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EUROPEAN UNION SUPPORT FOR AFFORESTATION IN POLAND – PERFORMANCE AND RESULTS

Key words: afforestation measure, forest area, forests, Rural Development Programme

ABSTRACT. The aim of the paper is to evaluate the effects of EU support for afforestation in Poland. The research concerns afforestation measures under three subsequent Rural Development Programmes: 2004-2006, 2007-2013, 2014-2020. The examined period covers the years between 2004 and 2018. The analysis indicated that during the examined years about 80,000 ha of land were afforested. Thanks to the measure, forest area in Poland increased by 0.87%. The highest effect of the measure was achieved under RDP 2004-2006. The share of afforested area under that RDP was estimated to be at nearly 50% of total afforested area and in the case of RDP 2007-2013 at 46.7%. Under the current RDP 2014-2020, the interest of eligible agents in the measure and results are very modest. The afforested area, after five years of the financial perspective, was thirteen times lower than during three years of RDP 2004-2006. Although a rather unambitious target was set under RDP 2014-2020 – support for 82,000 ha of afforested land – small interest in new afforestation under the measure will probably be a barrier for achieving the target. The modest result is caused by a few factors, such as terms of the measure or farmer interest in different forms of support for agricultural activity.

INTRODUCTION

The European Union's Common Agricultural Policy (CAP) has evolved since being established in 1962. Initially, it focused on food security, but gradually new important phenomena and problems were taken into consideration, such as competitiveness, consumer and environmental priorities and wider rural development. In the beginning, the rural development policy, as a component of CAP, focused on agriculture and its structural adjustments. In the early 1970s, the rural development policy recognised the problem of less favoured areas. In the 1980s, the concept of broadening rural development policy was discussed. Finally, it was formally recognised by the European Union (EU) in its 1988 communication "The future of rural society". The CAP reform of 1992 expanded CAP accompanied measures for such areas as the agri-environment, early retirement and afforestation of agricultural land. These measures were included in subsequent revisions of the rural development policy: in

1999 – known as Agenda 2000¹, in June 2003² and in 2013 [EC 2013], and as a result, in Rural Development Programmes (RDPs): 2000-2006, 2007-2013, 2014-2020.

As Poland joined the EU in 2004, it implemented three RDPs: RDP 2004-2006 (during the financial perspective of 2000-2006), RDP 2007-2013 and RDP 2014-2020. However, it is necessary to point out that in 1995, many years before EU accession, Poland set up a measure called the National Programme for Expanding Forest Cover³. The document was modified several times [Kaliszewski et al. 2016, Malczyk, Świeżak 2008, Kazak et al. 2016].

In 1997 the Council of Ministers adopted the document ‘National Policy on Forests’, which stated that forest cover should reach 30% of the total area of the country by 2020 and 33% by 2050. It stemmed partly from disseminating and generally approving the concept of sustainable development that originated from the report “Our Common Future”, published by Brundtland Commission in 1987. Concerns about forests are an important element of operationalisation of ideas of sustainable development.

The inclusion of afforestation into the scope of interest of rural development policy was a result of acknowledging a vast range of benefits provided by forests. FAO’s Report “The State of the World’s Forests” [FAO 2018] delivers an insightful list of them. Different kinds of advantages are indicated as a means for achieving ten Sustainable Development Goals. The publication shows the importance of forests for the economy, environment and social life. The list is a modified version and does not show the vast range of dimensions. Forests:

- are vital sources of income, livelihoods and well-being for rural populations, particularly indigenous people, smallholders, those living in close proximity to forests, and those who make use of trees outside forests;
- are a source of food and dietary diversity;
- offer important opportunities for women’s participation in public life;
- are an integral element of the water cycle: (regulation of streamflow, groundwater recharge, cloud generation and precipitation, natural water purification and filtering, reduction of soil erosion, sedimentation of water bodies);
- supply wood fuel for cooking, heating and industrial needs;
- provide an occupation for people especially in remote rural areas;
- greatly contribute to improving the well-being of citizens by providing sociocultural and environmental benefits;
- remove pollution by carbon sequestration, reduce storm water and as a result of shade save energy;
- are a resource of goods that can substitute oil-based products (construction, pharmaceutical and food industries);
- play a crucial role in the accumulation of greenhouse gases in the atmosphere;
- are among the most important repositories of biodiversity;
- have protective functions as they reduce erosion and the risk of landslides, floods and droughts, and prevent desertification and salinization.

