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Improving of small farm market capability in Latvia

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Abstract

The aim of the paper is to analyze the possibilities to improve the market capability of small farms in Latvia. Therefore the paper deals with the factors constraining development plans of small farm holders, the current possibilities for improving small farm market capability, the possible development strategies to choose, and proposals for the improvement of small farm market capability in Latvia. The most significant barriers to implement the development plans for Latvian small farms are the lack of the production assets and also the difficulties to attract funding for long-term investments and current assets, as well as poor market infrastructure. The existing support measures have had a positive impact on the structural changes in Latvian agriculture; however, these measures have not been sufficient to solve the problems of the market capability of small farms and to contribute to their economic growth sufficiently. In order to improve the market capability of small farms of Latvia, programmatic approach is proposed consisting of four components: 1) training, 2) development of a business plan, 3) evaluation of a business plan, and 4) implementation of the business idea. Different instruments for the implementation of business ideas are attractable depending on whether the owner has selected the implementation of full-time agricultural strategies, part-time agricultural strategies or business diversification strategies.

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1. Introduction

Latvian agriculture is characterized by a large number of small farms – 95% of the total number of farms (79 130 farms in total numbers) are with the standard output less than 25 thousand EUR (CSB, 2011).

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These farms employ 79% of the total agricultural labour force (in annual work units (AWU)), hold about half of the total utilized agricultural area (UAA), but produce just 30% of the total standard output of Latvian agriculture. Along with the apparent low production level and productivity at these farms, they also receive small cash income due to the high level of self consumption and low volumes of sales.

The typical portrait of the average farm in Latvia (i.e, small farms) is summarized in Table 1.

Table 1. The typical portrait of the average farm in Latvia and in EU countries (Eurostat, 2013)

Indicator	Latvia (on average)	EU countries (on average)
UAA per farm, ha	21.5	14.4
Labour force per farm, AWU	1.0	0.8
Output per farm, EUR	9 320	25 450
Output per ha of UAA, EUR	433	1 770
Output per AWU, EUR	9 127	31 325
Share of farms with more than 50% of self-consumption	71%	27%

If compared to the portrait of the average farm in the EU, we can see a weak market capability of Latvian small farms - they are only partly market oriented and have questionable economical viability.

The weak viability of the small farms manifests itself in the tendency of declining number of farm numbers in Latvia. If year 2010 is compared just to the 2005, the number of small farms has decreased by almost 40% in Latvia (CSB, 2011).

According to statistical information, the similar situation with the large share of small farms in the total farm structure is typical also for some other EU countries like Lithuania, Poland, Romania and Bulgaria and they also face the decreasing tendency in number of small farms.

In the research literature, it can be found that generally subsistence oriented agriculture is linked with low level of economic development; it is considered that it lacks efficiency of resource use, especially labour (for example, Heidhues & Brüntrup, 2003; Braun & Lohlein, 2003). Though, there is also acknowledgment of the safety net nature of subsistence farming, as well as it can be a strategy selected by choice to satisfy lifestyle and consumption preferences (Fredriksson, Davidova & Bailey, 2010). Taking into account the current trends and general considerations regarding subsistence agriculture, it could be assumed that the tendency towards decreasing number of farms will continue in Latvia. Therefore, it was rather surprising that the survey conducted by the authors to obtain the intentions of small farm holders in Latvia showed large number of these farms planning the development. Finding solutions to support the development needs of these farms is a new challenge to face, and it is necessary because those processes affect close to two hundred thousand people in Latvian rural areas.

The aim of this paper is to analyze the possibilities to improve the small farm market capability in Latvia. Therefore the tasks were set to analyze the factors constraining development plans of small farm holders; to analyze the current possibilities for improving small farm market capability; to define the possible development strategies to choose, as well as to make proposals for the improvement of small farm market capability in Latvia.

