Vilnius, Kaunas, Šiauliai and Klaipėda. Depending on the season, commercial activities are carried out by around 250 farmers and small producers. Currently, 16 farmers are members of the Lithuanian Agricultural Quality agricultural co-operative.

Trucks have been bought by farmers and converted into suitable transport for the Mobile Farmers' Market, and they comply with all food safety and hygiene requirements. With the permission of local municipalities, farmers sell food products near shopping centres and other popular places. The Ministry of Agriculture has adopted legislation regarding sales at Mobile Farmers' Markets, according to which only producers or those hired by the producers are allowed to sell their products, while reselling is banned.

The farmers are required to obtain a production permit from the veterinary service. The State Food and Veterinary Service also controls the farmers at the sales points. Lithuanian Agricultural Quality organizes farm visits to inspect their production methods and use of fertilizers, among other things.

Furthermore, the co-operative supplies products to retail chains. The local farm products can also be purchased in large shopping centres—Maxima XXX in Vilnius, Kaunas, Klaipėda and Šiauliai—at times convenient for consumers. In these shopping centres, there are special sections named 'Linkėjimai iš kaimo' ('Greetings from the village'). Here the consumers can find products such as beef, pork, poultry, smoked meat products, dairy products, fruit, vegetables, bread, fresh and smoked fish products, honey and berries.

Impact and outcomes

As for benefits for the consumers, the Mobile Farmers' Markets provide opportunities for urban residents with different income levels to purchase high-quality products. The consumers also benefit from direct communication with the producer, as they can ask additional questions about food products and become acquainted with the producer.

The farmers participating in the Mobile Farmers' Markets have the opportunity to generate higher value when they sell food products directly to the consumers without intermediaries. They also have an opportunity to create a link with a consumer and to strengthen co-operation with other farmers who participate in the market. Among other benefits is the opportunity to diversify sales channels and to become known outside their local area, even in larger cities. In other words, it provides additional income for small farmers. Second, the initiative promotes a healthy lifestyle by providing consumers with easy access to high-quality food products directly from the countryside.

Enablers and barriers

Under the pressure of the economic crisis, the farmers felt the need to establish a retail network controlled by producers that would bring the products as close to the consumers as possible.

A high level of co-operation between state agencies and farmers has been key to the success of the initiative and has involved the Ministry of Agriculture, the State Food and Veterinary Service, the municipal authorities and the State Tax Inspectorate. Moreover, the support of national authorities has been crucial in creating an enabling framework for the operation of small-scale farmers. The requirements for production on small-scale farms have been reviewed, assessed and simplified as a result of a dialogue between the Promotion of Lithuanian Farmers' Products during Trade Fairs project partners, the National Consumer Federation, and the State Food and Veterinary Service.

Access to funding under the EU rural development programme 2007–2013 enabled the members of the co-operative to purchase processing equipment, trucks and trailers for outdoor shopping.

The agricultural co-operative's success has also been attributed to the bottom-up approach of the initiative, as well as to the enthusiasm of the members and a clearly identified idea.

Lessons learned and recommendations

A co-operative is a good organizational model for farmers' market initiatives, as it allows some challenges related to aspects such as scarcity of labour and financial resources to be addressed in a more efficient way, through co-operation between



Picture 10. The local farm products at large shopping centres. Photo by Vilma Eimutienė.

farmers. Establishing effective co-operation across state and local organizations and authorities is also an important factor in success.

First, it is important to select carefully local producers that would meet all necessary requirements for product processing; e.g., the requirements of the State Food and Veterinary Service and the State Tax Inspectorate. It is important that the farmer should have all the certificates required for product processing. High-quality products engender loyalty among the customers.

Selecting a good location for the Mobile Farmers' Markets is also highly important. These places should be co-ordinated with the municipalities, civil parishes and other units. In parallel, advertising issues should be also taken into consideration, as systematic and targeted advertising enables the markets to attract new consumers and to retain loyal ones.

In addition, the initiators should encourage co-operation between the producers. The customers often prefer to buy everything in one place, so it is important to consider ways in which producers can co-operate and complement each other. This co-operation would also reduce costs.

Read more: www.mobilusturgelis.lt

3.9 Paczka od Rolnika (A package from a farmer), Poland



Paczka od Rolnika is a co-operative organization uniting 16 local farmers who make contracting-based direct sales to about 200 regular customers.

Initial stage of local food system creation

The main initiator of the Paczka od Rolnika ('A package from a farmer') project is Jan Czaja, who is a graduate of the AGH University of Science and Technology in Kraków and an owner of a 20 ha farm near the city of Tarnów in southern Poland.