¹ It established the rural development policy as the 2nd pillar of CAP [EC 1999].

² A new financial instrument was introduced – the European Agricultural Fund for Rural Development EAFRD [EC 2005].

³ A National Programme for Afforestation was prepared in 1993 by the Forest Research Institute on the request of the Ministry of Environment. It was accepted by the Ministry Council on 23 June 1995. Since then, it was modified several times.

The aim of the paper is to evaluate the effects of the EU support for afforestation in Poland. The research focuses on such issues as: (i) a comparative evaluation of the terms of support in subsequent RDPs, (ii) the size of interest in the afforestation measure, (iii) the effects of the measure.

The paper is organised as follows. In the beginning, the characteristics of the forestation problem in Poland in comparison to other EU countries is presented. Next, the evolution of access terms for participation in the afforestation measure between 2004 and 2018, under three subsequent RDPs, is given. It is followed by an analysis of trends in the interest of eligible age in the measure and the effects of the measure.

RESEARCH MATERIAL AND METHODS

The examined period covers the years 2004-2018. Since Poland joined the EU in 2004, three RDPs have been introduced: RDP 2004-2006 (financial perspective 2000-2006), RDP 2007-2013 and RDP 2014-2020 (current perspective). To display the background of the studied issues, some data for previous years were used.

Data and information were taken from The Central Statistical Office of Poland, The Agency for Restructuring and Modernization of Agriculture (ARMA, a payment agency), The Food and Agriculture Organization of the United States (FAO) and relevant literature. The statistics illustrate the scope of the problem, show the scale of changes and their tendencies. However, the data on the effects of support, published by ARMA for every year, are presented in a different way and various degree of aggregation. Due to this fact, the effects are assessed for entire periods of particular financial perspectives.

A short overview of benefits offered by forests suggests very different possible results of afforestation. In the paper, an analyses of the effects of the afforestation measure focus on the afforested area as a precondition to gaining positive forest outcomes in the future. The number of applications is the second indicator as afforestation is a source of income for beneficiaries.

The average rate of forestation for regions (Europe and the EU) can be calculated in different ways, for example as an average of country rates or as a proportion of forest area to region area. In the paper the second method is applied.

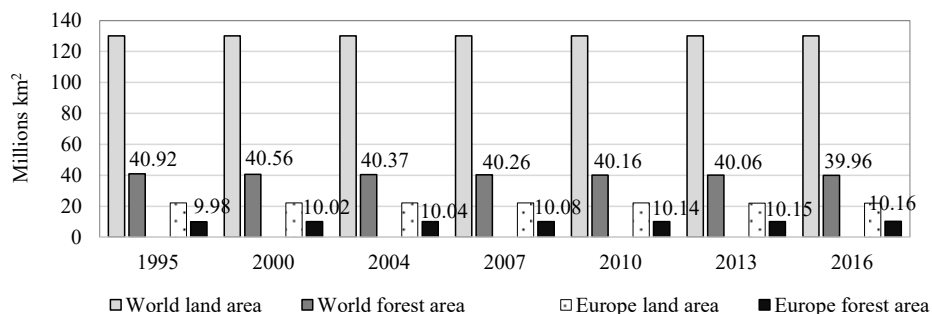
The analyses are partly of comparative character. To carry them out, statistical methods were applied.