The research methods used in the paper include academic publications analysis, statistical data analysis, and a survey of small farm holders. The small farm survey was conducted in Latvia in May-June, 2013. A mechanical sampling was applied for the survey to guarantee random sampling and to be able to analyse the data by statistical methods. Ranking analysis was used to range and analyze the development impact factors and importance of current support measures. Descriptive statistics and the analysis of cross tabulations were also used in the research.

In the context of this research the small farms are considered to be with the standard output less than 25 thousand EUR. The market capability the authors define as a market orientation and economic viability of the farms.

2. Discussion

2.1. Factors constraining small farm development

The small farm development and growth are affected by disadvantages in terms of the organization of production inside the farms as well as requirements established by the external environment. Referring to Schiffer & Weder study, small companies are more vulnerable to the external environment requirements than medium and large companies, in general, by rating three major problems affecting the development of small companies - the inability to attract funding; inflation; as well taxes and conditions (tax and regulations) (Schiffer & Weder, 2001). Euro-area microenterprises are most concerned about the ability to find buyers, the availability of financing, as well as skilled labour force or experienced managers (ECB, 2013). In turn, in the Concept about support measures for microenterprises developed by the Ministry of Economy of Latvia it is indicated that the main problems faced by small companies in Latvia are relatively high business start-up costs, a complex system of taxation and bookkeeping, as well as minimal funding, which could be associated with the development of business (Ministry of Economics of Latvia, 2009).

According to the survey results, the most significant barriers that interfered or may in the future interfere with the realization of Latvian small farm development plans are lack of the required production assets and difficulties in attracting funding for long-term investments and acquiring current assets, as well as poor surrounding infrastructure (see Table 2). In the barriers rating, knowledge is placed low. Owners of small farms in Latvia do not believe that the current economic progress is detained by the lack of different type knowledge.

Table 2. Evaluation of the factors constraining farm development by surveyed small farm holders in Latvia (n=635)

Hindering factors	Very important	Important	Less important	Not important at all	Ratings
Lack of machinery and equipment	37%	40%	17%	5%	2.10
Problems to attract financing for investments	31%	42%	14%	12%	1.92
Lack of necessary buildings for production and storing	29%	39%	24%	8%	1.90
Problems to attract financing for current assets	27%	42%	19%	13%	1.83
Poor infrastructure (roads, electricity, Internet etc.)	28%	28%	33%	12%	1.72
Lack of labour	21%	38%	29%	12%	1.69
Problems to sell products and services	18%	35%	33%	15%	1.55
Lack of land	19%	23%	39%	18%	1.44
Lack of entrepreneurial knowledge	7%	27%	45%	22%	1.19
Lack of business ideas and initiative	8%	25%	42%	25%	1.17
Lack of other knowledge	4%	26%	46%	23%	1.11
Lack of agricultural knowledge	4%	22%	48%	26%	1.05
Other (bureaucracy, unsatisfactory tax policy, poor cooperation etc.)	20%	10%	11%	59%	0.91

Ratings are based on grades: „very important” – 3; „important” – 2; „less important” – 1; „not important at all” – 0.

Basically, five of the barriers with the highest level of importance are related to the availability of funding for agricultural development, both – operational and long-term. According to the survey data, since 2004, investments in small farm development have been mostly made at their own resources, to make technical improvements the second hand machinery and equipment have been purchased for cultivating the land, feed preparation and harvesting, as well as investments in buildings, structures and infrastructure development, both – building renovation, repair and new building construction. The low level of productivity is the main reason why the provision of financial resources of small farms in Latvia and their availability for development is limited. A high level of self-sufficiency and small market-orientated economic activity, typical to this farm group, is the reason, why the offer of credit services, provided by the credit institutions to small and medium-sized farm groups, is limited and quite expensive.