Jan Czaja obtained the farm in 2004 and started converting it to organic production. Popular Polish varieties of beans, beetroots, potatoes, cucumbers and raspberries are cultivated on an area of about 1 ha. Polish red-and-white dairy cows are kept on the farm for manure to fertilize the soil and various vegetables.

The farm fills individual orders, delivers products directly to its customers and conducts on-site sales at its store under the aegis of the Grupa Odrolnika Association. The farm won the competition for the

Best Organic Farm in 2015 in Małopolskie Province in the 'Organic commodity farm' category.

The Paczka od Rolnika project is a co-operative effort between Jan Czaja and two other local farmers—Barbara Zych and Stanisław Ziółkowski. These three main initiators of the project met at the Dunajec-Biała Local Action Group. They ran agri-tourism farms at that time and sold their organic farm products (potatoes, vegetables, fruit, milk and honey) at marketplaces in nearby cities. The sales were time-consuming and unprofitable. They hoped to develop their businesses further with the help of the LAG or external fundraising opportunities and came up with the idea of alternative agricultural produce sales. It was decided to pursue a French model of contracting-based direct sales and to adapt crops to customer demand statements.

Key elements of the project

The initiative is conducted by farmers (from 16 farms at present) who deliver their products to a specific location where 2–3 farmers prepare parcels ordered by the customers. The parcels are prepared twice a week and distributed to recipients by Jan and Barbara. Paczka od Rolnika is addressed to individual customers, in particular to those who suffer from allergies and to the parents of toddlers. An increasing number of customers have undergone chemotherapy. The clients also include hotels and restaurants. To function, the project requires constant supervision and the work of 2–3 leaders.

The group can supply its products to approximately 200 regular customers throughout the year, although the demand is much higher. Approximately 1,300 people are registered on the website.

Farmers also conduct direct sales of their own products under the Odrolnika ('From the farmer') brand. The Grupa Odrolnika association operates as a co-ordinator while developing the project and promoting direct sales. Thus, farmers receive a better price for their products, and consumers gain access to fresh, high quality food of known origin at a lower price.

The development and implementation process

The farmers participating in the project include a wide variety of producers, ranging from mushroom producers and fish farmers to fruit and vegetable producers, and farms producing cereals and herbs.

The following distribution channels were intro-

duced: a domestic courier service (EUR 3.50 for deliveries up to 30 kg), a domestic COD service (EUR 4 for deliveries up to 30 kg), personal collection at a partner store (free) and direct delivery in two large cities within the province (EUR 4.75).

An average order costs approximately EUR 35. Given that one farmer can deliver parcels to about 10 recipients (one parcel per week), the farmer can earn up to EUR 15,000 per year.

Impact and outcomes

Product prices are fixed, so that farmers can obtain a price higher than the wholesale price, while customers can purchase goods at lower prices than retail prices. Another benefit for consumers is that they can identify the origin of a product and enjoy its high quality.

Farmers in the group benefit from their co-operation. For example, if one farm faces seasonal crop failure, other farmers may deliver goods for that farm. Trust and co-operation allow farmers to maintain a reserve production capacity and to minimize risk related to, among other factors, climate change and resulting seasonal crop failures. At present, farmers manage orders and deliveries themselves. However, project development and demand growth will necessitate additional staffing to manage sales.

Enablers and barriers

Members of the initiative assess opportunities for project development positively, given the growing interest of customers and despite their still insufficient awareness of the values of organic products. Reasons for this lack of awareness include large-scale media campaigns by producers of highly processed food, which advertise it as beneficial to health.

However, there are problems as well. For example, profits earned by some farmers made them cheat—they purchased vegetables at a fair and sold them as their own. 'However, consumers immediately realized that', said the initiator Jan Czaja. 'Such dishonest farmers are immediately expelled from the association.' There was another problem with parcel delivery. On one occasion, because of traffic jams, only eight of 20 parcels were delivered. At present, farmers avoid delivering their products in rush hours.

Since the beginning, the Paczka od Rolnika initiative has been co-financed by the Dunajec-Biała Local Action Group by submitting subsequent

projects. Moreover, a local municipality financed an asphalt road to the Local Project Centre. The Marshal's Office of the Podkarpackie Province co-finances visits to the Biofach Organic Products Fair in Nuremberg. The project has also received funding from the Swiss programme of co-operation with the new EU Member States.

Lessons learned and recommendations

Small and medium-sized farms have considerable potential for organic production and traditional food; i.e., chemical- and GMO-free food. Subsequent food scandals, revealing the harmful effect of processed food substances (e.g., dyes in food cause hyperactivity in children) have made an increasing number of people concerned about anonymous food at supermarkets, and they seek reliable suppliers in rural areas—as in the past when everyone had his/her own farmer friend.