RESULTS OF RESEARCH

FORESTATION IN POLAND IN COMPARISON TO EUROPE

In 2016 total world forest area amounted to 39.96 m square kilometres (Figure 1). In relative terms, it means that the forest covered 31.7 % of the world's land surface. Since 1995 to 2016, forest area declined by 2.4% and the proportion of forest in total land area dropped by 0.74 percentage points (p.p.). Europe⁴ accounts for one quarter of the world's forest area. As during the aforementioned period, in Europe, forest area increased by 1.8%, the proportion of Europe in total forest area increased slightly from 24.4% to 25.4%.

⁴ According to FAO's methodology, the total territory of Russia is treated as Europe.

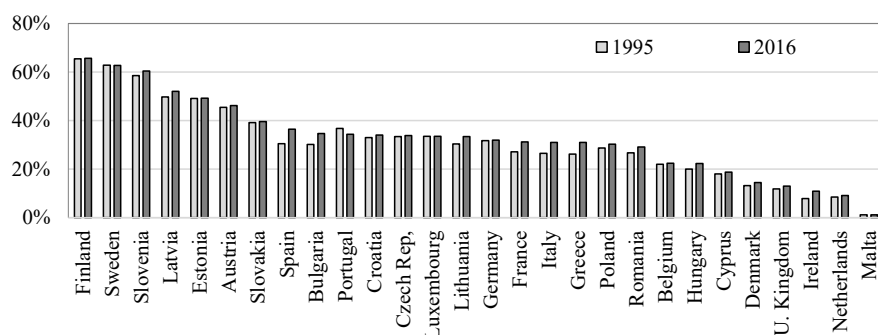


Note: Data for Europe include the total area of Russia

Figure 1. Area of land and forest in the world and Europe in 1990-2016

Source: [FAO 2019]

In the examined period, in the EU, the rate of forestation⁵ was higher than in Europe (without Russia). Between 1995 and 2016 it rose from 34.52% to 36.82%, while for Europe from 31.73% to 32.4%. However, as forest area is unequally located over European territory, the ratio varied noticeably between countries, with the highest level for Finland and the lowest for Malta (Figure 2). In 2016, the ratio exceeded a level of 50% for four countries: Finland, Sweden, Slovenia and Latvia; and was below 20% for six countries: Cyprus, Denmark, the United Kingdom, Ireland, the Netherlands and Malta. It is important to notice that for the vast majority of EU member countries the rate of forestation increased. Only in Portugal and Sweden did a decline take place, in the case of the latter a very small one. For Luxembourg and Malta the ratio did not change, and for Finland, Estonia, Germany, Belgium, the Czech Republic and Slovakia the increase was smaller than 0.5 p.p. The highest improvement occurred in Spain where the ratio soared by more than 6 p.p. Quite a big increase, between 4.0 and 5.0 p.p., was observed in Greece, Italy, Bulgaria and France.



Note: For 1995 data for Luxembourg and Belgium in FAO's statistics are combined, so for Luxembourg the data was assessed at the 2000 level

Figure 2. The forestation ratio in EU member countries in 1995 and 2016

Source: [FAO 2019]

⁵ The proportion of forest area in the EU area.

Regional variances in the rate of increase in forest area have been a result of many determinants. Their influence has differed noticeably between countries. After World War II, compensation for over cutting during the war was very important for many affected countries as they wanted to achieve timber self-sufficiency [Gold 2003]. Agricultural land abandonment, rural emigration processes, legal restrictions or the EU support for afforestation are other important factors, however the list of factors encompasses many others [Zanchi et al. 2007].

