Annex I to ministerial decree No 95
""Estonian Organic Farming Development Plan
2014-2020" and endorsement of its action plan",
of 27 June 2014, from the Minister of Agriculture.

ESTONIAN ORGANIC FARMING DEVELOPMENT PLAN 2014-2020

CONTENTS

1. INTRODUCTION

Over the ages, agriculture has been an important area of activity for Estonian population, with one of the main objectives of continually providing the inhabitants with food. In addition to yielding agricultural products, farmers also share the task of keeping the environment clean, applying the principle of economy while using renewable natural resources, conserving natural diversity and socio-economic vitality of rural areas. All these objectives can be obtained through organic (in Estonian "MAHE" or "ÖKO") farming, also called ecological farming.

Organic farming is cooperation between the preserved traditional farming practices and the new scientific developments. Organic farming is an eco-friendly farming practice, preserving biodiversity and clean water. Organic farming does not use synthetic mineral fertilisers and artificial plant protection products. Soil is being kept fertile with the use of crop rotations with leguminous plants adapted to local needs and organic fertilisers (manure, green fertilisers, compost etc.). Preservation of the level of plant nutrition elements in the soil of organic fields might be problematic though (soil erosion), as low use of fertilisers often results in more plant nutrition elements being removed with the harvest than brought back into the field. But with the use of skilled crop rotation and green and other organic fertilisers, it is possible to attain balance of plant nutrition elements and to ameliorate soil conditions. Spread of biological pest is being prevented by ensuring biodiversity in the productive environment (through facilitating the growth of natural enemies of the biological pest), but also by mechanical techniques and the use of natural plant protection products. Due to not using chemical plant protection products in organic farming, soil will cleanse itself in time from the residue of the plant protection products, which will ameliorate the quality of water and soil. Organic livestock production is balanced with plant production, as animal fodder is mainly produced in the same farm and manure from animals is used as a fertiliser in the fields. Organic livestock production guarantees the well-being of animals: they have to be able to stay outside, eat organic fodder and serve all their instinctive needs. It is forbidden to use chemically-synthesised allopathic veterinary medicinal products or antibiotics to prevent diseases. Organic processing leaves the food as natural as possible, whereat only a restricted choice of food additives of natural origin is allowed. Genetically modified organisms and products made of them or with them are not allowed in organic farming. The result of all this is a clean environment and an increase in biodiversity. On the other hand, organic farming is a quality scheme with a task of providing products that for different reasons appeal to the consumer.

The main organic farming requirements are the same all over the European Union (the area is regulated by EU regulations), valid for plant production and livestock production as well as for processing and distribution. In addition, several Estonian legal acts should be considered by the people involved in organic farming. Under the Organic Farming Act, all enterprises related to production, processing and distribution in organic farming have to be approved. Catering enterprises, wishing to prepare and distribute organic food, are only obliged to inform about it. Control authorities regularly check fulfilling of the requirements of organic farming.

Organic farming is a constantly growing agricultural sector in the whole world. In 2006 the total area of organic farming land was 30.5 million hectares and there were over 700,000 organic farmers, but in 2011 the total area of organic farming land was already 37.2 million hectares and there were 1.8 million organic farmers. There were 205,500 organic farmers in Europe in 2006 and the total area of organic farming land was 7.5 million hectares. In 2011 there were 280,000 organic farmers and the total area of organic farming land was 10.6 million hectares. In 2011 the biggest proportion of organic farming land compared to the total area of agricultural land in the European Union, was in Austria (19.7%), followed by Sweden (15.4%) and Estonia (14.8%).

The world organic market size in 2011 was estimated at € 47 bn and European organic market size at € 21.5 bn[1].

Organic farming production is well developed in Estonia. In 2013 16.3% of the agricultural land was under organic farming and almost 50% of all sheep and beef animals were from organic farming. At the same time, most of the meat and milk from organic farming reach consumers with no indication of organic farming or having been processed with non-organic products. During the last few years, the number of products with organic labelling has quickly increased and distribution of organic products to other European Union states has started.

It is very important that an efficient risk-based supervision along all the supply chain is well in place. The system of supervision is being audited on a regular basis and compliance officers go through systematic training. This gives the customer a certain confidence and trust towards the organic origins of the distributed products.

Estonian Organic Farming Development Plan 2007-2013 and Estonian Rural Development Plan 2007-2013 have had a positive impact on the development of the organic sector. Strong emphasis has been placed on extension of organic plant production and livestock production, on training the people engaged in organic farming, on informing customers and on developing the control system of organic farming. The organic production support, paid within the framework of the agri-environment support, has been an important factor in the development of organic farming.

[1] .https://www.fibl.org/fileadmin/documents/shop/1636-organic-world-2014.pdf

Organic Farming Development Plan is in particular needed to improve the competitiveness of organic farming and to increase the consumption of local organic food. The development plan shall address under the general subject of organic farming the following topics: organic plant production and livestock production, processing, distribution, consumption and catering, but also researches in organic farming, training and supervision. Bottlenecks of the sector have been pointed out and possible solutions suggested. Adding value to organic production, improving the production efficiency, product development, economy ensured in the use of resources, quality of the food, improving the knowledge of the organic farming sector workers and advisors, as well as improving the research and development of the sector and the supervision, are particularly important. A bigger contribution is made into organic processing and distributing as well as into developing common activities.

As a result of a recommendation from the European Commission to draw up a national organic farming development plan in every member state, in 2012 the Ministry of Agriculture of Estonia started preliminary work for preparing the present development plan with the involvement of representatives of Estonian Organic Farming Foundation. An advisory working group of 30 members for preparing the development plan and its implementation plan was created with a ministerial order on 21st August 2013. The group worked in the form of meetings. In total 10 meetings took place, having besides the members of the group also organic farmers, officials and other professionals taking part. The following were involved in drafting the plan: commercial association Estonian Organic, Estonian Organic Farming Foundation, Centre for Ecological Engineering, Estonian Biodynamic Association, Läänemaa Organic Farmers' Society, non-profit association Saare Organic, non-profit association Hiiu Organic, Research Centre of Organic Farming of Estonian University of Life Sciences, Estonian University of Life Sciences, non-profit association Harju Organic Farmers' Association, commercial association Wiru Vili, commercial association South-Estonian Food Network, non-profit association Virumaa Organic Producers, Estonian Crop Research Institute, Central Union of Estonian Farmers, Agricultural Research Centre, Estonian Horticultural Association, Estonian Farmers Federation, Agricultural Board, Veterinary and Food Board, Estonian Agricultural Registers and Information Board, Estonian Chamber of Agriculture and Commerce, Estonian Chefs Association, non-profit association Estonian Young Farmers, Rural Economy Research Centre, Statistics Estonia, TNS EMOR, non-profit association Pärnu Bay Partnership and non-profit association Estonian Rural Tourism. The preparation and coordination of the development plan took place under the auspices of the deputy secretary general of food safety and science and development of the Ministry of Agriculture.

The basis for planning the activities of the organic farming development plan is the SWOT analysis put together by the development plan preparation work group in 2013.

2. STRATEGIC OBJECTIVE OF THE DEVELOPMENT PLAN

The development plan has been prepared on the basis of the European Action Plan for Organic Food and Farming. In accordance with the recommendations of the European Action

Plan for Organic Food and Farming, an organic farming development plan is mostly needed in Estonia for developing the field of organic farming and for improving its competitiveness.

THE STRATEGIC OBJECTIVE OF THE DEVELOPMENT PLAN IS TO IMPROVE THE COMPETITIVENESS OF ORGANIC FARMING AND TO PROMOTE THE CONSUMPTION OF LOCAL ORGANIC FOOD.

INDICATORS

Rate / Levels	**Basic level 2013**	**Target level 2020**
Net value added per labour unit in organic farming (euro) *Source: Rural Economy Research Centre (FADN)*	12,400[2]	20,500
Proportion of regular (weekly) organic food consumers in Estonia (%) *Source: TNS EMOR*	8	20

The organic farming development plan is based on six sectors: 1) production; 2) processing; 3) catering; 4) distribution and consumption; 5) scientific studies and applied research, training, consulting and dissemination of information; 6) legislation and supervision. In addition to the strategic objective of the development plan, a objective has been set in every domain and a list drawn up of all the measures and actions for reaching it. Indicators have been specified for estimating the target reach and real influence of the measures, whereat in case of the supportive domains – like scientific and applied research, training, advice and communication; legislation and supervision – specification of indicators has not been considered important, as their influence will be seen through indicators of other domains. The level of achievement of the objectives of the development plan shall be measured yearly and in order to reach the best possible result, the development plan shall be amended if and when necessary.

3. SECTORAL ANALYSIS OF ORGANIC FARMING

3.1. PRODUCTION

3.1.1. SITUATION AND OPPORTUNITIES

Organic farming is a sustainable way of plant production and livestock production. Gathering edible plants and mushrooms from non-cultivated areas is also considered organic plant production.

The number of enterprises engaged in organic farming has grown 32% between the years 2006 and 2013 (Figure 1). By the end of 2013, there were 1,553 organic enterprises in the organic farming register (1,173 in 2006).

[2] Estimation from 2006-2012 time series. The accurate basic level will be clear in the second half of 2014.

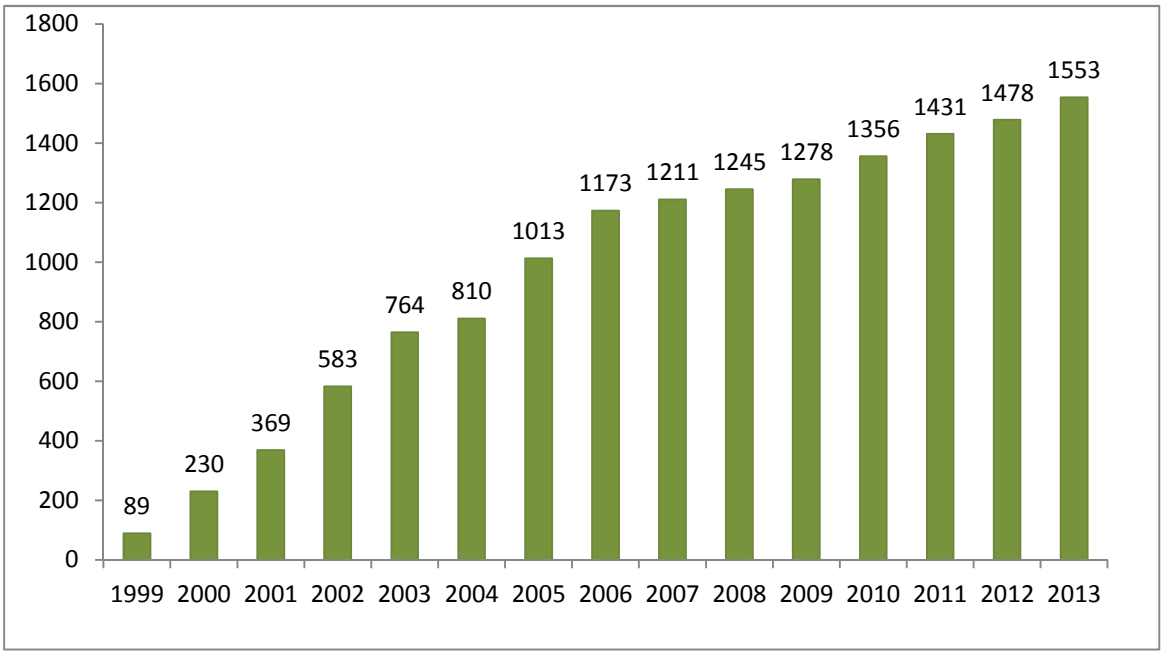

Figure 1. Number of enterprises engaged in organic farming (plant production and livestock production) in 1999-2013
Source: Organic Farming Register

Area of land under organic farming (including the land subjected to conversion period and grazed non-agricultural land) has doubled since 2006 (figure 2). According to the Organic Farming Register, at the end of 2013, there was 153,426 hectares of land under organic farming, 131,610 hectares (86%) of which had completed the conversion period. In addition to this, according to the Organic Farming Register, there were 40,579 hectares of non-cultivated areas for picking wild plants (plants and mushrooms) (only 223 hectares in 2006). Organic land, including the land subjected to conversion period, accounted in 2013 for 16% (Figure 3) of Estonian agricultural land (12% in 2010, 14% in 2011). Organic production is spread in Western and South-Estonia. In terms of number of organic farmers, Võru County is the first; in terms of area of organic land, Saare County takes the lead.

Organic farms have been growing, year after year. The average area of an organic farm in 2006 was 67 hectares; in 2013 it was 99 hectares. The largest organic farms in 2006 had 800 hectares of land. In 2013, the nine largest Estonian organic farms had over 1000 hectares of land each. There has been an increase of interest in organic production among the members of the younger generation. Support for organic production has substantially contributed to the expansion of organic production.

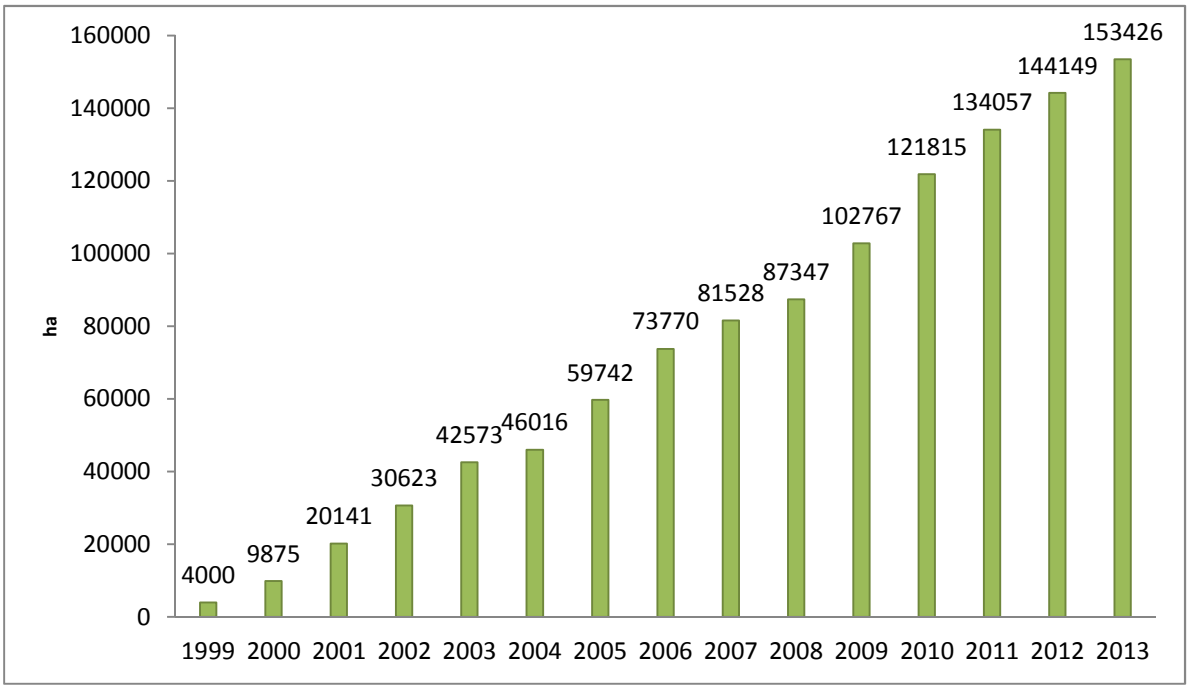

Figure 2. Area of land under organic farming, including the land subject to conversion period, 1999-2013 (hectares)
Source: Organic Farming Register

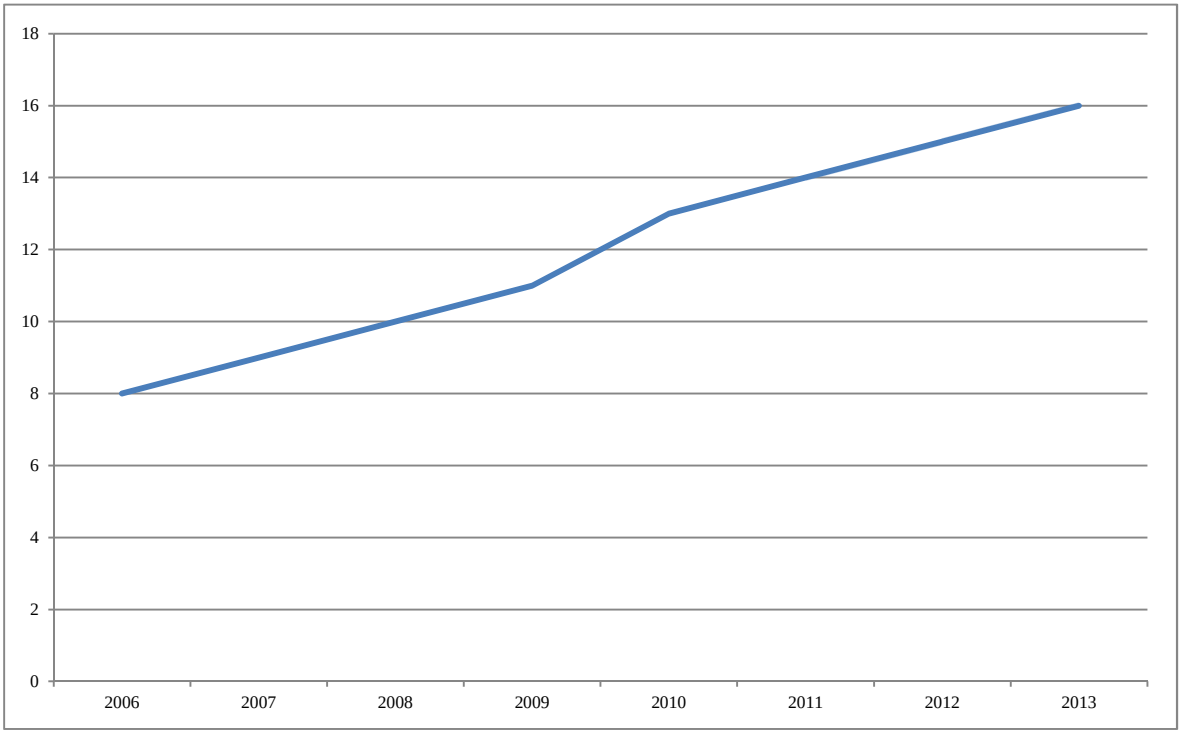

Figure 3. Proportion of land under organic farming compared to all agricultural land, 2006-2013 (%)
Source: Organic Farming Register

From the total area of organic land in 2013, 43% was arable land, including short-term grassland; 43% was permanent grassland, 12% natural grassland, 1% was fruit and berry orchards and 1% was grazed non-agricultural land (Figure 4). It is characteristic of organic

land-use to have a large proportion of grassland, but at the same time the relative proportion of grassland in organic production has decreased. In 2006, permanent grassland, natural and short-term grassland in crop rotation made up 83% of organic land; in 2013 it was 76%.

