

Analysis of the Areas Declared in Aukštadvaris Regional Park and Paluknys Subdistrict

Giedrė Ivavičiūtė*^{1, 2, 3}, Rasida Vrubliauskienė¹

¹Aleksandras Stulginskis University

Studentų str. 11, Akademija, LT-53361 Kauno dc. E-mail ivavice@gmail.com

²Kaunas College of Forestry and Environmental Engineering

Liepų str. 1, Girionys, LT-53101 Kauno dc. E-mail ivavice@gmail.com

³Klaipėda State College

Jaunystės str. 1, LT-91274 Klaipėda, Lithuania. E-mail ivavice@gmail.com

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Abstract

Comparative analysis of the agricultural farming lands, situated in the picturesque Dzūkai upland of Aukštadvaris regional park of the south-eastern Lithuania, declared in 2008 and 2011 as well as payments received for areas declared is presented in the article. Almost entire territory is situated in Trakai district, only the small north-western part belongs to Prienai and a Kaišiadorys districts, therefore Paluknys subdistrict, situated in the south-eastern part of Trakai district and not falling into the protected area, is chosen for comparison purposes.

Key words: protected areas, regional park, agricultural lands, declared areas.

Anotacija

Straipsnyje pateikiama Aukštadvario regioninio parko, esančio pietryčių Lietuvoje, vaizdingoje Dzūkų aukštumoje, 2008 m. ir 2011 m. deklaruotų žemės ūkio naudmenų plotų bei gaunamų išmokų už deklaruotus plotus, lyginamoji analizė. Beveik visa teritorija yra Trakų rajone, tik nedidelė šiaurės vakarinė dalis priklauso Prienų ir Kaišiadorių rajonams, todėl palyginimui parinkta Paluknio seniūnija, esanti pietrytinėje Trakų rajono dalyje ir nepatenkanti į saugomą teritoriją.

Reikšminiai žodžiai: saugomos teritorijos, regioninis parkas, žemės ūkio naudmenos, deklaruoti plotai.

Introduction

Agriculture has been one of Lithuania's most important occupations for many centuries. Agriculture in Lithuania always had and has very important social, economical and ethno-cultural functions; therefore it is an exceptional (priority) branch of economy having large influence on the living nature. The entire environment surrounding us, landscape as well as the variety of the wildlife nature depend on the activity of agriculture, therefore the necessity to coordinate the activity of agriculture and the preservation of biodiversity arise.

Environmental requirements cause the particular problem for the development of agriculture (Aleknavičius P., Aleknavičius M., 2010). The interests of preservation and economic use unavoidably intercross due to the importance of the landscape and biodiversity, the uneven position of the valuables of natural and cultural heritage, the universal value of natural resources and human activity in protected areas. The economic activity in protected areas is being regulated (Raudonytė, 2009).

The fact that our country has insufficient possibilities of financial compensations for the solving of various problems inflames the situation, and the legal base of the environment protection is insufficiently perfect in some cases as well (Bukantis et al., 2008). Consequently, it is necessary to form the clear and sufficient policy over the compensation for the restrictions of the farming in protected areas, which should decrease the load of ordinary economic activity in protected areas and their usage should become more favorable for protected valuables.

However, the area of agricultural lands is limited, their productivity depends upon the soil characteristics of the locality, therefore, and this land should be protected in the same way as other non-renewable natural resources. The necessity to conserve and suitably use land as an important

component of natural environment is emphasized in strategic international and national documents (Aleknavičius P.; Aleknavičius A., 2010).

In one of these documents, i.e. in the Rural Development Program for Lithuania in the period of 2007-2013 (Lithuania, 2007), the priorities/objectives of the implementation of the second strategic axis are as follows: to protect and enhance biodiversity, to promote the use of environment-friendly farming practices (ecological farming, inducements for the representatives of the agrarian environmental protection programs, payments to farmers farming in the “Natura 2000” territories as well as in the lands designated for agricultural and forestry purposes), to take measures for the improvement of soil and water quality, to support first afforestation of agricultural lands and sustainable forest management, knowledge accumulation and the good farming experience and, without any doubt, large investments into the primary production and the processing industry of agricultural products according to the first axis, as well as diversification of the activity and the alternative environment-friendly activity, local cooperation and partnership, the objective of which is to improve living conditions in rural areas (according to the third axis).

After the achievement of the objectives of the strategy following the planned measures in the fields of ecological farming, renewable energy sources, climate change, soil protection and forestry, the EU environment protection requirements would be implemented.

The Ministry of Agriculture of the Republic of Lithuania indicates that 7.89 billion Lt (of which 6.097 billion Lt are received from EU funds) are intended for the implementation of the Lithuanian Rural Development Program for 2007-2013, 2 770.9 million Lt of which – for the second direction “Improvement of the environment and landscape”.

The aim of the investigation is to carry out the comparative analysis of the direct payments received in years 2008 and 2011 in Aukštadvaris Regional Park and Paluknys subdistrict.

The method of the investigation

The object of the investigation is the declared areas of Aukštadvaris regional park and Paluknys subdistrict.

