



WP3

Latgale (RR14) – Latvia – Food System Regional Report

Authors: Sandra Šūmane, Emils Kilis, Talis Tisenkopfs, Anda Adamsons-Fiskovica, Mikelis Grivins

BSC | BALTIC STUDIES CENTRE

December 2018

Table of Contents: Food System Regional Report

| | |
|--|-----------|
| 1) Socio-economic and agricultural profile of the reference region | 3 |
| 2) Key products and regional food balance sheet | 5 |
| 3) Food system: Key nodes and flows and role of small farms and small food businesses | 7 |
| 3.1. Key product 1: Wheat | 7 |
| 3.2. Key product 2: Cow milk | 9 |
| 3.3. Key product 3: Potato | 12 |
| 3.4. Key product 4: Honey..... | 14 |
| 4) Typology of small farms in the reference region..... | 17 |
| 5) Governance..... | 19 |
| 6) Small Farms and rural livelihoods | 24 |
| 7) Role of Small Food Businesses..... | 25 |
| 8) The Future..... | 27 |
| 9) Annex: List of resources | 30 |



1) Socio-economic and agricultural profile of the reference region



Latgale is the easternmost region of Latvia and also of the European Union: it borders Russia, Belarus and Lithuania. This peripheral location means longer distances and more costs for the regional residents and entrepreneurs, including farmers, to principal urban centres, markets and services within Latvia.

Approximately 14% of the entire population of Latvia live in Latgale, and it has a high proportion (37%, 2018) of ethnic Russians. The regional population has decreased to 270 211 in 2017. Depopulation has affected Latvia as a whole, but the impact is most critical in Latgale (-7.7% since 2013) due to outmigration and negative natural population growth. Approximately 60% of the population live in urban areas. Small and very small villages and groups of individual farms or houses (up to 10 houses) remain a typical form of settlement in the rural areas.

Latgale is the least economically developed region in Latvia, with the lowest average monthly bruto salaries (671 euro compared to 961 euro in Latvia (March 2018) and the highest level of unemployment (15.9% (April 2018)). Entrepreneurial activity and investments are lower than in other regions. Due to this modest economic performance Latgale accounts for a disproportionately small percentage of Latvia's GDP (7.3%) and has the lowest per capita GDP in Latvia (6839 euro (2015)). As regards the employment structure, agriculture has a more significant role than in other regions. The sector provides jobs for 11.4% of all economically active people.

Agricultural production in Latgale is dominated by small-scale farming. It is the Latvian region with the biggest share of small farms (SFs). On average, agricultural holdings there are smaller (19.7 ha) than in Latvia (27.6 ha) as a whole. The principal characteristics of agriculture are provided in Table 1. In addition, it can be noted that Latgale has a high proportion of organic holdings. In 2017, there were registered 1464 certified organic farms which cultivated 56 832 ha. It counts for approximately 40% of all organic holdings and 34.3% of total organic agricultural land in Latvia.



Table 1: Basic data for the region

| Indicators | Data per Region - Nuts 3 |
|--|-----------------------------------|
| Land size (km2) | 14,550 |
| Population (thousands of people) | 270 |
| Density (people/km2) | 19 |
| GDP (thousand USD/inhabitant) | 7,912 |
| Total labour force in AWU | 24,600 |
| Total number of holdings | 24,086 |
| Total Agricultural area (ha) | 508,900 |
| Total Utilized Agricultural Area (ha) | 474,300 |
| Agricultural Area in Mountain Area | n.a. |
| % of UAA in the RR | 32.6 |
| Average Farm size | 19.7 |
| Number of farms by UAA farm size: | |
| 0-5 ha | 7,683 |
| 5-20 ha | 12,218 |
| 20-50 ha | 2,600 |
| >50ha | 1,446 |
| Average size of farms < 5ha of UAA | 2.4 |
| Area of main crops (ha) | |
| Cereals | 135,727 |
| Wheat | 72,504 |
| Barley | 17,794 |
| Rye | 4,231 |
| Pulses | 9,569 |
| Open field vegetables | 475 |
| Potatoes | 4,044 |
| Rape | 14,308 |
| Area of main crops (ha) in farms < 5ha of UAA | Potatoes, open area vegetables* |
| Livestock (LSU) per type | |
| Cattle, of which | 98,300 |
| dairy cows | 37,200 |
| Pigs | 4,400 |
| Sheep | 2,810 |
| Goat | 300 |
| Poultry | 981 |
| Livestock (LSU) per type in farms < 5ha of UAA | Sheep, goats, cattle, dairy cows* |
| Annual work units (AWU) by UAA farm size: | |
| 0-5 ha | 4,900 |
| 5-10 ha | 5,700 |
| 10-50 ha | 9,800 |
| >50ha | 4,100 |
| Total family labour per farm size: 0-5, 5-20,20-50,>50ha | No public data available |

* No data in requested units available at NUTS 3 level.

Source: Central Statistical Bureau of Latvia, data of 2016 and 2017.



There are several events which have influenced agricultural development and small-holders' situation in Latgale and the country as a whole. Firstly, the agricultural reform in the beginning of the 1990s (decollectivisation) resulted in a very fragmented agricultural production structure. Farming performed a very crucial function of socio-economic safety net in rural areas, but its production efficiency was often low. Rural policies failed to create social and economic alternatives or improve the situation of small farmers (Slee 2000). Integration and accession to the EU in 2004 provided new opportunities and resources to farmers, including small ones (with some specific target support programmes to semi-subsistence farms and small farms). In the meantime, public agricultural support has not been well-balanced among various goals and farms, and small farms have not been among the principal beneficiaries: the biggest share has been devoted to modernisation goals and absorbed by a limited number of large farms (Vēveris and Kālis 2011).

2) Key products and regional food balance sheet

a. Key products produced and consumed in the region



Photo © Anda Adamsone-Fiskovica

On the basis of the available statistics on food production and consumption in Latgale region and in discussions with experts of the regional agriculture, the following key products were selected for in-depth analysis in Latgale: wheat, milk, potatoes and honey. According to the joint SALSA methodology, four regional key products had to be selected to respond to following criteria: two products that are much produced and consumed (wheat and milk), one - with high production but low consumption (potatoes), and one with social or cultural relevance in the region (honey).

b. Balance of production and consumption of key products in the region

Table 2 includes data on production and consumption of these four products in the region.



Table 2. Production and consumption of the key products in Latgale.

| Product | Approximate amount produced in the region (ton/year) | Approximate amount consumed in the region (ton/year) | Balance (produced - consumed) | % surplus-deficit on total consumption* |
|----------|--|--|-------------------------------|---|
| Wheat | 217 262 | 63 428 | 153 834 | 2.42 |
| Milk | 203 556 | 71 761 | 131 795 | 1.84 |
| Potatoes | 63 997 | 17 834 | 46 163 | 2.59 |
| Honey | 1 014 | 218 | 796 | 3.64 |

* Accordingly to the project methodology, calculated as Balance divided by Consumption.

Source: Central Statistical Bureau of Latvia; Data on consumption are calculated on the basis of EFSA database “Comprehensive European Food Consumption Database” (<https://www.efsa.europa.eu/en/data/food-consumption-data>).

Wheat, milk and also potatoes production are considered among the best suited agricultural branches for Latgale region taking account of its agro-climatic conditions. However, potatoes and wheat are sown in a comparatively smaller area than in Latvia as a whole, and the average yields of wheat and potatoes per ha are well below the national average (in 2017, they were respectively 66% and 47% of the national average). Nevertheless, wheat is the most produced crop and the most consumed crop in the region, and it is also one of the principal export products (approx. 45% traded outside the region). Milk in turn is the most typical regional animal product, both in terms of production and consumption; a considerable part (approx. 50%) is exported. Considering potatoes’ production-consumption balance, its production volumes greatly exceed consumption within the region, albeit it is a key product in consumers’ diets. Finally, honey is important product in the region for cultural reasons, it is a traditional product. Compared to other key products, the production volume of honey is low, but it considerably exceeds the regional demand, leading to a significant surplus (3.64%). In total, the region is self-sufficient regarding all the four products.

