

AGRICULTURAL LAND USE IN FARMERS' FARMS

Vilma Šalkauskienė

Aleksandras Stulginskis University, Lithuania

Abstract

The article provides the distribution of agricultural land used by farmers' farms, analyses the declared areas of agricultural land in use and cropland and the amounts of support received. The article also provides the analysis of the change in land used by the farmers' farms in the period of 2003-2005, and indicates the prevailing specialisation of farms in Kaunas district. According to the analysis results, the number of farmers' farms had decreased during the analysed period, and land area used by farmers had decreased as well. Even though in 2010 the average farm size increased to 11.19 ha, currently it is only about 7 ha. The majority of farms are from 1 to 10 ha (68.8 percent).

In Kaunas district, there prevails combined specialisation of farmers' farms as crop production might be combined with cattle-breeding, moreover, according to the data of 2015, there are 35 organic farms in the district. In Kaunas district, the areas of declared agricultural land in use and cropland increased by approximately 3.2 percent, however, the number of submitted applications decreased by 12.7 percent. Winter wheat and meadows-pastures (up to 5 years) are mostly declared. Although the grant amount to farmers is decreasing, the support to Kaunas district farmers is constantly increasing.

Key words: *farmers' farms, declaration of crops and agricultural land in use, agricultural land*

Introduction

Private landowners (farmers) and private farms utilise the largest part of agricultural land. According to the data of National Land Service on 1 January 2016, they own 82 percent of all agricultural land. The majority of farmer's farms are smaller than 10 ha.

According to Markevičius (2006), specialisation of specialised farms highly depends on natural and economic conditions.

Since 1993 organic farming has become more and popular in Lithuania. Kazakevičius (2010) claims that rapid development of organic farming was determined not only by consumers' interest in food safety, but also by people's concern about the quality of environment as well as stable and sustained future economic development. In 1993, there were 9 certified organic production farms in Lithuanian, and in 2012 there were even 2511 farms taking up the area of 162655 ha (VŠĮ "Ekoagros"..., 2014).

As asserted by Laurinkus (2014), implementation of the Rural Development Programme for Lithuania 2014-2020 involves initiation of rural infrastructure and business restoration projects. The programme will be allocated 14 percent less funds for the new period, but the amount is still quite profound, i.e. 6.805 billion litas. Priority goals of rural development policy remain similar to those of the previous programme as they include enhancement of agricultural competitiveness, sustainable management of natural resources, and balanced territorial development of rural areas. The number of viable farms increases as they get bigger. However, as small farms prevail in Lithuania, it is important to develop an integrated approach to rural development because not only implementation of agricultural policy, but implementation of other policies is of significant importance as well (Jurkėnaitė, 2012).

Having taken comparative methodology into account, H.Nieberg ir F.Offermann (2009) set out the key factors for competitive economy: harvest, prices of crop production and grants for organic farming. Their analysis showed that support of different countries and the EU contribute to successful performance of farms. In the EU counties, namely Austria, Denmark, Germany and Switzerland the average grant comprised 15-20 percent of total benefit of farms.

Financial support of the European Union has a significant impact on the intensity of agricultural land use and economic status of agricultural entities. In 2007-2013, each of agricultural entities received 3 740 LTL on average for the development of farms (for no smaller than 1 ha of declared agricultural land in use). During the same period, the area of the declared land in use increased by 6.8 %, the cropland area which requires intensive cultivation increased by 21.7, and the size of average farm increased from 13.3 to 20.0 ha of agricultural land in use. These changes took place unevenly in different agro-economic zones of the country, thus it is expedient to regulate further agricultural development by organisational and economic means (Stravinskienė ir kt., 2015).

The article aims at performing the analysis of agricultural farmland in use on the basis of farmers' farms in Kaunas district.

The number of farms and its variation were analysed by means of logical analysis, i.e. by comparing old data with the most recent data.