Read more: <http://www.paczkaodrolnika.pl/>;
<http://www.odrolnika.pl/>

3.10 Salty Winds, Lithuania



Salty Winds is a public organization that was established in the Druskininkai region to create opportunities for local inhabitants, farmers, craftsmen, artists and rural communities in Druskininkai municipality to sell their services, products and articles, and to make it possible for people to achieve their potential with products and to obtain additional income.

Initial stage of local food system creation

The Druskininkai rural area is located close to the neighbouring city resort of Druskininkai, which welcomes around 300,000 tourists each year. When implementing the local development strategy 2007–2013, the Druskininkai LAG realized that many farmers, craftsmen and gardeners who grow or produce specific products in the area lacked marketing and entrepreneurship skills. The Druskininkai LAG founded a public institution (PI) called 'Salty Winds' in 2015 to support local development and to encourage rural entrepreneurship.

Key elements of the market

The main aim of the Salty Winds PI is to create better opportunities for local farmers, rural residents and other local people to sell their products or services with the help of educational programmes. The organization offers various educational pro-

grammes and organizes entertainment events targeting both producers and visitors to the Druskininkai region. The initiative also promotes healthy lifestyles and consumption of local food by the population, tourists and visitors, thereby addressing the demand side. Consultants from Aleksandras Stulginskis University and other training specialists were involved in the initial stage of the project development.

The development and implementation process

The project was financed within the framework of the Leader programme under the local development strategy of Druskininkai rural area in 2007–2013. After 2013, the organization operated without project financing. The organization receives a commission from the producers if the products are sold. Today, the Salty Winds PI co-operates with more than 25 different physical and legal entities in rural areas.

All year round, the Salty Winds PI provides over 20 educational programmes and organizes training courses, various entertainment events and conferences for various target groups. These activities involve more than 100 residents of the Druskininkai rural area. Among the consumers are various companies, families, clients of the tourist companies, schools, kindergartens and others seeking educational and entertainment services in the Druskininkai resort. Some of the programmes are listed below.

Educational programmes: 'Cheese making and tasting'; 'Traditional potato dishes'; 'Beekeeping programme'; 'Aromatherapy programme'; 'Leipalingis Manor programme'; 'Honey tasting and candle production'; 'Blacksmith course'; 'Newspaper weaving programme'; 'Felting course'; 'Ceramic course'; 'Introduction to Galloway'; 'Weaving course'; 'The linen path'.

Entertainment programmes: 'A Lithuanian looking for a wife'; 'Manor secrets'; 'Golf entertainment'; 'Robbers' forest'; 'Attractions in Antanas Česnulis sculpture parks'; 'Chatty Madam in Druskininkai'; 'Mineral town'; 'Biscuit whistles production'; 'Creative course'; 'Fun with Sylvester the Cat'.

The Salty Winds PI has created a website—www.surusvejai.lt—where all information about the educational programmes and other local products and services is provided.

The Salty Winds PI takes care of marketing and advertising for the farmers, and searches for new customers. They co-operate with rural develop-

ment actors in the Druskininkai region and create packages of services that satisfy various needs of tourists. The Salty Winds PI advertises products and services on the website and through other channels, and participates in trade shows, festivals and other events. In other words, the Salty Winds PI links the local farmers, inhabitants of rural communities and tourists in the Druskininkai region.



Picture 11. Juices and smoothies produced in Druskininkai. Photo by Agnė Jazepčiakytė-Gaidienė

Among the main benefits for the producers involved in the initiative is support in marketing and an extended network of consumers, which results in extra income. The producers can better organize their time and reduce production costs, as marketing and attracting new clients are taken care of by Salty Winds PI.

The main benefit for the consumers is the opportunity to gain easy access to a wide variety of products and services in the Druskininkai region. All service packages and educational programmes for producers and consumers are advertised on the website. Consumers also have an opportunity to taste local products and to become acquainted with Druskininkai region's culture and traditional dishes.

Concerning social benefits, the initiative contributed to creating jobs in rural areas, especially for rural youth involved in selling local products and promoting healthy lifestyles.



Picture 12. Salty Winds PI local entertainment event. Photo by Agnė Jazepčiakytė-Gaidienė.

Enablers and barriers

Among the challenges that the Salty Winds PI faces in developing and popularizing the local food system is competition with cheaper products from Poland that flood the market. Hypermarkets are also a significant competitor. For this reason, developing co-operation with health resorts and cafés is challenging, as they are more interested in lower prices than in higher quality. Currently there are few health resorts that order products from local producers.