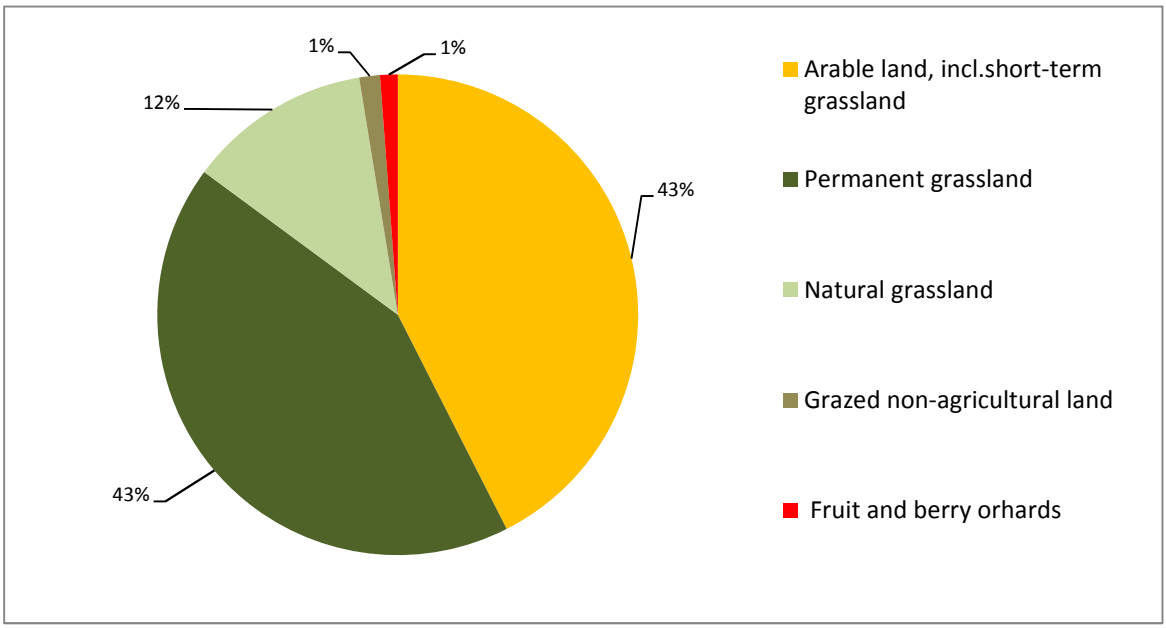

Figure 4. Use of organic farming land in 2013.
Source: Organic Farming Register

The cultivation area under organic cereals has greatly increased in the last few years (Figure 5). In 2006, organic cereals were grown on 8,520 hectares of land; in 2013, on 23,090 hectares of land, of which 20,810 hectares were converted. Between 2006 and 2013 the area under organic cereals has increased 2.7 times. In 2013, organic cereals were cultivated by 658 farms and the largest area per farm was 570 hectares. The most popular cereal was oats (about half of the area under cereals), then wheat, barley and rye. Compared to conventional production, the average cereal yield in organic production is 25-40% lower. With regard to the possibility of distributing organic cereals in other European Union countries, production of organic cereals for food is increasing step by step. According to the data provided by the Organic Farming Register, in 2012 the total cereal production on 20,006 hectares of land were converted, was 34,147 tons, which is 3.4% of Estonian total cereal production (Table 1).

Organic production of industrial crops (mostly rape and turnip rape) has increased (Figure 5). Flax, white mustard, hemp, caraway, camelina and fodder radish are also being cultivated. In 2006, industrial crops were organically cultivated on 312 hectares of land; in 2013, on 3,439 hectares.

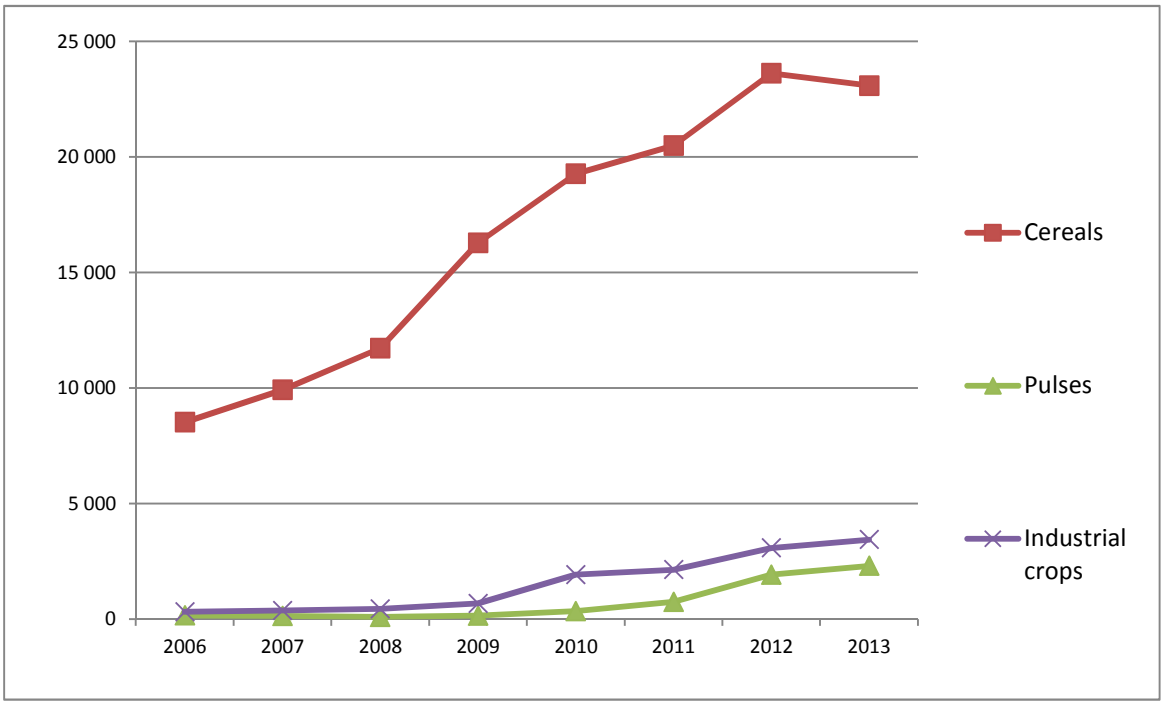

Figure 5. Area (including the area subject to conversion period) under organic cereals, pulses and industrial crops in 2006-2013 (hectares)
Source: Organic Farming Register

Organic vegetables and potatoes are mostly cultivated on small areas (Figure 6). In 2006, organic vegetables were grown on 58 hectares of land; in 2013, on 132 hectares (increase of 86% compared to 2006). In 2012, the total harvest from 92 hectares of land with had already passed the conversion period was 535 tons, which was 0.8% of the total vegetable production in Estonia. In 2006, organic potato was grown on 241 hectares of land; in 2013, on 199 hectares (decrease of 17% compared to 2006). In 2012, the total harvest of organic potato from 183 hectares of land which had passed conversion period was 2,295 tons, which was 1.7% of the total potato production in Estonia.

Fruit and berry orchard area has increased (Figure 6) from 1,146 hectares in 2006 to 1,669 hectares in 2013 (46%). In fruit orchards mainly apple trees are grown; in berry orchards mainly sea buckthorn is cultivated. In 2006 sea buckthorn was grown on 523 hectares, in 2013 on 832 hectares. Fruit and berry production from organic land with already passed conversion period in 2012 was in total 296 tons from 1,124 hectares of land, which was 5.8% of the total production in Estonia.

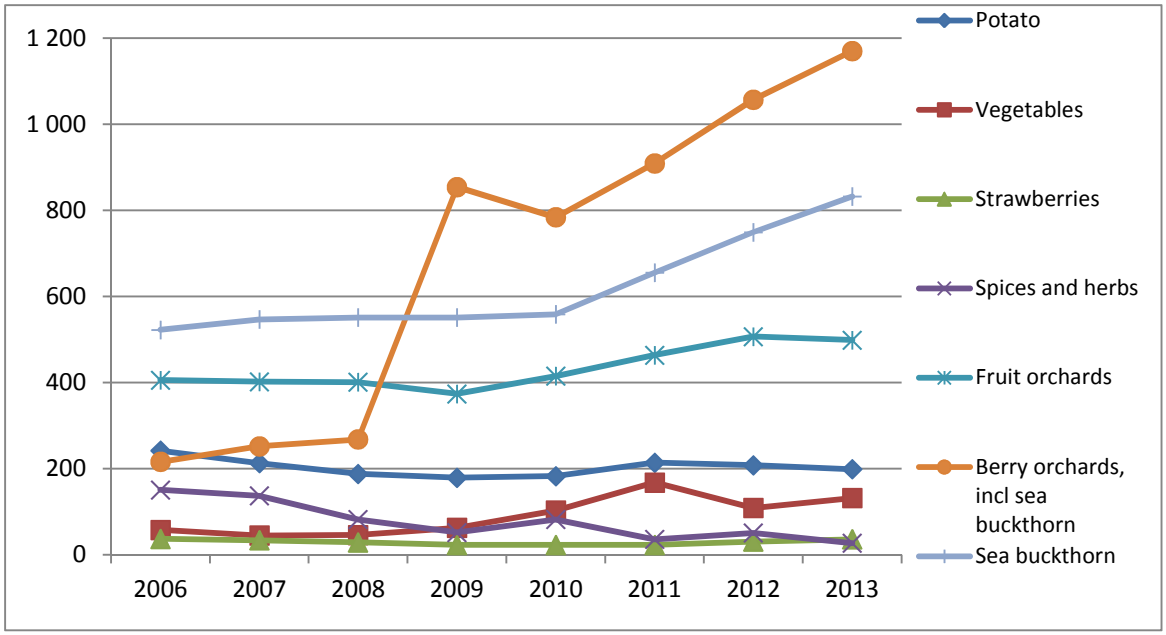

Figure 6. Total area under organic potato, vegetables, strawberries, aromatics and medicinal plants, fruit trees and berries (including the land in conversion) in 2006-2013 (hectares)

Source: Organic Farming Register

Table 1 Plant production as on 31.2012.

Crops	Area a thousand hectares)		Proportion of ORGANIC compared to total area (%)	Production (tons)		Proportion of ORGANIC compared to gross value of production (%)
	In total	ORGANIC (converted)		In total	ORGANIC	
Cereals in total	290.5	20.0	6.9	991,200	34,147	3.4
- wheat	124.3	3.7	3.0	484,700	6,077	1.2
- rye	16.9	2.9	17.1	57,100	6,420	11.2
- barley	108.7	3.5	3.2	340,300	4,118	1.2
- oats	31.8	8.7	27.4	78,400	16,615	21.2
Pulses	11.0	1.3	11.8	12,900	1,707	13.2
Potato	7.6	0.2	2.2	138,900	2,295	1.7
Open field vegetables	2.9	0.1	3.8	66,100	535	0.8
Fruit and berries	6.8	1.1	14.3	5,834	296	5.1

Source: Organic Farming Register, Statistics Estonia

Aromatics and medicinal plants, berries and mushrooms may also be picked from verified non-cultivated areas which are in compliance with organic farming requirements. In 2006, 16 approved enterprises had in total 220.9 hectares of wild plants collection areas; in 2013, 38 approved enterprises had 40,579 hectares of wild plants collection areas.

The first organic seed multiplication enterprise was approved in 2008. In 2013, there were 15 enterprises in organic farming register engaged in organic seed multiplication. These were mainly engaged in cereal, legumes, grasses and some vegetables (tomato, onion, radish, cabbage, swede, bean, pea) seed multiplication. There was no organic multiplication of seed potato. The administrator of the database of organic seed, seed potato and multiplication materials is the Agricultural Board. In 2013, organic farmers requested from the Agricultural Board permits for the use of in total 99 tons of wheat, 72 tons of barley, 48 tons of oats, 35 tons of rye etc. seeds from non-organic farming, as the needed species or varieties of organic seed was not available. Hence organic seed production, as well as the choice of species and varieties, does not cover the needs of organic farming. Creation of organic seed multiplication centres would permit to quickly and effectively increase the multiplication of organic seeds. It would also promote the development of organic seed multiplication, if financial contribution would be paid for the use of certified seeds (of cereals, potato).

In 2006 as well as in 2013, around two thirds of the organic farmers were engaged in organic livestock production (726 farmers in 2006, 977 farmers in 2013). Organic livestock production is characterised by increase in flock sizes. This is one of the reasons why only so little of organically grown animals or organic meat reach the market. The number of organically grown bovine animals bovines, sheep and goats has increased year on year (Figure 7, Figure 8). This has been promoted by the large proportion of grassland in organic use of land and favourable natural conditions.

In 2006, 464 farms were engaged in organically growing bovine animals; in 2013 the number of farms was 629. In total there were 14,255 organically grown bovine animals in 2006 and 35,582 in 2013 (2.5 times more). In 2013, there were 2,609 dairy cows organically grown in 170 farms, which is significantly less compared to 2006. Organic farmers' milk producing flocks are usually relatively small. In 2013, there were only 24 flocks with more than 30 cows. The biggest flock had 231 dairy cows and there were three more flocks with over 100 cows. In 2012, in total 12,172 tons of organic cow milk was produced, which makes the proportion of organic milk only 1.7% from the total milk production (Table 2). Conditions for producing organic milk in Estonia are in general good and with a short supply chain there is a possibility to gain. Joint action of organic farmers and cooperation with scientists should be encouraged. On 1st January 2014, a free range requirement was applied for bovine animals, in case the farm has more than 20 livestock units of tethered animals, which causes a decrease of 12% in the number of organic dairy cows.

In 2013, organic beef suckler cows were kept by 500 farmers who owned in total 10,882 animals (which is over 50% of Estonian suckler cows). 126 farmers had more than 30 suckler cows. The biggest flock had 162 suckler cows.

The number of organic sheep has increased 2.3 times compared to 2006 (20,723 animals in 2006, 47,566 animals in 2013). More than half of all Estonian sheep are organically kept. In 2013, 358 farms were engaged in organic sheep farming. There were 116 farms with more than 100 sheep. The biggest sheep flock, in Valga County, had 2,969 sheep.

The number of organic goats has doubled. In 2006, there were 558 organic goats, in 2013 the number of goats was 1,245 (26% of the total number of goats in Estonia). In 2012, in total 94 tons of organic goat milk was produced.

In 2012, 36% of Estonian sheep and goat meat was organic.

Other animals (pigs, rabbits, poultry) are rare in organic farming. In 2006, there were 434 organically reared pigs in 45 farms; in 2013 there were 890 pigs in 26 farms. In the pig herd with the biggest number of sows, there were 42 sows.

The number of organically reared rabbits has tripled: in 2006, there were 483 organically reared rabbits, in 2013 the number was 1,524 (Figure 8).

Compared to 2006, the number of organically reared poultry has sextupled (from 5,037 birds in 2006, to 28,582 in 2013). In 2006, there were in total 3,934 laying hens in 207 farms; in 2013, there were 19,516 hens in 151 farms (Figure 7). Only 29 farms had more than 100 laying hens. In 2012, 8,040 laying hens, who had converted, laid 1.4 million organic eggs, which is 0.8% of Estonian egg production.

In 2012, 1,400 tons of organic meat was produced, which is 1.8% of the total meat production. Organically produced animal products make up a significant proportion of Estonian agricultural production in certain product groups. Sadly not all of the organic production reaches the customer with an organic label on it, as the development of processing and distribution has not been sufficient yet.

The number of organic beehives has increased significantly (Figure 8). In 2006, there were 14 farms engaged in organic beekeeping and they had in total 331 beehives (in 2013 there were 32 farms with 1,510 beehives). The biggest organic apiary in 2013 had 347 beehives. In 2012, 755 beehives that had converted produced in total 22 tons of organic honey (2.3% of Estonian total honey production).