Forest area in Poland, in 2016, amounted to 94,562 square kilometres [FAO 2019], so the rate of forestation was 30.2% – some p.p. below the rate for the EU and about 5,000 square kilometres more than in 1995. In the course of 1995-2016, the rate of forestation rose by about 1.55 p.p. In comparison to the rate of change in the EU as a region, it is rather a small increase. However, bearing in mind that afforestation of so called ‘old EU members’ was supported under rural development policy since 1993, it is important to recognise the problem since 2004, when Poland, together with 9 other countries, joined the EU. The data showed that between 2004-2016, the forestation rate for Poland increased by 0.9 p.p. (from 91,728 square kilometres), while for the EU by 1.2 p.p. It shows that although Poland was granted access to the same measure as other EU members, the increase in forestation was below average. The spatial distribution of forests is very uneven. The higher level of the forestation rate is observed in the western and north-western part of Poland [Polna 2017]. The forest ownership structure in Poland is of a special character with the public sector prevailing in the structure. In 1995, 82.93% of forest area belonged to the public sector [GUS 2017]. By 2016, participation fell slightly to 80.8% because of an increase in private forest area, while the area of public forests remained nearly unchanged.

EVOLUTION OF TERMS OF THE AFFORESTATION MEASURE IN SUBSEQUENT RDPS

Since 2004, afforestation measures under RDPs have been implemented three times. Their comparative characteristics are presented in Table 1.

The comparative analyses of characteristics of afforestation measures in subsequent RDPs in Poland indicate the evolution of aims and terms. There were three enumerated targets of the measure in RDP 2004-2006, each of them rather of environmental nature: an increase in forest area, the maintenance and strengthening of ecological stability through a reduction of forest fragmentation and establishing ecological corridors as well as an enhancement of forest participation in the global carbon balance. In 2007, a strict economic target appeared – an increase in the economic value of low quality land. In RDP 2004-2006, only agricultural land (arable land, meadows, orchards) could be afforested. In two following financial perspectives, the limitation was relaxed and other kind of land could be taken into consideration. However, when ecological organisations indicated that afforestation of meadows causes degradation of the natural environment, since 2007 meadows have been excluded [Rowiński 2008].

The next change concerns beneficiaries of the measure. In RDP 2004-2006, farmers, farmer groups (minimum 3 persons) and cooperatives could apply for the support. Since 2007 cooperatives have been excluded, but aside from farmers or farmer groups, local

Table 1. Characteristics of the afforestation measure under subsequent RDPs in 2004-2018

Specification	RDP 2004-2006	RDP 2007-2013	RDP 2014-2020 (as 31 XII 2017)
Aims	<ul style="list-style-type: none"> –increasing forest area; –maintaining and strengthening ecological stability through a reduction in forest fragmentation and establishing ecological corridors –enhancing forest participation in the global carbon balance 	<ul style="list-style-type: none"> –increasing forest area; –maintaining and strengthening ecological stability through a reduction in forest fragmentation and establishing ecological corridors –enhancing forest participation in the global carbon balance <i>and mitigating climate change</i>² –<i>increasing economic value of low quality land</i> 	<ul style="list-style-type: none"> –increasing forest area; –maintaining and strengthening ecological stability through a reduction in forest fragmentation and establishing ecological corridors –enhancing forest participation in the global carbon balance and mitigating climate change –increasing the economic value of low quality land
Subject of afforestation	afforestation of agricultural land	afforestation of agricultural and <i>other land</i>	afforestation of agricultural and other land
Beneficiaries	<ul style="list-style-type: none"> –farmer gets at least 20% of income from agricultural activity –agricultural cooperative gets at least 20% of income from agriculture –a group of minimum 3 farmers conducting activity on at least 3 ha of agricultural land 	<ul style="list-style-type: none"> –farmer –group of farmers –<i>local governments and their units</i> 	<ul style="list-style-type: none"> –farmer –group of farmers –local governments and their units
Terms of applying for support	<ul style="list-style-type: none"> –private agricultural land –min. area of afforestation – 0,3 ha, but a plot with a at least 20 m width –native trees only –about 8,000 seedling/ha 	<ul style="list-style-type: none"> –private agricultural land or communal land –min. area of afforestation – 0,5 ha <i>but maximum 100 ha per person</i>, a plot with a at least 20 m width –native trees only –<i>afforestation plan prepared by a senior forester</i> –<i>number of seedlings/ha depended on tree species</i> 	<ul style="list-style-type: none"> –private agricultural land or communal land –min. area of afforestation – 0,1 ha <i>but maximum 20 ha per person</i>, a plot with a at least 20 m width –native trees only –afforestation plan prepared by a senior forester –number of seedlings/ha depends on tree species

Table 1. Cont.