The local authorities have supported the initiative by giving official permission to sell fruit and vegetable cocktails in Druskininkai Wellness Park, where no other tradesmen are permitted. Furthermore, the Salty Winds PI received financial support to advertise its activities under the Druskininkai municipality programme for small- and medium-sized businesses. The products and services of the Salty Winds PI are also advertised in the tourism and business information centre of Druskininkai.

Lessons learned and recommendations

A crucial factor for the success of similar initiatives is committed initiators who are confident in realizing the project idea. First and foremost, it is im-

portant that the initiators should carefully consider who the producers and consumers could be, and consider the ways in which they could co-operate. In other words, the initiators of the idea should have a detailed plan to co-operate with producers and to reach the target groups.

Second, the initiators should be innovative in providing consumers with various packages of services. For example, organizing educational programmes, entertainment events and training proved to be an efficient way to stimulate the consumption of local food. Moreover, the initiatives should aim to provide a full package of services to different target groups (such as children, youth, adults or various kinds of specialist). Another aspect to consider is the provision of different services depending on the season of the year. Moreover, the initiator should carefully consider what kind of financial, human and other resources may be needed to develop and implement the idea.

Finally, the initiators should consider new or different ways to introduce services, products or packages of services to the market. Marketing issues are very important in this endeavour.

Read more: <http://www.surusvejai.lt/en/about-us-3/>

3.11 Tirzas Bullis, Latvia



Tirzas Bullis ('Tirzas Bull') is a cattle-breeding farm run as a family business specializing in beef meat production.

Initial stage of local food system creation

The initiators of Tirzas Bullis are a couple, Līga Āpša and Mareks Kovaļevskis, who decided to return to their local community in rural Latvia and start beef cattle breeding. They started with five heifers and a 20 ha farm in 2012.

Key elements of the project

The farm offers direct sales of fresh meat from a variety of beef breeds (Hereford, Limousin, Angus and Simmental) and their cross-breeds—in bulk and in vacuum-packed bags with an ID, breed and age indicated on the packaging. Deliveries to the customer's door in Riga and Gulbene take place once a month.

The development and implementation process

The initiators received financial support from the Latvian rural development programme to start up their business. The farm has a co-operative agreement with the slaughterhouse in Limbaži. The number of cattle has grown from five heifers in 2012 to 80 in 2016. The size of the farm has also grown, and it now occupies 60 ha. The cattle graze outdoors on pastures. Barley and wheat flour are used as supplementary feed in summer and winter, while the feed is also supplemented with high-quality hay and oat straw in winter.

The initiators have received necessary permits for direct sales of meat, and they comply with hygiene and safety requirements. Bulls are slaughtered at a certified slaughter-house, and meat distribution and packaging also take place in a certified meat processing plant. In future, the initiators plan to export six-month-old calves and to increase their knowledge of beef cattle breeding further.

The farm is in the second year of transition to organic farming. This means that the farm has used sustainable farming methods for two years now and will receive organic certification after the transition period.

The market for beef in Latvia is limited because of the low purchasing power of the population and traditions of meat consumption, as pork and poultry traditionally dominate the market. Beef is a

relatively new product in the market. Raising consumer awareness and marketing are important areas of activity for the initiators. The initiators have developed a homepage using a *WordPress* platform and printed T-shirts with the logo of the farm. An online platform is used for receiving orders.

Impact and outcomes

The producers provide high-quality meat that is traceable, which is appreciated by the customers. Direct sales have enabled a link to be created between consumers and producers. Knowing the farmer and the origin of the food provides consumers with a clearer connection between farming and the food that they eat.

The cattle farm is a good example of a viable rural business in Latvia that contributes to sustainable regional development through job creation and reducing the carbon footprint of meat production by shortening the food chain.

Enablers and barriers

A serious hindrance is the constantly changing taxation policy in Latvia, which causes considerable pain for small producers. Among other barriers to small-scale beef producers is a shortage of slaughter-houses. There are only a couple of slaughter-houses in the region, only one of which



Picture 13. Tirzas Bullis farm. Photo by Līga Āpša.



Picture 14. Product photo by Matiss Markovskis.

provides meat distribution services. Another barrier is a lack of qualified meat cutters, as there are no professional schools or training courses available in the country.

Among the important enablers of business development has been a significant boost from EU support programmes and funds with a financing rate of up to 70%.

Lessons learned and recommendations

From the company owners' perspective, it is crucial to introduce a significant tax relief system for new businesses. The initiators noted that the costs of equipment and appliances are high and often unaffordable. Some investments are not worthwhile, considering current low sales volumes, even with the EU co-financing support of 70%. Among the recommendations for producers is to consider careful planning and reasonable investments, to avoid excessive production costs. In addition, the importance of marketing activities should not be under-estimated. A well-functioning and current website has proved to be important for maintaining communication and attracting customers.