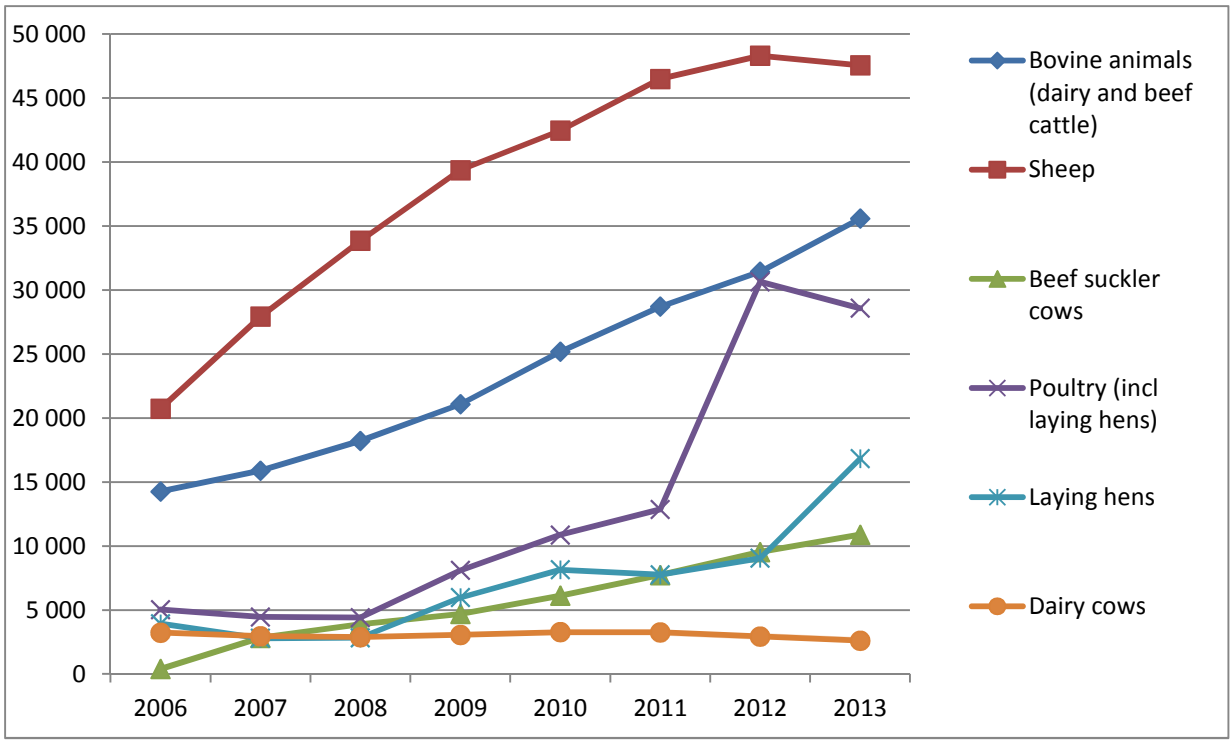

Figure 7. The number of organic bovine animals (incl. dairy and beef cattle), beef suckler cows, sheep, poultry (incl. laying hens) and laying hens in 2006-2013, in total: the ones still in conversation period and the ones already converted.
Source: Organic Farming Register (data from on-the-spot checks)

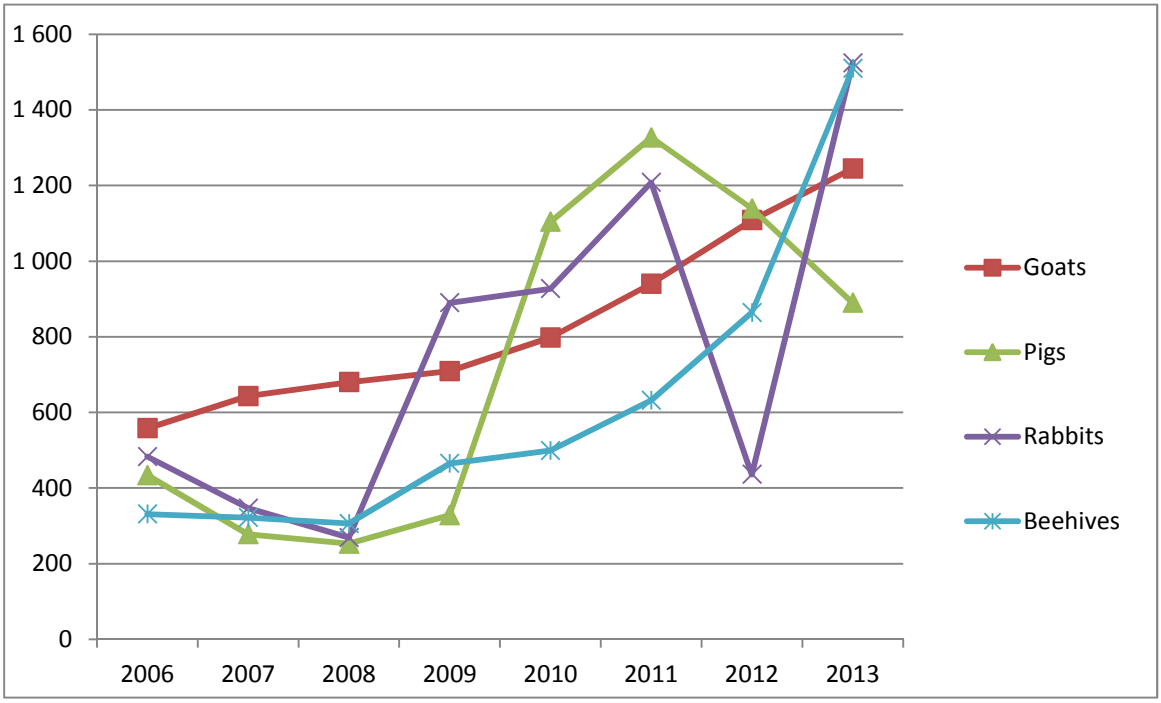

Figure 8. Total number of organically kept goats, pigs, rabbits and beehives from 2006-2013 (in conversion+converted)
Source: Organic Farming Register (data from on-the-spot checks)

Table 2. Livestock production and its products as on 31.12.2012.

Name	Number (1000 animals/birds/beehives)		ORGANIC proportion of total (%)	Production (in tons)		ORGANIC proportion of production (%)
	In total	ORGANIC (converted)		In total (in tons)	ORGANIC (converted)	
Bovine animals	246.0	27.1	11.0	12,300	1083	8.8
- including dairy cows	96.8	2.5	2.6	721,000	12,174	1.7
Pigs	375.1	0.9	0.2	48,800	64	0.1
Sheep and goats	81.4	36.1	44.3	700	249	35.6
Laying hens	607.6	16.2	2.7	174,8 million	1,4 million	0.8
Beehives	41.4	0.9	2.2	957	22	2.3

Source: Organic Farming Register, Statistics Office

Land under organic farming is usually located in less fertile areas. Around 75% of it is permanent and short-term grassland where a relatively big amount of legumes are grown. If the farm has a lot of grassland, organic farming has a positive impact on soil fertility. The monitoring data of the Agricultural Research Centre and the changes that took place in the pilot field of the Estonian Crop Research Institute, in Jõgeva, show that the level of potassium derived by the plants from organic fields' plough layer, decreases to some extent, level of assimilable phosphorus and soil pH stay unchanged and the soil balance is positive[3].

The proportion of unplanted fallow land is high (6.9% in 2013). Keeping unplanted fallow land is not an environment friendly choice, as unplanted fallow land decreases the levels of soil organic matter and humus, and fractures soil structure. Instead of unplanted fallow land for weed control, it is possible to use combined tillage and elaborated crop rotation. During the period of assistance of Estonia's Rural Development Plan 2014-2020, there shall be no organic farming support to unplanted fallow land. Hopefully that will contribute to decrease of the proportion of unplanted fallow land.

The proportion of crop production sales has increased in the incomes of the recipients of organic farming support. A big proportion of the income is still the support, under which 45% of the organic farmers are sustainable, without the support the proportion is 33%. Organic farmers have been quite active in applying for the investment support of the Estonian Rural Development Plan 2007-2013. 433 organic farmers applied for the support of the Estonian Rural Development Plan 2007-2013 measure 1.4.1 (22% of the applicants); the support was given to 316 organic farmers (21% of the beneficiaries). 104 organic farmers applied for the support of the measure 1.4.2 (25% of the applicants); it was granted to 65 organic farmers (23% of the beneficiaries).

[3] Estonia's Rural Development Plan 2007-2013, evaluation report of axis 2, http://pmk.agri.ee/

Table 3. SWOT analysis of organic production (plant production and livestock production).

Strengths	Weaknesses
1. Big proportion of organic land 2. Big number of organic beef cattle and sheep 3. Favourable natural conditions for organic farming 4. Presence of organic farmers with long experience	1. Low medium efficiency 2. Low yields 3. Inadequate attention paid to preservation and elevation of soil fertility 4. Lack of capacity to invest 5. Seed multiplication not developed enough. 6. Inadequate technological level 7. Lack of agricultural advisers 8. Lack of inputs (fodder and seed), their high price and poor access to them 9. Majority of organic farming land situated in areas with low fertility 10. Lack of co-operation between the farmers
Opportunities	**Threats**
1. Better accessibility to modern technology 2. Increasing interest of young producers in organic production 3. Cooperation interest of other sectors (for example tourism, catering in child care institutions) 4. Rise in prices of inputs not used in organic farming 5. Conversion of conventional producers with high soil fertility land and better technological level to organic production 6. Increasing interest of the consumer and the readiness to pay more for the quality of organic food compared to the conventional food	1. Lack of labour force in rural areas 2. Lack of opportunity of expansion of enterprises 3. Retardation of the development of organic processing 4. GMO contamination 5. Decrease of soil fertility

3.1.2. OBJECTIVE

ORGANIC FARMING PRODUCTION IS COMPETITIVE, DIVERSE, WIDELY USED AND HAS HIGH PRODUCTIVITY

The objective will be above all obtained through development of organic plant production and livestock production, improvement of the productivity of organic production and quality of products, improvement of production efficiency and through ameliorating the common effort and activities of organic farmers.

INDICATORS

Rate / Levels	Basic level 2013	Target level 2020
Organic land (in conversion+converted) / converted organic land (ha) *Source: Organic Farming Register*	153,426 / 131,610	180,000 / 175,000
Proportion of organic farming total production compared to total production of Estonian agriculture (%) *Source: Rural Economy Research Centre*	No available data	50% up compared to 2014

3.1.3. MEASURES AND ACTIVITIES

MEASURE 1.1 DEVELOPMENT OF ORGANIC FARMING PRODUCTION

1.1.1. Developing organic livestock production and plant production through supporting organic farming production

MEASURE 1.2 DEVELOPING ORGANIC SEED MULTIPLICATION

1.2.1. Establishment of organic seed centres, including investments into buildings or installations
1.2.2. Development of organic seed centres

MEASURE 1.3 DEVELOPING ORGANIC VEGETABLE GROWING, INCLUDING IN GREENHOUSES

1.3.1. Buying the needed installations and machinery for vegetable growing, constructing greenhouses, constructing and renovating buildings, establishment of irrigation systems
1.3.2. Construction and renovation of buildings needed for storage and conservation of vegetable production and purchase of equipment

MEASURE 1.4 DEVELOPING ORGANIC FRUIT AND BERRY PRODUCTION

1.4.1. Buying the needed installations and machinery for fruit and berry production
Purchase of plants for setting up plantations and construction of irrigation systems and other needed facilities
1.4.2. Construction and renovation of buildings needed for storage and conservation of fruit and berry production and purchase of equipment

MEASURE 1.5 DEVELOPING ORGANIC CROP PRODUCTION

1.5.1. Improving technological possibilities (appliances and machinery needed for crop production; storage, dryers and buildings)

MEASURE 1.6 DEVELOPMENT OF ORGANIC LIVESTOCK PRODUCTION

1.6.1. Development of production and processing of organic feed

1.6.2. Promotion of cultivating and using uncommon soiling crop rich in protein
1.6.3. Construction and re-construction of farm buildings for animals to improve their welfare.

MEASURE 1.7 DEVELOPMENT OF ORGANIC AQUACULTURE

1.7.1. Construction of needed facilities and purchase of installations
1.7.2. Purchase of the reproductive material needed for organic aquaculture

MEASURE 1.8 RECOGNITION OF BEST ORGANIC FARMERS

1.8.1. Competition of organic farmers
1.8.2. Organising an organic farming theme day with the announcement of competition results

MEASURE 1.9 DEVELOPING COLLECTIVE ACTION OF PRODUCERS

1.9.1. Promoting joint action of the producers for purchase of input of products and distribution the products
- Setting up of producer groups
- Developing the activities of producer groups

1.9.2. Supporting an umbrella organisation for developing organic farmers cooperation

MEASURE 1.10 IMPROVING THE PRODUCTIVITY, THE EFFECTIVENESS AND THE QUALITY OF ORGANIC PRODUCTION

1.10.1. Putting innovative solutions into service

3.2. PROCESSING

3.2.1. SITUATION AND OPPORTUNITIES

Since 2009, the number of organic processors has grown significantly. In 2006, there were 13 enterprises engaged in organic processing, in 2011 there were 55, in 2012 – 72 and in 2013 – 84. In 2013, the most common were processors of vegetables, fruit and berries (30) and cereals and pulses (18). Enterprises are not distributed equally among different counties; more than half of the enterprises engaged in organic products processing are located in Hiiu County. Only organic products are mostly processed by organic farms using their own raw material. In 2013, there were 34 organic farmers also engaged in processing. Around half of the organic processors produce organic as well as conventional products.

In 2008, from all processed organic products, cereals and pulses made up 41%, dairy products – 37%, vegetables and fruit – 7%, common bakery products and pastry – 9% and meat products – 3%. In 2012, structure indicators of processed products were: cereals and pulses 45%, dairy products 9%, vegetables and fruit 11%, common bakery products and pastry 7%

and meat products 11% (Figure 9); new products were spirit/vodka, soya and fish products and yeast.

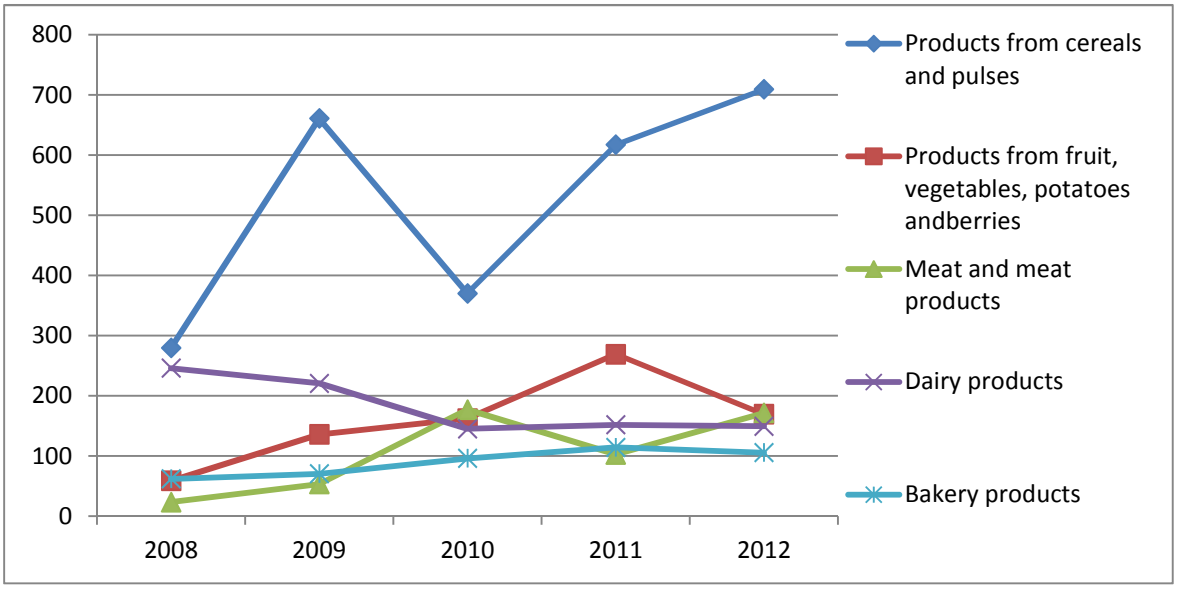

Figure 9. Volume of most significant organic products in 2008-2012 (tons)
Source: Organic Farming Register

There has been a possibility to develop processing with the means of investment support of the rural development plan, which gives certain advantages to the applicant in case of involvement in organic processing. At the same time, a lot of small enterprises do not have the means for self-financing. The development of processing enterprises has also been prevented by the lack of qualified labour [4].

In the future, the possibility to increase the added value of the products should be used better. Even though a substantial part of Estonian organic products are processed as conventional products or exported as raw material, the possibility to increase the added value of the product is used more and more, which brings additional revenues in export as well as in the home market. Thus more and more organic food processed in Estonia reaches our customers, there is a larger variety of organic food to choose from and its availability has improved. First enterprises amongst the major producers of food industry have started to look for possibilities to produce organic food, which so far has been the sole preserve of small producers.

The number of enterprises engaged in organic feed processing is small: in 2013, there were three enterprises engaged in preparation and distributing of processed feed (two of them are organic farmers), one enterprise was involved in distributing organically produced feed material and three enterprises were engaged in distributing organically processed feed (one of them an organic farmer).

Table 4. SWOT analysis of organic processing

[4] K. Sarapuu, „Situation and Development opportunities of Organic Food in Estonia“, 2013, Tartu

Strengths	Weaknesses
1. Growing number of small enterprises engaged in processing of organic products 2. There is a legal framework for processing, including small processing 3. Existence of good guide materials for small processors	1. Absence of big scale (including joint activity) processing 2. Small investment capacity 3. Low level of cooperation between the producers in distributing and processing 4. Lack (incl. seasonal) of raw material of certain product group, which is problematic for awakening the interest of big processors 5. Lack of interest in organic processing from the part of industrial enterprises due to poor profitability 6. Lack of knowledge in record-keeping 7. High logistics costs, complicated logistics 8. Absence of agricultural advisers in the field of processing 9. Lack of information about technologies
Opportunities	**Threats**
1. Increase in demand of locally processed organic products 2. Improvement of investment options and emergence of favourable loan opportunities 3. Increase in production of local organic raw material (emergence of the needed so called critical mass) 4. Increasing interest from the side of customers and readiness to pay more for organic food than for ordinary food	1. Infringement of good repute by cheating the customer 2. Increase in input prices and major price fluctuations (world market prices) 3. Losses of competitiveness

3.2.2. OBJECTIVE

ENTERPRISES ENGAGED IN ORGANIC PROCESSING ARE COMPETITIVE AND THE NUMBER OF ENTERPRISES ENGAGED IN PREPARATION OF ORGANIC PRODUCTS HAS INCREASED

The objective will be above all obtained through different activities for developing organic processing and through creating and developing organic processing centres.