Comparative, analytical as well as statistical and logical analysis methods were used for the investigation.

The analysis of the agricultural lands in Aukštadvaris regional park and Paluknys subdistrict was carried out following the data of the Agriculture information and rural business center on the declared areas of agricultural lands and crops in the year of 2008 and 2011.

Characterization of Aukštadvaris regional park

Aukštadvaris regional park is situated in southeastern Lithuania, in the most remarkable part of the Dzūkai upland. Almost entire territory is situated in Trakai district. Only the small Northwestern part belongs to Prienai and Kaišiadorys districts. The area of the regional park covers 17032.43 ha, in which Mergiškiai nature reserve (covering the area of 157 ha) is situated. There are 15 reserves in Aukštadvaris regional park: Antakmeniai, Tabaliukai, Verniejus, hydrographical reserves of the sources of the Strėva and Verknė, Mergiškiai, Saloviškiai, Spindžius, Vilkokšnis, Skrebis botanical reserve, Verknė botanical-zoological reserve, Moša archeological reserve, Aukštadvaris urbanistic reserve, etc.

27 territories correspond to the criteria of the habitats of European importance.

There are over 100 objects of cultural heritage in Aukštadvaris regional park (hereafter – RP): 39 archeological places, 33 places of interment, 20 mythological places, over 20 valuable constructions and paraphernalia and urbanized localities (Aukštadvario, 2011).

The entire territory of Aukštadvaris regional park is incorporated into the physical-geographical region of South Lithuania, into the sub-region of the Dzūkai upland. Hilly and lake

moraine uplands cover the largest part of the territory of Aukštadvaris regional park. Because of the expressive relief and the abundance of lakes the territory is especially valuable from the aesthetical point of view.

Surroundings of Aukštadvaris are the most picturesque sites in Lithuania, what creates good preconditions for the development of recreation and tourism.

Aukštadvaris regional park is famous for its clear and clean lakes, which occupies almost 8 percent of the whole territory.

When the Government of the Republic of Lithuania had approved the plan of the buffer and protection zones of Aukštadvaris regional park and its zones on 9 March 2005, the area of Aukštadvaris regional park increased by 482 ha (according to the new plan) and at present covers the area of 17032.43 ha. After the changes, the largest area is occupied by the functional priority zone – the territory of reserves covering 44.20 percent of the whole park's territory, and the ecological protection priority zone, covering 16.47 percent of the whole park's territory (Table).

Table. The areas of the functional priority zones of Aukštadvaris regional park (Aukštadvario, 2011)
Lentelė. Aukštadvario regioninio parko funkcinio prioriteto zonų plotai (Aukštadvario, 2011)

Number	The name of the functional priority zone	Area, ha	Percent from the RP area
1	Conservation priority zone – reserve	156.39	0.66
2	Conservation priority zone – parks	10551.10	44.20
3	Ecological protection priority zone	3932.69	16.47
4	Recreational priority zone	1474.29	6.18
5	Economic priority zone	692.64	2.9
6	The living zone	225.32	0,94
Total:		17032.43	71.35
The area of the buffer protection zones		6839.62	28.65
Total area:		23872.05	100

The average efficiency of the agricultural lands in Trakai district is 33.4 points, i.e. is smaller than the average point of the Republic of Lithuania (39.1).

The agricultural lands in Trakai municipality makes up 32.7 per cent, roads – 2.5 percent of the urbanized territory, water bodies – 4.9 percent, other lands – 10.2 percent (Trakų..., 2010).

The agricultural lands in Aukštadvaris RP make up 38.09 percent of the whole park's territory (Raudonytė, 2009) (Fig. 1).

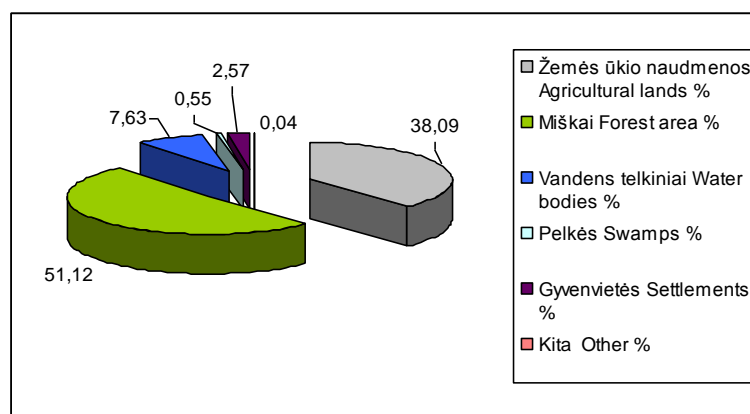


Fig 1. Distribution in percent of agricultural lands in Aukštadvaris RP
1 pav. Aukštadvario RP žemės naudmenų pasiskirstymas (procentais)

Forests cover the largest part of agricultural lands (51.12 percent). They are divided into forest massives of 100-1700 ha each. Park forests are very different (from the point of view of types, age, etc.). Pine-trees, birches, oaks, hornbeams grow in these forests (Aukštadvario, 2010).

