

# THE AGRI-ENVIRONMENTAL PROGRAM IN THE DEVELOPMENT OF AGRICULTURAL AND RURAL AREAS OF THE POMORZE REGION

Gabriela Czapiewska<sup>✉</sup>

Akademia Pomorska w Słupsku

**Abstract.** Polish accession to the European Union resulted in the emergence of new instruments of supporting the development of sustainable agriculture and rural areas. The aim of this paper is to show the implementation of agri-environmental program in Pomerania region (Pomeranian and West Pomeranian voivodeships) in 2004–2015. This article presents the current state of structure and spatial diversity of agri-environmental program implementation by district and in region. Studies have shown that Pomerania region is one of the largest areas in Poland where agri-environmental program was implemented. Taking into account the financial support of the surveyed rural areas, significant intraregional variation is evident. The smallest number of beneficiaries and the lowest amounts of realized payments are characterized by districts with the highest agro-ecological potential in the region. Similarly, most applications for agri-environment payments filed users farms located in the counties of potentially the least favorable conditions for the development of high-productive agriculture. At the same time, they received the highest financial support. For the purposes of analysis source material was used – The Central Statistical Office (CSO) data, the reports on activities of the Agency for Restructuring and Modernisation of Agriculture (ARMA) data as well as the literature on research issues taken. The study method used descriptive statistics and comparative analysis. The results are presented in graphical and tabular form.

**Keywords:** agri-environmental program, Pomerania region, rural areas, agricultural, the Common Agricultural Policy (CAP)

## INTRODUCTION

In Poland, agriculture is an economic sector of great importance with a decisive socio-economic impact on a large part of the rural population, and on the natural environment, landscape structure and the country's biodiversity (Kukuła and Krasowicz, 2007). Throughout the centuries, agriculture has always had a significant impact on the natural environment. These relationships are bilateral: environmental resources determine the size and orientation of agricultural production, while the agricultural economy changes existing ecosystems, develops the landscape, and influences the various components of nature (Bołtromiuk, 2010). According to Kucharczyk and Różańska (2012), agriculture affects the reduction of biodiversity, water and air pollution, soil degradation and contributes to adverse changes in the landscape. The agri-environmental programs are an alternative for the agriculture sector, allowing farmers to deploy such management measures that will ensure adequate incomes while complying with environmental protection rules.

The objective of policies and actions implemented in the European Union is to reduce the adverse impact of agriculture on climate change and biodiversity reduction, and to promote organic and integrated farming (Cymerman and Ogryzek, 2014). Agri-environmental programs are one of the key policy instruments for

<sup>✉</sup>dr Gabriela Czapiewska, Instytut Geografii i Studiów Regionalnych, Akademia Pomorska w Słupsku, ul. Partyzantów 27, 76-200 Słupsk, Poland, e-mail: gabrielaczapiewska@poczta.onet.pl

sustainable rural development. They identify measures to integrate the development of the agricultural economy with environmental protection projects by minimizing the adverse impacts and maximizing the positive effects of agricultural activity (Brodzińska, 2009; Jończyk, 2014; Kucharska, 2005). Sustainable development policy, defined as a social, environmental and economic policy ensuring the progress of civilization, is supposed to provide an integrated solution for economic, social and environmental problems (Kożuch, 2011). The main assumption behind agri-environmental measures was to limit the intensification of agricultural production in extensive farming patterns (Pajewski, 2014). According to Kołodziejczak and Rudnicki (2012), the agri-environmental program has become an impetus for the development of the multi-functionality of agriculture. Financial assistance allocated to agri-environmental actions is a part of multifunctional rural development measures taken under the Common Agricultural Policy. Projects related to the protection and preservation of the natural environment are one of its key priorities (Michałowski and Wiśniewski, 2010). Therefore, the amounts of agri-environment payments should encourage farmers to implement and use agricultural production methods that are compatible with the principles for the protection and enhancement of the environment, landscape and its features, natural resources, soil and genetic diversity (Pradziadowicz, 2016).