INDICATORS

Rate / Levels	Basic level 2013	Target level 2020
Number of enterprises engaged in preparing (incl.	90	220

processing) organic products *Source: Organic Farming Register*		
Value of the products processed in organic processing enterprises (EUR) *Source: TNS EMOR*	Data of 2013 will be revealed in the beginning of 2015	Tripled compared to 2013

3.2.3. MEASURES AND ACTIVITIES

MEASURE 2.1 DEVELOPMENT OF ORGANIC PRODUCTION

2.1.1. Purchase of equipment (for processing, sorting, packaging, storing etc.), construction and renovation of warehouses and production halls

2.1.2. Developing the organic products and their technologies and extension of the assortment of processed organic products

2.1.3. Developing the cooperation between organic farmers, processors and distributors, including commercial chains

- Management of logistics services, including IT-solutions and transportation
- Start-up, managing and administering cooperation projects
- Encouraging joint purchase of equipment and buildings

2.1.4. Cooperation with other countries in the field of development of organic processing, including product development

MEASURE 2.2 DEVELOPMENT OF ORGANIC PROCESSING CENTRES

2.2.1. Enhancing the creation and the development of organic processing centres

MEASURE 2.3 COMPETITION FOR BEST ORGANIC PRODUCT

2.3.1. Competition of organic products

2.3.2. Declaration of the competition results and choosing the audience's favourite with declaring the winners of the best organic farmer's competition

3.3. CATERING

3.3.1. SITUATION AND OPPORTUNITIES

One of the obstacles in the way of serving organic food in catering enterprises has been the complicated requirement of organic catering. On 1st July 2013, an amendment to the Organic Farming Act took effect, under which the caterers do not need to be approved. According to the new regime a notification to the control authority on serving organic food, is sufficient. Furthermore, enterprises engaged in catering educational establishments, healthcare and social welfare institutions now also have the duty to notify the control authority about preparing organic food and referring to it. In 2013, Veterinary and Food Board was notified by 7 enterprises catering 5 schools and 5 kindergartens. There are in addition 4 enterprises engaged in organic catering, serving organic food in 6 canteens.

Between 2011 and 2013, interest in organic food has increased considerably and organic food finds its way more and more to school and kindergarten menus. This is demonstrated by the number of participants in trainings for child care institutions and by the results of the inquiry about their use of organic food. Interest for organic food is larger in private schools and kindergartens. Several kindergartens have established or are planning to establish organic vegetable gardens, in order to introduce children to plant growing and to grow their own seasoning plants, salad or other.

Restaurants' and cafeterias' interest in organic food has also increased. For example, catering enterprises in Tallinn are increasingly interested in buying organic food (for example vegetables or meat) directly from the producer or through commercial associations of organic farmers. Organic food is also served in catering businesses in other areas of Estonia (Pärnu and Viljandi for example). At the same time many mass catering enterprises do not indicate in their menus to organic food.

In the framework of the Organic Farming Developing Plan 2007-2013, there have been since 2011 different projects and activities organised for the staff of local authorities, schools and kindergartens, in order to promote serving organic food. Most of them have been for personnel connected to catering in child care institutions (heads, cooks, economic managers). The subject of organic food has been less introduced to parents, other stuff at school, including teachers. Activities related to preparing food from organic raw material and visiting farms have been organised for children, but there have been very few educational activities and prepared teaching materials. These activities have been organised by many different organisations, like Estonian Organic Farming Foundation, Centre for Ecological Engineering, Estonian University of Life Sciences' Research Centre of Organic Farming, non-profit association Saare Organic, non-profit association Harju Organic Farmers’ Association, commercial association Estonian Organic, non-profit association Hiiumaa Cooperation Network, West-Estonian Islands Partnership, Tallinn City Education Department and others. Activities have been financed from different sources, for example on behalf of the Ministry of Agriculture, with the support of market development funds, Beras Implementation (Interreg) project and Environmental Investment Centre. Many initiatives have been by organic organisations and private persons without any national financial assistance, for example training sessions for Tallinn kindergartens and their individual consultation, lectures at schools, 5 years of training for children of Lotte kindergarten in Tartu, organic farmers selling their products to child care institutions with much more favourable prices etc.

Some example of the activities for child care institutions:

- Trainings and workshops for staff of Tallinn child care institutions in 2011-2013;
- Trainings and workshops for staff of child care institutions in different regions of Estonia in 2012 and 2013;
- Competitions "The best organic food in kindergarten" and "The best organic food at school" in 2012;
- Competitions of preparing food from organic products (for example at Pelgulinna school) in 2012 and 2013;

- Lectures on organic farming and preparing food from organic products with children and parents in schools and kindergartens (in various places around Estonia) in 2012 and 2013;
- Pupils and kindergarten children visiting organic farms;
- Publication on using organic food in kindergartens (in 2011, supplemented reprint in 2012 and 2013);
- Publication with organic recipes for schools and kindergartens in 2012;
- Study programme of six lectures – "Food production and environment" for grades 8 to 12;
- Information days "Organic production and distributing and the possibilities of using organic food in child care institutions" for representatives of child care institutions, local authorities and organic farmers in 2013, in all counties (in total 151 child care institutions);
- Organic food workshops for crafts teachers in 2013;
- Conference "Development trends of organic farming. Organic food in child care institutions" in 2013 with a foreign expert from Italy.

Local authorities have modest interest in organic food, which is proven by the fact that during the information days held in 2012-2013 in all counties only 13 participants from 309 represented the local authorities. The role of the local authority in organising catering for child care institutions varies – for the most part it is limited to financing and sometimes joint procurement is pursued. According to the European Union green public procurement directive[5] and the Public Procurement Act it is possible to prioritise organic food in public sector catering, including child care institutions catering, public procurement, but parents' financial situation should also be taken into account as prices of some product groups (for example vegetables, eggs, flakes) is twice as high as that of conventional products and its transportation is expensive and complicated because of small quantities and constant deliveries. At the same time, experience of several schools and kindergartens has proven that when there is a will, there is a way – one may start even just with a few organic products or one organic food day per week. Most child care institutions need help for starting using organic food. Experience of many countries and interest from the part of Estonian child care institutions show that personal consultation is needed for reviewing the menus, finding the priority raw material to be exchanged, making financial calculations, finding suppliers etc. At the same time, kitchen staff and teachers/educators should be trained and parents informed.

From 2013, there is an obligation for child care institutions to notify the Veterinary and Food Board of organic catering; before there was no obligation of approving nor of notifying. In order to invite the child care institutions already using organic food to notify about it, a campaign has been launched in the course of which organic farming principles have been introduced and recommendations provided about using organic food.

[5]For example: Directive 2004/18/EC of the European Parliament and the Council of 31st March 2004 on the coordination of procedures for the award of public works contracts, public supply contracts and public service contracts.

The activities that have already taken place have not been a part of a unified project but rather individual actions in the framework of different projects. The next steps should include examining the experience of other countries in preparing organic food in child care institutions, developing a full long-term national programme "Organic food in child care institutions" if possible, and using the possibilities of preferring organic food in procurements and school fruit, school vegetables and school milk schemes.

Availability of organic food can certainly be improved through cooperation of producers/processors/distributors with child care institutions, cooperative activity and developing alternative outlets. Production cost of raw material may be reduced through increase of production. Green public procurement principles should be applied (including drawing up a guide material about prioritising organic products) and organic catering should get extra funding, whereas counselling and training support may be included in extra funding.

As European Union regulations do not govern the use of organic food in catering enterprises, it is not allowed to use the European Union organic farming logo in order to refer to the organic origin of the food in catering business. In Estonia, a national organic label is in use alongside with the European Union organic farming logo. The label may be used for only the products that have at least 95% of ingredients from organic farming. It is complicated to reach this percentage in the food served in catering enterprises, as the choice of organic raw material in the market is not large enough, supply is irregular and prices for some product groups are higher. Therefore it is important to enable the caterers to refer to organic farming even in the cases where the percentage of organic ingredients is lower. A special sign should be designed which would enable customers to make informed choices between different caterers serving organic food.

Table 5. SWOT analysis of organic catering

Strengths	Weaknesses
1. Interest from the side of knowledgeable parents 2. Increase of interest from the side of caterers, including child care institutions, to serve organic food 3. Preparedness from the side of organic farmers to provide caterers with their products 4. Existence of organic raw material	1. Absence of simplified requirements of organic catering 2. Customers' and caterers' knowledge about differences between organic and ordinary food is insufficient 3. Caterers are not motivated enough to serve organic food 4. Additional burden on the caterers in record-keeping 5. Limited availability and unstable supplying of organic raw material 6. Logistic chain of organic products and information about their availability are ineffective 7. LA's lack of knowledge and financial capability to provide organic food 8. Additional costs incurred from adopting

	organic food are not compensated in Estonia 9. Inconsistent quality of local organic raw material
Opportunities	**Threats**
1. Customers' increased knowledge about organic food and its labelling 2. Caterers' increased interest in serving organic food 3. Child care institutions' and parents' increased interest in serving organic food 4. Top restaurants' transition to organic food (motivates others) 5. Increase in the number of organic food advocates and in the knowledge about organic food 6. Wider coverage of organic food in study programmes	1. Damage to the reputation of organic food (from using forbidden food additives, inadequate communication etc.) 2. Decrease in finance for school food or national support taken away from school food 3. Decrease in customer's purchasing power 4. Decrease in proposal of local organic raw material and increase in prices

3.3.2. OBJECTIVE

HIGH PROPORTION OF ORGANIC FOOD IN CATERING

The objective may be obtained in particular through developing cooperation, taking more organic food into use in catering enterprises and through different activities for raising the awareness about organic food

INDICATORS

Rate / Levels	Basic level 2013	Target level 2020
Proportion of Estonian child care institutions who have notified about serving organic food (%) *Source: MER, VFB*	0.1	30
Number of mass catering enterprises serving organic food and having notified about it, excluding child care institutions *Source: VFB*	8	100

3.3.3. MEASURES AND ACTIVITIES

MEASURE 3.1 RAISING AWARENESS ABOUT ORGANIC CATERING

3.1.1. Introducing principles of organic farming, organic product labelling and requirements of organic catering to different target groups

3.1.2. Organising, advising, training and communication for caterers

- Advising caterers about how to start and develop organic catering
- Compiling manuals on the use of organic food for different target groups among catering enterprises
- Publishing organic food cookbooks and compiling recommended customised (inc. financially) organic food menus for child care institutions
- Organic food workshops for caterers, also with a foreign lecturer

3.1.3. Introducing organic food success stories (also from other countries)
3.1.4. Serving organic food during public events
3.1.5. Stimulation of awareness about supplying products processed at home or in community kitchens into catering enterprises

MEASURE 3.2 DEVELOPING THE ENTRY OF ORGANIC FOOD INTO CATERING ENTERPRISES

3.2.1. Developing and applying the programme "Organic food in child care institutions"
3.2.2. Compiling a guiding document in order to raise organic food to a privilege position in public sector procurements
3.2.3. Presentation of the possibilities of offering organic products to the school fruit and vegetables and school milk support applicants
3.2.4. Organising of the competition "The best organic caterer" (different categories for kindergartens, schools, restaurants)
3.2.5. Development and introduction of a label referring to organic ingredients of the food prepared in a catering enterprise

MEASURE 3.3 DEVELOPMENT OF CO-OPERATION

3.3.1 Developing cooperation between caterers for ordering organic products jointly
3.3.2 Creating cooperation networks for caterers
3.3.3 Developing cooperation between Estonian caterers and caterers from other countries
3.3.4 Developing cooperation between producers, processors and caterer organisations

Activities of measures 3.1, 3.2 and 3.3 will be planned and carried out with the activities of the developing plan "Estonian food".

3.4. DISTRIBUTION AND CONSUMPTION

3.4.1. SITUATION AND OPPORTUNITIES

Estonian customer values organic food[6], especially local organic food. According to the survey of TNS EMOR in 2013, about 15% of the population consumed organic food monthly. The choice of local organic products gets bigger every year. As Estonian organic farming is

[6] The Ministry of Agriculture has commissioned TNS EMOR to carry out a survey called "Overview of the organic products' market" in order to obtain information about distributing and consuming organic food in Estonia. The survey also includes the results of customer survey and observation of assortment and prices, http://www.agri.ee/uuringud-10/

fairly young (25 years) compared to the conventional farming, it has some "teething" problems: small quantities and high production costs of organic food somewhat make it difficult to sell and there are not many enterprises that can invest in organic processing. Therefore, often food prepared from organic raw material reaches customer's table as ordinary food and organic farmer forfeits the advantage, because the markup for organic food will not be paid. An important proportion of Estonian products sold as organic products (namely cereals and meat) is distributed on the external market. Ideally Estonian kindergartens and schools should serve organic food.

According to the survey of TNS EMOR, there were about 40 special organic shops in Estonia in 2013. Organic food has also reached the supermarket shelves. During the four reference periods in 2013, there were in total 1274 different Estonian made organic food products sold in the shops (853 products in 2012). The biggest choice of products in assortment was in the category of cereal products (27%, in total 347 trade designations), next came herbs and teas. Estonian produced organic production retail turnover has grown from 4.33 million EUR (in 2010) to 8.31 million EUR (in 2012) (figure 6).

Table 6. Estonian produced organic products retail turnover in 2010-2012 (million EUR).

Retail turnover of organic products	**2010**	**2011**	**2012**
Dairy products	1.11	2.08	2.49
Cereal products	0.23	0.31	1.69
Potatoes and vegetables	0.83	1.36	1.61
Meat products	1.5	0.9	0.93
Eggs	0.14	0.19	0.38
Fruit and berries	0.24	0.71	0.37
Other products	0.28	0.46	0.83
In total	4.33	6.01	8.31

Source: TNS EMOR

A positive example of the development of organic food distributing is the fact that customers' warmly welcomed the 15 vending machines of raw milk placed in 15 supermarkets of Selver, ETK and RIMI chain-stores. Creation of networks uniting producers directly with customers has accelerated. In 2013, there were 6 organic food consumer circles that helped to bring organic food closer to the customers.

In 2013, the most modern organic cereal terminal of the Baltic States was opened in Ida-Viru County, Avinurme. It can stock up to 1,700 tons of organic cereals. Our internal market is not a big consumer of organic cereals, so commercial association Wiru Vili has found a way to enter the external market.

According to the 2013 customer survey of TNS EMOR called "Residents' eating habits and food product preferences", 8% of residents bought organic food weekly or more often, 15% bought it 1-3 times a month, 26% bought it less than once a month and 43% have not bought it during the last year.

The main reasons for buying organic food were that it's healthy (65%), it tastes good (44%), its local origin and production (43%), environmental friendliness of organic production (29%), liking the principles of production (27%), interesting products (23%).

The products bought most often were black bread, white bread and bakery products (40% of the customers having bought organic food have bought this) and dairy products, vegetables and honey (all of the above mentioned has been bought by 36% of organic food buyers), then potatoes (30%), fruit and berries (28%), eggs (27%), flour, flakes and other (24%), meat (21%) etc. 34% of the respondents are willing to pay an 11-20% higher price for organic food (Figure 10).

For the respondents who had not bought organic food in 2013, the main reason was the high price of organic products (43%). One fourth (26%) of the respondents claimed that they are growing the needed raw material for food themselves, 26% said they do not feel any difference between organic and conventional food and therefore see no need to purchase organic food, 14% get organic products directly from the producer, 11% can't find suitable products, 10% don't know where to buy from and 7% don't trust organic products.

The difference between the prices of organic and conventional products depends on the product: in some cases it is double (ex. vegetables, flour), in some cases the same or even less expensive (ex. beef, herbal tea).

To the question about buying organic food in 2014, 29% replied that they are planning to buy organic vegetables. Potatoes, honey, fruit and berries (26%), dairy products and meat (25%) and eggs (25%) are also of interest.

More than half of the respondents (57%) think that organic food does not get enough publicity. Thus there is still a long way to go in informing about organic food. At the same time it is important to keep in mind that organic food shouldn't be opposed to conventional food.

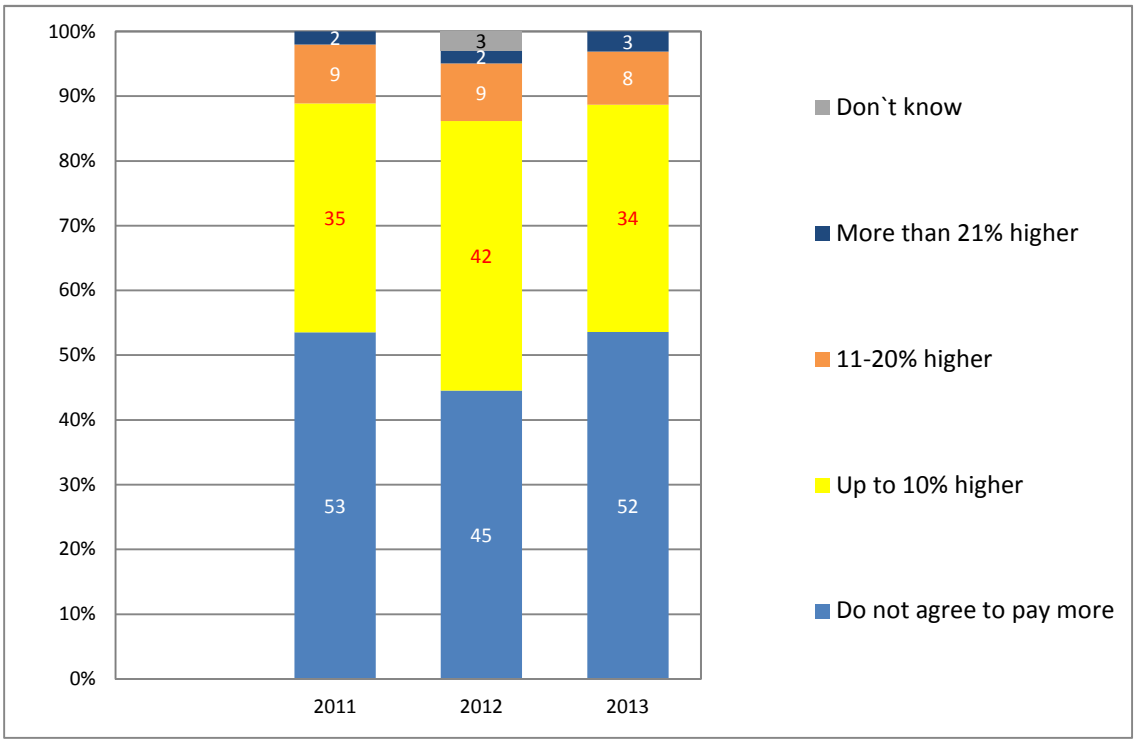

Figure 10. Readiness to pay a higher price for organic food in 2011-2013, in Estonia.