Discussion of the results

Analysis of the areas declared in Aukštadvaris regional park and Paluknys subdistrict

Following the data of the Agriculture information and rural business center the declared area of agricultural lands and crops, in the year of 2008, occupy 1955.14 ha, it makes up 11.48 percent of the total regional park's area. The number of the farmers, who declared their farming lands, is 471. The average area of the declared farms is 4.15 ha.

In 2011, the total agricultural land and crop area declared in the regional park was 3167.84 ha (Fig. 2). i.e. larger by 1212.70 ha or 1.6 times more than in 2008. 635 farmers' farms were declared, i.e. by 164 farms more in comparison with 2008.

Paluknys subdistrict, situated in the south-eastern part of Trakai district, was chosen for the comparison of the use of agricultural lands in Aukštadvaris regional park. The comparative analysis of the declared data from Aukštadvaris RP and Paluknys subdistrict is being carried out in order to confirm the hypothesis that legal regulation has no significant influence on the agricultural land use in the regional park.

The territory covers the area of approx 14 thousand ha. There are 14 villages in the subdistrict. Due to the low productivity of soils in the subdistrict the most profitable is the production of dairy products. Part of the inhabitants upholds the traditional agriculture (Trakų, 2010).

In 2008 the declared area of the agricultural lands in Paluknys subdistrict covers 2065.45 ha and it makes up 14.75 percent of the total subdistrict's area. 164 farmers introduced declarations. The average area of the declared farms – 12.59 ha.

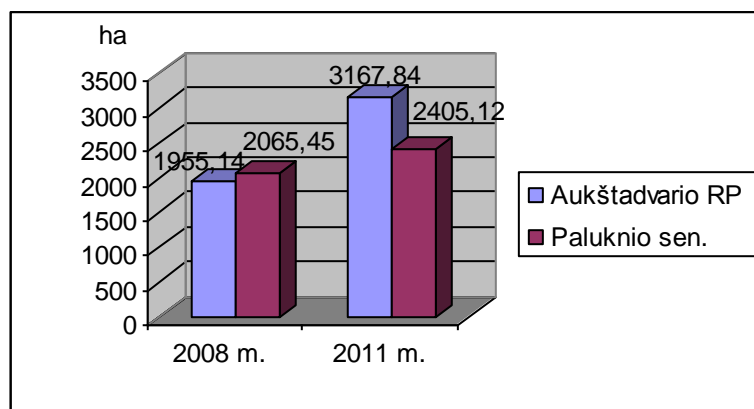


Fig 2. The total area declared in Aukštadvaris RP and Paluknys subdistrict, ha
2 pav. Bendras deklaruotas plotas ha Aukštadvario RP ir Paluknio sen.

The area declared in 2011 was 2405.12 ha. The number of declared farms – 193 (Fig. 3), i.e. by 17.78 percent more than in 2008.

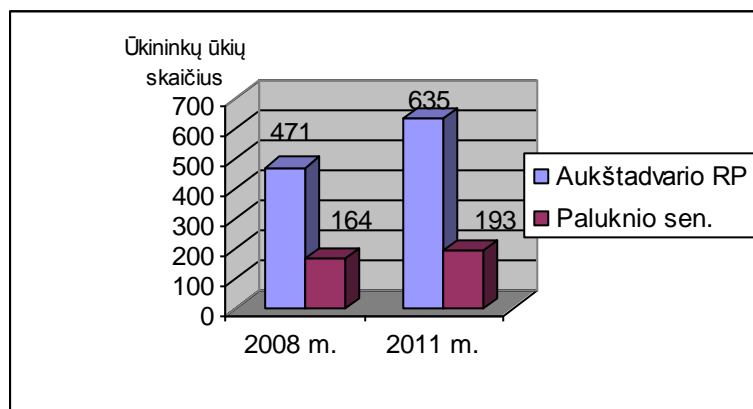


Fig. 3. The number of farmers' farms declared in Aukštadvaris RP and Paluknys subdistrict
3 pav. Deklaruotų ūkininkų ūkių skaičius Aukštadvario RP ir Paluknio sen.

So, the fulfilled analysis of the declared data shows that from 2008 up to 2011 the number of declared farmers' farms and the total declared area has increased both in the regional park and in the subdistrict. The number of farmers' (who had declared areas) farms in the park increased by 34.82 percent, in the subdistrict – by 17.68 percent. The total declared area increased by 62.03 percent in Aukštadvaris regional park and by 16.45 percent in Paluknys subdistrict.

The Rural Development Policy for 2007-2013 and payments for the areas declared in Aukštadvaris RP and Paluknys subdistrict

As far back as 1997, at the conference of the European Council (held in Luxemburg) the European agricultural model was recognized as the base for the further development of the European agricultural policy. The main characters of this model are as follows: the stable and multi-functional agriculture and the multi-sectoral rural development. This model is substantiated by the balance between economical, social and ecological valuables. It influences the multi-functionality of the activity of rural localities manifesting not only in the agricultural production but in the preservation of rural environment and landscape, and in the sustainable development in rural regions as well (Treinys, 2005).