Specification	RDP 2004-2006	RDP 2007-2013	RDP 2014-2020 (as 31 XII 2017)
Forms of support	<p>1. Afforestation payment: One-time payment per 1 ha of afforested land, the value of support differentiated due to :</p> <ul style="list-style-type: none"> – the proportion of deciduous and coniferous seedling species – the kind of protection against wild animals – the slope of land <p>2. Premium on new forest maintenance – annual payment per 1 ha granted for 5 years after afforestation</p> <p>3. Premium on afforestation due to loss of agricultural income: Annual payment/1 ha</p> <ul style="list-style-type: none"> – granted for 20 years; – two rates of the payment: bigger for individuals with an agricultural income exceeding 20% of their total personal income 	<p>1. Afforestation payment: One-time payment per 1 ha of afforested land, the value of support differentiated due to:</p> <ul style="list-style-type: none"> – proportion of deciduous and coniferous seedling species – the kind of protection against wild animals – the slope of land <p>2. Premium on new forest maintenance – annual payment per 1 ha granted for 5 years after afforestation</p> <p>3. Premium on afforestation due to loss of agricultural income: Annual payment/1 ha <i>granted for 15 years</i></p> <p>Only individuals with an agricultural income exceeding 25% personal income were eligible</p>	<p>1. Afforestation payment : One-time payment per 1 ha of afforested land, the value of support differentiated due to:</p> <ul style="list-style-type: none"> – the proportion of deciduous and coniferous seedling species – the kind of protections against wild animals – the slope of land <p>2. Premium on new forest maintenance – annual payment per 1 ha granted for 5 years after afforestation</p> <p>3. Premium on afforestation due to loss of agricultural income: Annual payment/1 ha <i>granted for 12 years</i></p>

Note: new elements in relation to previous RDP are included in italics

Source: own collating based on RDPs 2004-2006, 2007-2013, 2014-2020

government entities have been included as eligible agents. In each RDP the measure has not comprised individuals who have not been farmers (registered in a special register of agricultural producers). In light of the fact that not only farmers are agricultural land owners, given that many of them fail to use the land, especially small plots, such exclusion is incomprehensible. In the first period, there were no limitations of the support. In the second considered RDP, a limitation of support for one farmer was introduced, however, it was not very restrictive – 100 ha per beneficiary. In the third financial perspective, the area declined noticeably to 20 ha. In the first considered RDP, the minimum required area of afforestation was 0.3 ha but in the second perspective the threshold was lifted to 0.5 ha. Adam Kaliszewski [2016] noticed that limitations for the area and width of a parcel were high participation barriers for many farmers, especially in regions with a high fragmented agriculture. The area barrier has been eased to 0.1 ha in the current RDP.

It is worth underlining that the forms of support have been unchanged. All participants of the subsequent measures were offered one-time payments for covering the costs of afforestation. From three categories of beneficiaries only farmers could get an annual premium on new forest maintenance and a premium on afforestation due to a loss in agricultural income. But, the conditions for getting support were the same only in the case of a one-time afforestation payment and premium on new forest maintenance. The requirements for support in the form of a premium on afforestation, due to a loss of agricultural income due to a reduction in agricultural land, changed noticeably in every RDP. The period of time for getting this form of support decreased gradually. Initially, compensation was paid for 20 years, and the rate of the payment was connected to the proportion of agricultural income (20%) in the beneficiary's total income. In RDP 2007-2013, the time decreased to 15 years and only individuals with an agricultural income exceeding 25% of total income were eligible for this premium. Finally, in 2014 time declined to 12 years and the requirement for the proportion of agricultural income in total income was abolished.