Source: TNS EMOR

In 2012, European Commission conducted a survey about the European Union member states' residents' opinion on organic farming. The results indicated that organic food is being bought in the European Union mostly for the purpose of environmental sustainability and for avoiding GMOs and residue of substances not authorised in organic farming. Regular consumers of organic food prefer buying it from organic shops, supermarkets of directly from a farmer. Occasional consumers prefer buying from supermarkets. Only 8% of regular consumers and 4% of occasional consumers buy organic food from the Internet. 78% of the respondents are ready to pay a higher price for organic food. More than half (53%) of the consumers find 10-25% higher price for organic food to be acceptable. 94% of the respondents would like to get more information on organic farming.

In 2011, there were 4 recognized enterprises importing organic products (from outside EU), in 2013 there were 8. The imported organic products are cereal products, coffee, tea, cocoa products and alcoholic beverages. Export-import of organic products within the EU is very large and many enterprises are engaged in it.

Market development support has had a very positive impact on distributing and consuming organic products. Organic farming organisations have been quite active in applying for the market development support. In 2007-2012, there were 6 applicants for organic subjects (in total around 40 projects) for the sum over 700,000 EUR (11% of the granted sum). In 2013, the organic farming related projects were carried out by four organic farming organisations and one organisation of conventional farmers. In 2010-2013, the focus has been on informing about organic food at trade shows, fairs, training and study tours abroad and communication campaigns about organic food, including publicity on television and in foreign media, organic

food days on farms, in kindergartens and schools, organic food related press releases and articles, publications, trainings for retail store workers, concentrating information to maheklubi.ee etc.

Even though the survey of TNS EMOR in 2013 shows that recognition of the European Union organic farming logo and Estonian national organic label is on the rise, customer awareness-raising should definitely go on, as the existence of organic food is recognised, but its true meaning and value is understood by very few. It is often thought that all domestic food (especially from farms) is "almost organic" or "basically organic".

Up to now the European Union awareness-raising and promotion measure has not been used for introducing organic products in Estonia, though application for it is possible.

Opening up new markets and staying on the existing ones need a close and flexible cooperation between private and public sectors. Dialogue with the consumers requires maintaining high quality of organic products and improving product development.

Table 7. SWOT analysis of organic farming distribution and consumption.

Strengths	Weaknesses
1. Distribution related cooperation between the producers has started. 2. Number of outlets and sales volumes (including export) has grown. 3. Interest of customers in organic food has increased. 4. Alternative distributing channels have been taken into use (consumer circles, Internet business, directly from producer to consumer etc.)	1. High prices of most organic products 2. Absence of a logistics centre, high logistics costs 3. Unstable quality of products 4. Small share of market for organic products 5. Low interest of cooperation between producers and lack of coordination in activities 6. Lack of distribution knowledge of producers 7. Unattractive packaging for retail 8. Small choice in organic products 9. Low level of awareness and purchasing power among customers 10. Insufficient informing of the public 11. Weak product development 12. Insufficient cooperation with the tourism sector
Opportunities	**Threats**
1. Growth in awareness and demand 2. Growth in demand from other countries 3. Growth in interest from retailers (including commercial chains)	1. Economically difficult situation, reduced purchasing power of customers 2. Penetration of cheap imported organic products 3. Infringement of good repute of organic farming

3.4.2. OBJECTIVE

ORGANIC PRODUCTS ARE ACCESSIBLE TO CUSTOMERS IN A LARGE RANGE OF CHOICE AND CUSTOMERS ARE AWARE OF THE NATURE OF ORGANIC FARMING

The objective will be obtained through development of organic distribution and raising the awareness of customers about organic farming through different activities.

The achievement of the objective will be measured through the proportion of customers having bought organic food, the proportion of regular organic food consumers, proportion of crop and animal production produced organically and distributed under organic labelling, and the value of organic products exported and distributed in other EU countries.

INDICATORS

Rate / Levels	**Basic level 2013**	**Target level 2020**
Proportion of Estonian population having bought organic food (%) *Source: TNS EMOR*	49	80
Proportion of labelled organic products in Estonian organic plant production products (%) *Source: ARC, Rural Economy Research Centre*	55 (estimated)	90
Proportion of labelled organic products in Estonian organic livestock production products (%) *Source: ARC, Rural Economy Research Centre*	10 (estimated)	50
Organic products exported and distributed in other EU countries (EUR) *Source: MA*	Data from 2013 will be revealed in 2014 survey	Tripled compared to 2013

3.4.3. MEASURES AND ACTIVITIES

MEASURE 4.1 DEVELOPMENT OF DISTRIBUTION OF THE ORGANIC PRODUCTS

4.1.1. Informing distributors about principles and products of organic farming
4.1.2. Creating and managing an information portal of distributed organic products
4.1.3. Informing in public procurements about the possibilities for procuring organic products (so called green public procurements)
4.1.4. Creating and developing distributing centres for storage, wholesale and logistics of organic products
4.1.5. Conducting a survey on organic food market and consumption, including gathering information on the prices of organic products
4.1.6. Gathering information about organic products exported or distributed in other EU countries
4.1.7. Organising and participating in organic markets, fairs, exhibitions and other events, preparing publicity materials
4.1.8. Creating short supply chains and developing their activities
4.1.9. Promoting the development of regional consumer networks

MEASURE 4.2 RAISING THE AWARENESS OF CONSUMERS ABOUT ORGANIC FARMING

4.2.1. Organising campaigns aimed at informing about organic food
4.2.2. Informing the public about organic food in cooperation with the media
4.2.3. Publishing materials on organic farming for different target groups
4.2.4. Introducing organic farming to different target groups, for example LA-s, heads of child care institutions, teachers, children, parents, medical staff, health professionals and social workers

Individual actions of 4.1 and 4.2 are being planned and will be carried out with the activities of the "Estonian food" development plan.

3.5. SCIENTIFIC AND APPLIED RESEARCH, TRAINING, COUNSELLING AND DIFFUSION OF INFORMATION

3.5.1. SITUATION AND OPPORTUNITIES

Economic innovation requires educated promoters and work force with up-to-date skills and knowledge, also in organic farming. Using new technologies and machinery makes it necessary to contribute to science and development, to upgrade our knowledge, skills and attitudes. Scientific expertise is an important supporting measure for the advisory system, legislation and public surveillance.

Distributing the results of Estonian as well as EU scientific research in Estonia is a must. From the point of view of competitiveness, research and development are extremely important, as export capacity and growth in added value are dependent on innovation, product development and new scientific solutions.

In 2011, evaluation of agricultural plant and soil science was conducted for the first time. The objective was to get information about the level, efficiency and impact of the mentioned area of research. The need for allocating clearer tasks to agricultural sciences was emphasised in the report. Low core financing of research and development agencies, low involvement of interest groups and low contribution and involvement of advisory system in disclosure of scientific results, were also identified as weaknesses.

International agricultural science must be integrated into Estonian scientific system; that is to create the knowledge appropriate to local conditions. Existence of modern infrastructure and of material-technical base is necessary for promoting the competitiveness and effectiveness of agricultural sciences. Several universities (Estonian University of Life Sciences, Tallinn University of Technology, University of Tartu), Agricultural Research Centre, Estonian Crop Research Institute and the centres, test stations and test farms located at research organisations, contribute to the development of innovation and knowledge-basis.

In 2007-2013, research related to organic farming in the programme of agricultural applied research, was mostly on plant production (including gardening) and plant health. Five

researches have been conducted in the field of organic plant production, two in the field of organic livestock production. Results of the applied research have been published on the website of the Estonian Agricultural and Rural Development Advisory Coordinating Centre. Two agricultural applied researches from measure 1.7.1 (cooperation for development of new products, processes and technologies in the agriculture and food sector and the forestry sector) of Estonia's Rural Development Plan 2007-2013 got support. In addition, the Ministry of Agriculture has commissioned four organic farming related surveys.

Estonia is participating in the work of international cooperation networks (ex. ERA-Net Core Organic II, ERA-Net Core Organic Plus, ERA-Net EUPHRESCO II, ERA-Net SUSFOOD, ERA-Net C-IPM), which aim is international integration of the EU member states' research programmes, improving the coordination of research, developing common priorities and joint calls for proposals, using different possibilities of finance schemes etc.

Estonia has used the joint research programming initiative on Agriculture, Food Security and Climate Change (FACCE JPI). Scientists from Estonian University of Life Sciences take part in a pilot programme A Detailed Climate Change Risk Assessment for European Agriculture and Food Security.

A rural economy related university degree may be obtained in Estonian University of Life Sciences. The university has a key role in providing the qualified work force with the much needed competency in using new technologies and attitudes for a sustainable and environmentally safe professional activity. As subjects related to organic farming are covered in higher education and vocational training establishments on a very sporadic basis and it is not possible to obtain a vocational school diploma or a degree in organic farming, the subjects related to organic farming need to be integrated to study programmes of universities and vocational schools.

There is a big gap between the demands of the employers and the level of the skills of the older generation, which makes it necessary to also update the knowledge of the work force through lifelong learning. The main way to insure oneself against the lack of qualified labour is in-service training. One of the requirements of organic production support is taking part in initial and in-service training. The Ministry of Agriculture has regularly commissioned organic farming related initial, in-service and specific training, including by foreign lecturers. It is important to continue the organic farming related in-service training, during which attention should be paid to trainings on current issues, which would reflect important legislative amendments, support related subjects and new trends, but also to initial trainings giving information about the major activities of the sectors.

In 2008-2013, there were 20 organic farming related applicants for getting financial support through Estonian Rural Development Plan 2007-2013 measure 1.1. In 2013, in total 39 activities related to organic farming got endorsed (Table 8). Large proportion of support was used for organising information days and developing printed materials. The covered subjects included: seed growing, plant protection, starting with organic farming, economic accounting in organic farming and distributing organic products.

Table 8. Organic farming activities that got support from Estonian Rural Development Plan measure 1.1:

Year	The total number of organic farming related activities that got approval	Total sum of subsidies allocated
2008	15	48,333
2009	32	57,886
2010	22	67,194
2011	22	49,571
2012	19	29,249
2013	39	50,717

Source: Agricultural Registers and Information Board

There are different advisory organisations and networks in Estonia and each one of them has specificity and is necessary for the target group. In addition to the agricultural and rural economy advisory system, there is also a regional development centre network of Enterprise Estonia. Never the less, many farmers, who actually need counselling, often do not reach advisers or certified agricultural advisers. The main reason for not using the advisory service is that high level advisors are too busy and the farmers do not have enough knowledge about the possibilities of advisory system.

In 2012, a survey was conducted on advisory needs of organic farmers[7], according to which about half of the organic farmers who participated in the survey, are using advisory services. 40% of organic farmers think the need for advisory service will increase and 35% think it will stay the same. The most needed advice is specifically production related, but also processing and distribution related. 74% prefer paying separately for every advice.

Even though different advisory service user surveys have shown a high level of satisfaction with the quality of advisory service, the further development of advisory service goes on. In order to be useful to clients, an advisor has to generally have a spectacular knowledge base and varied practical skills. It should also be taken into consideration that as many farmers are in plant production as well as livestock production, one advisor is hardly enough, as it is important to understand the integrated processes of agriculture and economy together. There is absence of advisors for specific subjects in the organic sector (for example various subsections of gardening and livestock production, producing etc.). While developing a rural economy advisory system, it should be taken into consideration that the advisory centres would have to cooperate with each other as well as with research and development agencies and different sector associations. The activities for finding new active advisors and training advisors should be carried on, also in new sectors, for example adapting to climate change or promotion of innovation.

For executing the activities of the development plan, there is a need to develop a long-term programme and create an organic competency centre, which would focus on scientific

[7] The survey has been published on the webpage of the Ministry of Agriculture: http://www.agri.ee/public/juurkataloog/UURINGUD/uuring-mahe-noustamisvajadus-2012.pdf.

creation (tests, prioritising fields of study and coordination) as well as dissemination of results.

Table 9. SWOT analysis of organic farming related scientific and applied research, training, advising and dissemination of results.

Strengths	Weaknesses
1. Many different organic farming related materials have been published, including clarifications of the requirements and guidance documents 2. High quality organic farming related training held on different subjects for different target groups (including with foreign lecturers, lectures and field trips), great interest in training 3. Organic farming related research done in different scientific institutions, contribution to international scientific networks 4. Existence of good advisors 5. Existence of organic farming related information webpage maheklubi.ee 6. Experience in customer information campaigning	1. Many farmers do not possess enough knowledge and know-how for sustainable economic activity in organic farming 2. Organic farming related scientific research has been done on only a few subjects, complex research does not exist 3. Absence of possibility to follow a full organic farming related study programme in university or vocational school 4. Inadequate plant breeding for organic farming 5. Not enough advisors in practical experience 6. Insufficient interest of farmers in specialised advice 7. Lack of trainers and advisors in specific fields 8. Low financial capacity of organic farmers to take part in applied research 9. Insufficient accessibility to scientific results and putting them to practice
Opportunities	**Threats**
1. Getting an organic farming related education in universities or vocational schools 2. Growth in the number of scientific research, fields of study and support 3. Growing interest of the public in organic farming	1. Insufficient contribution of public and private sector into research and development activities of organic farming (reduction of funding) 2. General lack of knowledge of the population about organic farming 3. Inadequate number of scientists knowledgeable in organic farming

3.5.2. OBJECTIVE

ORGANIC FARMING IS SUSTAINABLE AND COMPETITIVE THROUGH WIDESPREAD IMPLEMENTATION OF KNOWLEDGE CREATION AND KNOWLEDGE TRANSFER

The objective will be obtained through diversification of the organic farming related subjects in scientific and applied research, supporting cooperation projects related to organic farming training and information distribution, organising training and informing activities, teaching the public about organic farming through different activities.

3.5.3. MEASURES AND ACTIONS

MEASURE 5.1 ENRICHMENT OF THE SUBJECTS OF SCIENTIFIC AND APPLIED RESEARCH ON ORGANIC FARMING AND THEIR CONNECTION TO PRODUCTION AND PROCESSING

5.1.1. Creation and development of an organic knowledge transfer centre and starting up a long-term programme of knowledge transfer
5.1.2. Mapping of research on organic farming and scientific resources, elaborating the development needs and agreeing on the prioritised aspects of research and coordinating the work

- Establishing a list of Master students' subjects of applied research on organic farming, research training; establishing a list of Doctorate students' subjects of base and applied research on organic farming, research training

5.1.3. Promotion of cooperation between producers, processors and research and applied establishments, for example creation of EIP's organic farming working group
5.1.4. Increasing the State's contribution into Estonian scientists taking part in cooperation projects through international scientific networks (Era-Net Core Organic II, CORE Organic Plus etc.)
5.1.5. Research on organic technologies for beekeeping, plant production and livestock production, including long-term tests and studies and identification of suitable varieties for organic farming and plant breeding
5.1.6. Research on the quality of organic food and feed, improvement of laboratory base
5.1.7. Socio-economical research on organic farming
5.1.8. Creation of model enterprises and conduct of model tests in order to bind the scientific research to production and processing
5.1.9. Giving advantage to organic research, if possible, in developing a sustainable farming system
5.1.10. Taking part in the work of international organisations and cooperation networks

For a more detailed overview of the activities, see Annex I.

MEASURE 5.2 SUPPORTING COOPERATION PROJECTS RELATED TO TRAINING AND DISSEMINATION OF INFORMATION

5.2.1. Co-funding of participation in internal and external organic farming related projects

- Bilateral cooperation projects

5.2.2. Initiating and undertaking cooperation projects for knowledge transfer
5.2.3. Initiating and taking part in organic farming related communication programmes and projects with other countries and organisations
5.2.4. Communication with other countries on the subject of organic aquaculture, processing and distributing

MEASURE 5.3 ORGANISING TRAINING AND AWARENESS-RAISING FOR ENTERPRISES ENGAGED IN ORGANIC FARMING

5.3.1. Organising organic farming training and information days for producers, processors and distributors (also with foreign lecturers) and starting up long-term training programmes
5.3.2. Creation of a practical knowledge basis for organic farming (knowledge transfer centre, using model enterprises etc. tests for training and practice)
5.3.3. Creation of a practical study centre for small scale processing and using it for training organic processors.

For a more detailed overview of the activities, see Annex III.

MEASURE 5.4 DEVELOPING AN ORGANIC FARMING ADVISERS SYSTEM

5.4.1. Organic farming training for advisers, including development and implementation of training programmes
5.4.2. Preparation and publishing of materials needed for organic farming advisory service
5.4.3. Organisation of joint organic farming study days for producers, advisors and compliance authority officers
5.4.4. Increasing the usage of organic farming advisory service

MEASURE 5.5 EXTENSION OF THE SUBJECT OF ORGANIC FARMING INTO HIGHER EDUCATION INSTITUTIONS', VOCATIONAL INSTITUTIONS' AND GENERAL EDUCATION SCHOOLS' STUDY PROGRAMMES AND SUBJECT SYLLABUS

5.5.1. Extension of the educational resources of general education schools with topics of organic farming and organic food
5.5.2. Developing study programmes of organic farming (including organic producing, processing and catering) for vocational and higher education institutions

MEASURE 5.6 PRODUCTION AND DISSEMINATION OF ORGANIC FARMING RELATED TRAINING AND INFORMATION MATERIALS FOR ORGANIC FARMING RELATED ENTERPRISES

5.6.1. Preparation and distribution of guide materials for organic farmers and small scale handlers
5.6.2. Preparation and distribution of professional publications related to organic farming and making educational documentaries
5.6.3. Preparation and distribution of publications promoting scientific and applied research from Estonia and abroad on organic farming

5.6.4. Publishing the constantly updated information on organic farming on the Internet, including training and reports
- Publishing and distribution of the magazine "Organic Farming" ("Mahepõllumajanduse leht")
- Administration of the Organic Club webpage

For a more detailed overview of the activities, see Annex II.