The main priorities of the rural development of the European Union and the Republic of Lithuania for 2007-2013 are as follows: expansion of the competitive ability of agricultural sector; improvement of the condition of the environment and landscape; increase of the life quality in rural areas and diversification of economical activity.

Special financial axes are planned for the achievement of every priority. One of the financial axes of the rural development policy is the improvement of the environment and landscape. Following priorities are being defined for this axis (Lietuvos..., 2007):

- Environment-friendly farming practices (23.36 percent of the main support of axis 2). It is intended to limit the intensity of farming activity in the places of high nature and landscape value.
- Climate change reduction (16.93 percent of the main support of axis 2). It is aimed to combat climate change through rational use of available land resources in particular abandoned agricultural land not used for agriculture, as well as sustainable forestry development through afforestation.
- Preservation of biodiversity and development of traditional agrarian localities of high nature value (59.70 percent of the main support of axis 2). It is intended to ensure that suitable farming methods and forest management practice should be applied in the areas of biological variety.

On the other hand, there are areas in which economical activity of the necessary level is not maintained and it endangers natural valuables existing in them as well as there are areas, which in the future will, in all probability, become abandoned, if no actions will be taken. Therefore it is necessary to implement actions stimulating local inhabitants to be occupied in suitable economic activity not harming valuables of the environment. For this purpose such measures as „Nature 2000“, the support for farmers farming in less favourable for farming areas, afforestation and the sustainable development of forest husbandry, are invoked. The support for farmers farming in less favourable for farming areas is closely connected with the integrated support related principle, according to which farmers participating in the above-mentioned program must maintain good agricultural and environmental conditions in the supported land areas.

Compensations are paid to those farming in the localities with worse natural conditions for farming or some environmental restrictions are predicted, as well as the support is given for the methods of agricultural production stimulating environment protection and landscape protection (Žemės..., 2007).

The total area of agricultural lands, crops etc., for which the compensational payment according to the programs „Ecological Farming“, „Landscape Management“, „At-risk Water Bodies' Condition Improvement“ is paid, should not be less than 1 ha. The field area, for which payments are asked according to the following programs, such as „Landscape Management“, „The Management of Natural and Semi-natural Meadows“, „Wetland Management“, „The Management of Water Bodies' Coastal Protection Zone in Meadows“, „Protection of Water Bodies from Pollution and Soil Erosion in Arable Lands“, „Stubble Fields During Winter“, „Strips of Woody Plants in Arable Land“, „Ecological Farming“, „The Management of at-Risk Water Bodies“, should not be smaller than 0.1 ha (Lithuanian, 2008).

In Aukštadvaris regional park, direct payments are paid to 470 farmers for the area of 1921.56 ha (Fig. 4), i.e. 98.28 percent from the total declared area and 29.62 percent from the regional park's agricultural land area.

In 2011, 623 farmers (98.11 percent) in the regional park were paid direct payments for 3101.18 ha of agricultural land area, i.e. 97.90 percent of the total declared area and 47.80 percent of the regional park's agricultural land area. So, in the regional park in 2011 the declared agricultural land area (for which direct payment were paid) was 61.39 percent higher.

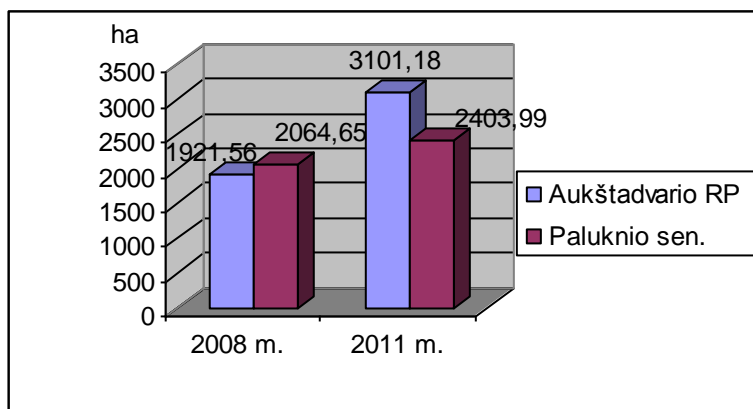


Fig. 4 Agricultural land areas in Aukštadvaris RP and Palukny subdistrict, for which direct payments are paid, ha

4 pav. Žemės ūkio naudmenų plotai ha, už kuriuos mokamos tiesioginės išmokos Aukštadvario RP ir Paluknio sen.

In 2008, 163 farmers (from 164) in Palukny subdistrict, who declared areas, get direct payment for the area of 2064.55 ha, i.e. 99.96 percent from the total declared area.

In 2011, direct payments for the area of 2403.99 ha were paid to 192 farms from 193 farmers' farms, i.e. 99.95 percent. Comparing with the year 2008, the declared agricultural land areas, for which direct payments were paid, had decreased by 16.44 percent.

In 2008, 56 farmers in Aukštadvaris regional park, are not paid direct payments for the area of 33.58 ha, i.e. for 1.72 percent from the total declared area. In 2011, 135 farmers' farms did not get payments for 66.66 ha (Fig. 5) and it makes up 2.10 percent of the total declared area

In the subdistrict, direct payments were not paid only to 1 farmer, in 2008 – for the area of 0.8 ha and in 2011 – for the area of 11.3 ha.

