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## SUPPORT TOOLS FOR THE PRODUCTION OF ORGANIC PRODUCE IN LATVIA

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Organic farming is part of the national economy where renewable natural resources are used in a sustainable and prudent way in the production process, and therefore the production of primary products is environmentally friendly. Latvia has high potential for growth on the basis of the EU as a whole – in 2016, the area of organically certified territories totalled 270.73 thousand hectares, or about 11% of the total agricultural land area, which was the fifth highest indicator among the EU Member States. The aim of the research is to analyse the availability of support tools for the organic farming sector and ways to improve their use efficiency. The available support tools contribute to increase in the number of organic farms and in the organic agricultural area as well as increase in productivity and a higher level of mechanisation. The development of organic processing and the provision of a complex production cycle are less important. Financial support for organic farming partially compensates for the loss of profits, but it does not include support measures directly addressing the problems faced by farmers – the availability of organic seed, certification fees, the availability of animal breeds and public awareness.

*Keywords: organic farming, support tools, sustainability.*

### INTRODUCTION

Agriculture and the environment are indissolubly interrelated. Any chosen farming technique causes, to a greater or smaller extent, negative changes in the environment. Farmers increasingly seek solutions to balance their business interests with biodiversity preservation and environmental protection. Only prudent farming techniques ensure an opportunity to maintain ecological balance in nature in a long-term, while sustainably benefitting from land use. Three agricultural systems could be distinguished according to sustainability criteria: conventional, integrated and organic. Conventional farming is the most intensive one, which means that the most negative impact is made on the environment. Under such a system, for example, chemically synthesised pesticides are applied for the purpose of plant protection and synthetic fertilisers are used as well. Compared with the mentioned system, integrated farming techniques are less harmful for the environment, as synthetic fertilisers are applied according to a fertilisation plan and crop rotation is practised as well as field monitoring is performed regularly. Organic farming is the most sustainable agricultural system, and not only the wish of farmers themselves to make as little damage to the environment as possible but also the political will in the country, i.e. whether mechanisms have been created to provide support for it and to contribute to choosing and developing such a farming model, are important for the development of organic farming. To achieve the aim, the following two specific research tasks were set: 1) to examine the legal framework for organic farming; 2) to assess the available support tools for organic farming. Research methods employed: monographic, analysis and synthesis, logical construction and a survey. The research used the following sources of information: theoretical studies and statistical data, research papers, legal documents of the Republic of Latvia and of the European Union.

### RESULTS AND DISCUSSION

#### Legal framework for organic farming

In Latvia, the Ministry of Agriculture makes a policy on organic farming. The year 2001 may be considered to be the beginning of institutionalisation of organic farming when a definition of organic farming – *an agricultural technique that promotes self-regulation of natural processes and raises soil biological activity and does not use chemically synthesised fertilisers and pesticides as well as genetically modified organisms or products* – was incorporated in the Law on Agriculture as an amendment (Grozījumi Lauksaimniecības likumā..., 2001). In 2001, there were certified 219 organic farms with a total area of 10.54 thou. ha, while in 2016 their number rose to 4147 and their total area reached 271 thou. ha (Lauksaimniecības gada..., 2002). Organic agricultural products are the products certified by an accredited institution.

Organic farming certification is done by the association “Environmental Quality” and the State Ltd “Certification and Testing Centre”. A compliance assessment of the certification institution is carried out in accordance with the following legal documents of the European Union and the Republic of Latvia:

- 1) Council Regulation (EC) No. 834/2007 on organic production and labelling of organic products and repealing Regulation (EEC) No 2092/91;
- 2) Council Regulation (EC) No. 889/2008 laying down detailed rules for the implementation of Council Regulation (EC) No 834/2007 on organic production and labelling of organic products with regard to organic production, labelling and control;
- 3) Cabinet Regulation No. 485 Procedure for the Supervision and Control of Organic Farming.

After performing a detailed analysis of the EU legal documents, one can draw conclusions on the key barriers to the development of organic farming and a potential association of organic farming with the available support tools (Table 1).