Read more: <http://tirzasbullis.lv/>

3.12 The Cheese House, Lithuania



The Cheese House is involved in selling local food products, including a wide variety of cheeses, bread, cream, caramel and other delicacies produced by the cheese makers of Darguziai village in Lithuania.

Initial stage of local food system creation

The initiator of the local food market was Valdas Kavaliauskas, who decided to move from the capital city to Darguziai village to raise goats and to produce goat cheeses. Together with other cheese

producers, the Viva Sol association was founded to strengthen relations between producers and consumers and between rural and urban populations.

This initiative arose as a result of a situation in agriculture where the price of raw milk was so low that small farmers could hardly survive. The need for high-quality and delicious food, which is difficult to meet in the conventional food system, was one of the most important factors in the decision to create a market for local food, to move to the countryside and to turn to farming.

The initiator also claims that participation in Darguziai Village community activities and his foreign experience in cheese-making empowered him and encouraged him to develop his activities and to bring like-minded people together. The initiator gained cheese-making experience in Normandy, Northern France, where he worked on a farm for three years.

Key elements of the project

The Cheese House was founded by Valdas Kavaliauskas in co-operation with fellow cheese makers in 2010. The Cheese House is involved in selling local food products, including a large variety of cheeses, bread, cream, caramel and other delights produced by the cheese makers. It also provides catering and accommodation services, arranges cheese tastings, organizes voluntary workers for cheese-making on the farm and organizes celebrations of public holidays.

Currently Valdas Kavaliauskas's farm has 15 goats, two milking cows and 15 ha of pasture. The farm does not use any machines.

Impact and outcomes

The initiator claims that Darguziai Village has undergone visible changes over the past six years. These days, Darguziai Village is identified with cheese-making activities. It is one of a few villages in Lithuania where people can buy locally produced goods or have a dish made of locally grown vegetables at the Cheese House.

Recently, two young women were employed by the Cheese House, which is proof that young people are coming to understand that people can work and have an interesting life in the village. The Cheese House has attracted visitors and cyclists who also bring liveliness to the village. The implementation of this initiative also generates benefits to other farmers in the village who supply the

Cheese House with locally grown vegetables and dairy products.

Consumers also clearly benefit from their participation in this local food system, as they gain access to high-quality and exclusive local products that can be purchased weekly at the market or through an agreement with a farmer. Additionally, consumers can communicate directly with the producers and thus reinforce the relationship of trust.



Enablers and barriers

In the case of the Cheese House, human resources were the keystone of the successful implementation and further development of the initiative. Starting up the initiative did not require considerable financial investment, as land and other inventory are not expensive in the rural areas of Lithuania. Intangible resources have been particularly important in developing and running the Cheese House, such as the establishment of informal relations among the producers and between producers and consumers, developing innovative marketing campaigns, promotion of direct sales, selling to farm visitors and consumer involvement in various activities and events.

According to the cheese makers, sharing common values is the key factor in the successful operation of the small farmers' network. The common values shared by the farmers of Cheese House are based on nature-friendly behaviour, building the relationship between producers and consumers, and personal responsibility. Moreover, the cheese makers' claim that the key element in their relations is mutual trust, which can more easily be maintained in a small group of people. As the



Picture 15 (above). One of the cheeses produced. Photo by Ilona Pencyle.

Picture 16 (below). Guests at the Cheese House. Source: Picture provided by the Cheese House.

group of cheese makers is small, the farmers represent each other's products at the market and take turns at the counter.

The social and economic effects in the rural area stem from the individual interests of the cheese makers in rural viability and their chosen lifestyle. The initiator of the initiative feels that sometimes people consider him to be the leader of the village, who can be approached or followed. Thus, having a strong and committed leader has been an important enabling factor.

Lessons learned and recommendations

The cheese makers believe that rural viability can be enhanced by strengthening the relationship between rural and urban citizens, and between producers and consumers, which can be achieved through direct selling and continuous dialogue. The initiators believe that rural development initiatives should focus on facilitating the emergence of new links and co-operative activities among the different producer groups. This case demonstrates the importance of a committed initiator who can attract like-minded people, including potential suppliers and consumers.

Read more: www.surininkunamai.lt, www.vivasol.lt

3.13 Village to your Home, Lithuania

The two-sided Village to your Home network is a national network consisting of communities of local food consumers and farmers in different regions in Lithuania who organize direct purchases through an online platform.