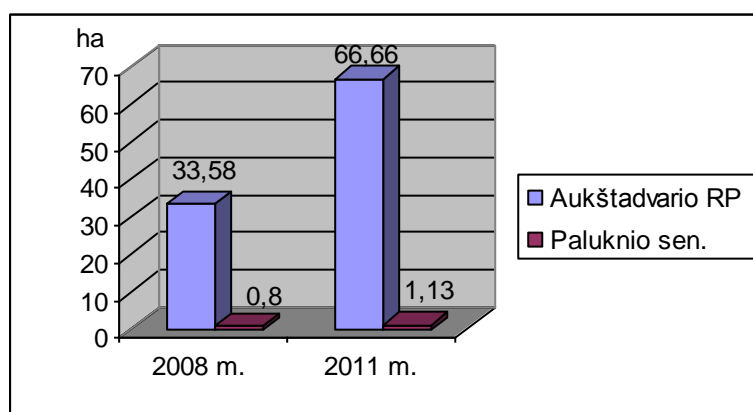


Fig. 5 Areas, for which direct payments were not paid in Aukštadvaris RP and Palukny subdistrict, ha
 5 pav. Plotai ha, už kuriuos nemokamos tiesioginės išmokos Aukštadvario RP ir Paluknio sen.

In the highly disadvantaged areas of Aukštadvaris regional park (the total area declared – 1818.42 ha (Fig. 6) or 93 percent of the total area declared)) 445 farmers farmed (94.48 percent) in 2008, and in 2011 – 579 (91.18 percent of all who had declared agricultural lands). The area of the highly disadvantaged areas made up 2865.35 ha in 2011 (90.45 percent from the total area declared).

In the highly disadvantaged areas of Palukny subdistrict (the total area declared 1971.43 ha or 95.45 percent of the total area declared) 162 farmers (98.78 percent) farmed in 2008. In 2011 – 184 or 95.34 percent, and the area of highly disadvantaged areas made up 2200.07 ha (91.47 percent of the total area declared).

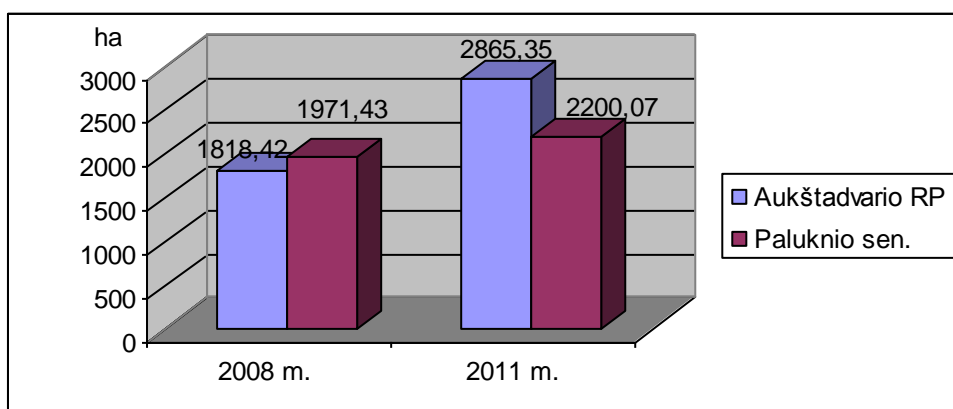


Fig. 6 The highly disadvantaged areas in Aukštadvaris RP and Paliekny subdistrict, ha
 6 pav. Didelio nepalankumo vietovės Aukštadvario RP ir Paluknio sen. ha

In 2008, in Aukštadvaris regional park the total area of less unfavourable declared localities is 90.89 ha (4.65 percent), the number of farmers is 25. While in 2011 the declared area was 177.16 ha (5.59 percent), and the number of farms was 45.

No data on the farming in the highly disadvantaged areas of Paluknys subdistrict was reported. The area of 4.9 ha (0.2 percent) was declared in 2011.

In Aukštadvaris regional park 21 farmers (2.83 percent) apply measures of ecological farming in the area of 151.84 ha (Fig. 7) and it makes up 7.77 percent from the total declared area. In 2011, 42 farmers' farms (6.61 percent) applied the above measures in the area of 598.3 ha and it makes up 18.89 percent of the total area declared.

Only 1 farmer from Paluknys subdistrict applies measures of ecological farming in the area of 15.19 ha. It makes up 0.74 percent of the total area declared. In 2011, the above measures were applied already in 62.22 ha (2.59 percent) of 3 farms.