## OBJECTIVE AND RESEARCH METHODS

The purpose of this paper is to present the implementation of the agri-environmental program in the Pomorze region. The spatial scope of the research covers the Pomorskie and Zachodniopomorskie voivodeships with a total area of 41,202.82 km<sup>2</sup>, representing 13.1% of the country. This paper presents the current state, structure and spatial diversity of the regional agri-environmental program implementation by district. The amount of payments disbursed and the number of farms who benefited from this form of aid on a local basis were adopted as the main evaluation criteria.

The time range used in this study was the 2004–2015 period. Source material used for the purposes of this analysis was Central Statistical Office (CSO) data, reports on activities of the Agency for Restructuring and Modernization of Agriculture (ARMA), and the literature addressing the related research issues. Methods of

descriptive statistics and comparative analysis were used to analyze the results, taking into account the spatial distribution of the agri-environmental program implemented by the districts. The results are presented in graphical and tabular form.

## THE AGRI-ENVIRONMENTAL PROGRAM'S IMPACT ON THE AGRICULTURE SECTOR AND RURAL AREAS

In 2004, the integration of the Polish agriculture sector and rural areas into the structures of the European Union allowed to access financial support for the agriculture under the agri-environmental program, legally implemented in the 2004–2006 Rural Development Plan. The program was subsequently extended through Rural Development Programs (2007–2013 RDP and 2014–2020 RDP) defining the priorities and principles for promoting sustainable rural development. To obtain agri-environmental payments, eligible farmers must comply with the standards and cross-compliance requirements.

In the 2004–2006 RDP (measure “Support for agri-environment and animal welfare”), the agri-environmental program included seven packages<sup>1</sup>. The 2007–2013 RDP (“Agri-environment program” measure) and the current 2014–2020 RDP (“Agri-environmental-climate measure”) include seven<sup>2</sup> and nine packages<sup>3</sup>, respectively. Each of them covers some agri-environmental variants enabling the introduction of large-scale environmental protection measures. Payment disbursed under all packages are decreasing. The implementation

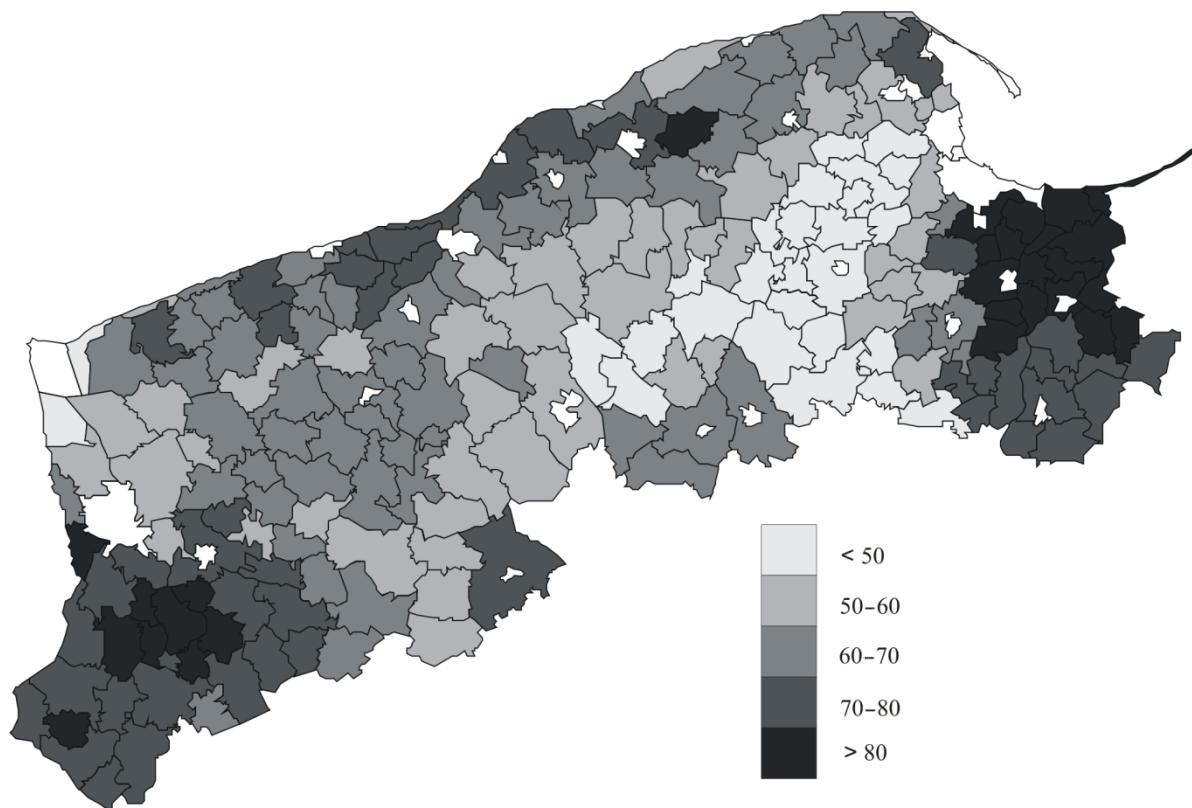
<sup>1</sup> S01 – sustainable agriculture, S02 – organic farming, P01 – maintenance of extensive meadows, P02 – maintenance of extensive pastures, K01 – water and soil protection, K02 – buffer zones, G01 – maintenance of local farm animals’ races.