Discussions and results

On 1 March 2016 in Lithuania there were 122301 registered farms with the total area of 1145863.25 ha, the average farm size being 9.378 ha Agricultural land in use in these The following tasks have been set to achieve the aim:

1. To determine the changes in farmers' farms and the land in their use, and to determine the volume of cropland and agricultural land in use.
2. To provide distribution of the number of farmers' farms by the elderates.
3. To analyse information about the grants that farmers received under application regarding agricultural land in use and crops with the period of 2011-2013.

Methodology of research and materials

In order to achieve the aim and fulfil the tasks, the following methods were applied: information search, systemising and analysis; analysis of scholarly literature, comparative analysis and generalisation. The object of the study is Kaunas district and farmer's farms located in this district. Kaunas district was chosen due to the fact that the land there is fertile, the size of farmer's farm is close to the size of an average farmer's farm in Lithuania, and there prevails combined specialisation of farms. The study takes the data about agricultural land areas and agricultural production indicators in municipalities from National Land Service under the Ministry of Agriculture, National Paying Agency, State Enterprise Centre of Registers, Statistics Lithuania, State Enterprise Agricultural Information and Rural Development Centre, State Enterprise State land Fund. Statistical information about farmers' farms, land area that they manage and its average size was obtained from Kaunas District Municipality and Agricultural Information and Rural Development Centre.

farms occupied 958145.16 ha, forests – 96281.11 and water bodies – 7529.03 ha (Table 1).

Table 1

The number of farms and its land area registered in the Register of Farmers' Farms as of 1 March 2016

Administrative unit	Number of farms	Total land area, ha	Average farm size, ha	Agricultural land in use, ha
<i>Total in the Lithuania</i>	122301	1145863.25	9.37	958145.16
Kaunas county	16703	150916.92	9.04	125286.01
Birštonas	342	1878.81	5.49	1483.41
Jonava distr.	1207	8412.03	6.97	7231.73
Kaišiadorys distr.	2829	21538.92	7.61	18318.65
Kaunas distr.	3596	25041.11	6.96	14367.97
Kėdainiai distr.	2490	30422.23	12.22	27219.26
Prienai distr.	3159	20873.41	6.61	18354.39
Raseiniai distr.	3072	42745	13.91	38305.67
Kaunas city	8	5.41	0.68	4.93

Farmers' farms of Kaunas region make up about 14 percent of all farms in the country, the majority being located in Kaunas district municipality. The analysis of nationwide data showed that the number of farmers in 2015 increased by 57.8 percent as compared with 2003. The number of farms and their utilised area has not changed since 2012, thus it can be stated that there is stability in farm existence. According to agricultural census of 2003, the average farm size in Kaunas district was 6.74 ha, in 2010 – 11.19 ha, on 1 November – 7.58 ha, on 1 February 2014 – 7.37 ha. The average farm size increased by 66.2 percent from 2003 to 2010, however, it decreased by 34.0 percent until 2014. The average farm size increased by 9.7 percent within the analysed period. .

The analysis of agricultural land in use by their areas showed that the majority of farms in Kaunas district take from 1 to 3 h. Farms that occupy 150-200 ha or more than 500 ha are the minority (Figure 1).