EFFECTS OF THE MEASURE

The size of the afforested area is the most obvious and tangible effect of the examined measure. It is the keystone in getting a vast range of aforementioned benefits provided by forests in the long term. At the beginning of Poland's membership in the EU, interest in the afforestation measure was quite noticeable (table 2). During three years of the RDP 2004-2006, 10.5 thousand applications for afforestation payment were made. Nearly 90% were accepted. Under the measure, afforestation of nearly 40 thousand ha was supported. For the entire period of RDP 2007-2013, despite the number of applications doubling, a decrease in interest in the measure was observed, as the number of applications per year fell by 10%. Additionally, the rate of approval sank to 76% in comparison with previous RDPs. Although the total number of applications rose, the afforested area was smaller than in the previous programme by 2.3 thousand ha. In the current financial perspective, 2014-2020, the situation is very different. Five years after introducing RDP 2014-2020, the number of applications only amounted to 3.8 thousand and the rate of application acceptance decreased to 60% (because of the application procedure, the rate will probably increase). The afforested area – 3 thousand ha – is numerous times smaller in comparison to previous RDPs. The total area of afforested land supported under RDP 2014-2020 – new afforested area in 2014-2020 and under previous RDPs – has been set at 82,000 ha. At the end of 2018, the support encompassed 75,100 ha (not all beneficiaries from previous RDPs can apply for premiums). This means that during the last two years of the current financial perspective, it will be difficult to fulfil the target. Authors of the evaluation of RDP 2014-2020 implementation indicate that this small interest in the measure can stem from the growth of specialisation and concentration of agricultural production. These phenomena strengthen the economic viability of farms and their ability to participate in other measures of CAP and, as a result, their propensity to conduct agricultural activity [IERiGŻ-PIB 2017]. The impact of changes in the value and terms of payments for the farmers' interest in the programme should also be taken into consideration.

Table 2. The number of applications and afforested area under RDP in the course of 2004-2018

Specification	RDP 2004-2006	RDP 2007-2013	RDP 2014-2020
Afforested area [thousand ha]	39.7	37.4	3.0
Number of applications	10,507	22,011*	3,796
Number of accepted applications	9,006	16,803	2,260

* including applications under 2007-2013 but financed from RDP 2014-2020

Source: Reports of ARMA for 2004-2018

In total, during the examined period, the number of applications amounted to 36,314 of which 28,069 (77.3%) were approved. Under the measure, about 80,000 ha (800 km²) of land were afforested. This means that, thanks to the measure, forest area increased by 0.87% during 2004-2018 (assuming there was no reduction of area due to cutting down forests).

The interesting fact is that the area of public owned forests only rose by 46,000 ha, so nearly half of the increase took place thanks to the afforestation measure. In the private sector a rise in forest area between 2005 and 2016 (available data) amounted to 184,000 ha. From that 42%, 77,000 ha, of the climb was connected with the support. This illustrates that the assessment of the effect is a multidimensional and complex issue. This number – 42%, seems to be a quite good result but as the share of the private sector in the forest ownership structure is small, progress in the afforestation of the country as a whole is minor. Also, it is hard to agree with the opinion of Franciszek Woch and Anna Jedrejek [2016] that a decrease in the rate of afforestation (afforested area/per year) under RDP 2007-2013 is appropriate to the objectives of the programme as Poland is close to reaching the target level of the afforestation rate of 33% in 2050. The target was delineated nearly 25 years ago. Considering the level of the forestation ratio in the EU and environmental challenges, it is unambitious. For example, it did not take into consideration (because it was impossible to predict) the enormous reduction in the number of older trees caused by the liberation of the law on cutting trees.