<sup>2</sup> Sustainable agriculture, organic farming, extensive permanent pasture, protection of endangered bird species and natural habitats outside the Natura 2000 areas, preservation of endangered bird species and natural habitats within the Natura 2000 areas, preservation of endangered plant genetic resources in the agriculture, preservation of endangered animal genetic resources in the agriculture, water and soil protection, buffer zones.

<sup>3</sup> Sustainable agriculture, water and soil protection, preservation of traditional fruit tree cultivars in orchards, valuable habitats and endangered bird species within the Natura 2000 areas, valuable habitats outside the Natura 2000 areas, preservation of endangered plant genetic resources in the agriculture, preservation of endangered animal genetic resources in the agriculture.

of agri-environmental packages imposes various constraints on farmers in terms of intensification of their agricultural production. These restrictions are mainly related to chemical production, interacting directly on agricultural land. Environmentally-oriented principles for the development of rural areas, implemented as a part of rural development programs, are intended to enhance the local environment while contributing to the production of high-quality food. The agri-environmental program is therefore a financial instrument encouraging the farmers to continue or start applying agricultural practices for the greening of the agricultural production. As a consequence, its primary objective is to provide financial support to farmers who switch to new operational practices, reducing their adverse environmental impact in rural areas. This includes, without limitation, restoring or preserving valuable farmland habitats,

preserving biodiversity in rural areas, promoting sustainable farming, appropriate use of soils and water conservation, protection of endangered local livestock breeds and local cultivars (Pawlewicz and Bórawski, 2013). A secondary objective of the program is to raise the environmental awareness of the rural community. Agri-environmental measures are oriented at consolidating the patterns of viable and sustainable farming, especially in protected and degraded areas. They are a form of institutional interventions through subsidizing producers who voluntarily discontinue the conventional processes of using available resources in the agricultural production and management, and who commit themselves to follow the recommendations of this program. With this solution, the agriculture can contribute to environmental protection and preservation of natural values. Note however that the environmental effects of the



**Fig. 1.** Valuation of agricultural production area in Pomorze

Source: own elaboration based on data from the Puławy Institute of Soil Science and Plant Cultivation.

**Rys. 1.** Waloryzacja rolniczej przestrzeni produkcyjnej Pomorza

Źródło: opracowanie własne na podstawie danych IUNG w Puławach.

agri-environmental program's implementation largely depend on the precise definition of the objectives to be addressed and on the proper definition of the level of support (Brodzińska, 2009).