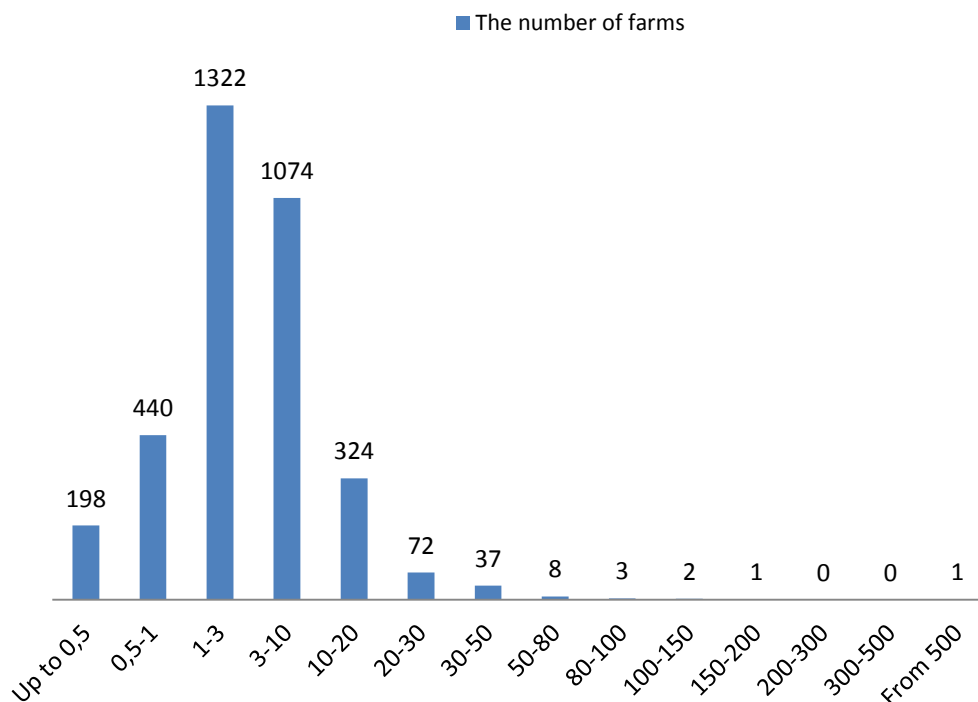


Fig. 1. The distribution of the farmers' agricultural land in use by the area as of 1 February 2015 (The Register of Farmers' Farms)

198 farmers possess farms that take up to 0.5 ha, comprising 5.7 percent of the total number of farms in Kaunas district. The largest number of farms (38 percent) are farms ranging in size from 1 to 3 ha (1322). A large number of farms (30.8 percent) are the farms ranging in size from 3 to 10 ha (1074). 10-20 ha farms comprise 9.3 percent, 20-30 ha – 2.1 percent, 30-50 ha – 1.1 percent. All remaining farms that greater 50 ha account for a very small share, i.e. 0.4 percent of all Kaunas district farms.

The greatest number of farmers' farms is observed in Babtai, Raudondvaris, Garliava county and Vilkija county municipalities. The smallest number of farmers' farms is observed in Kulautuva, Kacergine, Akademija and Ezerelis elderates. In 2010, the greatest number of farmers was observed in Garliava, Vilkija county and Zapyskis municipalities, and the smallest number of farmers was observed in Kulautuva, Kacergine, Akademija and Vilkija municipalities. In 2010, as in comparison with 2003, the number of farms increased only in Neveronys municipality (by 18.8 percent) and in other Kaunas district municipalities the number of farmers was observed to have decreased. During the analysed period, the greatest reduction on the number of farms is observed in Akademija (74.4 percent.), Babtai (58.2 percent), Garliava (73.7 percent), Kulautuva (69.6 percent), Raudondvaris (72.1 percent) and Vilkija (87.2 percent) municipalities. In other municipalities the number of farms increased by 20-30 percent.

The analysis of farmers' farms specialisations in Kaunas district showed that crop production and cattle breeding are prevailing specialisations. Single specialisation is a very risky factor in farms due to losses incurred as a result of natural disasters (drought, heavy rain, etc.). Therefore, there usually exist farms of combined specialisation as crop production is combined with cattle-breeding of vice versa in order to have lower risks and greater benefits. Specialised farm find it difficult to change mode of farming due to market conditions that depend on supply and demand. Organic farming is one more mode of farming, however, specialisation of organic farms has also to be combined. According to the analysis results of farms in Kaunas district, there are 35 organic farms in Kaunas district. Even 77.1 organic farms are engaged in crop production and cattle-breeding and the rest farms deal with product management in a company.