Initial stage of local food system creation

The idea of starting up the Village to your Home network originated with the employees of the Lithuanian Institute of Agrarian Economics, who had purchased food products directly from farmers by arranging for food baskets to be delivered to the Institute for several years. During those years, a stable network of suppliers providing fresh and high-quality fruit and vegetables was established, but the system had some drawbacks. First, the employees of the Institute were interested in a broader selection of food products supplied by the farmers. However, the network of farmers was growing slowly, mainly as a result of random contacts. Additionally, the organizational work and co-ordination was time-consuming for the

farmers, as the communication and orders relied on phone and emails.

Thus, there was an interest in, and a need to develop, a marketing instrument that would be convenient for organizing direct purchases and would enable both farmers and consumers to gain the benefits of a short supply chain.

Key elements of the project

The initiators applied a theory of a two-sided network to create an interactive online platform that brings together consumers and farmers/producers, and allows them to exchange information about the supply of, and demand for, products and to organize the purchasing process more conveniently and without intermediaries. One side of the network includes local consumer communities that can be founded by any person who registers his/her initiative on the platform. The local food communities rely on voluntary work to administer the orders. The other side of the network includes food producers (farmers and farmers' co-operatives) that deliver their products in food baskets to the communities.

The creation of the network and launch of the platform were supported in the framework of the *Bilateral Co-operation Network* project implemented by the Lithuanian Institute of Agrarian Economics, with funding provided under the Lithuanian Rural Development Programme for 2007–2013.

The development and implementation process

The experience of the researchers of the institute has shown that successful co-operation with farmers depends on the ability to organize a sufficiently large food basket for the farmer, as this reduces the product transportation costs per unit. This result is achieved when several consumers pre-order a food basket together. This principle was implemented on the platform, and the consumers were asked to organize themselves into communities.

A simple and user-friendly tool was installed on the platform to create aggregated food baskets for the farmer that combine the orders of all community members. First, one community member initiates the purchase of products from a specific farmer. Second, each community member receives an email with an invitation to join the purchase. Based on their needs, the members add information about the products that they want

to purchase from the range of goods offered by the farmer. Finally, all requests of the community members that have been submitted to the system go to the common basket of this community, and the farmer receives an email with a list of purchasers and a list of orders. At the time of initiation of a purchase, delivery time and place are organized. A product evaluation system was integrated on the platform to prevent low-quality products and poor service. Each participant is invited to assess the quality of the products and their delivery to the consumer at the end of the purchase.

In the process of creating the platform, particular attention was paid to community development activities and communication between the consumers and producers; e.g., through the message board. Farmers can introduce their farms and products on the platform because they sell directly from their farm without intermediaries. The platform enables farmers to update information regularly about the range and prices of products, to respond to the season of production, to provide production quality certificates, to react immediately to consumer orders and to create and sustain relationships with regular consumers, as well as to initiate consumer communities for purchasing farm products. Considering that the success of the network requires a certain number of members, called the critical mass, it is believed that the communication platform has to operate at the national level, considering that Lithuania is a small country. The Village to your Home platform is a two-sided network that represents the public interest and encourages advanced nutrition through its short food supply chain model.

Current stage of project development

By the end of 2016, about 200 producers participated in the network, and there were about 1700 consumers in 300 communities. The network covers the whole territory of Lithuania, but the majority of these communities have been formed in major cities, where people usually have higher incomes and higher levels of education and are more aware of healthy lifestyles. The consumers can purchase more than 900 food products on the platform: meat, dairy products, bakery products, fish, fruit and vegetables.

Impact and outcomes

Among the benefits of the two-sided network are reduced transaction costs for both farmers and consumers. Consumers in the network receive high-quality local food for lower prices than those of the freshest products in other marketplaces. Products are delivered to the community in a convenient location at a time agreed in advance, and consumers do not waste their time going to the shop or to the farm. Members of the community share information about the taste of new products and recommend products. The product quality evaluation system in the communication platform reduces the risk that the farmer will provide low-quality products to the consumer. Consumers can also negotiate prices with the farmer and thus reduce the money spent on food.

Moreover, the network allows farmers to establish long-term relationships with consumers and to gain stable farm income flows, ensuring stability and security. Like other systems based on the pre-order principle, the platform helps farmers to plan production quantities and range of goods, avoiding sudden or unexpected losses of production. Direct contact with consumers helps farmers to collect information about consumer needs, allows them to taste the products and provides guidance about adjusting production processes to increase demand for their products. Farmers communicating with end users without intermediaries receive a better price for their products, resulting in higher revenues.

While farmers as members of the communication platform introduce their products individually, there is a tendency for co-operation among producers. It is becoming more common that the farmers who deliver their products to the communities suggest tasting or purchasing products produced by neighbouring farms. The initiators of this network hope that in the near future, the efforts of the farmers in one village or one region will grow with co-operation in the delivery of products to the communities, and the one-sided effect of farmer participation in the network will be strengthened as well. The platform provides an opportunity for the farmers to develop their own territorial networks, thereby expanding their range of products and reducing logistical costs.

