PROBLEMS OF SMALL FARMS IN LATVIA

Irina Pilvere¹

Faculty of Economics and Social Development, Latvia University of Agriculture

The small farmers play a key role in meeting the future food demand of the population and in the economic and social development of rural areas. The European Union (EU) employs different methods to define small agricultural holdings and provides different information sources, hence, hindering the application of a single approach to fostering farm development in the EU Member States. Therefore, the aim of the present research is to analyse the historical background of formation of small agricultural holdings and their number in Latvia, based on various information sources. The country’s historical background determined the formation of private agricultural holdings in Latvia, since the independence was regained in 1991 after more than 50 years of collective farming under socialism, and the countryside, alongside with the land reform, needed also the management reform, i.e. both of the former constituting integral parts of the agrarian reform. The number of small holdings in Latvia differs depending on the applied methodology, and it ranged from 66366 to 83064 (80% and 100%, respectively, of total number of holdings) in 2010. Therefore, the numbers of small holdings and agricultural employees considerably decreased in the period of 2001-2010 and the total agricultural area and the average area farmed by an agricultural holding also declined in Latvia increasing risks for the sustainable development of these farms.

Keywords: agricultural holding, size, small holdings.
JEL classification: Q12, Q18

Introduction

A small agricultural holding sector exists both at the EU-12 and at the EU-15 level. Within the EU-15 countries, a further distinction shall be made as regards the Southern countries, i.e. Spain, Portugal, Italy, and Greece where the small scale of farms is a product of historical conditions and the nature of production. Even more significantly, this diversity is also found in the new Member States. In the EU-12, particularly in the countries of the former socialist bloc, the small size of farms is also the result of historical and political processes (European Parliament, 2013).

In recent years small farms have received increased attention in the political debate, recognizing the role they play in rural areas and the need to improve their economic and social conditions in times of structural change of the agricultural sector towards fewer and larger farms (European Commission, 2011). Over the recent years, scientists have also focused on this problem. J.Spicka (2013) points out that the structure of agricultural holdings within the EU-27 is highly heterogeneous. In the EU, the farm structure shows that farms have a small size accounting for 12 ha on average. The largest farm size is found in the Czech Republic (152 ha) and the smallest ones in Romania and Cyprus (3 ha). The small farmers play a key role in meeting the future food demand of the population (Popesku, 2013).

Small farms are seriously challenged today in ways that make their future precarious. If most small farmers are to have a viable future, then there is need for a concerted effort by governments, NGOs, and the private sector to create a more enabling economic environment for their development. This shall include assistance in forming effective marketing organisations, targeted agricultural research and extension, revamping financial systems to meet small farm credit needs, improved risk management policies, tenure security and efficient land markets, and where all else fails, targeted safety net programmes (Hazell, 2005).

As emphasised by Ika Darnhofer (2010), farmers understand change as unpredictable and unfolding, they have a number of strategies to ensure the flexibility and adaptability of their farm and build extensive networks to diversify information and income sources.

Therefore, the aim of the present research is to analyse the historical background of formation of small agricultural holdings and their number in Latvia, based on various information sources.

In accordance with this aim, the following research tasks were defined:

– to characterise the historical background for the development of small agricultural holdings in Latvia;
– to analyse the number of small agricultural holdings in Latvia, based on various information sources.

¹Dr.oec., professor
Research fields: agricultural, rural and regional development policy and impact evaluation, EU funds, entrepreneurship
Mailing address: Faculty of Economics and Social Development, Svetes iela 18, Jelgava, LV-3001, Latvia
E-mail: Irina.Pilvere@llu.lv
Synthesis, and the logical and constructive methods were employed to tackle the research tasks, analysis. The present research analysed information and data from the Eurostat and the Central Statistical Bureau (CSB) on various socio-economic indicators, the Latvian State Institute of Agrarian Economics (LVAEI), the Farm Accountancy Data Network (FADN), special and general literature, methodological materials on agriculture and rural development etc.

Methodology. There is a big methodical but also an institutional problem, which is the classification of farms, particularly, the so-called lower area groups or small economic size as measured in the FADN system (Musial, 2013). Once a unit of measurement to define small size farming has been chosen, problems may arise linked to the availability of data (European Commission, 2011). However, the author believes that there are several options to define what is meant by small farms: 1) the economic size of the holding – the so-called ESU (European Size Unit) until 2009 or from 2010 onwards – the standard output (SO) which is expressed in EUR; 2) the UAA farmed; and 3) the number of persons working in the holding, which forms the basis of the so-called AWU (Annual Working Units).