## IMPLEMENTING THE AGRI-ENVIRONMENT PROGRAM: INTRA-REGIONAL DIVERSIFICATION OF RURAL SUPPORT

In the geographic area covered by this study, the agricultural conditions are conducive to highly-productive organic farming. This includes natural soil resources as well as the socio-economic background. In the Pomorskie voivodeship, the highest agro-environmental potential (with a ratio of agricultural production area valuation beyond 80) is demonstrated by: Żuławy Wiślane and the Lower Vistula Valley. High ratios are recorded in northern areas (Równina Słupska, Wysoczyzna Damnicka, Wysoczyzna Żarnowiecka) and in southern ones (Pojezierze Krajeńskie). In the Zachodniopomorskie voivodeship, the most favorable environmental conditions are reported in the south-western part of the region (Fig. 1). As regards Pomorze, the average value of the above ratio is close to the national average (66.6). Levels reached in Zachodniopomorskie and Pomorskie regions are 67.5 and 66.2, respectively. Areas with the highest ratio are mainly characterized by a combination of soils with the highest or high relevance, a high share of agricultural land, and a well established agricultural function of the agri-food processing sector, as developed over the years. The best soils and agricultural production conditions are reported in Żuławy and Powiśle regions with a predominant share of alluvial soils, bog and brown soils (Czapiewska, 2015; 2016).

According to CSO data, at the end of 2015, in the Pomorskie and Zachodniopomorskie voivodeships, agricultural land represented 41.5% (759,900 ha) and 36.6% (837,100 ha) of the total area, respectively. Large agricultural areas with the highest share of agricultural land include the south-western part of the region (Gryfice and Łobez districts), the northern-central part (Koszalin, Białogard and Słupsk districts) and the south-eastern parts (Malbork, Sztum and Kwidzyn districts). The share of agricultural land in total area determines the agricultural nature of these areas while setting the targets for the economic activity of the local rural population (Czapiewska, 2015; 2016). Compared to other

parts of the country, the Pomorze agriculture also demonstrates a relatively favorable structure of the farms' size. According to ARMA, at the end of 2016, the average size of a farm above 1 ha in the Pomorze region was beyond the national average (10.56 ha), reaching 30.20 ha in the Zachodniopomorskie voivodeship and 19.09 ha in the Pomorskie voivodeship. The vast range of available packages of agri-environmental programs and numerous support options are associated with high levels of biodiversity in rural areas covered by this study. Such a composition of the program makes it accessible to a large group of farmers. The implementation of the agri-environmental program is intended to contribute to the sustainable development of, and the preservation of biodiversity in, rural areas.

The Pomorze region is one of the largest areas where the agri-environmental program was implemented. In the Zachodniopomorskie voivodeship, the largest-area implementation of agri-environment payments was that performed under package 2 (Organic farming). On the other hand, in the Pomorskie voivodeship, package 1 (Sustainable Agriculture) was prevalent. In 2004–2015, which means during both RDP programming periods, domestic agri-environmental payments went beyond PLN 9.5 billion. The largest part of the total amount, nearly PLN 1.3 billion, was disbursed to beneficiaries from Pomorze Zachodnie (13.4% of total funds disbursed on a countrywide basis). In Pomorze, the corresponding amount was lower by 43.8%, reaching nearly PLN 719 million. Note also that Pomorze Zachodnie was the country's top-ranked region as regards absorption of funds for the implementation of agri-environment schemes (the normalized absorption rates in the Zachodniopomorskie and Pomorskie voivodeships were 2.85 and 1.50, respectively<sup>4</sup>). Absorption paths were different in terms of the amounts of money raised for the implementation of agri-environment packages.

In the period considered, soil and water protection, sustainable agriculture and organic farming were the most popular options among Pomorze farmers (as regards both the number of applications and the amount of payments disbursed). In 2004–2015, a total of 24,214 applications were submitted by Pomorze

<sup>4</sup> In order to identify and compare the spatial diversity of the levels of absorption of EU funds, synthetic indicators were used to illustrate the phenomenon, using the standardization of the values of selected features (Racine and Reymond, 1977).