The platform strengthens the link between rural and urban areas, and between producers/farmers and consumers, as they have an opportunity to see each other directly and to discuss all important issues related to issues such as food production, farm activities and rural life. People from urban areas can visit farms or events organized by participants in this platform.

Enablers and barriers

Human resources were the main factor in the successful implementation and further development of the initiative. The employees of the institute shared the same interests and willingness to create and to contribute to building a local food system. Financial resources have been particularly important in the process of creating a platform for the purchasing process. Access to financial resources has also been important for marketing the platform to attract new farmers and producers, and for encouraging the consumers to initiate and join the local food node for purchasing farmers' products.

The challenges faced during the initial stage of project development were associated with dif-

ficulties in attracting consumers to create or join communities and launching a website that meets the needs of both producers and consumers. In the later stage, the challenges have been associated with the increased administrative tasks for communities, as not all members were willing to commit to voluntary work to administer orders for the whole community.

Lessons learned and recommendations

Similar to other initiatives of this kind, the key to success is having a group of driven individuals who attract like-minded people to develop the informal co-operation network, including both potential suppliers and consumers.

A platform where farmers and producers can promote their products while the consumers create their communities to start the selling and purchase process is an essential tool for the initiative to function. Developing and launching the platform requires human and financial resources, not least for marketing activities once the platform is launched.

Read more: www.kaimasinamus.it

4. Stimulating local food system creation — lessons learned in practice

Although these local food cases and the contexts from which the initiatives emerge vary in many ways, there are some broad lessons and wide-ranging conclusions that can be drawn. This chapter provides a brief overview of the lessons learned from the 13 examples of local food initiatives and meetings with practitioners and researchers across the BSR, focusing on the transferrable findings and main drivers of, and barriers to, the success of the initiatives. This section also includes key findings on how to support the development of local food initiatives aimed at different groups of actors who develop local food systems or would like to do so.

Although one can argue about the capacity of local food initiatives to generate larger structural changes in the agri-food sector, the above examples show that local food initiatives can be a good and more environmentally sustainable alternative to mainstream food systems. These cases illustrate how local food systems can be economically viable and can provide fresh, nutritious and seasonal food.

Local food systems support social and environmental sustainability goals that mainstream food systems rarely value and often neglect. For many small-scale farmers, the local food initiatives have provided opportunities to diversify their sales channels and to receive a better price for their products.

As illustrated in several cases, local food is part of culture and is an element that unites the community and people of all ages. Therefore, the social aspects of local food systems are no less important than the nutritional and health benefits. Local food initiatives cultivate mutual trust, encourage social contact, co-operation and engagement of the members of the community, improve neighbourly ties and people-to-people contacts, and thus positively contribute to local development,

both urban and rural. Some of these local food initiatives have been commended for strengthening urban–rural interactions by bringing rural producers to the cities and encouraging urban residents to explore the countryside.

One can observe from the cases studied above that both producer- and consumer-driven local food initiatives are common. Therefore, the development of local food initiatives in the BSR is driven by both supply and demand. Many of the successful local food initiatives produce niche products (e.g., cheese or organic beef) or are oriented towards specific groups of customers who are willing to pay extra for quality and local origin.

Local food initiatives tend to appeal to environmentally and socially conscious customers who are concerned about health issues and nutrition, the origin of food and its environmental impact and carbon footprint. Moreover, local food appeals to tourists and visitors, for whom tasting local food contributes to the experience of visiting a place. From this perspective, local food is a wide-ranging issue and is a part of rural and agri-tourism, cultural heritage and food tourism. Therefore, developing local food initiatives is a good way to increase the attractiveness of a place through branding based on unique and traditional food products, or developing new and innovative food products and services.

In terms of organizational structure, these local food initiatives have encompassed mainly 'neo-traditional' organization models based on complex collaborative networks and off-farm sales. These types of initiatives have flourished largely thanks to the development of digital technologies and social media. Digitalization signifies a new milestone in the expansion of local food initiatives by facilitating direct contact between producers and consumers, and by improving the efficiency of production and sales processes.

4.1 Key opportunities and challenges

Overall, one can see from these cases that the creation of a local food system is a complex social process that calls for innovations in marketing, management and social areas, in addition to the farmers' tacit knowledge and experience. Activating all these elements has been important for the success of the initiatives.

As the majority of the cases were initiatives developed from the bottom up, the presence of committed and driven individuals (a leader or a group of leaders) was a crucial precondition for initiating and running them, whether consumer or producer driven. In addition, many of the initiatives rely on volunteer work; e.g., in managing the direct purchase groups. Therefore, finding the right people and mobilizing the community members has been key to the success of many initiatives.