MEASURE 5.7 INTRODUCING ORGANIC FARMING TO THE PUBLIC

5.7.1. Organising conferences on organic farming
5.7.2. Introducing organic farming to different target groups
5.7.3. Organising information days in model enterprises and introducing model tests
5.7.4. Sharing the scientific results of organic farming in a simple and understandable format
5.7.5. Recognition of the best media report related to organic farming or the reporter behind it
5.7.6. Drawing up regional tourism maps on enterprises engaged in organic farming

For a more detailed overview of the activities, see Annex II.

3.6. LEGISLATION AND SUPERVISION

3.6.1. SITUATION AND OPPORTUNITIES

LEGISLATION

Scope and minimum requirement of organic farming were first regulated in the European Union in 1991, with Council Regulation (EEC) No 2092/91, about organic production of agricultural products and labelling of agricultural products and food products. Even though in Estonia organised involvement in organic farming started already in 1989, with the supervision of Estonian Biodynamic Association, the Estonian term for organic farming ("mahepõllumajandus") was not defined until the first organic farming act, which came into effect on 7th July 1997.

Since 1st May 2004, when Estonia joined the European Union, Estonian organic farming is being regulated by European Union direct applicable regulations, Organic Farming Act and the regulation of the Government of the Republic and regulations of the Minister of Agriculture adopted thereunder.

The current Organic Farming Act came into effect 01.01.2007 (last version came into force 01.07.2013). The new Organic Farming Act introduced organic farming requirements, which were not introduced with European Union regulations. Those requirements include the bases and scope of implementing supervision over a person engaged in organic farming and the responsibility of the person for non-compliance with organic farming requirements.

From 1st January 2005, there is a new Estonian national label referring to organic farming[8] – the eco-label.

In 2007, the Council of the European Union adopted an organic farming regulation (EC) No 834/2007 on organic production and labelling of organic products and repealing Regulation (EEC) No 2092/91. The regulation provides clearly the principles and objectives of organic farming and all labelling, supervision, import and production related rules in one document. In 2008, for implementing the regulation of the Council, the Commission regulations (EC) No 889/2008 laying down detailed rules for the application of Council Regulation (EC) No 834/2007 as regards the organic production, labelling and supervision, and (EC) No 1235/2008 laying down detailed rules for the application of Council Regulation (EC) No 834/2007 as regards the importation of organic farming products into third countries, were adopted. All this European Union regulations were implemented from 1st January 2009. Since 1st January 2009, regulations of the Council have been amended several times. The most important amendments have been the addition of detailed rules on production of aquaculture animals, seaweeds and organic wine into the Council regulation (EC) No 889/2008, which entered into force respectively on 1st July 2010 and 1st August 2012.

The new European Union organic farming logo[9], use of which on the package of organic products is obligatory, is applied since 1st July 2010.

SUPERVISION

Operator engaged in the sector of organic farming is being supervised by the Agricultural Board, the Veterinary and Food Board and the Consumer Protection Board.

Agricultural Board supervises organic plant production (including plant and mushroom picking from non-cultivated land), livestock production, beekeeping, aquaculture, primary feed production, packaging and placing on the market self-produced non-processed, and producing, preparing and placing on the market organic seed and propagating material.

Veterinary and Food Board supervises operator engaged in organic food preparation (including processing and preparation of products for mass catering enterprises), preparation and placing on the market of processed feed and storage and placing on the market of organic products (including importing and distributing non-packaged products to final consumers).

Consumer Protection Board supervises the retailers in fulfilment of organic labelling requirements and accuracy of information provided.

In 2013, there were as many officials supervising organic production in the Agricultural Board, as in 2006 (26 county surveyors and 4 officials in the organic farming office). At the same time, the number of enterprises has grown 32% and the area of land to be checked has doubled. In 2006, there were 1,280 inspections of organic plant production and 848 in organic livestock production; in 2013 the same numbers were 1,891 and 1,187 (in total 3,078 inspections). Organic farmers are quite law abiding and the number of injunctions and

[8] https://www.riigiteataja.ee/akt/12759709
[9] http://ec.europa.eu/agriculture/organic/eu-policy/logo_et

misdemeanours has decreased in recent years. From 2014, the number of control samples will increase, as control samples should be taken from 5% of the test subjects. It has been considered important to raise the effectiveness of inspections and the qualification of the inspection officials. In addition to the internal and external training of the Agricultural Board, since 2008 also joint training (gardening, crop cultivation, poultry-, pig- and cattle breeding etc.) with a foreign lecturer for organic farmers, advisors and inspection officials were held in the framework of the Organic Farming Developing Plan 2007-2013, under the order of the Ministry of Agriculture. Since 2010, joint seminars of the Veterinary and Food Board and the Agricultural Board are being held. Cooperation between control authorities (also in counties) has also improved. Participation of officials of the Agricultural Board in foreign projects, cooperation with other countries' control institutions and organising joint training for organic farmers, advisors and inspectors, should be included in the list of activities of the new developing plan. Supervision information system has been developed. Since 2006, the inspectors have been equipped with laptops and printers and mobile inspecting has been going on. In 2009, issuing documentary evidence was started, and since 2013 documentary evidence has been published on the webpage of the Agricultural Board. In 2014, an analysis of the area of organic farming software will be conducted, on the basis of which financing will be sought from Structural Funds for developing a new up-to-date register, which could be further developed (creation of supporting documents through the register) and capable of interfacing with needed information systems. There will be no public view of the new organic register, all e-services will be realised through the interfaced customer portal. The information systems of the Agricultural Board and the Veterinary and Food Board require interfacing. EARIB's application of the card will also be interfaced with the organic farming register (in order to stop the transmission of field cards in paper format). In 2013, EARIB's e-service was used by 42% of the applicants of organic support. A solution should be sought for training and advising the rest of the farmers in transition to computerised transmission of data.

In 2012, there were in total 29 officials in the Veterinary and Food Board, inspecting the enterprises in 15 counties, engaged in organic sector. In total 169 inspections were carried out. Areas of activity of the organic enterprises, under the inspection of the Veterinary and Food Board can be seen in Table 10.

Table 10. Areas of activity of the enterprises engaged in organic farming, under the inspection of the Veterinary and Food Board, in 2011-2013.

Area of activity	**Number of enterprises 2011**	**Number of enterprises 2012**	**Number of enterprises 2013**
Processing	55	72	90
Storage	50	69	78
Only distribution	40	55	56
Preparation in catering	8	8	8
Packaging	6	10	10
Importation	4	7	8

Source: Veterinary and Food Board

Compared to the previous years, the frequency of checks per enterprise has decreased year after year. Before every enterprise was checked twice a year, now in general once a year (storekeepers once in three years). In 2009, one enterprise was checked on average 1.6 times a year; in 2012 only once a year. Traceability of the product in every stage of production has become problematic though, in case the preparer uses third party contracts.

The number of precepts made during check-ups has been decreasing compared to previous years. In total 24 precepts in 2012, 40 in 2011, and 54 in 2010 were made to enterprises. In 2012, one misdemeanour was started and two penalty payment warnings were made. Penalty payment was prescribed twice. There were no shortcomings in organic processing detected in 2012. Most precepts in 2012 were about shortcomings in labelling. There were also shortcomings in accounting documents, collection of products and storage.

Table 11. SWOT analysis of organic farming legislation and supervision

Strengths	Weaknesses
1. Functioning supervision (control system) 2. Available requirement explanations to the producers and guide documents for processors	1. Complicated legislation with mistakes in translation 2. Shortcomings in legislation that can be used in bad faith 3. Innovation gap in development of IT solutions
Opportunities	**Threats**
1. Simplification of requirements resulting in a more flexible supervision	1. Poor analysis in case of legislation amendments 2. Requirements getting stricter

3.6.2. OBJECTIVE

SUPERVISION OVER COMPLIANCE WITH THE REQUIREMENTS OF ORGANIC FARMING AND ENTERPRISE'S COMPLIANCE WITH THE REQUIREMENTS IS GUARANTEED

The objective will be obtained through creating a legal environment, improving the effectiveness and quality of supervision, improving the public service of supervisory authorities and communication of information, improvement of competence of supervisory officials through different activities.

3.6.3. MEASURES AND ACTIVITIES

MEASURE 6.1 CREATING A HIGH-QUALITY LEGAL ENVIRONMENT

6.1.1. Cooperation in preparation of clear, simple and precise legal acts in the domain of organic farming

MEASURE 6.2 AMELIORATING THE EFFICIENCY AND QUALITY OF SUPERVISION

6.2.1. Creating IT solutions for arrangement of Organic Farming Register, AB and VFB information systems

- Analysis of AB and VFB information systems
- Development and application of information systems

6.2.2. Purchasing mobile work equipment for VFB compliance officers for accessing the information system

6.2.3. Developing the data bases of organic seed

- Analyses of IT system
- Developing and application of IT system

MEASURE 6.3 AMELIORATING THE PUBLIC SERVICE SUPPLY OF SUPERVISORY AUTHORITIES AND THE EXCHANGE OF INFORMATION

6.3.1. Simplifying the administration through arrangement of data bases

- Analysis of the possibilities of arranging the data bases needed for providing EARIB and AB data on plant production
- Developing and applying a common data format

6.3.2. Creating e-services in the client portal

- Arranging a common client portal
- Creating e-services in the common client portal

6.3.3. Connecting the Organic Farming Register with the Geographical Information System

- applying the application of the card
- connecting the data in the application of the card with the data of the Organic Farming Register

MEASURE 6.4 RAISING THE PROFICIENCY OF THE COMPLIANCE OFFICERS

6.4.1. Participating in foreign projects
6.4.2. Cooperation with other countries' audit institutions
6.4.3. Common training (also with a foreign lecturer)
6.4.4. Guide books (manuals) for compliance officers

Activities of measure 6.2 and 6.3 are being carried out in accordance with the Estonian Information Society Development Plan 2020.

4. RELATIONSHIPS WITH OTHER DEVELOPMENT DOCUMENTS

The organic farming development plan is mostly related to the following national strategies, development plans and other documents:

- *Estonian National Sustainable Development Strategy up to 2030 "Sustainable Estonia 21"* – the objective is to guarantee a high quality of life and a safe and clean

environment today and in the future. The measures of the organic farming development plan are set to obtain the same objective;

- *Development Plan of Population's Health 2009-2020* – the strategic objective is a long and high-quality life. For obtaining this objective, it is important to raise people's awareness about health related behaviour and healthy choices. Awareness is also related to food and eating. In the framework of the activity "Giving customers (including children and pupils) information about food, food production and preparing" of the activity plan of Population's Health Development Plan 2014, informing child care institutions' caterers about organic food and its use and introducing pupils, teachers and parents to the principles of organic farming;
- *Nationwide Programming „Estonia 2030+"* – one of the objectives is to prevent undesirable impact on the environment, which is consistent with the principles of organic farming and the objectives of the organic farming development plan;
- *Estonian National Tourism Development Plan 2014-2020* – in the framework of which one of the activities for developing food tourism and increasing the attractiveness of tourism products, is raising awareness about organic products and improving cooperation between organic farmers, processors, distributors and tourism related enterprises, in order;
- *Development Plan of the Territory of the Ministry of Agriculture 2014-2017* – provides that the organic farming development plan 2014-2020 should be developed and applied and many of the directions coincide with the organic farming development plan: awareness of the consumer, knowledgeable crop grower and stock-farmer (including organic farming related advice, target oriented training, scientific and other research), innovativeness, product development, well developed production technology (including increase of organic products' market share), quality schemes, cooperation within the food chains (including creating sectoral cooperation networks) etc;
- *Estonian Rural Development Plan 2007-2013* and *Estonian Rural Development Plan 2014-2020 (under work)* – several measures help to obtain the objectives of organic farming development plan, for example production related support paid to active food producing enterprises in the plant production and livestock production sector (including organic enterprises) to ensure competitiveness, to preserve and increase biological diversity, to preserve and improve soil fertility and quality of water, to improve animal welfare;
- *Action Plan of Sustainable Use of Pesticides 2013-2017 and its roadmap* – include preventive measures against threat and influence of the use of pesticides on human health and environment, timetable of implementation and activities for developing and applying the principle of integrated pest management and other measures (including organic farming authorised pest control);
- *National programme „Agricultural Applied Research and Development Activities 2009-2014"* – includes organic farming sector research that help to obtain the objectives of the organic farming development plan;
- *National programme „Plant Breeding Programme 2009-2019"* – the objective is to breed varieties that would guarantee the competitiveness of plant production and

processing sector of agriculture - breeding high-yield, high-quality, winter-proof varieties with a larger distribution potential, for food, feed and technical needs;

- *Estonian Fishery Strategy 2014-2020* – main objective is the sustainable development of Estonian fishery and raising the competitiveness of fish products in internal as well as external markets, also guaranteeing a competitive and sustainable fishing industry, including development of aquaculture. Development of organic aquaculture is one of the measures of the organic farming development plan.
- *Estonian Dairying Strategy 2012-2020* – the trend is that Estonian sustainable and competitive dairying is oriented towards producing market demand related high added value dairy products (including more and more organic products) and towards export, based on vertical and horizontal cooperation;
- *Estonian Seed Growing Development Plan 2014-2020 and its action plan (under work)* – the objective is to develop the production, distribution and use of certified seeds and potato seeds (including organic seeds and potato seeds);
- *Estonian Food Development Plan 2015-2020 (under work)* – will help design the image of Estonian food (including organic food);
- *Estonian Gardening Development Plan 2014-2020 (under work)* – one of the objectives is a sustainable gardening sector (including organic gardening);
- *Estonian Cereal Sector Development Plan 2014-2020 (under work)* – the objective is to increase production and processing of cereals and oilseed crops and increase of added-value, including the increase of organic production.

5. FINANCING AND IMPLEMENTATION

Financing the implementation of the development plan will be channelled through development plans of different sources and according to legislation:

- Development Plan of the Territory of the Ministry of Agriculture 2014-2017;
- Estonian Rural Development Plan 2007-2013;
- Estonian Rural Development Plan 2014-2020;
- Estonian Information Society Development Plan 2020;
- Budget of the Ministry of Agriculture;
- European Union co-funded projects;
- National programme "Agricultural applied researches and development activities 2015-2020"
- National programme "Plant breeding programme 2009-2019"
- Horizon 2020
- Projects financed from other sources.

A seven year action plan was compiled for the development plan, containing activities, functions and needs of resources. Thus the development plan will be implemented according to the action plan of the Organic Farming Development Plan 2014-2020, which is indicative and non-binding to the state budget, Estonian Rural Development Plan 2014-2020 and other sources of financing. In order to ensure the achievement of the objectives set in development plan, funds will be provided from operational expenditure of the Ministry of Agriculture,

according to the possibilities each year. Allocation of the needed funds for implementing the activities should be applied for separately. Certain activities may be carried out administratively during everyday work, without any extra costs.

ANNEX I ORGANIC FARMING FIELD RESEARCH, INCLUDING SCIENTIFIC AND APPLIED RESEARCH 2014-2020

Title of the study	2014	2015	2016	2017	2018	2019	2020
Plant production							
1. Mapping the needs and means for starting and developing organic seed centres		x					
2. Choice of suitable varieties, selective breeding and seed multiplication of cereals and legumes, oil crops, potatoes, leguminous plants and hay grasses for organic farming	x	x	x	x	x	x	x
3. Interaction of soil and crop in organic farming		x	x	x	x	x	x
4. Changes in soil fertility, crop quantity and quality in organic and conventional farming based on different agricultural technology with the estimate of contribution margin		x	x	x	x	x	x
5. Research on agricultural technologies suitable for organic production in order to avoid pest and obtain high quality harvest		x	x	x	x	x	x
6. Finding solutions to problems specific to organic seed multiplication (for example: grasses weed, cereal seed dressings, avoiding potato viruses etc.)	x	x	x	x	x	x	x
7. Developing and implementing a balanced crop rotation for different types of organic production (crops, horticultural crops, feed crops)		x	x	x	x	x	x
8. Research within the framework of international academic networks	x	x	x	x	x	x	x
Livestock production							
9. Identification of the possibilities and needs of organic aquaculture		x					
10. Identification of the needs of organic feed for pig and poultry breeding and development of recommendations to meet the demand		x	x				
11. Organic feed related research with plant production (identification of the crop and pasture mixes rich in protein and energy, recommended in organic farming)		x	x	x			
12. Research on animal welfare and health (preventive healthcare, natural resources, homoeopathy)		x	x	x	x		
Food quality and catering							
13. Research on use of organic food in child care institutions			x				
14. Research on quality of organic products (meat, milk, vegetables, cereals)		x	x	x			
15. Research for safeguarding the quality of organic food in the chain of processing		x	x			x	x
16. Research on processing technologies and product development of organic food		x	x	x	x	x	x
Economy							
17. Organic food market investigation (total sales of organic food by various distribution channels) including collecting information on prices of organic	x	x	x	x	x	x	x

products							
18. Consumer research (including the proportion of consumers who have bought organic food and consumers who consume it on a regular bases)	x	x	x	x	x	x	x
19. Evaluation of the proportion of the products with an organic farming labelling in the market compared to all Estonian plant production and livestock production products	x	x	x	x	x	x	x
20. Evaluation of the prices of organic products exported and sold in other European Union countries	x		x		x		x
21. A comprehensive comparison between economic activity of organic and other enterprises				x		x	