**Table 1.** The number of applications and the amounts disbursed to farmers engaged in agri-environmental programs implemented under the 2004–2006 RDP and 2007–2013 RDP in the Pomorze region in 2004–2015

Specification Wyszczególnienie	Years Lata	Number of applications Liczba złożonych wniosków		Payments disbursed (thous. PLN) Zrealizowane płatności (tys. zł)	
		Pomorskie voivodeship województwo pomorskie	Zachodniopomorskie voivodeship województwo zachodniopomorskie	Pomorskie voivodeship województwo pomorskie	Zachodniopomorskie voivodeship województwo zachodniopomorskie
2004–2006 RDP PROW 2004–2006	2004	66	167	988.1	5 808.0
	2005	959	951	11 186.7	24 258.9
	2006	6 874	6 186	25 035.6	45 291.6
	2007	7 687	6 795	69 782.9	118 249.3
	2008	5 158	4 524	56 602.4	106 921.6
	2009	7 861	7 296	101 324.2	216 267.5
	2010	4 444	3 860	171 697.0	361 218.5
	2011	4 476	3 909	186 466.9	405 473.3
	2012	4 488	3 921	189 431.5	417 910.0
2007–2013 RDP PROW 2007–2013	2009	1 276	982	14 669.8	17 819.9
	2010	2 283	1 826	47 498.5	58 262.4
	2011	4 507	3 747	126 188.1	173 040.9
	2012	5 947	5 097	210 711.4	290 120.4
	2013	7 569	7 044	357 440.0	577 549.4
	2014	7 824	7 277	475 441.9	754 149.1
	2015	8 196	7 608	529 298.6	860 375.1

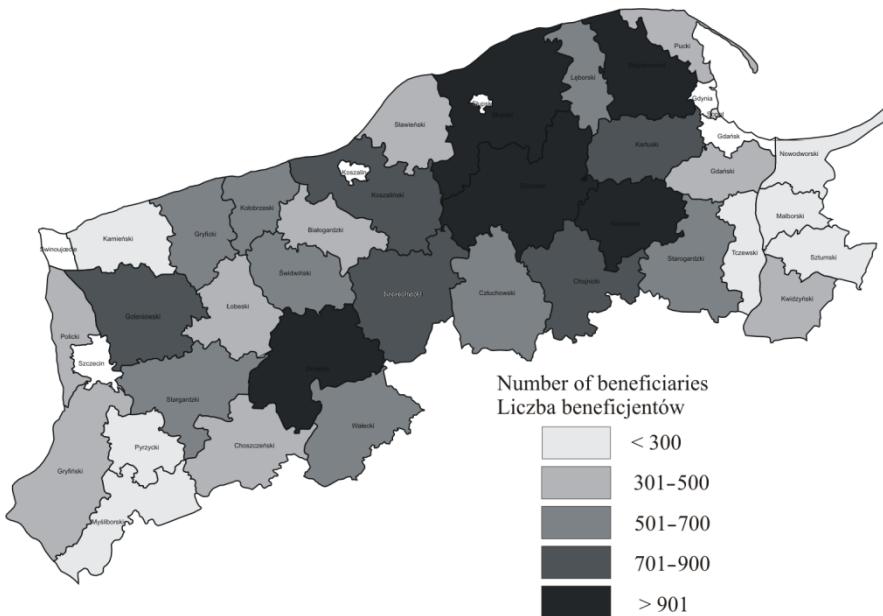
Source: own elaboration based on ARiMR data (*Sprawozdanie... za lata 2004–2015*).

Źródło: opracowanie własne na podstawie danych ARiMR (*Sprawozdanie... za lata 2004–2015*).

farms under the 2004–2006 RDP and 2007–2013 RDP (52.4% and 47.6% in Pomorskie and Zachodniopomorskie voivodeships, respectively). The average area of arable land per application in Zachodniopomorskie and Pomorskie voivodeships was 72.6 ha and 59.9 ha, respectively. According to data from the Agency for Restructuring and Modernization of Agriculture (*Sprawozdanie...*, 2016), the number of applications submitted by beneficiaries increased steadily (Table 1), and so did the amounts of funds disbursed to farmers under the program, reaching around PLN 2 billion in

the Pomorze region in 2015. The average amount disbursed to farmers in Pomorze Zachodnie and Pomorze was PLN 111,063.3 and 56663.5 PLN (about 49% less), respectively.