Until 2009, the EU requirement was to calculate the farm’s total standard gross margin (SGM) to determine the economic size of a farm. The economic size of EU farms was expressed in European Size Units (ESU) – 1 ESU was equivalent to EUR 1200. In Latvia, farms were classified into 7 size classes: size Class I – very small farms (less than 4 ESU); size Class II – small farms (4-<8 ESU); and size Class III – medium-small farms (8-<16 ESU) (LVAEI, 2010).

Since 2010, the economic size of a farm is the sum of the standard outputs (SO) for the farm’s all economic activities. The economic size of farms is expressed in EUR. Each Member State sets its own economic size threshold and classifies farms into economic size classes according to their specifics. The European Parliament, thereby, stresses that, according to the FADN’s new typology, very small agricultural holdings are those with an SO under EUR 8 000 and small agricultural holdings are those with an SO between EUR 8 000 and EUR 25 000 (European Parliament, 2013).

In Latvia, the FADN farms are classified into six economic size classes, of which the first class is small farms with a standard output within a range of EUR 4000-15000; the farms with a SO less than EUR 4000 are not included in the FADN calculations. The CSB data were used to specify farms in Latvia: data of the agricultural censuses of 2001 and 2010, and data of the farm structure surveys of 2003, 2005, and 2007. However, in 2001, the EU’s methodology for determining the size of farms changed which would be taken into consideration in calculating the number of small farms and their indicators.

Research results and discussion

1. Historical development of agriculture in Latvia

During the 20th century, agriculture and agricultural holdings in Latvia have undergone different stages of development (Pilvere, 2008) following the changes of political and economic regimes in the country. These developments have historically formed a large number of small farms in Latvia.

1) After the first establishment of statehood from 1918 to 1940. The second land reform in Latvia (1920-1937) completely eliminated the management system having existed since the Middle Ages in rural areas and towns, thus, returning the land to its real owners and creating a stable economic basis for the new state of Latvia. The land legislation system was created and consolidated during this reform. During a short period, owing to the increasing demand for agricultural goods in the European and world markets and the support of Latvia’s government, agriculture became the leading industry of the national economy (Dobele, Pilvere et al., 2012). In this period, the agricultural holdings were mostly small. However, in 1938, they produced 1 715 000 tonnes of milk, raised 1.2 million heads of cattle, 814 000 pigs, 1.3 million heads of sheep and more than 400 thousand horses.

2) Period of socialism. The agriculture of Latvia was collectivised at the end of 1949. The majority of families of the most successful and capable farmers were deported from Latvia. Private property on land was eliminated in Latvia, the land was nationalised and belonged to the state. Latvian farmers were transformed from land owners into simple land users one more time. Farmers were alienated from land, and their attitude to and responsibility for work was undermined. The structure of agricultural production was uniform with a small number of agricultural holdings, planned economy, clearly set prices, and a stable market outlet as well as a farm supply structure. In 1989, there were 199 state farms (average agricultural area of 4583 ha) and 363 collective farms (average agricultural area of 3752 ha) in Latvia (Dobele, Pilvere et al., 2012).

3) After regaining independence in 1991, the countryside, alongside with the land reform, needed also the management reform, i.e. both of the former constituting integral parts of the agrarian reform. The large state and collective farms were liquidated and the land ownership rights to the former owners of land – mainly very small and small agricultural holdings – were restored in the result of land restitution. Therefore, there were approximately 250000 very small agricultural holdings and numerous other land owners and holders in the beginning of 1999. Second, the change of the economic system – from centralised planning or a planned economy to a market economy – made a radical effect (Spogis, 1999).
This period may be divided into two main agricultural development periods: a 13-year period until Latvia became an EU Member State (from 1990 to 1 May 2004) and the post-accession period of 10 years (in 2014). Accession to the EU has radically influenced Latvian agriculturists through setting more strict requirements in regard of quality of products and production conditions as well as through the increased income level. The foreseeable level and amount of support for the new Member States was determined by the Accession Agreements on the basis of the operative CAP and the provisions of accession of new Member States, ensuring a gradual increase of support and reaching the support level of the EU Member States in 2013 (Bratka, 2005).

Nowadays, agriculture plays an important role both in the economy and in the preservation of the traditional lifestyle in Latvia, since agriculture contributes to the development as an economic activity, as a livelihood, and as a provider of environmental services, making the sector a unique instrument for development. In 2012 in Latvia, 32% of the entire population lived in rural areas and 73.3 thousand people, 4.3% less than a year ago, or 8.4% of total workforce in the country. Even though the year 2012 was favourable for development. In 2012 in Latvia, 32% of the entire population lived in rural areas and 73.3 thousand people, while Latvia takes the 4th place with 80% (European Parliament, 2013).