Table 1. Summary of the legal framework and recommended solutions for organic farming

BARRIERS	RESULTS	SOLUTIONS
<b>Lack of «organic resources»</b>	Derogations from the standards for purchased seed and livestock, for raising livestock and for feedstuffs may be allowed	To avoid organic production and technological deficiencies by means of research, innovations and the spread of the innovations. To contribute to the transfer of knowledge.
<b>Other technical, economic and structural barriers</b>	Inappropriate farm equipment, livestock breeds and crop varieties, lack of land resources, inappropriate barns	
<b>Multiple certification is required</b>	High administrative costs, lower revenues from product sales	To enhance the legislation between the EU and third countries
<b>Complicated legal documents</b>	High administrative costs, small farms cannot certify themselves	To develop a system of compensation for large and small farms
<b>Increase in the number of logos</b>	Consumers lose confidence in organic products	The legislation has to specify when to use the logos «bio» and «eko» on product labels

Source: authors' construction based on the EU legislation of organic farming

First, organic farming does not consume 100% organic resources. The following urgent problems in relation to the resources could be mentioned: insufficient availability of seeds and vegetative propagation materials because of poorly developed seed production, while livestock lacks protein-rich feedstuffs (peas, beans, wheat, barley and oats) and dietary micronutrients. The insufficient availability of the mentioned feedstuffs does not allow feeding livestock balanced diets. Sometimes there are problems regarding livestock raising practices, as Commission Regulation 889/2008 does not allow farmers to perform veterinary manipulations aimed at enhancing the health, welfare and hygiene of livestock, e.g. dehorning in cattle and tail docking in sheep are problems in Latvia. To tackle such problems, the basic principles of organic farming prescribe that only animals of appropriate breeds have to be raised, which is not always complied with in Latvia. The choice of a livestock breed can be determined by a number of factors: availability of the breed in the market, livestock productivity or carcass weight, demand in the market as well as the wishes of the entrepreneur. Consequently, many derogations from the legislation, which allow farmers to purchase conventional seeds and vegetative propagation materials, conventional livestock and conventional feeds and to raise the livestock in accordance with the derogations regarding livestock keeping and raising techniques, have been provided to tackle the mentioned and other problems. Overall, the authors conclude that the more derogations regarding the use of nonorganic resources in organic farming are provided, the higher the risk is that consumers could lose their confidence in this category of products. As a solution, the authors suggest cooperation between farmers and research institutions aimed at jointly developing crop varieties and livestock breeds that are appropriate for organic farming and innovative pest, disease and weed control techniques. This would enable seed farming to be developed and other problems to be tackled.

Second, the development of organic farming is hindered by the fact that farmers have no relevant experience to design effective crop rotation and change plans as well as no sufficient financial capital accumulated and knowledge of technologies built up, which would facilitate manual work. The authors suggest the availability of knowledge transfer and informative activities as a solution.

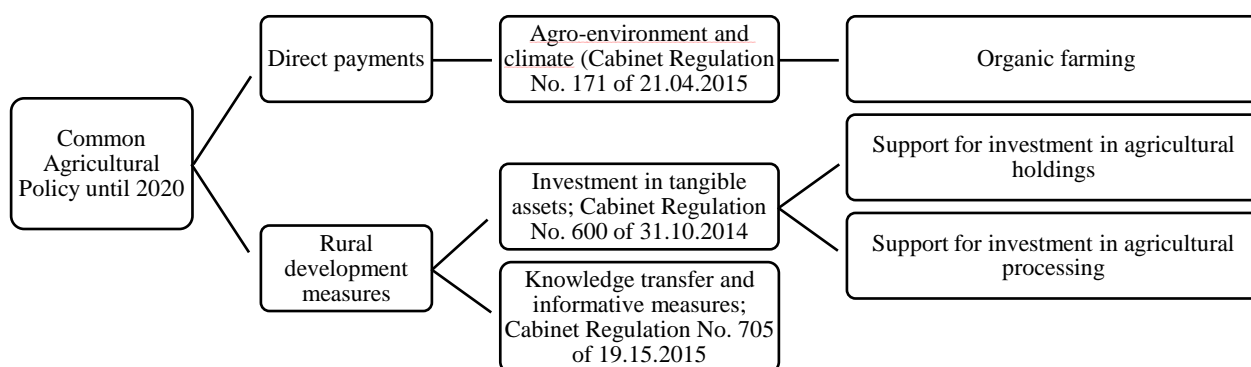
Third, the functioning of a single market for organic farming is limited by the requirement of multiple certification, which is needed to access certain markets, e.g. in order that organically certified hemp grown in Latvia could be sold in Lithuania, recertification has to be done in accordance with the legislation and control procedures of Lithuania with regard to the presence of residues in the product.

Fourth, the legislation of the EU creates a large administrative burden, which causes problems for small farms to engage in the organic farming scheme. According to the current legislation, there are 135 administrative cost-intensive obligations requiring providing information, of which 80 apply to operators (based on the kind of activity), 41 to state administration institutions and 11 to control institutions. The most burdensome obligations for the Member States are as follows: to provide statistical data, to report on permits regarding non-organically grown seeds and to publish updated operator lists. The most burdensome obligations for operators are as follows: to keep documentary evidence of (permitted) application of plant protection and fertilisers and of (potential) coexistence of organic and conventional farming, to maintain specific agricultural animal documentary registers and take control measures.