There are slight variations in production and consumption of these key products in SFs. Table 3 summarises production and consumption of the key products at the regional level (X), and more specifically in SFs (SF). The relevance of the products at SF was estimated on the basis of their relative importance in SFs’ production and consumption structure, and SFs’ contribution to regional production. Milk and potatoes were found to be typical products in small farms. SF produce a remarkable share (20%) of these two products in the total regional production output. Wheat is comparatively less produced in SF, but wheat-based products are typical consumption products. Although it cannot be said that honey production is very widespread among SF, honey is a typical SF product as approx. 80% of honey comes from small farms.

Table 3. Four key products for the Latgale region

| | Production | | Consumption | |
|----------|------------|-----|-------------|------|
| | High | Low | High | Low |
| Wheat | X | SF | X SF | |
| Milk | X SF | | X SF | |
| Potatoes | X SF | | SF | X |
| Honey | SF | X | | X SF |



c. Official statistics and key products in the region

Available national statistics characterize well production of these products at regional level; some data are freely available regarding production in different farm-size groups; more specific data are available for a fee on request. Available national data on consumption are not region specific, but calculations for regional consumption can be made for many products. However, these data are on consumable end products (like, bread and cheese) and not raw products (like, wheat). To calculate regional consumption, we used data from EFSA database “Comprehensive European Food Consumption Database”.

3) Food system: Key nodes and flows and role of small farms and small food businesses

3.1. Key product 1: Wheat

- a. Nodes in the regional food system: production, processing, commercialization and retail

Wheat is one of the major crops grown in Latvia, and it also central for the Latgale region (72 504 ha in 2017). Since wheat is mainly an industrial export product, the major share of this cereal is produced by medium and large farms operating in the region, though there is a discernible contribution of small farms (estimated around 10%). Around half of the interviewed 36 farmers grew at least some wheat, though only three noted that they sold wheat. Majority of small farms growing wheat do this for self-consumption, i.e. for animal feed. On the whole, however, the trend is definitely towards an agro-industrial model of the sector driven by large intermediary companies, processors and retailers, and medium and large farms.



Photo © Anda Adamsone-Fiskovica



b. Flows connecting the different nodes in the regional food system

Cooperatives play a central role in this agro-industrial model. There are several of them operating in the region. Commercial grain producers typically are cooperative members. Also the three interviewed small wheat producers who sold grain, did it through the cooperatives whose members they are. Cooperatives provide a range of services to their members: grain collection, pre-processing, storage, sales; supplies of production inputs (fertilizers, pesticides, fuel etc), offer agricultural machinery. What counts for small farmers is that they can postpone payments to the cooperatives for these provided inputs in spring until selling grain in autumn. In addition, there is a security in payments: the cooperative is paying fast for supplied grain.

c. Role of small farms and small food businesses within the food system

Regional farmers supply wheat also to the regional collection centres of agro-industrial companies such as *Baltic Agro*, *Linās Agro*, *Ageorna*, *Scandarga*. These are usually foreign companies and work also as suppliers of seed material, fodder, plant protection products, fertilisers.

The region used to feature its own large grain pre-processing company (*Daugavpils Dzirnavnieks*), located in Southern Latgale, which was a crucial market channel for farmers of the surrounding areas, but it went bankrupt in 2014. Another company – *Rēzeknes Dzirnavnieks* – has been operating in Eastern Latgale offering grain collection, pre-processing and storage facilities and services.

Grain producers sell wheat also directly to grain processing companies - e.g. *Rīgas Dzirnavnieks*, which is one of the largest grain processing companies in the Baltic region. There is a range of smaller and larger bakeries and local confectionaries in the region that use wheat flour as raw material for their products. Given the fact that wheat as such is not a product sold on food markets, it mainly reaches end-consumers in a processed form – either as flour or a product of flour (bread, pastries, etc.).

d. Importance of household self-provisioning in small farms and small food businesses

Small farms producing wheat operate predominantly within a mixed self-provision/proximity subsystem. As noted above, these farms produce wheat for own animal feed. Occasionally they sell or exchange some surplus grain with other farmers in the region or export organically produced wheat.

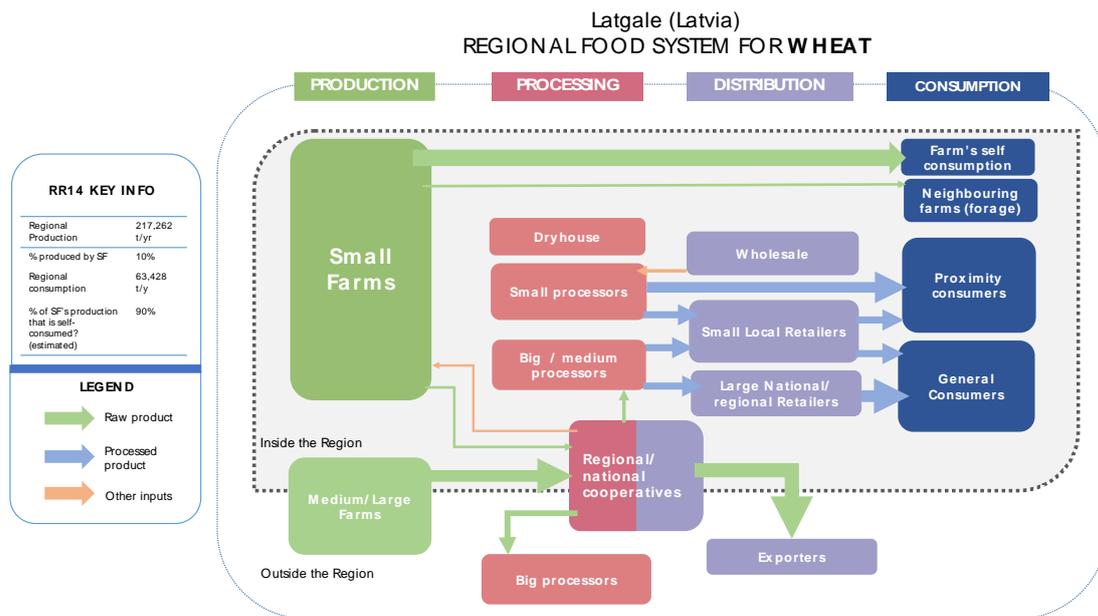
e. Other relevant information

The focus group participants mentioned following processes and their anticipated impacts that are influencing and/or will influence wheat production in small farms: (i) climate change and increasingly unstable weather conditions (e.g. draughts, flooding) may drive big grain farms to split into several smaller units and this may favour conversion smaller farms to organic cultivation which is climate-wise more resilient; (ii) the upcoming government support programme for small farms for joint machinery acquisition may stimulate small farmers to cooperate more in production and marketing; (iii) the influx of younger generation farmers and newcomers to agriculture could



stimulate innovativeness of take-over farms; (iv) increasing market demand for special wheat varieties required for making products of special quality (organic flour, pasta, etc.) could drive innovation in production and specialisation of grain farms.

On the other hand, there were factors mentioned which may further undermine and weaken small farmer position in grain sector, like an overall tendency towards farm concentration which puts land use and price pressures on small growers. Cooperation is also made difficult by specific climatic conditions such as short sowing and harvesting periods. Focus group participants considered that farmer education, cooperation and state support were necessary for small grain producers to stay in the market.



3.2. Key product 2: Cow milk

- a. Nodes in the regional food system: production, processing, commercialization and retail



Photo © Anda Adamsone-Fiskovica



The dairy sector takes a prominent place in the regional food system of Latgale. According to estimates (See Table 2), regional production exceeds regional consumption almost three times. A notable share of milk (approx. 50%) is exported outside the region; one of the largest milk processing companies in Latvia, *Preiļu siers*, is the largest exporter in the Latgale region. During recent years the dairy sector has experienced several shocks as a result of the Russian embargo, abolishment of EU milk quotas and fluctuating milk prices. According to experts, fragmentation of milk production and processing has aggravated these shocks as many relatively small farms and processing companies faced difficulties to adapt. Dairy herds and milk production have considerably decreased in 2017.