At certain degree this issue is addressed within the framework of the state support programmes (administered by State JSC “Mortgage and Land bank of Latvia”) to small and medium business development – where particular state supported programs are available for needs of small farm development, and which make the credit services relatively more accessible also to this group of farms. In addition to funding of business ideas, within the framework of these programmes, it is also possible to receive advice and training relating to the business, but not to professional issues regarding production.

EU structural funds co-financing has been attracted to only 40% of investment cases since 2004. The low participation could be related to both - the limited availability of support and the fact that until now, the purchase of the second hand machinery has not been supported in Latvia within the framework of the support measures co-financed by EU, while the purchase of new machinery in the group of small farms in most cases is not financially feasible. Farm development ability is constrained by the production resources being at its disposal. According to the Central Statistical Bureau of Latvia (CSB) Structure survey data, in the group of small farms in Latvia 1 795.3 thousand ha of land, including 902.3 thousand ha of UAA are concentrated (CSB, 2011). From 2005 till 2010, the total land area of the group of small farms has decreased by 23.3%, but calculating the average per farm, the land area has increased, and in 2010 it was 22.7 ha, including on average 11.4 hectares per farm are used as UAA. In the group of small farms a low share of UAA in total land area is observed – 53.6% in 2010 (as compared to 84.9% in farms with standard output above 25 thousand EUR), as well as low efficiency of the use of UAA – the standard output in 2010 was 255 EUR per ha of UAA (as compared to 612 EUR per ha in farms with standard output above 25 thousand EUR). The overall conclusion is – the availability of land as a productive resource is not the most critical obstacle for the development of the production in small farms in Latvia.

Although the average land areas per farm are small, the total resource of land being at the disposal of these farms is significant. The additional potential is made by current low efficiency of the use of UAA, by increasing of which it is possible to increase income in a farm, as well as it is possible to involve UAA areas being at the disposal of the farm and have not been used in the production up to now. Similar conclusions can be drawn in relation to the availability of labour force. The ratio of output against the number of employees (in 2010 the standard output is 3 438 EUR per AWU) indicates extremely low efficiency of labour force as a production resource. Taking into account the fact that in the group of small farms, the average input of labour force is less than one full agricultural work unit per farm (AWU 0.85 in 2010), it can be concluded that, in terms of quantity, small farms in Latvia are more than sufficient to provide the labour resource.

Despite the fact that the respondents of the small farm survey do not list the lack of knowledge among the main obstacles of the development, analysis of the statistical information shows that only ¼ of farm managers in the group of small farmers in Latvia have full education in agriculture, nearly 2/3 of the managers have only practical work experience. Since 2005 farm structure development tendencies indicate permanent decrease of both absolute number of small farms and also their share in total farm structure, whilst the share of farm managers with complete agricultural education in the group of small farms has increased from 21.1% in 2005 to 24.3% in 2010, at the same time the share of managers only with just practical experience has declined from 67.1% to 64.1% in the group. It can be acknowledged that the farms, which managers are with lower educational level, withdraw from the production primarily. Taking into account the above mentioned and the fact that in the groups of farms with higher standard output there is a higher share of managers with complete agricultural education, it can be concluded that, however, the knowledge plays an important role in the development of the farm. The positive impact of knowledge and experience on the performance indicators of farm is supported also by scientific publications (for example, Kantane, Sloka & Vilcina, 2013; Labarthe & Laurent, 2013).

2.2. The current possibilities for improving small farm market capability

Various forms of the EU and state support are available to small farms in Latvia – they cover several schemes of direct payments and also some farm development project oriented schemes. According to our data from our survey of small farm holders, the state support plays an important role as a source of income of small farms. However only one quarter of respondents benefited from the “Modernization of agricultural holdings” scheme, and just around one third treat the “Support to semi-subsistence agricultural holdings” as important source of income, while nine out of

ten respondents are outlining the importance of “Single Area Payment” scheme in the forming of their income. (see Table 3).