ANNEX II LIST OF ORGANIC FARMING RELATED PUBLICATIONS[10] 2014-2020

Name of the publication	2014	2015	2016	2017	2018	2019	2020
1. "Organic Farming" ("Mahepõllumajanduse leht")	x	x	x	x	x	x	x
2. "Organic Farming in Estonia" ("Mahepõllumajandus Eestis") (Estonian-English)	x	x	x	x	x	x	x
3. "Organic Farming Development Plan 2014-2020" ("Mahepõllumajanduse arengukava 2014-2020") (Estonian-English)	x						
4. "25 Years Of Organic Farming In Estonia" ("25 aastat mahepõllumajandust Eestis") (Estonian-English)	x	x					
5. "Explanation Of Organic Farming Requirements For A Producer" ("Mahepõllumajanduse nõuete selgitus tootjale")			x				x
6. "Explanation Of Organic Farming Requirements For A Caterer" ("Mahepõllumajanduse nõuete selgitus toitlustajale")	x				x		
7. "Guide for a Small Operator. Processing of Cereals, Legumes and Oil Crop" ("Abiks põllumajandussaaduste väikekäitlejale. Tera- ja kaunviljade ning õlikultuuride töötlemine")		x					
8. "Guide for a Small Operator. Milk and Processing It" ("Abiks väikekäitlejale. Piim ja piima töötlemine")		x					
9. "Guide for a Small Operator of Organic Crop. Processing Meat" ("Abiks mahepõllumajandussaaduste väikekäitlejale. Liha töötemine")		x					
10. "Guide for a Small Operator of Crop. Processing Fruit, Berries and Vegetables" ("Abiks põllumajandussaaduste väikekäitlejale. Puuviljade, marjade ja köögiviljade töötlemine")		x					
11. "Guide for a Small Producer. Increasing Biodiversity and Green Plant Protection" ("Abiks väiketootjale. Elurikkuse suurendamine ja loodushoidlik taimekaitse")		x			x		x
12. "Guide for a Small Producer. Making Compost" ("Abiks väiketootjale. Komposti valmistamine")			x			x	
13. "Guide for a Small Processor of Organic Food in Private Accommodation" ("Abiks mahetoidu väikekäitlejale eraelamus")	x						
14. "Guide for an Organic Product Distributor. Requirements of Organic Farming in Retail and Wholesale" ("Abiks mahetoodete turustajatele. Mahepõllumajanduse nõuded jae- ja hulgimüüjatele")	x						
15. "Explanation of Conditions While Visiting Organic Farming Enterprises" ("Nõuete selgitus		x					

[10] Including printed materials as well as online publications

	mahepõllumajandusega tegelevate ettevõtete külastamisel")							
16.	Guide "Organic Food in Public Sector Procurements, Including in Child Care Institutions" ("Mahetoit avaliku sektori, sh lasteasutuste toitlustamise hangetes")	x						
17.	"Organic Food in Estonian Catering Enterprises" ("Mahetoit Eesti toitlustusettevõtetes")	x			x			x
18.	"Organic Food in Child Care Institutions" ("Mahetoit lasteasutustes")			x		x		x
19.	"Basic Training of Organic Farming for Farmers" ("Mahepõllumajanduse algõpe tootjatele")		x			x		
20.	"Organic Dairy Farming" ("Mahepõllumajanduslik piimakarjakasvatus")		x				x	
21.	"Organic Cattle Farming" ("Mahepõllumajanduslik lihaveisekasvatus")		x			x		
22.	"Organic Pig Farming" ("Mahepõllumajanduslik seakasvatus")		x				x	
23.	"Organic Sheep Farming" ("Mahepõllumajanduslik lambakasvatus")				x			x
24.	"Organic Goat Farming" ("Mahepõllumajanduslik kitsekasvatus")				x			
25.	"Organic Poultry Farming" ("Mahepõllumajanduslik linnukasvatus")		x				x	
26.	"Organic Beekeeping" ("Mahemesindus")				x			
27.	"Organic Grain and Oil Crop Cultivation" ("Mahepõllumajanduslik teravilja ja õlikultuuride kasvatus")			x				x
28.	"Organic Seed Multiplication" ("Mahepõllumajanduslik seemnekasvatus")			x				x
29.	"Organic Potato Cultivation" ("Mahepõllumajanduslik kartulikasvatus")			x				x
30.	"Organic Vegetable Cultivation" ("Mahepõllumajanduslik köögiviljakasvatus")		x		x		x	
31.	"Organic Berry And Fruit Cultivation" ("Mahepõllumajanduslik marja- ja puuviljakasvatus")		x				x	
32.	"Organic Cultivation of Spices and Herbs" ("Mahepõllumajanduslik maitse- ja ravimtaimekasvatus")				x			x
33.	"Collecting Products From Non-Cultivated Areas and Evaluating It" ("Mitteharitavatelt aladelt saaduste kogumine ja väärindamine")			x			x	
34.	"Green Manure Improving Soil Fertility" ("Haljasväetis – mullaviljakuse parandaja")			x				x
35.	"Adding Value to Organic Farming Products, Quality And Distribution" ("Mahepõllumajandussaadustele lisandväärtuse andmine, kvaliteet ja turustamine")			x		x		x
36.	Organic food cookbook		x					
37.	Recommended customised (inc. financially) organic food menus for child care institutions and hospitals		x		x		x	
38.	Regional tourism maps about organic farmers with brief info on organic farming			x		x		x
39.	Publications about scientific and applied research on organic farming (for every conference)	x	x	x	x	x	x	x

ANNEX III ORGANIC FARMING RELATED TRAINING, INFORMATION DAYS AND INFORMATION ACTIVITIES 2014-2020

Training, information day or activity	2014	2015	2016	2017	2018	2019	2020
Training							
1. Basic training for organic farming		x	x	x	x	x	x
2. In-service training for organic farming	x	x	x	x	x	x	x
3. Training "Improving soil fertility and cover crops in crop rotation" (foreign lecturer)	x		x		x		x
4. Training "Nature friendly plant protection" (foreign lecturer)		x	x	x	x	x	x
5. Training "Biological diversity in organic production"	x	x	x	x	x	x	x
6. Training "Aquaculture in organic farming" (foreign lecturer)		x		x			
7. Training "Organic in the open vegetable growing " (foreign lecturer)	x	x	x	x	x	x	x
8. Training "Organic poultry farming, adding value to the products and distribution" (foreign lecturer)	x	x	x	x	x	x	x
9. Training "The right techniques of handling honey in organic beekeeping"	x		x		x		x
10. Training on handling meat		x	x	x	x	x	x
11. Training "Whey processing"	x						
12. Training on promoting organic farming	x	x	x	x	x	x	x
13. Practical organic food preparation courses (for cooks of restaurants as well as child care institutions)	x	x	x	x	x	x	x
14. Public sector regional catering workshops for caterers (foreign lecturer)	x	x	x	x	x	x	x
15. Distribution training for enterprises engaged in organic farming	x	x	x	x	x	x	x
16. Basics of organic farming - training programme + an excursion for teachers	x	x	x	x	x	x	x
17. Training on packaging (including design)	x	x	x	x	x	x	x
Information days							
18. Organic farming theme days in schools and kindergartens	x	x	x	x	x	x	x
19. Organising school excursions into organic enterprises	x	x	x	x	x	x	x
20. Introduction to organic farming in sport related institutions and organisations	x	x	x	x	x	x	x
21. Introducing organic farming to enterprises engaged in tourism and accommodation	x	x	x	x	x	x	x
22. Introducing organic farming in family schools	x	x	x	x	x	x	x
23. Nationwide thematic information days, including agricultural days	x	x	x	x	x	x	x
24. Introducing organic farming to medical staff		x	x	x	x	x	x
25. Starting and developing social organic gardens	x	x	x	x	x	x	x
26. Introducing organic food success stories (also from other countries)	x	x	x	x	x	x	x
Information activities, meetings							
27. Conference of organic farming	x	x	x	x	x	x	x
28. Organic farming day in Estonian Open Air Museum	x	x	x	x	x	x	x

29. Consultations for implementing and improving the organic farming development plan and for evaluating the achievement of objectives	x	x	x	x	x	x	x
30. Consultations of the organic farming sector organisations (Estonian Organic Farming Foundation)	x	x	x	x	x	x	x
31. Introducing organic farming in agricultural museums (recording history, exhibitions, workshops etc.)	x	x	x	x	x	x	x
32. Meetings with representatives of the third sector	x	x	x	x	x	x	x
33. Meetings with organic farming experts from other countries	x	x	x	x	x	x	x
34. Meetings between caterers, organic farmers and processors	x	x	x	x	x	x	x
35. Meetings for cooperation with media	x	x	x	x	x	x	x
36. "Get to know the Estonian organic farms" (tours)	x	x	x	x	x	x	x
37. Round table "Introducing the potentials of organic raw milk and developing healthy products"	x		x		x		x
38. Information day - representing organic food to institutions, organisations, enterprises etc. for choosing souvenir gifts	x		x		x		x
39. Regional competitions in cooking organic food	x	x	x	x	x	x	x
40. Information day - following the principles of organic farming in restoring and creating school gardens	x	x	x	x	x	x	x
41. Organising the Organic Academy		x		x		x	
42. Organising organic camps for children	x	x	x	x	x	x	x
43. Taking part in the agri-food fair Grüne Woche			x	x	x	x	x
44. Taking part in the organic agri-food fair BioFach		x	x	x	x	x	x

Ants Noot

Secretary General

Annex II to ministerial decree No 95
""Estonian Organic Farming Development Plan
2014-2020" and endorsement of its action plan",
of 27 June 2014, from the Minister of Agriculture.

Action plan of the Organic Farming Development Plan 2014-2020

STRATEGIC OBJECTIVE: Improving the competitiveness of organic farming and increasing the consumption of local organic food								
Indicators	**Basic level**	**Target level**						
	2013	**2014**	**2015**	**2016**	**2017**	**2018**	**2019**	**2020**
Net value added per labour unit in organic farming (EUR) *Source: Rural Economy Research Centre (FADN)*	12,400 (estimation)	13,200	14,200	15,500	17,000	18,000	19,000	20,500
Indicator 2. Organic land (in conversion+converted) / converted organic land (ha) *Source: Organic Farming Register*	153,426 / 131,610	154,000 / 140,000	158,000 / 148,000	162,000 / 154,000	167,000 / 159,000	172,000 / 165,000	176,000 / 170,000	180,000 / 175,000
Indicator 3. Proportion of organic farming total production compared to total production of Estonian agriculture (%) *Source: Rural Economy Research Centre*	No available data							up 50% compared to 2014
Indicator 4. Number of enterprises engaged in preparation (and processing) of organic farming products *Source: Organic Farming Register*	90	110	140	160	175	190	205	220
Indicator 5. Value of the products processed in organic processing enterprises (EUR) *Source: TNS EMOR*	Data of 2013 will be revealed in the beginning of 2015							Triple increase compared to 2013

Indicator 6. Proportion of the child care institutions in Estonia who have notified preparing organic food compared to the total number of child care institutions (%) *Source: MER, VFB*	0.1	2	6	10	15	20	25	30
Indicator 7. Number of catering enterprises in Estonia who have notified preparing organic food, excluding child care institutions *Source: Veterinary and Food Board*	8	20	30	40	55	70	80	100
Indicator 8. Proportion of Estonian consumers having bought organic food (%) *Source: TNS EMOR*	49	56	63	70	72	74	76	80
Indicator 9. Proportion of regular (weekly) organic food consumers in Estonia (%) *Source: TNS EMOR*	8	9	10	12	14	16	18	20
Indicator 10. Proportion of the labelled products compared to the total organic crop products (%) *Source: ARC, Rural Economy Research Centre*	55 (estimated)	58	60	65	70	75	80	90
Indicator 11. Proportion of the labelled products compared to the total organic animal products (%) *Source: ARC, Rural Economy Research Centre*	10 (estimated)	15	20	30	35	40	45	50
Indicator 12. Organic products exported or sold in other European Union countries (EUR) *Source: MA*	Data from 2013 will be revealed in the 2014 survey	Survey		Survey		Survey		Survey Triple increase compared to 2013

1. Production

Objective: Organic farming production is competitive, diverse, widely used and has high productivity

Measure	Activity	Target group	Period	Support alternatives* and source of financing	Approximate cost (EUR)	Function
1.1. Development of organic farming production	1.1.1. Developing organic livestock production and plant production through supporting organic farming production	Farmers	2014-2020	ERDP measure "Organic farming"	87,7 millions	MA, EARIB, farmers
1.2. Developing organic seed multiplication	1.2.1. Establishment of organic seed centres, including investments into buildings or installations	Farmers	2015-2020	ERDP's measure "Investments into ameliorating the performance of each farm“, farmers		MA, EARIB, farmers
	1.2.2. Development of organic seed centres	Farmers	2015-2020	ERDP's measure "Investments into ameliorating the performance of each farm", farmers		MA, EARIB, farmers
1.3. Developing organic vegetable growing, including in greenhouses	1.3.1. Buying the needed installations and machinery for vegetable growing, constructing greenhouses, constructing and renovating buildings, establishment of irrigation systems	Farmers	2015-2020	ERDP's measure "Investments into ameliorating the performance of each farm", farmers		MA, EARIB, farmers
	1.3.2. Construction and renovation of buildings needed for storage and conservation of vegetable production and purchase of equipment	Farmers	2015-2020	ERDP's measure "Investments into ameliorating the performance of each farm", farmers		MA, EARIB, farmers

1.4. Development of organic farming fruit and berry production	1.4.1. Purchase of the installations and machinery needed for fruit and berry production Purchase of plants for setting up plantations and construction of irrigation systems and other needed facilities	Farmers	2015-2020	ERDP's measure "Investments into ameliorating the performance of each farm", farmers		MA, EARIB, farmers
	1.4.2. Construction and renovation of buildings needed for storage and conservation of fruit and berry production and purchase of equipment	Farmers	2015-2020	ERDP's measure "Investments into ameliorating the performance of each farm", farmers		MA, EARIB, farmers
1.5. Developing organic crop production	1.5.1. Improving of technological possibilities (appliances and machinery needed for crop production, storage, dryers and buildings)	Farmers	2015-2020	ERDP's measure "Investments into ameliorating the performance of each farm", farmers		MA, EARIB, farmers
1.6. Development of organic livestock production	1.6.1. Development of production and processing of organic feed	Farmers	2015-2020	ERDP's measure "Investments into ameliorating the performance of each farm", farmers		MA, EARIB farmers,
	1.6.2. Promotion of cultivating and using uncommon soiling crop rich in protein	Farmers	2015-2020	ERDP's measure "Investments into ameliorating the performance of each farm", farmers		MA, EARIB farmers,
	1.6.3. Construction and re-construction of farm buildings for animals to improve their welfare.	Farmers	2015-2020	ERDP's measure "Investments into ameliorating the performance of each farm", farmers		MA, EARIB, farmers
1.7. Development of organic aquaculture	1.7.1. Construction of needed facilities and purchase of installations	Farmers	2015-2020	European Maritime and Fisheries Fund		MA, EARIB, farmers

	1.7.2. Purchase of the reproductive material needed for organic aquaculture	Farmers	2015-2020	Farmers		Farmers
1.8. Recognition of best organic farmers	1.8.1. Competition of organic farmers	Farmers	2014-2020	State budget	7x5000	MA
	1.8.2. Organising an organic farming theme day with the announcement of competition results (with the processors, see Processing 3.2)	Farmers	2014-2020	State budget	7x3000	MA
1.9. Developing collective action of producers	1.9.1. Promoting joint action of the producers for purchase of input of products and distribution the products	Farmers	2015-2020	ERDP's measure "Setting up of producer groups" and "Cooperation" farmers		MA, EARIB farmers,
	- Setting up of producer groups	Farmers	2015-2020	ERDP's measure "Setting up of producer groups"		MA, EARIB farmers,
	- Developing the activities of producer groups	Farmers	2015-2020	ERDP's measure "Setting up of producer groups"		MA, EARIB, farmers
	1.9.2. Supporting of an umbrella organisation for developing organic farmers cooperation	Farmers	2015-2012	State budget	6x10000	MA
1.10. Improving the productivity, the effectiveness and the quality of organic production	1.10.1. Putting innovative solutions into service	Farmers	2015-2020	ERDP's measure "Cooperation" (EIP) and "Investments into better performance of farms", farmers		MA, EARIB, farmers

2. Processing

Objective: Enterprises engaged in organic processing are competitive and the number of enterprises engaged in preparation of organic products has increased

Measure	Activity	Target group	Period	Support alternatives* and source of financing	Approximate cost (EUR)	Function
2.1. Development of organic production	2.1.1. Purchase of equipment (for processing, sorting, packaging, storing etc.), construction and renovation of warehouses and production halls	Farmers and processors	2015-2020	ERDP's measure "Investments into processing and distribution the agricultural products“, farmers and processors		MA, EARIB, farmers and processors
	2.1.2. Developing the organic products and their technologies and extension of the assortment of processed organic products	Farmers and processors	2015-2020	ERDP's measure "Cooperation", farmers and processors		MA, EARIB, farmers and processors
			2014	State budget	2000	
	2.1.3. Developing the cooperation between organic farmers, processors and distributors, including commercial chains	Farmers and processors	2015-2020	ERDP's measure "Cooperation", farmers and processors		MA, EARIB, farmers and processors
	- Support in organising logistics, including IT solutions and transportation	Farmers and processors	2015-2020	ERDP's measure "Cooperation", farmers and processors		MA, EARIB, farmers and processors
	- Start-up, management and custody of collaborative projects	Farmers and processors	2015-2020	ERDP's measure "Cooperation", farmers and processors		MA, EARIB, farmers and processors
	- Encouraging the acquisition of common equipment and buildings	Farmers and processors	2015-2020	ERDP's measure "Investments into processing and distribution agricultural products", farmers and processors		MA, EARIB, farmers and processors
	2.1.4. Cooperation with other countries in developing organic processing, including product development	Farmers and processors	2014-2020	ERDP's measure "Cooperation", farmers and processors		MA, EARIB, farmers and processors

2.2. Developing organic farming processing centres	2.2.1. Enhancing the creation and development of organic farming processing centres	Farmers and processors	2015-2020	ERDP's measure "Investments into processing and distribution agricultural products", farmers and processors		MA, EARIB, processors
2.3. Competition for best organic product	2.3.1. Competition of organic product	Processors	2014-2020	State budget	7x2000	MA
	2.3.2. Declaration of the competition results and choosing the audience's favourite with declaring the winners of the best organic farmer's competition (Organic food say with the producers, see "Production" - 8.2)	Processors	2014-2020	State budget		MA