There is a potential for developing various direct sales channels at proximity subsystem, already used by a number of small farms and small food businesses, like on-farm sale, farm shops, farmer markets, agricultural fairs, direct supplies to offices and residential apartments in cities, box schemes and supplies to restaurants. The decline of small cooperatives in the region during the recent years has been also urging small-holders to seek new sales channels. While a number of farmers have turned to bigger dairies, other have started to develop individual and direct channels, such as supplies to consumers in cities and sales on farmer markets. The raise of direct marketing was stipulated by milk crisis of 2014 - 2016 when prices paid to farmers fell by 40-50%. For example, a dairy farmer was selling raw milk to a big dairy in Lithuania for 24 cents a litre while he was also selling fresh milk to consumers in regional towns directly for 50 cents a litre. This suggests that direct marketing along with small-scale processing are seen by some small milk producers as viable economic alternatives to the mainstream sales channels.

b. Flows connecting the different nodes in the regional food system

Typically though, small dairy farms are selling surplus fresh milk to varied mainstream customers in proximity and agro-industrial subsystems – cooperatives, local processors, big dairies, intermediary buyers collecting raw milk for selling to processors in and outside the region or exporting to neighbouring countries. In particular large processors from neighbouring Lithuania purchase significant quantities of fresh milk from farmers in Latgale and are in fierce competition with national dairy companies. It has, however, been noted by experts that processors are generally unwilling to buy milk from small farms, partly due to the lower quality of milk supplied by these farms, which poses a challenge for small dairy farms having no alternative channels for selling their product. Although farmers' cooperation in dairy sector is quite developed in Latvia, overall, membership in cooperatives (small and very few operating in the region) and using them as intermediaries is not common in Latgale. Latgale farmers give preference to individual arrangements with processing companies or middlemen.

Consumers purchase milk and dairy products primarily through regional and national retail chains, as well as smaller shops. Public food procurement, in particular the School milk programme is important to provide with milk school children. These dairy products and milk are coming from bigger producers and processors. Direct access to supermarkets and local stores for small food businesses for selling their produce is very limited due to the industrialised food distribution patterns (specific requirements, demanding regulations).



It should be noted that despite the high and growing number of certified organic dairy farms in Latgale, organic milk sub-system is rather vaguely developed. Likewise, in wheat sector, there is missing organic processing also in dairy sector. Organic milk is sold in the regional conventional chains or is transported to certified processors outside the region. Opening of separate organic processing lines on conventional dairies in the neighbouring regions signal that organic processing facilities might be soon opened also in Latgale dairies.

c. Role of small farms and small food businesses within the food system

Most dairy farms in the region are small ones (a statistically average herd in Latgale was 4.7 milking cows), and they make a notable contribution (approx. 20%) to the overall regional production volume of milk. Still most of the marketed milk is produced in medium and big dairy farms. The milk from small farms is distributed via a quite complex set of channels in domestic, proximity and industrial markets.

Processing was generally insignificant as a source of income in the case of the farmers we interviewed. However, on-farm small-scale processing already represent a growing niche for small dairy farmers who produce various kinds of dairy products valorising old recipes, preserving culinary tradition and contributing to availability of local and farm products.

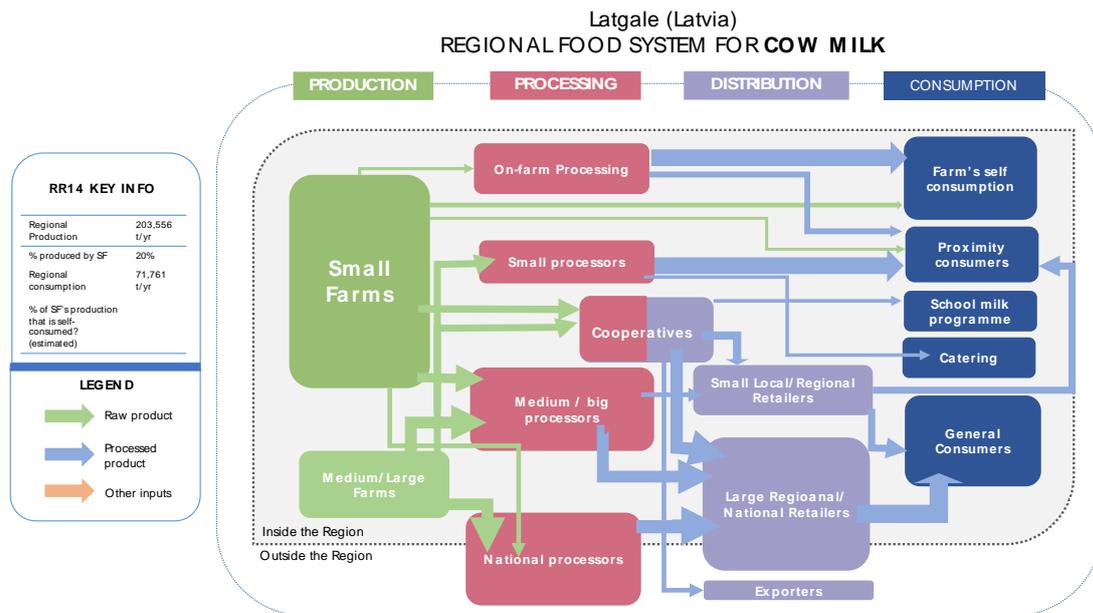
d. Importance of household self-provisioning in small farms and small food businesses

On average, a smaller proportion of milk produced on farm is consumed by the household or fed to animals. Approximately a half of the interviewed farmers were engaged in some form of artisanal processing (making cheese, cottage cheese, cream, butter) for family needs, informal exchange via family and community networks outside formal market, and for small-scale sales.

e. Other relevant information

As regards factors that might influence milk production on small farms in the future, focus group participants indicated several tendencies: (i) the growing international demand for milk will push up quality standards of production and urge small farms to modernise; (ii) farmer education and mutual experience sharing may activate product and marketing innovations and be stimulating for small food businesses; (iii) development of small-scale processing and commercialisation of culinary heritage products might successfully develop together with rural tourism services; (iv) the envisaged new government support measures for small farms, such as support to collective purchase of machinery will come together with facilitation of farmer cooperation and might be conducive to strengthening and competitiveness of small farms.





3.3. Key product 3: Potato

- Nodes in the regional food system: production, processing, commercialization and retail



Photo © Anda Adamsone-Fiskovica

Potatoes represent one of the traditional Latvian food products, which occupies a prominent place in the diets of many households in Latvia, especially in rural areas (sometimes even called the “second bread”). Latgale comes second after the Zemgale region in terms of the area used for growing potatoes, and there are more potatoes produced than consumed in the region (See Table 2). At the same time, Latgale has witnessed a reduction of the areas for potato growing in view of declining population numbers in the region and the changing consumption patterns. This has gradually reduced the role of potatoes in daily meals. Furthermore, there is strong competition with imported potatoes that are offered for lower prices in retail chains. Export of potatoes, in turn, has been comparatively limited both in Latgale and Latvia as a whole, with processed potato products accounting for the majority of export.



The major share of regional potatoes is produced by medium and large farms (e.g. *Debeskalni* in Svente). But potatoes are a very common crop for small farms, and also the vast majority of the small farmers we interviewed grew potatoes. On the whole, it is estimated that small farms produce approximately 20% of the potato output in Latgale. This estimate was corroborated by focus group participants.

b. Flows connecting the different nodes in the regional food system

Potatoes for human consumption sold via more formalised market mechanisms are mostly present in local farmers' markets. There is also a growing trend in urban areas of pre-ordering a specific amount of potatoes from farmers prior to the growing season. However, focus group participants noted that the expenses associated with transportation, and limited demand have made farmers less disposed to selling their potatoes at farmers' markets. On other hand, while the presence of small farmers as providers in processing is limited, one processor (*Aloja*) was highlighted by focus group participants because this processor purchases organically grown potatoes from small farms.

While cooperatives in Latvia are common in both grain and milk sectors, potato growers are much more individualised and seldom form producers' cooperatives.¹ There is a cooperative uniting 10 major vegetable and potato producers in Latvia (*Mūsmāju dārzeni*), but none of the members come from the Latgale region. There is also, however, the Union of Potato Growers and Processors (*Kartupeļu audzētāju un pārstrādātāju savienība*) uniting around 30 members all over Latvia. The union aims to represent the common interests of the group in local and foreign markets.

c. Role of small farms and small food businesses within the food system

Small farms mainly grow potatoes for self-consumption, including for animal feed. They are also providing and/or selling the produce to their neighbours, friends, relatives and other consumers. Therefore, they operate primarily within the domestic and proximity models. However, it should be noted that focus group participants indicated that the proximity model has gradually become less significant for small farmers who grow potatoes. For example, changes in public procurement procedures have reduced the role of small farmers in the provision of potatoes to local schools and kindergartens, which, in turn, has led to lower production volumes. Consequently, it was argued that the domestic model accounted for the vast majority of potatoes grown by small farms.