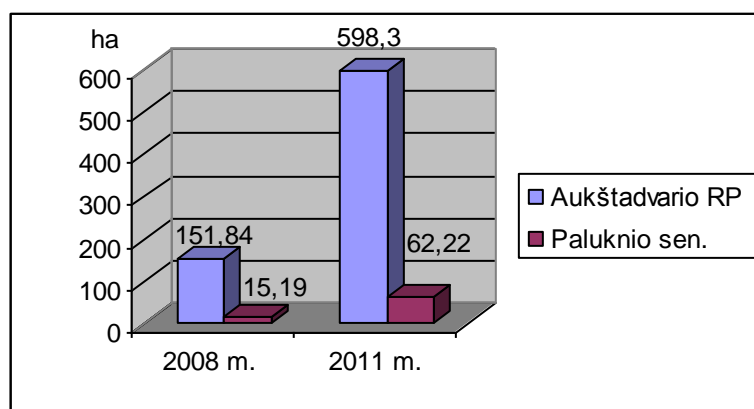


Fig. 7 Areas, in which ecological farming measures are being applied, ha
7 pav. Plotai ha, kuriuose taikomos ekologinio ūkininkavimo priemonės

In 2008, 7 farmers farm in Aukštadvaris regional park in the area of 20.79 ha of the Natura 2000 territory, in 2011 – 6 farmers in the area of 21.38 ha. So, the number of farms has decreased, but the area has increased by 0.59 ha. In 2011 – 6 farmers in the area of 21,38 ha.

Support recipients farming in the park get payments for the declared areas according to the measure „Landscape Management“ of the Lithuanian Rural Development Program for 2007-2013. In the field of activity „The Management of Natural and Semi-natural Meadows“ the area of 12.28 was declared (0.64 percent of the total agricultural land area, for which direct payments are paid). In 2011 – 58.56 ha, i.e. this area has increased by 4.77 times in comparison with the year 2008.

In 2008, the declared area in Paluknys subdistrict (in the above mentioned field) was 93.62 ha (4.53 percent), in 2011 – 152.94 ha, i.e. 63.36 percent more than in 2008. In the activity „Wetland Management“ the area of 0.7 ha was declared in 2011, for which the direct payments are received.

Support recipients participating in the activity „The Management of Natural and Semi-natural Meadows“ of the program „Landscape Management“ must do the following: not to use pesticides, fertilizers and lime measures in meadows, to mow meadows every year, not to plough and sow meadows, to preserve single trees etc. (Lithuania, 2008).

In 2008, according to the field of activity „Stubble Fields During Winter“ the total area declared was 2.23 ha, of which oat and stubble occupied the area of 1.27 ha, and spring unmalted barley and stubble occupied the area of 0.96 ha. The total area declared in 2011 was 1.95 ha, which was occupied by oats and stubble. In 2011, the area of spring unmalted barley and stubble hasn't been declared.

In 2008, rye and stubble occupied the area of 8.15 ha in the subdistrict (0.4 percent of the total agricultural land area, for which direct payments were paid), cereal-albumen (peas, field beans and sweet lupines) – oily plant mixtures (in which albumen plants predominate) and stubble occupied

30.00 ha (1.45 percent). In 2011, the direct payments were paid for buckwheat and stubble (22.00 ha), as well as for spring wheat and stubble (5.40 ha). The area of rye and stubble hasn't been declared, cereal-albumen (peas, field beans and sweet lupines) – oily plant mixtures (in which albumen plants predominated) and stubble occupied 24.6 ha, i.e. 5.4 hectares less than in 2008. According to the activity „Stubble Fields During Winter“ the areas declared in the subdistrict have increased by 36.30 percent.

Support recipients participating in the activity „Stubble Fields During Winter“ of the program „Landscape Management“ must keep to special requirements: to put in order straws after the harvest while putting them into bundles, chopping up and spraying them on the surface, not to spray pesticides and herbicides after the harvest, not to spray fertilizers on stubbles, not to lime, not to pasture livestock, etc. (Lithuania, 2008).

The areas declared in Aukštadvaris regional park (according to the measure „The First Afforestation of the Land Designated for Agricultural Purposes“ of the Lithuanian Rural Development Program for 2007-2013) are distributed in the following way:

- conifers with soft deciduous trees (not less than 20 percent) or soft deciduous trees (in 2008 – 1.22 ha, in 2011– 2.24 ha);
- conifers and (or) soft deciduous trees with the impurity of not less than 20 percent of hard deciduous trees and (or) lime-trees (in 2008 – 2.99 ha, in 2011 – 6.7 ha);
- hard deciduous trees, lime-trees, net plantations of aspen breeding (haven't been declared in 2008, in 2011 – 0.74 ha).

In 2008, according to the measure „The First Afforestation of the Land Designated for non Agricultural Purposes and the Abandoned Agricultural Land“ the area of 3.68 ha (conifers and (or) soft deciduous trees with the impurity of not less than 20 percent of hard deciduous trees and (or) lime-trees) was declared.

In 2011, according to the measure „The First Afforestation of the Land Designated for non Agricultural Purposes and the Abandoned Agricultural Land“ and “Forest-environment Payment” of the Lithuanian Rural Development Program for 2007-2013 the areas, for which payments were received are as follows:

- conifers with soft deciduous trees (not less than 20 percent) or soft deciduous trees (1.09 ha);
- conifers and (or) soft deciduous trees with the impurity of not less than 20 percent of hard deciduous trees and (or) lime-trees (10.46 ha).
- payments for the failure of main loggings in the indigenous forest habitats (3.48 ha). In Paluknys subdistrict, the areas according to the above-mentioned measures were not declared.