Finally, the authors point out that many logos being present in the market are a hindering factor for the development of organic farming, as the logos make consumers suppose that the products are organic.

### Economic support tools

The purpose of the new CAP, which has been implemented since 2014, is to make farming more environmentally friendly, effective and fair. In the result, a new payment for climate- and environment-friendly farming practices or a green payment, which is paid to organic producers automatically when applying for a single area payment, has been introduced since 2015 to overcome climate change and protect biodiversity and to double funding for research, innovation and knowledge exchange. The introduction of the green payment under CAP Pillar 1 stresses the positive impact of organic farming on the environment. CAP Pillar 2 promotes the development of rural areas through various activities. The support activities under the CAP are specified in the Rural Development Programme 2014–2020. The authors have shown the activities providing support to organic farmers aimed at the expansion of their economic activity in the period 2014–2020 in Figure 1.



Source: authors' construction based on the Rural Development Programme of Latvia..., 2015

Figure 1. Support measures for organic farming in the period 2014–2020

The activity “Organic farming” under the measure “Agro-environment and climate” is one of the most significant area-based kinds of support under this measure. Since the beginning of 2015 in Latvia, eligibility criteria for the activity “Organic farming” are stipulated by Cabinet Regulation No. 171 “**Regulations regarding the Granting, Administration and Supervision of European Union Support for the Improvement of the Environment, Climate and Rural Landscapes in the Programming period 2014-2020**”. The purpose of such payments is to compensate for the loss of revenue and costs incurred due to practising organic farming techniques. A comparison of the legal tools, i.e. **Cabinet Regulation No. 295** “Regulations regarding the Granting, Administration and Supervision of National and European Union Rural Development Support for the Improvement of the Environment and Rural Landscapes” and **Cabinet Regulation No. 171**, and differences the latter provides are given in Table 2.

Table 2. Comparison of the regulations for granting financial support for organic farming before 2014 and after 2015

Criteria	Before 2014 (inclusive), Cabinet Regulation No. 295	After 2015, Cabinet Regulation No. 171
<i>Documents</i>	An area payment application and an agro-environmental annex are submitted via the Rural Support Service's Electronic Application System or in printed format	A single application is submitted via the Rural Support Service's Electronic Application System
<i>Obligation period</i>	The obligation period is five years; besides, the area and location may not be changed	The Regulation provides 2 activities: BLA 1 (obligations for 2 years + 3 if wished); BLA 2 (obligation period is five years). During the obligation period an operator may not change the location of the fields
<i>Obligation takeover</i>	Obligations may be taken over unlimitedly	Obligations may be taken over by BLA 1 from BLA1 and by BLA 2 from BLA 2
<i>Entities to be certified; livestock density</i>	Fields and livestock could be certified separately. A livestock density of 0.2 livestock units per ha of permanent meadows and pastures eligible for assistance has to be ensured	The entire farm has to be certified (all the units of the farm). There have to be 0.3 cattle units per ha of permanent grass and grass sown in arable land during the grazing season (15 May – 15 September)
<i>Area</i>	The obligation area may not be extended, yet the obligations may be transferred or taken over as well as the obligation area may be decreased up to 20% without paying the support back; if the obligation area decrease is more than 20%, the support has to be paid back	A BLA 1 applicant may extend the area unlimitedly. The participants of the 2016 control scheme would receive support payments, even though it was not planned before. BLA 2 applicants, however, may increase their areas by 10% from the area declared in the first year. If the area is increased by more than 20%, a new obligation period begins for the entire area. If the obligation decrease is more than 2%, the obligations are terminated and the support has to be paid back
<i>Minimum revenue</i>	A minimum revenue from agricultural sales has to be earned	A minimum revenue, i.e. 170 EUR/ha in 2017, has to be earned

Source: authors' construction based on Noteikumi par Eiropas..., 2015 and Noteikumi par valsts..., 2010

An analysis of the information presented in Table 2 allows concluding that in the new programming period, the procedure for applying for this kind of support is easier, and the new regulation aims to support both transition to organic farming and the practice of it. In the new programming period, positive impacts on the environment are made stronger, and a minimum revenue threshold has been set as well. A positive fact is that the support policy promotes the engagement of new farms in the organic control scheme, while the farms that have been in the scheme for more than five years receive lower support payments for the area above 100 UAA ha in size. At the same time, in 2016 too, the farms that began practising organic farming only after 1 April 2016 could receive the support payments, even though earlier no support was granted to the farms that assumed their obligations after the beginning of a multiannual obligation period under the activity “Agro-environment and Climate”. Such corrections in the support policy could hinder development opportunities for “large” farms. An analysis of support rates for organic farming per UAA ha for various product categories reveals that the current rates do not offset production costs, according to the report Organic Farming in 2007–2020 (Table 3).