Second, the majority of successful initiatives have received support either from the EU or from national funding programmes at some point in the projects' lifetimes.

Successful marketing has been a critical element in most of these local food initiatives, in marketing of both products and services, as well as in finding customers. A well-functioning and current website has proved to be important for maintaining communication and attracting customers.

The regulatory framework has been identified as a barrier to small-scale producers in general, as meeting the necessary requirements for product processing and food safety regulations is not always easy. The practitioners also claim that the current tax policy does not sufficiently favour small producers.

Other challenges are related to the fragmentation of social and human capital in remote and rural areas. In relation to local food systems, there is a fragmentation of producers and marketing activities, meaning that people act individually rather than co-operating on these issues. Co-operation among producers in activities such as delivery of goods, sharing infrastructure and marketing is one way to overcome the challenges related to the fragmentation of social and human capital and the lack of economy of scale.

Moreover, seasonality of business is a weakness of local food initiatives. Consumption of local

products is closely linked to tourism, and for many territories, local food activities are scarcer during winter. From this perspective, developing local processing activities can offer additional benefits in increasing value generation and reducing dependency on seasonality. However, developing processing and scaling up is often challenging because of difficulty in obtaining loans, taxation policies and a lack of innovative ideas to create new products in a local production process, including storing and packaging.

Other barriers include weak co-operation among community members and lack of institutional support. LFS may be a way forward for local development in rural and remote areas based on the natural resources available in the area. Nevertheless, there is sometimes hesitation to extend government support to LFS because of the view that LFS leads to shorter food supply chains that decrease the number of jobs and the tax revenue for the government.

The attitudes among consumers and current consumer patterns can also be a hindrance in some areas. The main bottleneck is that we can access food too easily in conventional supermarkets. Therefore, the key opportunity is related to working out a practical way for people to buy local food on an everyday basis. Moreover, raising awareness of the benefits of local food products and building confidence and trust in local producers and products could reverse current trends. Furthermore, the disappearance of local food traditions may be a hindrance because fewer young people are interested in local food production and prefer migrating to urban areas to pursue education and work.

Overall, future opportunities in local food systems will be based on an understanding of the shift from quantity-driven through quality-driven to value-added production. Therefore, future opportunities are associated with:

- further development and innovation of food value chains, offering new services and food-related experiences;
- encouragement of local food processing; and
- identification of synergies between different sectors (linking local food, culture and nature-based tourism).

4.2 Key messages to local/regional authorities on supporting local food initiatives

- Research the capacity of local food producers and co-operation opportunities. What can they do, what do they want, what are the possibilities and how can the local food producers be encouraged to co-operate? One possibility is to set up business plans together or separately.
- Further exploit the networking possibilities between actors involved in the local food system and facilitate cross-sectoral collaboration and production opportunities. New forms of rural businesses may emerge from such co-operation. Make use of demonstration or pilot cases and inspiring good practice examples.
- Think what your municipality has to offer; e.g., empty buildings could be used by some industries and businesses, but there is a need to promote opportunities to use them.
- Promotions of local food could be used for marketing the local area and attracting tourists and visitors. Developing local food based on historical and traditional practices could also be a way to preserve cultural heritage.
- Learn from good and bad practice cases of local food market creation in other regions and abroad.
- Evaluating the economic, social and environmental impacts of local food systems is needed to increase visibility and to convince policymakers of the benefits of such initiatives for local development.

4.3 Key messages to food producers and practitioners on supporting local food initiatives

- Mobilize like-minded individuals, create a good team and be patient.
- Consider careful and timely planning; e.g., define a target group, marketing channels and a network; draw up a business plan and create a budget.
- Do not underestimate the importance of marketing activities for attracting and retaining loyal customers. Think about new or different ways to introduce products, services or packages of services to the market.
- Think about creating a business model where the revenue can be maximized by processing. This allows different market segments to be reached with different price tags, and overcomes seasonality challenges.
- Consider focusing on niche and higher value products (e.g., see case studies on the Cheese House and Tirzas Bullis).
- Consider establishing a co-operative form of organization, as it allows the risks and profits to be minimized and distributed, but also shares responsibility among the producers/initiators.
- If not setting up a co-operative, still consider strengthening co-operation with other farmers, companies (e.g., conventional shopping centres) and service providers. For example, co-operation among the producers in areas such as timing the deliveries of goods and sharing infrastructure could result in cost reduction and time saving.
- Seek to establish a dialogue with the local authorities, state institutions and private actors at an early stage. They may be helpful in gaining new perspectives on the development.
- Another aspect to consider is the provision of different services depending on the season of the year.

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