The European Parliament has estimated the number of very small agricultural holdings in the EU Member States (SO < 8000 EUR); in 2010, it was almost 7.7 million or 64% of total number of holdings (12 million). A higher proportion of very small holdings is observed in the new Member States that joined the EU in the period of 2004-2007, i.e. 81%, while in the EU-12 it is 33%. Among the new Member States, the proportion of very small farms in the total number of holdings is highest in Romania (95%), followed by Hungary (85%), Slovenia (82%), while Latvia takes the 4th place with 80% (European Parliament, 2013). The data on the UAA of small holdings are summarised in Table 2. In the period of 2001-2010, the total number of holdings decreased by 57.4 thousand units or 41%, while the number of small holdings declined even sharper by 60.4 thousand units or 43%. The number of medium and large holdings is quite small, 4.2 thousand or only 5.1% of the total number, even though their number increased by more than 3 times. In 2010, non-market-oriented holdings (SI is less than EUR 4000) accounted for 78% of total number of small holdings in Latvia.

2. Characteristics of small agricultural holdings in terms of ESU and SO in Latvia

The characteristics of agricultural holdings in terms of ESU and OS in Latvia are presented in Table 1. In the period of 2001-2010, the total number of holdings decreased by 57.4 thousand units or 41%, while the number of small holdings declined even sharper by 60.4 thousand units or 43%. The number of medium and large holdings is quite small, 4.2 thousand or only 5.1% of the total number, even though their number increased by more than 3 times. In 2010, non-market-oriented holdings (SI is less than EUR 4000) accounted for 78% of total number of small holdings in Latvia.

The Eastern European countries, in particular, the Baltic States (Estonia, Latvia, and Lithuania) show the highest rates of decline in the number of holdings. This can be considered a normal process of structural adjustment, as state-owned land was returned to the previous owners (or their successors) after independence in the early 1990s, leading to a large number of small holdings which are either not economically viable or where the owner has no intention of remaining in agriculture (European Commission, 2013).

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The data on the UAA of small holdings are summarised in Table 2. In the period of analysis, the UAA considerably decreased in Latvia after 2001 - by 19.5%; whereas, after joining the EU the UAA increased; however, the level of 2001 was not reached even in 2010. Similar trends were observed for the average area per holding as well as for small holdings in Latvia in the beginning of this period. As the
number of holdings declined, the average UAA of holdings exceeded the level of 2001 by 21% in 2007 and by 65% in 2010, while that of small holdings was greater by only 8%. It indicates that the increase in the size of small holdings is minimal and, for this reason, their development opportunities are limited. Similar trends may be observed in the entire EU. A decline in farm numbers combined with stable UAA means that farms are bigger. The average farm size in the EU grew by 3.8% per year between 2005 and 2010. Big differences remain between the 15 older Member States (23.6 ha/holding) and the 12 countries that joined the EU in 2004 and 2007 (7.1 ha/holding), yet, the latter are catching up, with annual growth rates almost three times higher than the former (5.5% as against 2% per year) (European Commission, 2013). However, the farms with a higher dimension produce the highest gross margin proving that farm size has a direct influence on profitability and economic efficiency (Popescu, 2013).

A comparison of the SGMs and SOs with the country’s average indicators for small holdings (Table 3) shows that the differences have increased in the period of 2001-2010 – from 65% in 2001 to 31% in 2010, which indicates a decrease in the potential of small farms. The differences have increased for various groups of small agricultural holdings. In 2001, the GEM produced by the smallest holdings (ESU <2) was 15.5 times smaller than that produced by the largest small holdings (ESU 8.0-15.9), while in 2007, this difference already reached 17.4 times. The GEM of the smallest holdings (ESU <2) increased by 7% in 2007 compared with 2001, while that of the largest small holdings (ESU 8.0-15.9) rose by 21%, which pointed to the different development rates for various groups of small agricultural holdings. In 2010, the standard outputs differed 16.6 times among the groups of small holdings. However, an analysis of the average SO in Latvia shows that it accounted for only 36% of the average EU-27 level in 2010 (European Commission, 2013).