Table 3. Comparison of support rates for organic farming

KIND OF SUPPORT	RDP 2007-2013 programming period, EUR/ha	RDP 2014-2020 programming period, EUR/ha	Change, EUR	Required support rates set by the LOFA for the 2014-2020 programming period, EUR
Permanent grasses, grasses sown in arable land, fallow land	138.00	97.00	- 41.00	Grain – 312.26, dairy livestock – 194.91, meat livestock – 161.27
Field crops (incl. industrial crops), other crops grown in arable land, grassland for the production of certified seeds, nectar crops	108.00	117.00	9.00	
Vegetables (incl. spices and herbs), except potato	357.00	399.00	42.00	756.74
Potato (incl. starch potato)	318.00	397.00	79.00	617.00
Fruit trees, berry bushes	419.00	485.00	66.00	1808.57
Amount of support per eligible bee colony	-	40.00	x	151.59

Source: authors' construction based on *Atbalsta likmes 2014, s.a. Atbalsta likmes 2015, s.a. and Bioloģiskā lauksaimniecība 2007-2020, 2013*

The Table 3 data reveal that in the new programming period of 2014-2020, the rates of support increased for all the eligible categories, except for permanent meadows and pastures, which indicates that the new support policy is aimed at raising productivity per ha of eligible area. Besides, it is obvious that the rates of support significantly increased for fruit and vegetable farming, and a new payment for bee colonies was introduced as well.

European Union financial support could be acquired by organic farms through participating in open project proposal competitions under one of the sub-measures of the measure “Investment in tangible assets”:

- 1) “Support for investment in agricultural holdings”. Its purpose is to support agricultural holdings in order to enhance their performance and competitiveness as well as to contribute to cooperation, thereby ensuring sustainable management of natural resources and supporting an economy resistant to climate change;
- 2) “Support for investment in agricultural processing”. It aims to raise the efficiency of agricultural processing and to increase the value added of products through promoting competitive cooperation and sustainable agricultural production and introducing innovations in enterprises;
- 3) “Support for investment in agricultural and forestry infrastructure”. Its purpose is to enhance the infrastructure related to agricultural development (Kārtība, kādā piešķir..., 2014).

Under the above-mentioned sub-measures, investments are made in new equipment, machinery, devices, information technologies and software intended for agricultural production and processing and related packaging and pre-processing operations, as well as new buildings are built or existing ones are reconstructed or renewed. **The procedure of granting national and European Union financial support on a competitive basis under the measure “Investment in tangible assets” is stipulated by Cabinet Regulation No. 600.** An analysis of the Regulation allows concluding that it creates some advantages for organic farmers. Their projects submitted are evaluated according to objective criteria for support applicants and projects, e.g. a project’s readiness for introduction (e.g. availability of a construction design), the amount of support received earlier, territorial development indicators, a production technique employed etc. The producers and processors of primary organic products additionally acquire 30 points on a criteria scale, which is an advantage for this scheme’s participants relative to the other agricultural systems. This means that organic farmers have greater opportunities to get public funding. An analysis of a questionnaire survey showed that in the previous programming period of 2007-2013, 46% of the surveyed farmers used only their own funds for the expansion of their business, 26% used EU co-funding, 17% took bank loans and used bank leasing services, 6% acquired funds from national support programmes and 7% made no investment in their business. Accordingly, one can conclude that farmers, however, used an opportunity to get co-funding from the EU Funds.

The new legislation for rural development provides **support for knowledge transfer and informative activities.** According to the 2015 survey, relatively many respondents – 43% of the total (83) – had secondary professional education in agriculture, while 7% had higher agricultural education. These indicators are higher than those for the agricultural industry as a whole (26%). Regardless of this fact, organic farming requires specific knowledge that has not been learnt during studies at school. The new Rural Development Programme and Cabinet Regulation No. 171 prescribe that those farmers who joined the organic farming scheme in 2015 for the first time have to take a 160 h course within two years