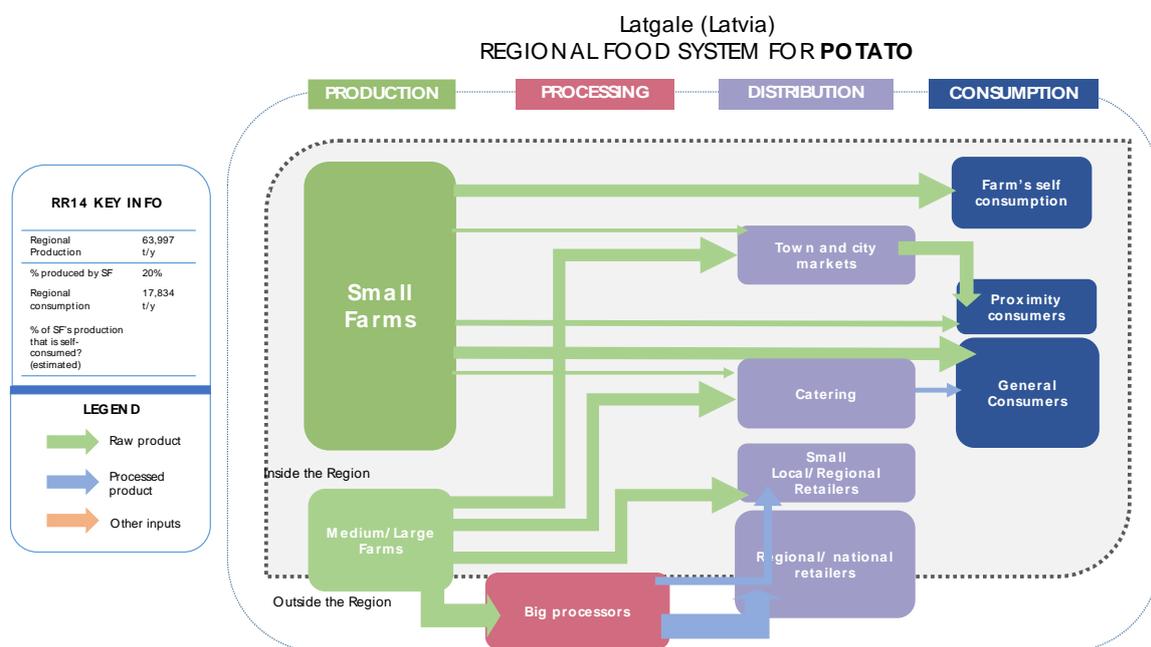
Primary processing of potatoes is mostly done on the farms – sorting, preparing (peeling, cutting) potatoes for restaurants or other catering service providers. Secondary processing, in turn, is mostly related to the industrial production of starch (also from organically grown potatoes) (*Aloja-Starkelsen* Ltd.) and potato chips (*JTC LATFOOD*). But these companies are located in the Pierīga region, and there are no major processors in the Latgale region. The niche of frozen (fried) potatoes has so far been occupied by foreign suppliers without any notable national players present in this segment.

¹ Out of 49 registered agricultural cooperatives operational in 2017 as members of the Latvian Association of agricultural cooperatives, 21 represent dairy sector, 18 - grain sector, 5 - fruit (and vegetable) sector, 3 - forestry, 1 - sheep-rearing, 1 - agricultural services. (<http://www.llka.lv/atbilstibas-lpks/>)



d. Importance of household self-provisioning in small farms and small food businesses

The interviewed farmers reported very different data regarding yields, which varied between 3 t/ha and 20 t/ha. Also, the total area where potatoes were sown varied greatly. In most cases it was well below a hectare and lumped together with other common vegetable varieties (though potatoes were generally sown in a bigger share of the area) meaning potatoes are grown primarily for self-consumption. The above has implications for the traceability of the actual amounts of potatoes produced on small farms. The farmers themselves do not keep track of the volumes grown and there is no official record of potatoes sold due to the lack of formal market mechanisms within this system. It was even indicated in our focus group discussion that small farms actually produce more than 20% of the total potato output in Latgale, but this can simply not be confirmed because potatoes are distributed via informal mechanisms (e.g. gifts, barter).



3.4. Key product 4: Honey

- a. Nodes in the regional food system: production, processing, commercialization and retail





Photo © Anda Adamsone-Fiskovica

Honey is a traditional product with an important place in Latvian cuisine and overall culture. Honey production in Latgale is notably higher than its consumption (See Table 2) meaning that a considerable share (at least half) is marketed outside the region.

To a large extent, beekeeping in Latvia is hobby-farming that is well-suited for the middle-life and older-age people; there is a minor share of professional bee-farms. Typically, beekeeping is carried on as a legacy from their ancestors, though also newcomers are not a rarity. Often beekeeping is secondary, not a principal specialisation of a farm. All of the nine interviewed bee-farms and food businesses had some other crops and/or animals. While the number of hives ranged from three to 86, two distinct groups appeared – farms with up to 10 hives, and farms with 30 or more hives. This threshold is largely related to the terms of subsidies whereby organic farms are required to have at least 20 hives and conventional farms – 30 hives to qualify for state support.

According to a survey carried out by the Beekeeping Association of Latvia in 2012, 71% of honey is sold to individual consumers by the beekeepers themselves, 16% go to wholesale trade, 9% - to both supermarkets and specialised beekeeping stores, while 4% are sold to bakeries and other food processing businesses.² Supermarkets mostly give preference to imported honey that is available for a lower price than the local product. Small farms in Latgale noted the severe competition with imported honey from Ukraine and the nearby Lithuania. Some beekeepers also pointed to the unfair domestic competition whereby informal direct sales of honey are by-passing certain formal requirements and tax payments, and are therefore undermining the officially registered and honest businesses.

b. Flows connecting the different nodes in the regional food system

There are very few large honey processing and trade companies in Latvia, and also smaller companies are predominantly located in the other regions of Latvia. This is another reason why beekeepers of Latgale mainly sell their products directly to end-consumers. Large processors give

² National programme of beekeeping for 2014-2016.
https://www.zm.gov.lv/public/files/CMS_Static_Page_Doc/00/00/00/28/10/LV_nacionala_biskop_programma.pdf (in Latvian)



preference to cheaper honey from the third countries, thus leaving local producers outside this market segment. While there is a niche for honey as a raw material in the domain of confectionary, this does not represent a notable market since the overall volumes of honey as a secondary ingredient are rather small.

Individual farms distribute honey in an unprocessed way, though some processed goods and beekeeping by-products are becoming prominent (e.g. wax, pollen, bee bread, propolis, royal jelly, bee venom) used for medical (apitherapy), cosmetic and other purposes. The region also features small businesses that offer services of organic wax cell production for beekeepers. The number of farms that undertake some on-farm processing of honey and its by-products is increasing, yet there is still a notable potential for generating higher value added and diversifying the assortment. This also calls for improved knowledge-base and skills of farmers that require additional investments in terms of time and money.

At the consumption side, farmers point to the decreasing consumption of honey in the country. This is due to depopulation, changes in diets, and limited public and private incentives for consumer education of the important qualities of this product. An interesting observation of cultural differences was noted during the focus group discussion that ethnic Russians make wider use of honey for preparing different dishes than ethnic Latvians.

c. Role of small farms and small food businesses within the food system

Honey represents a product that almost exclusively comes from small farms. According to estimates, small farms contribute around 80% of the honey produced in the region, and none of the large beekeeping farms in Latvia are present in Latgale. This makes honey a special case when considering the role of small farms in relation to food security.

Honey is also a commercial product providing farms with a considerable income not only from subsidies but also from sales. The specificity of the product is that it cannot be consumed in great quantities by the farming household, thus only some 5-10% are kept while the rest is being either given away or sold. By far the most common trade channel for honey is direct sales thereby adhering to the domestic and proximity subsystems. All the interviewed beekeeping farms (except for one that used honey mostly for self-consumption) sold most of their produce in person to individual clients, with only few of them using also other market channels like direct sales at farmers' market or middlemen. The couple of SFBs dealing with beekeeping were or were planning to use individual internet-based platforms for reaching out to clients.