CONCLUSIONS

Thanks to the afforestation measure implemented in three subsequent RDPs, forest area in Poland increased by 80,000 ha, in relative terms by 0.87% during 2004-2018. The highest effect of the afforestation measure was achieved under RDP 2004-2006. The share of afforested area under that RDP was estimated at nearly 50% of total afforested area under three RDPs in the examined period. The share of RDP 2007-2013 was a bit smaller – 46.7%. Under the current RDP, the interest in the measure and its results are very modest. The afforested area, during five years of the financial perspective, is thirteen times lower than during 3 years of RDP 2004-2006. The target set under RDP 2014-2020 – support for 82,000 ha of afforested land – can be considered unambitious. However, currently the interest in the measure is so small that this target might not be achieved. At the end of 2018, the target was fulfilled by 91.5%. Taking into consideration such circumstances, as the level of the forestation rate in other EU countries, climate changes or the big area

of low quality agricultural and non-agricultural land in Poland, effects are rather modest. This is a result of complex reasons of formal (terms of the measure) and socioeconomic character (appearance of incentives to conduct agricultural activity and CAP's offer of different forms of support for farmers).

BIBLIOGRAPHY

- ARMA (Agency for Restructuring and Modernization of Agriculture). 2005-2019. *Reports on Activity of ARMA for years 2004-2018*. Warsaw: Agency for Restructuring and Modernization of Agriculture.
- EC (European Council). 1999. *Regulation (EC) No. 1257/1999 of 17 May 1999 on the support for rural development from EAGGF*, http://www.ndp.ie/documents/publications/reg_cir/CR12571999.pdf.
- EC (European Council). 2005. *Regulation (EC) No 1290/2005 of 21 June 2005 on the financing of the common agricultural policy*, <https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=celex:32005R1290>.
- EC (European Council). 2013. *Regulations (EU) Nos 1303 - 1308/2013 of 17 December 2013 establishing a common organisation of the markets in agricultural products and repealing Council Regulations (EEC) No 922/72, (EEC) No 234/79, (EC) No 1037/2001 and (EC) No 1234/2007*, <https://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=OJ:L:2013:347:0671:0854:EN:PDF>.
- FAO (Food and Agriculture Organization). 2018. *2018 The State of the World's Forests. Forest Pathways to Sustainable Development*. Rome, Italy.
- FAO (Food and Agriculture Organization). 2019. *Forest land*, <http://www.fao.org/faostat/en/#data/GF>, access: 28 August 2019.
- Gold Stefan. 2003. *The development of European forest resources, 1950 to 2000*. Geneva Timber and Forest Discussion Papers. Geneva: United Nations, 1. <https://www.unece.org/fileadmin/DAM/timber/docs/efsos/03-sept/dp-d.pdf>, access: 23 October 2019.
- GUS (Central Statistical Office – CSO). 2017. *Forestry 2017*. Warsaw: GUS.
- IERiGŻ-PIB (Institute of Agricultural and Food Economics). 2017. *Ocena rezultatów wdrażania Programu Rozwoju Obszarów Wiejskich na lata 2014-2020 w latach 2014-2016. Raport końcowy* (Evaluation of the implementation RDP 2014-2020 in years 2014-2016. Final report). Warsaw: IERiGŻ-PIB.
- Kaliszewski Adam, Wojciech Młynarski, Piotr Gołos. 2016. Prospects for agricultural lands afforestation in Poland until 2020. *Folia Forestalia Polonica, Series A. Forestry* 58 (3): 163-169.
- Kaliszewski Adam. 2016. Krajowy program zwiększania lesistości – stan i trudności realizacji z perspektywy lokalnej (National Afforestation Programme – state and barriers of implementation). *Studia i Materiały CEPL w Rogowie* 18 (49B/5): 7-19.
- Kazak Jan, Szymon Szewrański, Małgorzata Świąder. 2016. Realizacja krajowego programu zwiększania lesistości w kontekście struktury własności gruntów (Implementation of the National Afforestation Programme in the context of land ownership structure). *Studia i Prace WNEiZ US* 45 (1): 329-341. DOI: 10.18276/sip.2016.45/1-26.
- Malczyk Jarosław, Jarosław Świeżak. 2008. Krajowy Program Zwiększania Lesistości w systemie lokalnego planowania przestrzennego w Polsce (Influence of National Program of Forested Areas Increase in the spatial planning system in Poland). *Studia i Materiały CEPL* 10 (3): 291-301.
- Polna Małgorzata. 2017. Zmiany lesistości obszarów wiejskich w Polsce w latach 1995-2016 (Changes in the woodiness of rural areas in Poland in the years 1995-2016). *Roczniki Naukowe Stowarzyszenia Ekonomistów Rolnictwa i Agrobiznesu XIX* (2): 194-198.