3. Catering

Objective: Proportion of organic food in catering enterprises is significant

Measure	**Activity**	**Target group**	**Period**	**Support alternatives* and source of financing**	**Approximate cost (EUR)**	**Function**
3.1. Raising awareness about organic catering	3.1.1. Introducing the principles of organic farming, organic product labelling and requirements of organic catering to different target groups	Caterers, LA, child care institutions	2014-2016 2017-2020	State budget	3x2000 4x1000	MA
	3.1.2. Organising, advising, training and communication for caterers	Caterers	2015-2020	State budget	6x2000	MA
	- Advising caterers in starting and developing organic catering	Caterers	2014-2016 2017-2020	State budget	3x4500 4x3000	MA
	- Compiling manuals on the use of organic food for different target groups among catering enterprises	Caterers	2014, 2016, 2018, 2020	State budget	4x7500	MA

	- Publishing organic food cookbooks and compiling recommended customised (inc. financially) organic food menus for child care institutions	Child care institutions and caterers	2015 2018	Market development support	8000 6000	MA, farmers
	- Organic catering workshops for caterers, also with foreign lecturers	Caterers	2015-2020 2015, 2016	State budget	6x4000 2x5000	MA
	3.1.3. Introducing organic food success stories (also from other countries)	The public, LA, child care institutions, caterers	2016, 2018, 2020	State budget	3x5000	MA
	3.1.4. Catering organic food at public events	Public	2014-2020	State budget	7x2000	MA
	3.1.5. Stimulation of awareness about supplying products processed at home or in community kitchens into catering enterprises	Farmers, caterers	2014, 2018	State budget	2x2500	MA
3.2. Developing the entry of organic food into catering enterprises	3.2.1. Developing and implementation of the programme "Organic food in child care institutions"	Farmers, processors, caterers, child care institutions, LA	2015-2016	State budget	10,000 (development of the programme)	MA
	3.2.2. Compiling a guide document in order to raise organic food to a privilege position in public sector procurements	LA, public authorities	2014 2018	State budget	3000 2000	MA
	3.2.3. Presentation of the possibilities of offering organic products to the school fruit and vegetables and school milk support applicants	Farmers, processors, caterers, child care institutions, LA	2015-2020	State budget		MA, LA
	3. 2.4. Organising the competition "The best organic caterer" (different categories for kindergartens, schools, restaurants)	Caterers	2015-2020	State budget	6x6000	MA

	3.2.5. Development and introduction of a label referring to organic ingredients of the food prepared in a catering enterprise	Caterers, the public	2014	State budget	2500	MA
3.3. Development of co-operation	3.3.1. Developing cooperation between caterers for ordering organic products jointly	Caterers	2015, 2016, 2019	State budget	3x1000	MA
	3.3.2. Creating cooperation networks for caterers	Caterers	2016, 2017, 2020	State budget	3x1000	MA
	3.3.3. Developing cooperation between Estonian caterers and caterers from other countries	Caterers	2016, 2020	State budget	2x5000	MA
	3.3.4. Developing cooperation between producers, processors and caterer organisations	Farmers, processors, caterers	2015, 2016, 2018, 2020	State budget	4x1000	MA

4. Distribution and consumption

Objective: A large variety of organic products is available for the consumer and the consumer is knowledgeable in organic farming.

Measure	**Activity**	**Target group**	**Frequency**	**Support alternatives* and source of financing**	**Approximate cost (EUR)**	**Function**
4.1. Development of distribution of the organic products	4.1.1. Introducing the principles and products of organic farming to the distributors	Distributors, farmers	2014-2020	Market development support, farmers		MA, farmers
	4.1.2. Creating and managing an information portal for marketed organic products	The public, consumers	2014 2015-2020	State budget, farmers	6000 6x2400	MA, farmers
	4.1.3. Introduction of the possibilities in public procurements for sourcing organic products (so called green public procurements)	Farmers, processors, distributors, consumers	2014-2020	State budget	7x1000	MA, LA, public authorities
	4.1.4. Creating and developing	Farmers,	2015-2020	ERDP's measure		

	distribution centres for stocking, wholesale and logistics of organic products	processors, distributors		"Cooperation" farmers		
	4.1.5. Research on organic food market and consuming, including gathering information on prices of organic products	The public, farmers, processors, distributors	2014-2020	State budget		MA
	4.1.6. Gathering information about organic products exported and sold in other European Union countries	The public, farmers, processors, distributors	2014, 2016, 2018, 2020	State budget	4x5000	MA
	4.1.7. Organising and participating in organic markets, fairs, exhibitions and other events, preparing publicity materials	The public, farmers, processors, distributors	2015-2020	ERDP's measure "Cooperation" farmers, State budget		MA, EARIB, farmers
	4.1.8. Creating short supply chains and developing their activities	Consumers, farmers, processors	2015-2020	ERDP's measure "Cooperation" farmers		MA, EARIB, farmers
	4.1.9. Promoting the development of regional consumer networks	Consumers, farmers, processors	2015-2020	ERDP's measure "Cooperation" farmers		MA, EARIB, farmers
4.2. Raising consumer's awareness about organic farming	4.2.1. Organisation of campaigns aimed at informing about organic food	Consumers	2014-2020	Market developing support, farmers, State budget		MA, farmers
	4.2.2. Informing the public about organic food in cooperation with the media	Consumers	2014-2020	Farmers, State budget		MA, farmers
	4.2.3. Publishing materials on organic farming for different target groups	All target groups	2014-2020	Market developing support, State budget	7x1500	MA, farmers
	4.2.4. Introducing organic farming to different target groups, for example LA-s, heads of child care institutions,	LA-s, heads of child care institutions,	2015-2020	State budget	6x5000	MA in cooperation with MSA, MER, Leader action groups

	teachers, children, parents, medical staff, health professionals and social workers	teachers, children and parents				and organic organisations

5. Scientific and applied research, training, counselling and diffusion of information

Objective: Organic farming is sustainable and competitive through widespread implementation of knowledge creation and knowledge transfer.

Measure	**Activity**	**Target group**	**Period**	**Support alternatives* and source of financing**	**Approximate cost (EUR)**	**Function**
5.1. Enrichment of the subjects of scientific and applied research on organic farming and their connection to production and processing	5.1.1. Creation and development of a organic knowledge transfer centre and starting up a long-term programme of knowledge transfer	Farmers and processors	2015-2020	ERDP's measure "Knowledge transfer and notification"		MA
	5.1.2. Mapping of research on organic farming and scientific resources, elaborating the development needs and agreeing on the prioritised aspects of research and co-coordinating the work	Scientists, farmers and processors, distributors and consumers	2015-2020	State budget		MA, EULS, ECRI
	- Establishing a list of Master students' subjects of applied research on organic farming, and research training; establishing a list of Doctorate students' subjects of base and applied research on organic farming, and research training	Master and Doctorate students	2015-2020	State budget		MA, EULS, ECRI

5.1.3. Promotion of cooperation between producers, processors and research and applied establishments, for example creation of EIP's organic farming working group	Farmers and processors, scientists	2015-2020	ERDP's measure "Cooperation", farmers and processors		MA, scientists, farmers and processors
5.1.4. Increasing the State's contribution into Estonian scientists taking part in cooperation projects through international scientific networks (Era-Net Core Organic II, CORE Organic Plus etc.)	Farmers and processors	2014 2015-2020	State budget	27,933	MA, scientists
5.1.5. Research on organic technologies for beekeeping, plant production and livestock production, including long-term tests and studies and identification of suitable varieties for organic farming and plant breeding	Farmers	2015-2020	ERDP's measure "Cooperation" farmers and processors, RUP		MA, scientists
5.1.6. Research on the quality of organic food and feed, improvement of laboratory base	The public, farmers and processors	2015-2020	ERDP's measure "Transfer of knowledge and notification", RUP, MER, structural instruments, Horizon 2020		MA, scientists
5.1.7. Socio-economical research on organic farming	The public, farmers and processors, distributors	2015-2020	ERDP's measure "Transfer of knowledge and notification", RUP		MA, scientists

	5.1.8 Creation of model enterprises and conduct of model tests in order to bind the scientific research to production and processing	The public, farmers and processors	2015-2020	ERDP's measure "Cooperation", farmers and processors		Farmers, processors, scientists
	5.1.9. Giving advantage to organic research, if possible, in developing a sustainable farming system	Scientists, farmers and processors	2015-2020	ERDP TS, RUP		MA
	5.1.10. Taking part in the work of international organisations and cooperation networks	Research and development institutions	2014-2020	State budget		MA, EULS, ECRI
5.2. Supporting cooperation projects of training and dissemination of information	5.2.1. Co-funding of participation in national and international organic farming projects	Farmers and processors, research and development institutions	2014-2020	State budget, organic organisations		MA, organic organisations
	- Bilateral collaborative projects	Farmers and processors, research and development institutions	2014-2020	State budget, organic organisations		MA, organic organisations
	5.2.2. Initiating and undertaking cooperation projects for knowledge transfer	Farmers and processors, distributors	2015-2020	ERDP's measure "Transfer of knowledge and notification"		MA, EARIB, scientists, farmers and processors
	5.2.3. Initiation of information exchange programmes and projects of organic farming, with other countries and organisations, and participating in them	Farmers and processors	2015-2020	State budget, organic organisations		MA, organic organisations
	5.2.4. Information exchange with other countries on the subject of cultivation, processing and distributing of organic aquaculture	Farmers and processors	2015, 2018, 2020	State budget, organic organisations	3x5000	MA, organic organisations

5.3. Organising training and awareness-raising for enterprises engaged in organic farming	5.3.1. Organisation of organic farming training and information days for producers, processors and distributors (also with foreign lecturers) and starting up long-term training programmes	Farmers, processors, distributors	2014 2015-2020	ERDP TS ERDP's measure "Transfer of knowledge and notification"		MA, EARIB
	5.3.2. Creation of a practical knowledge bases for organic farming (knowledge transfer centre, using model enterprises etc. tests for training and practice)	Farmers	2015-2020	ERDP's measure "Cooperation" and "Transfer of knowledge and notification" farmers		MA, EARIB, farmers
	5.3.3. Creation of a practical study centre for small scale processing and using it for training organic processors.	Processors	2015-2020	ERDP's measure "Cooperation" and "Transfer of knowledge and notification" processors		MA, EARIB, processors
5.4. Developing an organic farming advisers system	5.4.1. Organic farming training for advisers, including development and implementation of training programmes	Advisers	2015-2020	ERDP's measure "Advisory service support"		MA EARIB, Coordinating centre for advice
	5.4.2. Preparation and publishing of common materials needed for organic farming advisory service	Advisers	2015-2020	ERDP's measure "Advisory service support"		MA EARIB, Coordinating centre for advice
	5.4.3. Organisation of common organic farming study days for producers, advisors and compliance authority officers	Farmers, advisers,	2014 2015-2020	ERDP TS ERDP's measure "Knowledge transfer and notification" and "Advisory service support"		MA EARIB, Coordinating centre for advice
	5.4.4. Increasing the usage of organic farming advisory service	Farmers	2015-2020	ERDP's measure "Advisory service support"		MA EARIB, Coordinating centre for advice

5.5. Extension of the subject of organic farming into higher education institutions', vocational institutions' and general education school's study programmes and subject syllabus	5.5.1. Extension of the educational resources of general education schools with topics of organic farming and organic food	Pupils, students	2014-2020	State budget		MA in cooperation with SA Innove and Ministry of Education and Research
	5.5.2. Developing study programmes of organic farming (including organic producing, processing and catering) for vocational and higher education institutions	Pupils, students	2014-2020	State budget		MA in cooperation with SA Innove and Ministry of Education and Research
5.6. Preparation and distribution of organic farming related information materials for enterprises engaged in organic farming	5.6.1. Preparation and distribution of guidance documents for organic farmers and small scale handlers	Farmers and processors	2015-2020	ERDP's measure "Transfer of knowledge and notification"		MA, EARIB
	5.6.2. Preparation and distribution of professional publications related to organic farming and making of educational documentaries	Farmers and processors	2015-2020	ERDP's measure "Transfer of knowledge and notification"		MA, EARIB
	5.6.3. Preparation and distribution of publications promoting scientific and applied research from Estonia and abroad on organic farming	Farmers and processors	2015-2020	ERDP's measure "Transfer of knowledge and notification"		MA, EARIB
	5.6.4. Publishing the constantly updated information on organic farming, on the Internet, including training and reports	Farmers and processors	2015-2020	ERDP's measure "Transfer of knowledge and notification"		MA, EARIB
	- Publishing and distribution of the magazine “Organic Farming” (“Mahepõllumajanduse leht”)	Farmers and processors	2015-2020	ERDP's measure "Transfer of knowledge and notification"		MA, EARIB, organic organisations

	- Administration of the Organic Club webpage	Farmers and processors	2015-2020	State budget		MA, organic organisations
5.7. Introducing organic farming to the public	5.7.1. Organising conferences on organic farming	The public,	2014	State budget	9500	MA
			2015-2020	ERDP's measure "Transfer of knowledge and notification"		Organic organisations
	5.7.2. Introducing organic farming to different target groups	Public	2014-2020	State budget, market development support		MA, organic organisations
	5.7.3. Organising information days in model enterprises and introducing model tests	Public	2015-2020	State budget, market development support		MA, organic organisations
	5.7.4. Sharing the scientific results of organic farming in a simple and understandable format	The public, farmers	2015-2020	ERDP's measure "Transfer of knowledge and notification"		Research and development institutions
	5.7.5. Recognition of the best media report related to organic farming or the reporter behind it	Public	2014-2020	Organic organisations		Organic organisations
	5.7.6. Drawing up regional tourism maps about enterprises engaged in organic farming	Public	2014-2020	State budget, ERDP's measure "LEADER for local development"		MA, farmers

6. Legislation and supervision – objectives, measures and activities

Objective: Supervision over compliance with the requirements of organic farming and enterprise's compliance with the requirements is guaranteed

Measure	**Activity**	**Target group**	**Period**	**Support alternatives* and source of financing**	**Approximate cost (EUR)**	**Function**

6.1. Creation of a high-quality legal environment	6.1.1. Cooperation in preparation of clear, simple and precise legal acts in the domain of organic farming	Officials, social partners	2014-2020	State budget		MA
6.2. Ameliorating the efficiency and quality of supervision	6.2.1. Creating IT solutions for arrangement of Organic Farming Register, AB and VFB information systems	Enterprises engaged in organic farming	2014	State budget		MA, AB, VFB
	- Analysis of AB and VFB information systems	Enterprises engaged in organic farming	2014	State budget	40,000	MA, AB, VFB
	- Development and application of information systems	Enterprises engaged in organic farming	2016	Structural Funds, self-financing, state budget	500,000	MA, AB, VFB
	6.2.2. Purchasing mobile work equipment for VFB compliance officers for accessing the information system	VFB organic farming officers	2016-2020	State budget	300,000	Veterinary and Food Board
	6.2.3. Developing the data bases of organic seed	Enterprises engaged in organic farming, compliance officers	2014-2020	State budget		AB
	- Analyses of IT system	Enterprises engaged in organic farming, compliance officers	2014-2020	State budget		AB
	- Developing and application of IT system	Enterprises engaged in organic farming, compliance officers	2014-2020	State budget		AB
6.3. Ameliorating the public service supply of supervisory authorities and the exchange of	6.3.1. Simplifying the administration through arrangement of data bases	Enterprises engaged in organic farming	2014-2015	State budget		MA, SE, AB, EARIB, ARC

information						
	- Analysis of the possibilities of arranging the data bases needed for providing EARIB and AB data on plant production	AB, EARIB, enterprises engaged in organic farming	2014	State budget		ARC, AB, EARIB
	- Developing and applying a common data format	AB, EARIB, enterprises engaged in organic farming	2015	State budget		MA, AB, EARIB
	6.3.2. Creating e-services in client portal	Enterprises engaged in organic farming, the public	2014-2015	State budget		MA, AB, EARIB
	- Arranging a common client portal	Enterprises engaged in organic farming, the public	2014	State budget	100,000	MA, AB, EARIB
	- Creating e-services in common client portal	Enterprises engaged in organic farming, the public	2015	State budget	100,000	MA, AB, EARIB
	6.3.3. Connecting the Organic Farming Register with the Geographical Information System	Enterprises engaged in organic farming,	2014-2015	State budget		MA, EARIB, AB
	- Applying the application of the card (creating a layer for organic farming)	Enterprises engaged in organic farming,	2016	State budget		MA, EARIB, AB
	- connecting the data in the application of the card with the data of the Organic Farming Register	Enterprises engaged in organic farming	2016	State budget		MA, EARIB, AB
6.4. Raising the proficiency of the compliance officers	6.4.1. Participating in foreign projects	MA, AB, VFB organic farming officers	2014 2015-2020	State budget	1,500 6x1500	MA, AB, VFB
	6.4.2. Cooperation with other countries'	MA, AB, VFB	2015-2020	State budget		MA, AB, VFB

	audit institutions	organic farming officers				
	6.4.3. Common training (also with a foreign lecturer)	MA organic farming officers, AB and VFB organic farming surveyors	2014, 2015, 2018, 2020 2016, 2017, 2019	State budget	4x2500 3x5000	MA
	6.4.4. Guide books (manuals) for compliance officers	AB and VFB organic farming surveyors	2014-2020	State budget		AB, VFB

List of abbreviations: MA-Ministry of Agriculture, AB-Agricultural Board, VFB-Veterinary and Food Board, EARIB-Estonian Agricultural Registers and Information Board, ARC-Agricultural Research Centre, SE-Statistics Estonia, EIP-European Innovation Partnership, LA-Local authority, MSA-Ministry of Social Affairs, MER-Ministry of Education and Research, ECRI-Estonian Crop Research Institute, ERDP-Estonia's Rural Development Plan, ERDP TS-Estonia's Rural Development Plan's technical support.

* In addition to the specified ERDP action, support for activity described in the implementation plan can also be obtained through ERDP's action "LEADER local development" and the enterprises may also use the support granted in the framework of financial engineering instruments.

Ants Noot

Secretary General