Small farmers place great emphasis on the quality of their produce pointing to the taste nuances of the different kinds of honey coming from a diverse range of plants and collected in different years. This notable variation in taste of the various sorts of honey, and differences in consumer preferences are used as an argument in favour of direct sales to individual customers where tasting of the produce and face-to-face promotion of its unique qualities is made possible.

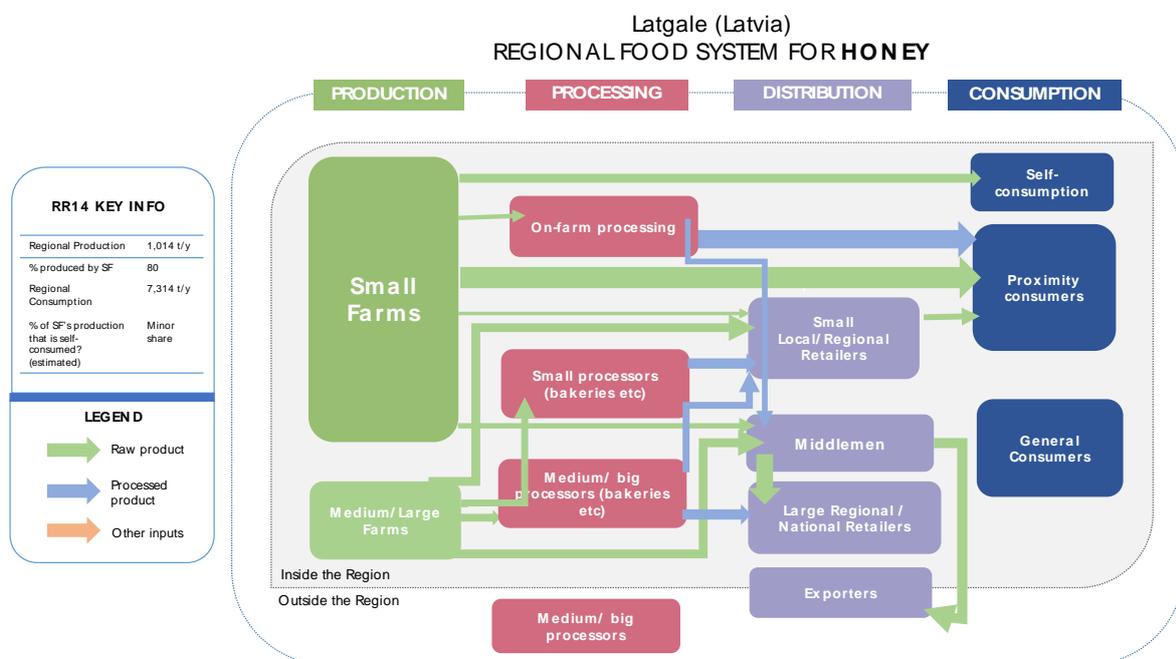


d. Importance of household self-provisioning in SF and SFB

Honey is a typical product of barter and gift economy in Latvia, used for informal exchange both among extended family members and in the wider social milieu. A telling example of this is offering honey as a gift or sign of gratitude to doctors in the capital city. Given the therapeutic value of honey, it is also a popular present to relatives with acute or chronic illnesses.

e. Other relevant information

There is a specific niche of organic honey that has been expanding over the last years (due to higher state support level for organic beekeepers introduced in 2015, and also due to the specific topography of the region which is not well-suited for intensive farming), creating an opportunity also for new export markets. Yet this is a more realistic option for larger beekeepers rather than small farms which are presently not tended towards cooperation.



4) Typology of small farms in the reference region

According to the SALSA Analytical Framework, the initial small farm typology was developed accordingly to two criteria: (1) small farms' market integration expressed as a proportion of sold production and (2) the degree of farm self-sufficiency expressed as a share of self-consumption of the products produced on the farm. The Analytical Framework suggests a threshold of 50% of sold and self-consumed production to distinguish between the types of small farms. By applying this methodology to our analysis, it was possible to discern four types of small farms in Latgale (See Table 4).



Table 4. Proposed small farm typology

| | | Degree of self-sufficiency | |
|------------------------------|-------|---|---|
| | | < 50% | > 50% |
| Degree of market integration | < 50% | Type 1: Lifestyle and hobby farms | Type 2: Semi-subsistence farms with moderate market integration |
| | > 50% | Type 3: Market oriented specialised small farms | Type 4: Market oriented small farms with a function of self-provision |

Type 1: Lifestyle and hobby farms: These are inherited or bought farms that are only marginally engaged in economic activity. Due to low levels of production these farms are neither well integrated in markets, nor are they the main source of food for the family. Some of them are phasing out agricultural activities due to owners' ageing, health or other reasons. Other are new, (re-)established by younger generation people, in-comers from the cities or re-emigrees who are returning to family properties and rural communities after a period of work and financial accumulation abroad. In this latter case when younger people take over a farm, a farm may be reorganised in order to develop a viable economic unit for food production, niche experimentation (e.g. hemp production) or new rural services. This type of farms is difficult to assess in quantitative terms, but they remain a vital part of the rural social structure and landscape, and at a certain degree also a source of food for the household and closest social network.

Type 2: Semi-subsistence farms with moderate market integration: These farms are typically engaged in low-input - low-output agriculture. The farming model and practices are mostly oriented towards self-provision of food, feed, energy (fire-wood), fertiliser (compost, residuals). A considerable share of the products generated are used for family consumption, feeding farm animals and other on-farm needs. A part of the products might be offered to or exchanged with the extended family members or neighbours. These farms operate in a community and sharing economy framework and include food as well as other farm resources in various forms of exchange, mutual help and barter. Some farms produce products in greater quantities, which allows them to sell surpluses for profit. Sales might be organised either directly to individual clients or through intermediaries (cooperatives, processors, middlemen).

From the perspective of food and especially nutritional security, it should be added that semi-subsistence farms often maintain and transmit the culinary heritage of the locality and region, and provide continuation of the local food culture. For example, some of the farmers we interviewed made cheese, and various fruit preserves, based on recipes that had been in local circulation for a fair period of time.

Type 3: Market oriented specialised small farms: Type 3 represents farms specialised in a limited number of products that are produced mainly for the market. This is done efficiently to generate substantial monetary income despite the relatively small size of land the farms are operating on. We note the application of intensive agro-technologies, use of less intensive agro-ecological approaches and an adherence to organic farming methods in this group of farms. The key products characteristic of small-scale specialised farms include both typical products (milk, grain) and niche products (e.g. organic products, fruit, berries, mutton, wool, etc.). Specialisation can be oriented towards bulk production, in particular in those farms aiming at upscaling (grain and dairy farms).



These farms sell their products to processors, cooperatives and middlemen. Other farms are rather meeting the demand in high quality products which might be sold at a premium price.

Type 4: Market oriented small farms with a function of self-provision: these small farms still fulfil the function of self-provision, but their main activity is producing agricultural products for the market. They have a multi-branch profile and they produce various food products in smaller quantities to provide for the family; but they produce certain cash crops in bigger quantities intended to be sold for profit. Therefore, these farms might be quite specialised and technologically advanced. These farms may actively seek niches of specialisation and therefore be quite innovative. Diversification and multi-functionality are the main strategies adopted by this group of farms.

The key products typical in this group of farms are similar to those in types 3 and 2. However, the product range might be slightly broader in comparison to type 3 as these farms still provide food and other products for the family. It is also worth mentioning that farms in this cluster are very responsive to seasonality and they are one of the main providers of fresh and seasonal products on the market.

5) Governance



Photo © Anda Adamsone-Fiskovica

a. Main interactions of SF and SFB with governance structures in the region

Small farms and food businesses operate in a set of multi-level governance frameworks. At local level, they are intertwined in informal social networks of professional, neighbourhood and local communities. For farmers, relations with other local farmers vary from cooperation to competition, but in all the cases other farmers serve as a reference in farmers' decision making: farmers observe, discuss and learn from each other on farming, marketing, administrative and other farming-related issues. Informal cooperation is quite widespread among small farmers, or rather neighbouring farmers of different sizes, and it is rooted in local culture and customs. Farmers regularly provide and receive non-economic assistance - help each other with labour and machinery, exchange products etc.