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<th>Table 2. UAA of agricultural holdings in Latvia in the period of 2001-2010</th>
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<td><strong>Indicators /Years</strong></td>
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<td>UAA on average per small holding, ha</td>
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<td>incl. ESU &lt;2 ha</td>
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<td>ESU 2.0-3.9, ha</td>
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<td>ESU 8.0-15.9, ha</td>
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<td>SO &lt;4000 EUR, ha</td>
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<td>SO 4000 -14900 EUR, ha</td>
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<td>SO 15000 -24900 EUR, ha</td>
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<td>UAA on average per holding in Latvia, ha</td>
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<td>Proportion of UAA of small holdings to the national average, %</td>
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**Source:** author’s calculations based on the CSB, 2011, 2013a, 2013b

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<th>Table 3. SGM and SO per holding in Latvia in the period of 2001-2010</th>
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<td>SGM on average per holding, EUR</td>
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<td>SO on average per holding in Latvia, EUR</td>
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<td>SGM/SO of small holdings, % of the average</td>
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**Source:** author’s calculations based on the CSB, 2011, 2013a, 2013b
3. Characteristics of small agricultural holdings in terms of UAA in Latvia

The data of the agricultural censuses of 2001 and 2010 were used to compare the groups of holdings in terms of UAA, which allowed dividing holdings into small holdings with a size of up to 19.9 ha of the UAA and other holdings with a greater size, and the farm structure surveys of 2003, 2005, and 2007 which provided a division into small holdings with a size of up to 15.9 ha and other holdings with a size of more than 15.9 ha. The analysis of the number of small holdings and their UAA used these thresholds to assess the average UAA per holding which increased from 13 ha in 2001 to 23 ha in 2010.

4. Characteristics of small agricultural holdings in terms of number of employees in Latvia

According to the European Commission Recommendation 2003/361/EC of 6 May 2003 regarding the definition of small and medium enterprises, a micro-enterprise is an enterprise that employs less than 10 employees and whose annual turnover and/or annual balance sheet value is less than EUR 2 million, while a small enterprise is the one employing less than 45 individuals (European Commission, 2003). Given the specifics of agriculture, several assumptions may be made regarding a small farm, in terms of number of employees, for instance, small farms are the farms on which only their owner is employed or on which at least two individuals are employed, assuming that they are family members, or the farms which employ less than five employees.

The number of farms broken down by the number of employees in Latvia is presented in Table 5. If assumed that the main source of employment on a farm is the family of two individuals, then 63,838 holdings might be regarded as small in Latvia in 2010, which account for 77% of total number of holdings, and the number of such farms has grown by 3.9 times compared with 2001. Yet, if the EU definition is taken into consideration, actually all farms in Latvia might have been recognised as micro-farms since 2003, as the number of other farms was very small, for instance, only 322 in 2010.
and their number has decreased by 46 thousand units compared with 2001. It should also be considered whether these employees work full- or part-time, as, for example, only 10% of employees on farms with one employee, 15% of employees on farms with two employees, 14% of employees on farms with 3-5 employed individuals, and 26% of employees on farms employing 6-10 people worked full-time in 2010 (CSB, 2011). On the one hand, the decrease in the numbers of farms and agricultural employees are positive facts, as labour productivity rose in agriculture. Yet, as admitted by J. Spicka (2013) the average labour input per 100 hectares in the EU-12 is substantially higher than in the EU-15. This fact, together with the lower fixed capital consumption per hectare, points to the lower level of the technical equipment and farming technologies in the EU-12. On the other hand, the labour input per hectare has been decreasing for a long period. In particular, different types of farming have different labour requirements which may be inversely correlated with physical farm size, for example, a horticultural enterprise may have a small physical area but a high number of workers; whereas, the opposite is true for grazing livestock enterprises (European Commission, 2011).

Conclusions, proposals, recommendations

1. There is no single methodology for defining a small farm in agriculture in the EU. Nevertheless, the economic size of the holding ESU until 2009 or from 2010 – the SO, which is expressed in EUR – are more often used. Yet, it is also possible to define a small farm in terms of UAA or number of employees.

2. After examining the number of small agricultural holdings and their development in Latvia, one can conclude that:
   – their number varies depending on the methodology used, and it ranged from 66366 to 83064 in 2010 (80% and 100%, respectively, of total number of holdings);
   – the numbers of small agricultural holdings and their employees have decreased sharper compared with the decline in the total number of agricultural holdings in the period of 2001-2010, which indicate the consolidation of farms and a rise in labour productivity;
   – in 2010, the average UAA of small holdings accounted for 53% of the average and it rose slower than the average size of farms in Latvia, which can significantly endanger their opportunities for the development of traditional agriculture. It is also evidenced by the total UAA farmed by small holdings, which in 2010 was only 61% of the level of 2001.

3. More detailed research on the economic and social roles of small agricultural holdings in rural areas and the possibilities for ensuring their sustainability has to be conducted in the future.

Bibliography