Table 3. Evaluation of the importance of the EU and state support by surveyed small farm holders in Latvia (n = 371)

Support type	Very important	Important	Less important	Did not receive	Ratings
Single Area Payment	66%	24%	6%	4%	2.53
Less Favoured Area Payments	47%	16%	6%	31%	1.80
Agri-Environment Payments	30%	5%	4%	61%	1.04
Support to semi-subsistence agricultural holdings undergoing restructuring	25%	11%	3%	61%	1.00
Modernization of agricultural holdings	15%	8%	1%	75%	0.63
Other	6%	3%	2%	88%	0.27

Ratings are based on grades: „very important” – 3; „important” – 2; „less important” – 1; „did not receive” – 0.

According to the survey results, 80% of holders believe that also in the future insufficient technical equipment issue should be solved by the means of the support for investments. When the options to solve a shortage of financial resources were dealt, a partial compensation for interest rates was mostly noted (58%), followed by the support for investment and credit guarantees.

Availability of financial support for small farms and business development and its positive role is emphasized by various authors in scientific publications (for example, Gruzina & Zvirbule-Berzina, 2012; Augustynska-Grzymek, Skarżyńska & Abramczuk, 2013). Referring to the LSIAE study, a significant effect on the increase of a net value added for the small farms in Latvia has been given by the participation of these farms in the RDP activity 1.4.1. “Support to semi-subsistence agricultural holdings undergoing restructuring”. The farms participated in the activity are producing net value added approximately 2 times more as to compare to those of the same size, who didn’t. And within 2 years (2007-2009) net value added produced in these farms, increased by LVL 1315 per farm (LSIAE, 2011), although remaining low in absolute terms. We may say - the participation in this support scheme has not given farms a sufficient boost for their further existence as primarily agricultural units (LSIAE, 2013).

Thus, it can be concluded that the existing support measures have had some impact on the changes of the structure of the Latvian agriculture (since 2005, the total number of farms has decreased, but the number of medium and large farms (standard output > 25 thousand EUR) – has increased 1.7 times), however, these measures have not been sufficient to solve the issues of the market capability of small farms in Latvia to the necessary extent.

2.3. Development strategies and proposals for the improvement of small farm market capability in Latvia

When looking for solutions, which could promote the capability of small farms in Latvia to earn more from the market revenues, and thus to improve their economic efficiency and viability, there are two basic development strategies: 1) intensification of agricultural activities and 2) economic diversification towards non-agricultural activities (Buchenrieder & Möllers, 2011).

On the farm level, evaluating future activity strategies, there is also an alternative - to stop farming activity, however, such a choice is not related to the improvement of farm market capability, so it is not envisaged in the study. The goal of the basic strategy “intensification of agricultural activity” is to develop agricultural production in a farm as the sole, primary or at least a significant source of income, possibly raising the productivity and return of resources, a well as gaining the improvement of farm market capability. Choosing this development strategy, a farm has two possible alternatives: 1) full-time agricultural production and 2) part-time (part-time work) agricultural production.

Full-time agricultural production alternative means that a farm has chosen any (or some) of agricultural production specializations to develop it as a primary (perhaps the only) source of income, and in a farm development plan it shall be provided that the economic size of the farm within the period under review will increase, exceeding 25 thousand EUR of standard output for one AWU (it has been found out that financial results of farms noticeably improve, when the farm goes behind the threshold of 16 ESU (which is comparable to farm’s economic size group with standard output 15–25 thousand EUR in new classification), and the most of farms, which achieve such