The ecological farming, afforestation and the expansion of woundedness in protected areas, as well as others environment protection measures are very important factors for environment protection, ecological landscape, preservation of cultural heritage when evaluating such aspects as the rational use of agricultural lands and other ecological, social and economical functions.

Conclusions

1. The carried out analysis of the functional priority zones of Aukštadvaris regional park shows that the conservation priority area, i.e. reserves cover the largest area (44.20 percent). Forests cover the largest part of the agricultural land area (51.12 percent). Agricultural land covers 38.09 percent of the regional park's territory.
2. After the analysis and comparison of the data declared in 2008 and 2011 we received that the number of farmers' farms declared in Aukštadvaris RP and Paluknys subdistrict, as well as the total area declared has increased in the following way: the area larger by 62.03 ha was declared in the park (comparing with the year 2008), in the subdistrict – by 16.45 percent.

3. In 2011, the declared agricultural land area (for which direct payments were paid) was by 61.39 percent larger, in the subdistrict – by 16.44 percent.
4. In 2008, 21 farmers' farms applied ecological farming measures in Aukštadvaris RP, in 2011 – 42. The area, in which the above-mentioned measures have increased almost four-fold, had been declared (in 2008 – 151.84 ha, in 2011 – 598.3 ha). In 2008, only 1 farmers' farms applied ecological farming measures in Paluknys subdistrict, in 2011 – 3. The area has increased four-fold.
5. In the activity field „Natural and Semi-natural Grassland Management“ the declared area was 12.28 ha in 2008, in 2011 – 58.56 ha, i.e. this area has increased by 4.77 times. In Paluknys subdistrict in 2008 the declared area in the above-mentioned activity field has increased by 93.62 ha, in 2011 – by 152.94 ha, i.e. 63.36 percent more than in 2008.
6. According to the activity field „Stubble Fields During Winter“, the total area declared in the park in 2008 was 2.23 ha, in 2011 it decreased up to 1.95 ha, however, the area declared in the subdistrict according this field has increased by 36.30 percent in 2011.
7. In Aukštadvaris RP according to the measure „The First Afforestation of the Land Designated for Agricultural Purposes“ 4.21 ha were declared in 2008, in 2011 – more than twice (9.68 ha). According to the measure „The First Afforestation of the Land Designated for non Agricultural Purposes and the Abandoned Agricultural Land“, the area of 3,68 ha was declared in 2008, in 2011 – 15.03 ha, i.e. more than four times. In Paluknys subdistrict the area hasn't been declared neither in 2008 nor in 2011.
8. It is recommended to develop animal-breeding as well as ecological farming for the improvement of the conditions of the environment and landscape because of unfavourable localities in Aukštadvaris RP.

List of literature

1. Aleknavičius P., Aleknavičius M. Rational Land Use Planning when Preparing Master Plans of Administrative Territories. *Vagos. Mokslo darbai*, 39(86). LŽŪU, 2010. P. 37–45.
2. Aleknavičius P., Aleknavičius M., Tumelionis A. Privačios žemės ūkio paskirties žemės perleidimų priežastys ir tendencijos. *Vagos. Mokslo darbai*, 37(84). LŽŪU, 2009. P. 46–55.
3. Aleknavičius P., Aleknavičius A. Žemės ūkio naudmenų pokyčių perspektyvos Lietuvoje. *Vagos. Mokslo darbai*, 39 (86). LŽŪU, 2010. P. 28–36.
4. Aukštadvario regioninis parkas. [interaktyvus]. [žiūrėta: 2011-12-09]. Prieiga per internetą: www.aukstadvaris.lt/parkas.htm.
5. Bukantis A., Gedžiūnas P., Giedraitienė J. ir kt. *Lietuvos gamtinė aplinka, būklė, procesai ir raida*. Aplinkos apsaugos agentūra, Vilnius, 2008.
6. Ivavičiūtė G. The management of Lithuanian Protected areas. *Environmental Engineering* [internetinis išteklius]. *The 7th International Conference*, May 22-23, 2008. *Proceedings*, Vol. 1. Vilnius, 2008. P. 1–7.
7. Ivavičiūtė G. The Use Of Agricultural Lands In Aukštadvaris Regional Park. Online ISBN: 978-9955-28-831-2 CD, Vilnius, 2011. P. 120–126.
8. Ivavičiūtė G., Gurskienė V. Lietuvos saugomų teritorijų naudojimo reglamentavimas. *Vagos. Mokslo darbai*, 39(86). LŽŪU, 2010.
9. Lietuvos Respublikos saugomų teritorijų įstatymo pakeitimo įstatymas (2001 12 04 Nr. IX-628). *Valstybės žinios*. 2001, Nr. 108(3902).
10. Lietuvos Respublikos Vyriausybės nutarimas „Dėl Aukštadvario regioninio parko ir jo zonų bei buferinės apsaugos zonos ribų plano patvirtinimo“ (2005m. kovo 9 d. Nr. 258). *Valstybės žinios*, 2005. Nr. 34(1100).
11. Lietuvos Respublikos žemės ūkio ministro įsakymas „Dėl žemės ūkio ministro 2007 m. balandžio 6 d. įsakymo Nr. 3D-152 „Dėl Lietuvos kaimo plėtros 2007-2013 metų programos priemonės „Agrarinės aplinkosaugos išmokos“ programų „Kraštovaizdžio tvarkymas“, „Ekologinis ūkininkavimas“ ir „Rizikos“ vandens telkinių būklės gerinimas“ įgyvendinimo taisyklių patvirtinimo“ pakeitimo“ (2008 m. balandžio 11 d. Nr. 3D-202). *Valstybės žinios*, 2008, Nr. 43(1613).
12. Lietuvos žemės ūkio ministerija. *Nacionalinė 2007–2013 m. kaimo plėtros strategija*. Vilnius, 2007.
13. Raudonytė J. 2009. Ūkinė veikla Lietuvos valstybiniuose parkuose. *Annales Geographicae*, T. 42(1–2).
14. Trakų rajono savivaldybė. [interaktyvus]. [žiūrėta: 2010-12-19]. Prieiga per internetą: www.trakai.lt/index.php?1356635623.