While most of the interviewed small farmers found moral, technical support in local farming and professional community, their views about their relations with other local people and their perceived place and role in rural communities and society in general were more divided. A part of the interviewed farmers expressed their feelings of being appreciated by locals, because of the work they do, food produce and well-maintained landscape. Other small farmers, however, felt estranged in their communities, especially in those with social and economic problems, like long-term unemployment, alcoholism, poverty. These farmers expressed they felt misunderstanding from the side of other locals about their devoted “dirty” work in agriculture. Some minor conflicts were reported about sharing collective public space, like villagers and local administration complaining about farmers polluting public roads with manure.

b. Levels of governance and their relative importance for SFs and SFBs

National level food and agricultural regulations and policies were the most referred to when discussing governance arrangements. Most of the interviewees and all the interviewed farmers were benefitting from some public support, national or European. For farmers and those businesses linked to a farm, these were single area payments, payments for cattle, organic agriculture, support from targeted programs for dairy farms, semi-subsistence, small farms and young farmers, fuel exempted from excise tax. In particular, the government support programme for modernisation of small farms (project grants of 15 000 EUR) and support programme for development of small-scale food processing (project grants from 5 to 40 thousand EUR) were positively estimated. These programmes have allowed many small farms to improve infrastructure, acquire new machinery and introduce new crops and methods of production; they have stipulated emergence of many small businesses. However, not all small processors have passed registration procedures and received trade permits yet.

It should be also noted that Latgale region has benefited the most from organic agriculture support schemes and policies. The comparatively high number of organic holdings suggests that a favourable combination of political, geographical, agro-ecological and market conditions may have boosted organic farming in Latgale to the benefit of many small farmers, especially younger ones. Some of the interviewees directly referenced the fact that organic farming attracts greater subsidies, and indicated that this was the reason for their choosing organic farming. Consequently, it could be argued that the prevalence of organic farming is contingent, at least in part, upon the availability of EU funds.

c. Constraints impairing full participation in the food system

Otherwise small farmers did not report on specific restrictions in public policies or support related to their size. Existing public support was estimated as covering well the whole range of farm sizes, regions and agricultural sectors. However, small farmers can be unintentionally penalized or discriminated as it is more likely for them to not meet the requirements and not qualify for public support (for instance, because of insufficient turnover on bank account), or to have proportionally higher costs to access public support. Their experience suggests the need to differentiate taxes, public support and procedures accordingly to farm size and specialisation. It was also repeatedly



put forward by research participants that the existing public support for agriculture and rural development should be restructured so that it better facilitates agro-ecological, resources-efficient agricultural production, artisanal food production and services.

Many of the research participants pointed to the need for a more targeted support for small farms, like semi-subsistence farms' and small farms' public support programmes that already have been implemented and much appreciated, or support to small farmers for buying land (which in some Latgale regions can be very resources demanding as there is available only abandoned agricultural land whose cultivation demands additional investments). In addition, an upper limit was requested to be set for the amounts received from public support; otherwise bigger farms receive proportionally much more.

A farm's size is an issue also when considering small farms' market involvement. Definitely, requested amounts, quality and regularity of supplies by bigger market actors who dominate food systems put some limits to individual small farms' market options and reduce their negotiation capacity. The interviewed small farmers producing surplus bulk products, like grain and milk, were well integrated in conventional chains though. They sell to the same cooperatives, middlemen or processors as bigger farmers. While cooperative members and those selling to middlemen were rather satisfied with market transactions, dairy farmers reported also arbitrary attitudes and practices from the side of processors. For instance, a processor did not make analysis but announced that a farmer's supplied milk has low quality and one-sidedly decided to pay less. Other farmers found that milk quality standards were too high and inflexible. For instance, in spring there is less fat (albuten) in the supplied milk (because of cows' pregnancy) and that means lower quality and smaller price. In autumn in return, there is more fat in milk, but the price is not increased. These farmers felt very dependent on the processor.

d. External policies, decisions and social norms affecting food systems

Although the interviewed farmers and business owners recognized the necessity of regulations and the importance of received public support, in the meantime they said to be struggling in meeting the legal requirements that food, agricultural and other relevant regulations impose them. The interviewees pointed that requirements are always more and more demanding, too often changing, new ones are difficult to understand, they are inflexible and ignoring real-life situations and there is no one to explain them how to implement them. For instance, in case of floods and resulting yield damages and limited market access (a farm was cut off from roads), the farm still has to make 200 eur/ha in order to qualify for receiving public funding. Or another farmer reported that controls are not postponed despite of his demand with a valid reason. In particular several organic farmers mentioned strict requirements of production and sales, and over-controlling as too demanding, restricting and even leading to abandoning organic farming in one case. In addition, several dysfunctions were expressed regarding the administrative and controlling system.

In general, there is a lot of bureaucratic work in agriculture, in particular if a farm applies for and receives public funding; this paper work reduces considerably the time available for actual farming; in one case a farmer abandoned the idea to apply for a public support because of the paper work involved. Some procedures ignore timing in agriculture or are too short, for instance new animals



must be registered in a week time. There was reported miss-coordination and poor data and information exchange between public institutions that consumes farmers' time and energy. In face of many and changing regulations and procedures that are difficult to understand and implement, the professionalism of persons issuing those regulations is questioned, and, on the other hand, farmers and producers themselves feel distrusted (e.g. "the State Revenue Service treats everyone as a potential tax evader"), with underestimated their professionalism and limited decision making. Food sector is very top-down governed, with a considerable dose of uncertainty and insecurity for small farmers and small business owners.

e. Gender issues intersecting governance issues

No particular gender-related differences were identified in attitudes towards farmers, division of tasks in farms or agricultural governance structures. Men's help is searched for farming tasks where physical force is needed, and men more often were operating agricultural machinery, but not in all farms and not systematically. However, accordingly to experts' estimations, small farmers in Latgale are majority senior women because of shorter lives for men.

f. Other actors and processes important for the regional food system

When analysing and mapping regional food systems we have been focusing on food market actors, their connections and food products circulating between them. A more complete picture of a food system would involve also non-market actors from policy, agricultural advisory and education, financial, civic and other relevant sectors. In addition to food products, there are other important elements of the food system, such as information, knowledge, inputs, funds, rules and norms, machinery, equipment, infrastructure, which have a big impact on food security. Some processes and elements of the food systems are more subtle, diverse or complex. For instance, in parallel to the depicted food system, there is also a "grey" one, consisting of informal and also illegal activities. Informal practices are particularly widespread among small farmers.

g. Forms of collaboration and organization between small farms

Few small farmers though are active members in formal farmer organisations – cooperatives, associations or other. Among the interviewed farmers, cooperative members were commercially oriented small farmers, in particular grain and dairy farms. These are two sectors in which cooperation is the most developed in Latvia. Being a cooperative member provides such advantages as joint marketing, better price, supplies of inputs (fertilizers, fuel, pesticides) and agricultural machinery, credit (postponed payments to a cooperative for its provided inputs), secure and timely payment for supplied products. Farmer associations were frequented mostly for networking, learning, receiving advice. In some cases, membership was a formal condition to work in a particular branch or with a particular processor. For instance, for Holstein cow breeders membership in the association is necessary for monitoring the breed and also for receiving public subsidies; one must be a member in the dairy cooperative Viļāni to supply milk there.