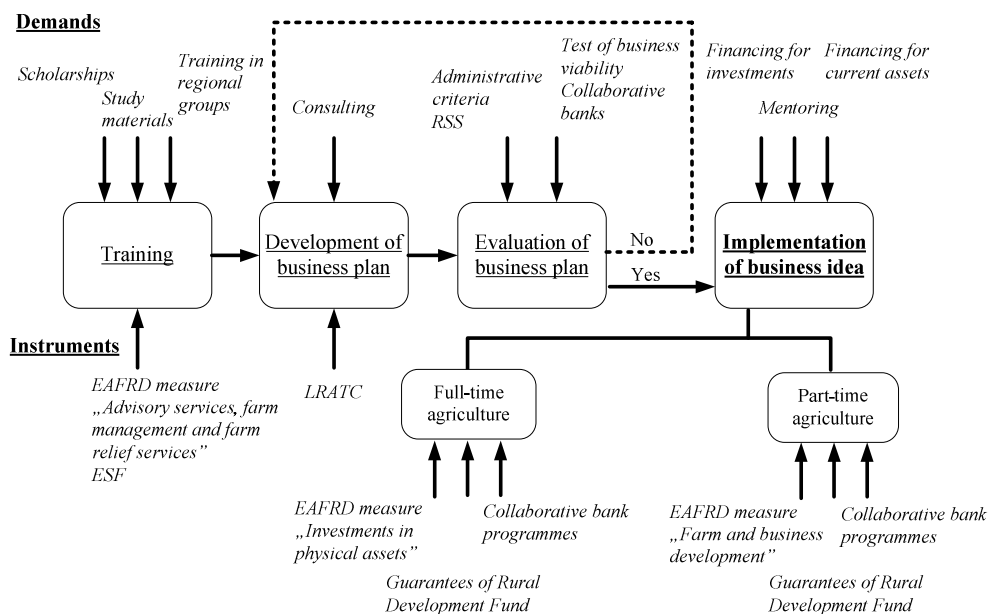
economic size, are able to produce the value added at least in the amount of an average wage per person in the region (Vēveris, 2009).

Part-time agricultural production means that a farm has chosen any of agricultural production specialization direction (or some) to develop it as an additional source of income (possibly, even as the primary, but certainly not the only). In this case, it is clear that the farm may not have a task to increase its size of economic activity significantly as its primary goal, the improvement of the market capability and profitability of these farms becomes the most important development objective.

The second option of basic strategy is linked to the development of non-agricultural activity in a farm - as the sole, primary, or at least a significant source of income. In case of choosing this basic strategy, it is important to make sure that the chosen business idea may provide market earnings at the level sufficient to cover all costs of production factors and to ensure income for the owner and other employees corresponding to ambitions and life quality requirements of each of them.

The choosing of any basic strategy numbered above is connected with the significant changes in the perception of the owner of a farm, as well as in the organization of production. This process can be facilitated by several state support measures - facilitating the knowledge development, consultations in planning of business development, support for investments, funding for the implementation of business ideas and the ensuring operational activities during the initial period, as well consultative supervision in the period of the implementation of investments and initial period of starting activity. However their exposure should be integrated under certain farming unit development program in order to ensure that the public financial resources are invested purposefully and the farm may become as a viable economic unit that is able to gain at least a significant part of its income from the market.

In order to encourage the market capability of small farms of Latvia, programmatic approach is strongly recommended, with different support measures being at the disposal of the state to be applied as successive complementary tools for achieving a common objective (Figure 1).



RSS – the Rural Support Service; LRATC – the Latvian Rural Advisory and Training Centre; EAFRD – European Agricultural Fund for Rural Development; ESF – European Structural Fund

Fig. 1. Scheme of the programmatic approach to the improving of small farm market capability in Latvia

The programmatic implementation approach consists of four principal steps: 1) training (improvement of knowledge), 2) development of a business plan, 3) evaluation of a business plan, 4) and implementation of the

business idea. Considering that farm holders' participation in the programme is associated with the desire and the need to change the organization of production fundamentally (to review the specialization directions existing on farm already and further to be developed; to define product and sales markets; to define the necessary resources; to attract financial resources for investments and acquisition of current assets; to plan production growth, to enter markets, etc.), it cannot be achieved without the improvement of knowledge.