after joining the scheme in order to acquire a useful knowledge of this agricultural system. The present research was done when there was the second and final year when organic farmers had to take such a course, yet this support measure was still at the stage of development. A draft Cabinet Regulation “Procedure of Granting National and European Union Financial Support under the Measure “**Knowledge transfer and informative activities**” was discussed by the Cabinet of Ministers on 8 December 2015. However, an analysis of professional training courses reveals that course fees were relatively high, e.g. at the LLU Centre for Lifelong Education the fee for the course “Production of Organic Farming Products” was EUR 260, while the fee of the course “Basics of Organic Farming” delivered by the State Ltd “Certification and Testing Centre” was EUR 250; the Latvian Agricultural Advisory and Training Centre (LLKC) offered a professional training programme through distance learning that cost EUR 90. An analysis of this measure leads to a conclusion that various legal acts are not consistent; therefore, the situation is that it is mandatory for farmers to complete a course in order to acquire EU co-funding, yet this is not possible because no legal regulation exists for the measure “Knowledge transfer and informative activities”.

To promote organic products in the market, the government supports producers, pre-processors and processors of primary organic products, which participate in the organic farming scheme, in the form of subsidies, thereby contributing to retail sales of the products. The size of support is specified in Cabinet Regulation No. 1524 “Regulations regarding National Support for Agriculture”. A comparison of eligibility criteria for financial support between the programming periods 2007-2013 and 2014-2020 shows that considerable changes were made:

1. A producer of primary products that supplies the produce, e.g. to a cattle processor is not included in the organic farming scheme to receive financial support in the new programming period.
2. Enterprises involved in the handling of food that apply for the organic farming scheme are not classified by kind of organic processors, i.e. home producers, recognised enterprises, registered enterprises.
3. Support rates are doubled for enterprises involved in the handling of food; besides, the size of support depends on the number of products produced.

The analysis of the new and old version of the Cabinet Regulations leads to a conclusion that in the new programming period a greater focus is placed on producing higher value-added products rather than the production and sale of primary products. A breakdown of the output of organic produce is presented in Table 4.

Table 4. Breakdown of organic production in Latvia in 2010 and 2016, thou. tonnes

Primary products	2010			2016			Change in sales 2016/2010
	Produced	Sold	Self-consumed	Produced	Sold	Self-consumed	
Milk	57.1	41.40	15.70	83.5	70.47	13.03	29.08
Grain	41.5	8.96	32.54	77.8	41.23	36.57	32.27
Potato	18.6	2.57	<b>16.03</b>	19.5	5.85	<b>13.65</b>	3.28
Meat	2.4	2.06	0.34	2.7	2.41	0.29	0.35
Fruits and berries	1.4	0.32	<b>1.08</b>	2	0.69	<b>1.31</b>	0.36
Vegetables	2	0.49	<b>1.51</b>	2.2	0.62	<b>1.58</b>	0.14
Hen eggs	0.6	0.11	<b>0.49</b>	1.2	0.44	<b>0.76</b>	0.33
Honey	0.1	0.07	0.03	0.5	0.28	0.22	0.21

Source: authors' calculations based on Latvijas lauksaimniecība, 2011, 2017

The Table 4 data show that organic milk, meat and grain were commercial products. The proportion of sold products in the total output for the commercial products was above 70%, while the other products: potato, fruits, berries, vegetables, hen eggs were mainly used for self-consumption. A comparison of the kinds of commercial products between 2010 and 2016 shows no change, yet a considerable increase in sales was reported for grain – 32.27%. In order not to create an imbalance between producers and processors of primary products, in the opinion of the authors, it is necessary to divide primary products into categories and set support rates based on the kind of consumers because, e.g. fresh vegetables and fruits are an important component of diets and the public procurement of the mentioned products by hospitals, local-level institutions and schools results in significant public benefits.

## CONCLUSIONS

The authors conclude that:

- 1) the legal framework for organic farming imposes additional obligations and responsibilities on organic agricultural holdings with the purpose of providing an opportunity for the holdings to sell their products in the agricultural market constrained by market barriers; the legal framework ensures competitive advantages for the holdings and enables them to acquire extra financial support provided the Common Agricultural Policy;
- 2) the available support tools contribute to increase in the number of organic farms and in the organic agricultural area as well as increase in productivity and a higher level of mechanisation. The development of organic processing and the provision of a complex production cycle, which affect the performance of a sustainable farming pattern, are less important;

- 3) financial support for organic farming partially compensates for the loss of profits, but it does not include support measures directly addressing the problems faced by farmers - the availability of organic seed, certification fees, the availability of animal breeds and public awareness;
- 4) among the organic products, milk, meat and grain were commercial products, while fruits, berries, vegetables and hen eggs were used by farmers mainly for self-consumption. The current government policy does not contribute to the entry of equal product groups into the domestic market.

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