Several farmers were members in collective organisations only to qualify for public support. Two thirds of the interviewed farmers were no members in any organisation; and one third expressed that according to their knowledge there were no any collective farmer organisation in the region; other did not see any interest in being a member or considered themselves inappropriate because of age or busyness. This moderate membership in collective organisations discovers Latgale's small farmers' quite weak involvement in the agricultural sector's formal governance and power structures. (Contrary to bigger farmers who have well-established lobbying structures.) At some extent, small farmers' 'voice' is transferred by local agricultural advisors who are working directly with them. However, local level agricultural advisors have become quite rare in rural municipalities, their employment is up to local administration's priorities and financial possibilities. Small food business owners in turn appeared more often to be members of cooperatives or associations (e.g. culinary heritage associations.). Even though the experience was not always positive, membership was associated with practical benefits: e.g. information, potential to influence policy decisions.

h. Forms of collaboration and organization between small farms and consumers

Individual direct selling was less popular among Latgale small farmers than in the other Latvian reference region Pierīga (16 of 36 respondents reported direct selling to individual clients). While the selected key products partly explain this (vegetables and fruit in Pierīga are very advantageous for direct selling), it is rather lack and scarcity of local consumers and also poor collective marketing. Latgale region is experiencing depopulation due to strong outmigration and negative natural population growth. Several farmers mentioned there were no customers, "I would not know whom to sell even if I produced more". In addition, consumers' purchasing and consumption habits are changing. Food is purchased primarily in supermarkets where small farmers products are the least likely to be found (however, small farms rarely supply also to smaller retailers).

Consumers have particular tastes and it may be challenging to satisfy their diversity. As one dairy farmer reported, for one person her farm's milk is too fat, for other too liquid, and at the end it is less stressful for her to sell to a dairy, not individual clients. There is increasing demand, particularly among young families, for organic and healthy products, which can be advantageous for small farms, as many of them are organic. However, no particular communication or collaboration between small farmers and consumers were identified that might improve small farms' situation in the market. Even opposite, fluctuating prices and uncertainty about consumers were among the principle risks mentioned by the small farmers. The tradition among local people to grow own food reduces small farmers' chances to establish direct selling links with local consumers.

i. Other governance issues

To deal with this insecurity of 'insurmountable' requirements and improve their farms viability, small farmers may use 'alternative' solutions. For instance, when a certified slaughterhouse is too far away from a farm to bring there livestock for reasonable costs, livestock is sold on a farm and slaughtered "by the client" "around the corner"; farm products that cannot be sold officially because a farmer does not have all the needed authorisations or he cannot meet the formal requirements (of packaging, for instance) are sold illegally; some products are sold without



documentation or a farm's turnover is reported under 3000 euros (a threshold under which farms are exempted from some taxes) to avoid paying taxes, which often were claimed to be too high and putting farms at the risk of peril; farmers who cultivate small plots up to 0.3 ha register them as permanent grassland to receive any subsidies (it is the only category under which they can receive payments for so small plots); machinery services are bought for a lower price from unregistered local service providers (they also avoid paying taxes which are too high for them to keep their business profitable) and these expenses are integrated under other expense categories in financial reports. It is difficult to estimate the real extent of such 'grey' practices, but they point to a range of difficulties that formal rules impose on small farms.

6) Small Farms and rural livelihoods



Photo © Anda Adamsone-Fiskovica

As stated above, Latgale is economically the least developed Latvian region which suffers the most also from a range of socio-economic problems – depopulation, unemployment, poverty. Limited employment opportunities in Latgale, especially in rural areas, may contribute to the resilience of small farms but can also bring negative consequences such as *poverty-pockets*, low-paid jobs and opportunity *lock-ins*.

a. Importance of household labour in SFs

A common theme in the interviews was that farming was the only real option available to these farmers in face of migration or social delinquency. While not all farmers talked about this, some intimated that they continue working on the farm mainly because they lack any practical alternatives that would allow them to generate enough income to sustain themselves. While they could sell their holding, it was argued that there are few, if any, other employment prospects, and most would involve them working on a fixed schedule that was deemed less desirable than working on one's own farm.



b. Farm and non-farm income in the SF's households

As illustrated by several of the interviewed successful small farmers, farming can be a solid business opportunity, but in Latgale it plays also an important social safety net function. Small farms have been a considerable support for farming families since decades by providing food, other farm-based resources (like, energy, water), employment, income, personal development and other. As an interviewee summarised, “small farmers work themselves and do not cue for social allowances”.

Small farms' contribution to rural livelihoods extends beyond farming households. Although many farms are poorly involved in market transactions, they still provide with food a broad set of people, sometimes for free or in exchange. Small farmers maintain social and economic activities and networks in countryside, they keep rural areas populated. In terms of employment, small farms provide with jobs primarily family members, on regular or occasional base. Very few of the interviewed farms had some non-family employees.

Small farms are important sources of revenues for rural households. Three quarters of the interviewed farmers stated that their farms bring a half and more revenues in their family total income. In eight farms farming was the only source of income. However, many farmers reported little or none profit after all the costs are paid; annual farms' profit were estimated between 0 and 10000 euros (one case). In most of the interviewed farms agriculture was the only economic on-farm activity. In very few farms (5 out of 36) some non-agricultural economic activities were developed and brought additional income. These non-agricultural activities were forestry and tourism. Finally, it has to be noted that subsidies compose a considerable share in farms' income, most often the interviewed farmers reported the share of public subsidies between 30 and 50 %.

c. Shocks and coping mechanisms of SF households

Along the long-lasting unfavourable socio-economic situation, small farms have experienced also a range of shocks. For many of the interviewed farmers, the very beginning of farming has been challenging when (re)establishing their farms during the decollectivisation in the 1990s. More recently, in particular dairy farms have been suffering from several crisis in the sector following the abolishment of EU milk quotas, Russian embargo on EU products, and from permanently low and fluctuating prices. Natural disasters, like floods and drought, and animal diseases was another common source of shocks causing losses of yields and income. There are also many personal and family events, like deaths, births, loss of off-farm jobs that put a considerable pressure on farms' operation. Farmers have opted for various solutions in order to cope with these shocks: switching from one branch to another, diversifying production, securing the farm against natural disasters, or patiently waiting till the situation gets back to 'normal' again.

7) Role of Small Food Businesses

a. Main insights and patterns

As regards small food businesses, our study finds that, compared to small farms, small processors in Latgale have lower relative importance in primary production. This can be explained by the



effects of increased competition in the food industry in the last decades which lead to the closure of many small processors in Latgale (vegetable processors and small dairy processors in particular).

It should be noted, however, that a recent reinvigoration of small food businesses can be observed, and it was also referenced and illustrated by the businesses we interviewed. Such businesses are attempting to revive regional culinary traditions and grow out of a vital home processing movement that emphasises craftsmanship and artisanal production. Newly established small food businesses are driven by the values of authenticity and target premium and niche markets.



Photo © Anda Adamsone-Fiskovica

Several factors contribute to the emergence of small food businesses in Latgale: a culinary heritage movement and projects which are popular in the region, rural tourism activities, LEADER projects, various forms of niche and direct marketing, cultural events such as town festivals, traditional celebrations, food and tourism fairs. For example, a small dairy business *Jura Siers* produces five kinds of historical local cheeses from own farm's milk and markets the produce via on-farm shop. The farmer is a member in various associations such as Culinary Heritage, Rural Traveller, which provide access to information and knowledge. The farm offers also educational excursions to visitors, thereby linking culinary heritage tradition with food education.

b. Labour in SFB work

The situation as regards the availability of, and need for, labour is complicated. Due to the size of the businesses, labour requirements are modest, and most businesses employ family members, though both full-time and occasional employees are not uncommon. Nonetheless, a number of our interviewees indicated that depopulation was a serious long-term threat the effects of which were already apparent. The number of clients and customers was low, and some complained about the availability of labour (a sentiment echoed by the farmers we interviewed). Indeed, the declining population in the surrounding area, in addition to technological limitations, old equipment and the



location (i.e. far from regional centres) were the main obstacles to expansion and producing more food.

c. SFB income

A common reason for starting working for a business was the continuation of a family tradition, but the search for new business opportunities and lifestyle changes were also prominent reasons. This was also reflected in the range of professional experience exemplified by our respondents. Small business owners were generally at the extreme ends the scale when it came to time worked in the business, with the majority having worked either up to 5 years or more than 20 years. We suggest that this reflects the countervailing trends of ageing and the influx of younger farmers and entrepreneurs. There was a great range in terms of annual turnover among the businesses we interviewed. The smallest business reported an annual turnover of just 4500 euros, while the biggest reported a turnover of 120 000 euro. Nonetheless, a common thread was the important role played by public financial support (in most cases - EU funding).

d. Shocks and coping mechanisms of SFB households

The strengths of regional small food businesses primarily relate to their embeddedness in the local context, and the growing demand for locally-sourced, organic products. Their location and proximity gives them an advantage over other business, though it hampers the expansion of their business due to the distance from regional and national centres. They provide goods that are perceived as being of higher quality and this makes them competitive with cheaper mass-produced products. Furthermore, small businesses often use locally grown or processed raw materials, offer local products and attempt to preserve the methods, traditions and culinary heritage specific to the region.