- Rowiński Janusz. 2008. *Program Rozwoju Obszarów Wiejskich na lata 2007-2013. Analiza zatwierdzonej wersji programu i pierwszych lat realizacji* (Rural Development Programme 2007-2013. Analyses of approved programme and five years of implementation). Warsaw: IERiG-PIB.
- Woch Franciszek, Anna Jędrejek. 2016. Evaluation of changes in rural areas under the selected measures of the European Union's Common agricultural policy. *Infrastructure and Ecology of Rural Areas* IV (4): 1771-1788. DOI: 10.14597/infraeco.2016.4.4.133.
- Zanchi Giuliana, Daniel Thiel, Tim Green, Marcus Lindner. 2007. *Afforestation in Europe*. Sixth Framework Programme Priority 8: Policy-Oriented Research Specific Targeted Research Project no. SSPE-CT-2004-503604: "Impact of Environmental Agreements on the CAP". Document number: MEACAP WP4, http://minisites.ieep.eu/assets/298/wp4_nd_afforestation_in_europe.pdf, access: 20 October 2019.

WSPARCIE ZE ŚRODKÓW UNII EUROPEJSKIEJ ZALESIANIA W POLSCE – DOŚWIADCZENIA I EFEKTY

Słowa kluczowe: program zalesianie, wskaźnik lesistości, lasy,
Program Rozwoju Obszarów Wiejskich

ABSTRAKT

Celem artykułu jest ocena efektów wsparcia ze środków Unii Europejskiej zalesiania w Polsce. Badanie dotyczyło wsparcia zalesiania gruntów oferowanego w trzech kolejnych programach rozwoju obszarów wiejskich (PROW): 2004-2006, 2007-2013, 2014-2020. Badany okres obejmował lata 2004-2018. Analiza wykazała, że we wskazanym okresie zalesiono około 80 000 ha gruntów. Dzięki temu obszar lasów w Polsce wzrósł o 0,87% w stosunku do stanu z 2004 roku. Największy efekt tego działania miał miejsce w ramach PROW 2004-2006. Udział zalesionej w tym okresie powierzchni w całkowitej powierzchni zalesień w ramach trzech PROW wynosił niemal 50%, natomiast zalesionej powierzchni w ramach PROW 2007-2013 – 46,7%. Zainteresowanie działaniem zalesiania oferowanym w obecnie realizowanym PROW 2014-2020 jest niewielkie, a więc i efekty też są takie. W ciągu pięciu latach funkcjonowania tego PROW zalesiono obszar trzynastokrotnie mniejszy niż podczas trwającego trzy lata PROW 2004-2006. Chociaż w PROW 2014-2020 postawiono raczej mało ambitny cel – wsparcie zalesień 82 000 ha, małe zainteresowanie nowymi nasadzeniami może być barierą w osiągnięciu tego celu. Skromne efekty są wynikiem splotu działań takich czynników, jak warunki uzyskania wsparcia oraz zainteresowanie rolników różnymi konkurencyjnymi w stosunku do zalesiania programami wsparcia działalności rolniczej.

AUTHOR

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