Thus, any participant of farm small farm development programme might undertake a training course that consists of several thematic modules: 1) Micro-business planning (starting a business, planning income and resources, strategic and operational planning of activity, business plan development); 2) Farm management (production resources: personnel, land, management, marketing, financial management, bookkeeping etc.); 3) Agricultural specialization (agronomy, zootechnics, veterinary etc.). Depending on a participant's initial level of knowledge and education – the training course attendance can be modulated, although all participants of the programme must pass a knowledge test after the training course. In the time period from the moment of starting the programme determined before, the programme participant must develop a business plan, the development of which in essence concludes the training step.

The developed business plan is to be submitted for evaluation, and it might become at the same time both - an application for investment support measure and an application for receiving lending services from a credit institution involved in the implementation of the programme. Consequently, the acceptance of a business plan at the same time means to the farmer an opportunity to start the implementation of a project.

Different EAFRD support instruments for the implementation of business ideas may be applied, depending on the development strategy chosen by the small farm holder – full-time farming or part-time farming with diversification into non-agricultural activities. Although other instruments could be the same – provision of consultancy assistance, mentoring, and financial guarantees.

3. Conclusions

The small farm development and growth are affected by the disadvantages in terms of the organization of production on the farms as well as requirements established by the external environment. Small companies are more vulnerable to the external environment requirements than medium and large companies.

The availability of land and labour are not critical obstacles for the further development of the production of small farms in Latvia. Although the average land area per farm is small, the additional potential lies in the existing low efficiency of the use of UAA, as well as it is possible to involve UAA area not been used in the production up to now. The ratio of output against the number of employees indicates on a low productivity of labour force as well. Considering that the average input of labour force in small farms is less than one full agricultural work unit, it can be concluded that, in terms of quantity, the labour force as a resource in small farms of Latvia is more than sufficient.

According to the survey results, the most significant barriers, that interfered or may interfere in the future with the realization of Latvian small farm development plans are the lack of the required production assets and difficulties in attracting funding for long-term investments and acquiring current assets, as well as poor surrounding infrastructure. The low level of productivity is the main reason, why the provision of financial resources in small farms in Latvia and also their availability for development is limited.

Despite the fact that the lack of knowledge is not among the main obstacles of the development outlined by the respondents in the small farms holders' survey, the level of education among small farm managers in general is low – only ¼ of small farm managers in Latvia have full education in agriculture, nearly 2/3 of the managers have only practical work experience.

Small farms in Latvian have accessibility to the EU and state support in the form of production subsidies and investment support, as well as the support for knowledge advancement is available. So far the support measures have had a focus to supporting investments, less to the development of knowledge. The state support in the various forms of direct payments is evaluated as a significant source of income of small farms. Other support measures have less importance. Among investment support measures, the measure of 2007–2013 of RDP 1.4.1 "Support to semi-subsistence agricultural holdings undergoing restructuring" and the measure 1.2.1 "Modernization of agricultural holdings" are evaluated as significant.

Although the existing support measures have had a positive impact on the structural changes in Latvian agriculture; these measures have not been sufficient to solve problems of the market capability of small farms and significantly contribute to their economic growth.

There are two basic development strategies to improve the economic efficiency and viability of small farms in Latvia: 1) intensification of agricultural activities (full or part time) and 2) economic diversification towards non-agricultural activities. The choice of one or other basic strategy of activity is connected with significant changes in the perception of the owner of farm, as well as in the organization of production.

In order to improve the market capability of small farms of Latvia, programmatic approach is proposed consisting of four steps: 1) training, 2) development of a business plan, 3) evaluation of a business plan, and 4) implementation of the business idea.

Different EAFRD support instruments for the implementation of business ideas may be applied, depending on the development strategy chosen by the small farm holder – full-time farming or part-time farming with diversification into non-agricultural activities. Although the other instruments could be the same – provision of consultancy assistance, mentoring, and financial guarantees.

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