According to agricultural census of 2010, there were 4983 farms in Kaunas district and 3452 crop declarations were submitted for the area of 61562.12 ha. In 2012, 3215 applications were submitted for 23066 land fields comprising the area of 63298.37 ha. In 2012, 3005 application were submitted for the area of 63379.5 ha. During the analysed period, the declared area comprised 2.3 of total declared area. The declared area increased by 3.0 percent if to 2013 with 2010, however, the number

of applications decreased by 12.9 percent. From 2013 to 2015 the areas of declared land did not change significantly. It is observed that even though the number of farms had decreased within the analysed period, but the area of agricultural land had increased and the area of the declared agricultural land in use had increased as well. In 2015, winter wheat (11393.61) and meadows-pastures (10915.72 ha) were mostly declared and sunflowers (0.1 ha) were among the least declared. Although the grant amount to farmers is decreasing, the support to Kaunas district farmers is constantly increasing.

Conclusions

1. Farmers' farms of Kaunas region make up about 14 percent of all farms in the country, the majority being located in Kaunas district municipality.
2. Within the period of 2003-2015, the number of farmers' farms decreased by 61.3 percent and their utilised area decreased by 57.5 percent. The average farm size significantly changed within the period of 2003-2010 as it increased from 6.74 to 11.19 ha, the current size being about 7 ha. It was observed the majority of farms are of size ranging from 1 to 10 ha, and farms larger than 50 ha form the minority.
3. The analysis of data on agricultural land in use and crop declaration indicated that since 2013 the declared area of agricultural land in use and cropland has remained stable despite the fact the number of applications has increased. This shows that farmer-owned land areas are increasing. Winter wheat and meadows-pastures (up to 5 years) are mostly declared whereas rarer plants such as sunflowers are declared least.
4. In 2012, Kaunas district farmers received grants, the amount of which comprises 2.2 of total grant received by Lithuanian farms, in 2012 it comprised 2.9 percent, in 2013 – 3.0 percent. From 2013 until 2015 the grant amount did not change significantly. Although the grant amount to farmers is decreasing, the support to Kaunas district farmers is constantly increasing.

References

1. Jurkėnaitė N. (2012). *Lietuvos ūkininkų ūkių ekonominio gyvybingumo palyginamoji analizė*. Žemės ūkio mokslai. Nr.4, p. 288 - 298.
2. Kazakevičius Z. (2010). *Tiesioginės paramos Lietuvos ekologinės gamybos ūkiams efektyvumas*. Management theory and studies for rural business and infrastructure development. Nr. 20.
3. Kazakevičius Z. (2007). *Žemės ūkio subjektų struktūriniai ir veiklos pokyčiai*. Vadybos mokslas ir studijos – kaimo verslų ir jų infrastruktūros plėtrai. Nr.4.
4. Laurinkus S. *Nusitaikyta į opiausias kaimo problemas*. Valstiečių laikraštis, 2014-04-19. Nr. 32(9360).
5. Markevičius P. (2006). *Ūkininkų verslumas naujomis rinkos sąlygomis*. Vadybos mokslas ir studijos – kaimo verslų ir jų infrastruktūros plėtrai: tarptautinės mokslinės konferencijos straipsnių rinkinys, LŽŪU.
6. Stravinskienė V., Aleknavičius A., Aleknavičius P. (2015). *Ūkių žemės naudojimo perspektyvos Lietuvoje*. Žemės ūkio mokslai. Nr. 4, p. 216-228.
7. Offermann, F., Nieberg, H., & Zander, K. (2009). Dependency of organic farms on direct payments in selected EU member states: Today and tomorrow. *Food Policy*, 34(3), 273-279.
8. *Ūkininkavimo Europoje apžvalga*. Europos komisija. Interactive, Accessed in 2016-03-20 (http://europa.eu/rapid/press-release_MEMO-13-631_lt.htm).
9. VŠĮ „EKOagros“ veiklos ataskaita. Interactive, Accessed in 2016-03-24 (http://www.ekoagros.lt/uploads/file/VEIKLOS%20ATASKAITA%202012%20m_.pdf).

Information about author

Vilma Sinkevičiūtė – Lector, Aleksandras Stulginskis University. Address: Universiteto 10, LT-53067 Akademija, Kaunas distr., Lithuania. Tel. +370377523372, e-mail: vilma.sinkeviciute@gmail.com.