15. Treinys M. *Daugiafunkcinio kaimo plėtra. Lietuvos kaimo raida*. Vilnius, 2005. P. 7.
16. Žemės ūkio informacijos ir kaimo verslo centras. *Informacija apie 2009 metais Lietuvoje deklaruotus žemės ūkio naudmenų ir pasėlių plotus*. Vilnius, 2009.
17. Žemės ūkio ministerija. Lietuvos kaimo plėtros 2007–2013 metų programos priemonės. [interaktyvus]. [žiūrėta: 2011-12-11]. Prieiga per internetą: [http://www.zum.lt/min/failai/KPP LT final 09 19 svarus.pdf](http://www.zum.lt/min/failai/KPP_LT_final_09_19_svarus.pdf).

Aukštadvario regioninio parko ir Paluknio seniūnijos deklaruotų plotų analizė

(Gauta 2012 m. sausio mėn.; atiduota spaudai 2012 m. kovo mėn.; prieiga internete nuo 2012 m. balandžio 23 d.)

Santrauka

Straipsnyje pateikiama Aukštadvario regioninio parko, esančio pietryčių Lietuvoje, vaizdingoje Dzūkų aukštumoje, 2008 m. ir 2011 m. deklaruotų žemės ūkio naudmenų plotų bei gaunamų išmokų už deklaruotus plotus, lyginamoji analizė. Beveik visa teritorija yra Trakų rajone, tik nedidelė šiaurės vakarinė dalis priklauso Prienų ir Kaišiadorių rajonams, todėl palyginimui parinkta Paluknio seniūnija, esanti pietrytinėje Trakų rajono dalyje ir nepatenkanti į saugomą teritoriją.

Remiantis Žemės ūkio informacijos ir kaimo verslo centro duomenimis, Aukštadvario regioniniame parke bendras deklaruotas žemės ūkio naudmenų ir pasėlių plotas 2008 m. – 1955,14 ha, tai sudarė 11,48 proc. viso regioninio parko ploto. Deklaruotų ūkininkų ūkių skaičius – 471, tačiau 2011 m. šis skaičius išaugo iki 635, t. y. padidėjo 34,82 proc., o bendras deklaruotas plotas lyginant su 2008 m. padidėjo iki 3167,84 ha arba 62,03 proc.

Paluknio seniūnijoje 2008 m. deklaruotas žemės ūkio naudmenų plotas – 2065,45 ha ir tai sudarė 14,75 proc. visos seniūnijos ploto. Deklaruotų ūkininkų ūkių skaičius – 164. 2011 m., kaip ir regioniniame parke, deklaruotų ūkininkų ūkių skaičius bei deklaruotas plotas išaugo atitinkamai 17,68 proc. ir 16,45 proc.

2008 m. Aukštadvario regioniniame parke 470 ūkininkų buvo išmokėtos tiesioginės išmokos už 1921,56 ha žemės ūkio naudmenų plotą, t. y. 98,28 proc. nuo bendro deklaruoto ploto ir 29,62 proc. nuo regioninio parko žemės ūkio naudmenų ploto. 2011 m. regioniniame parke 623 ūkininkams (98,11 proc.) buvo išmokėtos tiesioginės išmokos už 3101,18 ha žemės ūkio naudmenų plotą, t. y. 97,90 proc. nuo bendro deklaruoto ploto.

2008 m. Paluknio seniūnijoje iš 164 ūkininkų, deklaravusių plotus, 163 buvo mokamos tiesioginės išmokos už 2064,65 ha žemės ūkio naudmenų plotą, t. y. 99,96 proc. nuo bendro deklaruoto ploto. 2011 m. iš 193 ūkininkų ūkių 192 ūkiams išmokėtos tiesioginės išmokos už 2403,99 ha plotą, t. y. 99,95 proc.