8) The Future

a. Main objectives and priorities of SF for the future

The interviewed farmers had three kinds of plans for their farms: to expand, to maintain without changing anything, or to reduce their farming activities. These future objectives varied accordingly to the farmers' personal situations, primary reasons being farmers' physical condition related to their age and health. A part of the farmers did not have particular objectives, and they were planning to continue farming as beforehand. Older farmers most often were planning to reduce farming activities, or keep their farms status quo as long as their health allows and then liquidate the farm or give it over to a successor if there was one.

A half of the interviewed farmers, and more often they were younger ones, were very keen to develop and expand their farming business. Their plans were to invest in agricultural machinery and buildings, buy additional land, improve production quality, increase volumes, diversify on-farm activities (processing), develop or switch to a new branch. In order to be able to implement their



plans, public support for investments and personal health were two most often mentioned conditions. A half of the farmers had some successor or they were planning that their children would continue farming after their retirement. For the other half, children were not there yet, or they were not interested in farming and had settled their lives in urban areas or in other professions.



Photo © Anda Adamsone-Fiskovica

b. Main objectives and priorities of SFB for the future

The aims and objectives of small food businesses betray an optimistic future outlook. Some aim to introduce new production methods and maintain the quality of their products, whilst also developing their own brand. Others, on the other hand, aim to increase their international presence and visibility (e.g. in international food fairs). The objectives, in turn, lead to a somewhat predictable range of requirements. By expanding, businesses hope to attract new clients. Financial investments would allow them to expand production and purchase new equipment. However, given the advanced age of many small business owners, future prospects will be determined in large part by their health and ability to continue working.

c. Risk perception by SF

The principle sources of risks that probably will influence small farms' operation also in future were related to nature (weather, wild animals, diseases), market (fluctuating or low prices, lack of customers, physical distances to markets, competition with cheap imports), poor farm's production resources (outdated machinery, lack of available land) and lack of financial means to invest, personal reasons (age, health), changing and demanding regulations. According to some research participants' estimations, small farms are more resilient than big farms in front of some of these risks (like severe weather conditions) because of their better adaptability. However, the decreasing number of small farms and small farmers' experiences suggest that the totality of structural conditions are not so advantageous for them. Small farms' future possibilities were often linked to small farmers' individual entrepreneurship, innovativeness and hard work and non-conventional, niche sectors.



d. Risk perception by SFB

As regards the future, the overall outlook is pessimistic and fraught with uncertainty, but there is some measure of optimism fuelled by recent trends. Many small businesses are owned and run by people close to or above pension age, and there is considerable uncertainty as to whether the businesses will continue. In some cases, children or grandchildren may take over, but this was not always certain. Furthermore, depopulation may also impact local demand for the products provided by small food businesses. However, there is growing demand for organic food, quality products and regional cuisine in Latvia as a whole, and this may help in maintaining the existence of specialised regional small food businesses.

Nonetheless there are several sources of risk that businesses in the region will likely have to face and overcome. Issues such as health and depopulation, and the resulting loss of local clients and labour force are common and will affect a large number of small food businesses. The somewhat unpredictable nature of official regulations and requirements was also referenced by our interviewees. Businesses that also grow or produce the raw materials for their own products noted risks associated with unpredictable weather conditions or animal diseases (e.g. swine flu). An additional potential long-term issue was the quality and traceability of food products and raw materials. This is both a question of trust and a question of economic competition. For example, products from neighbouring countries (e.g. Belarus, Lithuania) are cheaper and sometimes marketed as local products.

e. Food system forecast in 5, 10 and 20 years

The hitherto public support measures have strengthened SF position in proximity markets in particular via improvements in production capacity, product quality and small-scale processing. If these support measures are to be continued in modified and adjusted form in the next EU programming period so that they better address SF situation and needs, regional stakeholders anticipated a good potential of further increase of contribution of SF and SFB to regional / medium level food systems. They related SF and SFB contributions to providing greater availability of local, farm-based, special quality and niche products via diversified and organised direct sales channels. Research participants saw the future of SF and SFB in Latgale in an integrated socio-economic perspective acknowledging their contribution to food provision via domestic, proximity and industrial models as well as acknowledging wider social functions such as maintaining countryside populated (which is also related to the aspect of security of remote EU boarder territories), securing diverse business patterns in rural areas and counterbalancing tendencies of excessive land concentration.

In order to capitalise on this potential of SF and SFB, in particular in proximity food systems, the research participants advised to focus on three key measures:

(i) To improve farmer education, access to information, knowledge and experience sharing in particular on issues of marketing small farm products and cooperation in marketing;



(ii) In terms of policies, to balance current asymmetric public support more in favour of small producers and agro-ecological production systems (bigger and intensive farms are primary beneficiaries of public support measures (Vēveris and Kālis, 2011);

(iii) To facilitate development of new digital platforms (e.g. internet platforms, mobile applications, digital sales assistants) enabling marketing SF and SFB products in proximity and distant markets.

9) Annex: List of resources

Several information sources were used to generate this report. Existing information and knowledge (statistical data, reports, literature, online materials, previous research) was combined with original information gathered from interviews and focus group discussions with various stakeholders – small farmers, small food businesses and other experts of regional food system and small farms. The source of the presented statistical data is Central Statistical Bureau of Latvia, if not mentioned otherwise. The tables below provide an overview of the participants in the expert interviews, SF and SFB interviews and the focus group discussions.

a. List of key experts interviewed

| No. | Key stakeholder's affiliation |
|-----|--------------------------------|
| 1. | Cooperative |
| 2. | Farmer NGO |
| 3. | Farmer NGO |
| 4. | Farmer NGO |
| 5. | Farmer NGO Local government |
| 6. | Research institute |
| 7. | Research institute |
| 8. | Research institute |
| 9. | Research institute |
| 10. | Agricultural advisory |

b. SF and SFB interviews and focus groups information

| Stakeholder typology* | N° of participants | | | | | | How were they contacted? |
|--------------------------|--------------------|-------|-------|--------------|-------|-------|--|
| | Interviews | | | Focus Groups | | | |
| | Men | Women | Total | Men | Women | Total | |
| Farmers | 15 | 21 | 36 | 5 | 1 | 6 | By phone. Face to face interviews and discussions. |
| Producers' cooperatives | | | | | | | |
| Slaughtering facilities | | | | | | | |
| Processors (small/large) | 3 | 2 | 5 | | | | |
| Wholesalers | | | | | | | |
| Retailers | 2 | | 2 | | | | |
| Caterers | | 1 | 1 | | | | |



| | | | | | | |
|---|----|---|---|----|---|---|
| Other small food business | 1 | 2 | 3 | | | |
| Exporters | | | | | | |
| Importers | | | | | | |
| Farm inputs suppliers | | | | | | |
| Advisory services | | | | 1 | 1 | 2 |
| Agricultural administration/Ministry of Agriculture | | | | | | |
| Consumers' groups/organizations | | | | | | |
| Local administrators and policy makers | | | | 3 | 1 | 4 |
| Political leaders and PMs | | | | | | |
| Other programs/initiatives | | | | 2 | | 2 |
| Nutritionist | | | | | | |
| NGOs | | | | | 2 | 2 |
| Traditional and religious leaders (for Africa) | | | | | | |
| Total | 47 | | | 16 | | |

* When a participant had several affiliations or occupations (for instance, a farmer being also a cooperative member, or a small food business – a processor and a retailer), the principal one was selected.

c. References

Slee, B. (2000). W(h)ither the small farm? Rural development and agricultural restructuring in transition economies, with particular reference to the Baltic States. International Conference: European Rural Policy at the Crossroads. 29 June –1 July, 2000. The Arkleton Centre for Rural Development Research, King's College, University of Aberdeen, Scotland.

Vēveris, A. and I. Kālis (2011). The impact of EU agricultural policy on the competitiveness of the farms in Latvia. *EkonomikairVadyba* 16 : 452-458.