To assess the implementation level of the agri-environmental program in the Pomorze region, characteristics that affect both the economic aspects and the level of farmers' activity were used. Beneficiaries from districts of the Pomorskie voivodeship proved to be very effective in accessing funds for the implementation of measures under the agri-environmental program, with 1394



**Fig. 2.** The number of applications for agri-environmental payments in the Pomorze region (as at December 31, 2015)

Source: own elaboration based on data from the Central Statistical Office (n.d.).

Rys. 2. Liczba złożonych wniosków o płatności rolnośrodowiskowe na Pomorzu (stan na 31.12. 2015 r.)

Źródło: opracowanie własne na podstawie GUS (b.d.).

applications in Bytów and 1247 applications in Słupsk. On the other hand, the smallest number of applications for this subsidy was submitted by farmers in areas demonstrating the best soil conditions in the region. This includes the Pyrzyce district in the Zachodniopomorskie voivodeship (71 applications), Nowy Dwór district (112 applications), Malbork district (156) and Sztum district (157) in the Pomorskie voivodeship (Fig. 2).

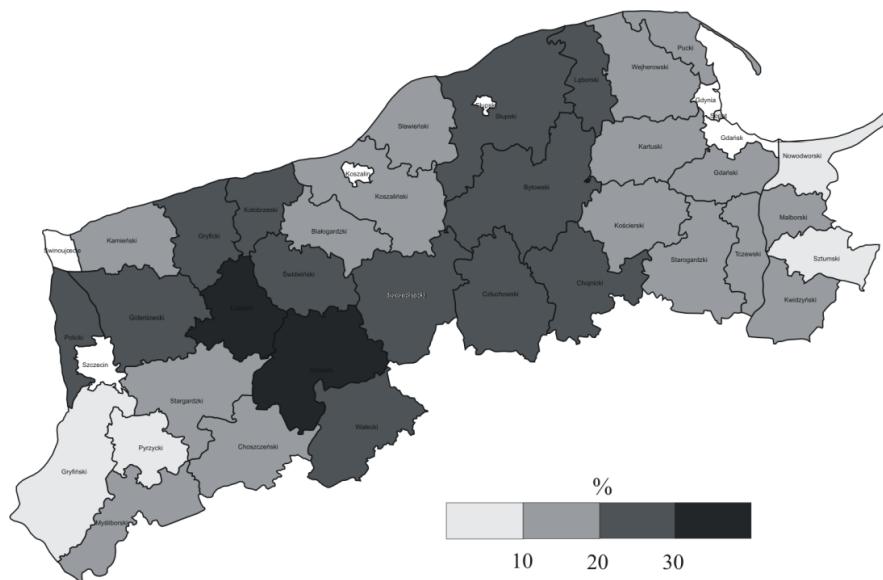
The spatial diversification of the farms' active involvement in benefiting from the implementation of agri-environmental programs reflects the share of submitted applications for payment in the total number of farms in the Pomorze region (Powszechny..., 2014). In both voivodeships, this ratio reached comparable levels (over 20%) and was above the national average (9.2%). The lowest shares of beneficiaries of the agri-environmental program, below or equal to the national average, were recorded in districts located within the areas with the most favorable natural conditions for agricultural development in the region under consideration (Fig. 3). In this context, the following districts should be mentioned: Pyrzyce (2.6%) and Gryfice (8.0%) (Zachodniopomorskie voivodeship) as well as Nowy Dwór (6.5%) and Sztum (7.1%) (Pomorskie voivodeship). High levels of the above ratio (over 30%) are characteristic for the operators based in the Pomorze Zachodnie region: Drawsko district (32.5%) and Łobez district (30.5%).

The share in payments for the implementation of agricultural-environmental program in the Pomorze region varies from one district to another (Fig. 4). The largest financial resources were credited to the budgets of farmers operating in the districts of Drawsko (PLN 148734.5 thousand), Police (PLN 126997.8 thousand) and Szczecinek (PLN 112121.2 thousand) from the Pomorze Zachodnie region, and Słupsk (PLN 134093.6 thousand) and Bytów districts (PLN 112524.5 thousand) in the Pomorze region. In turn, the lowest amounts of payments were recorded in Nowy Dwór (PLN 9939.2 thousand), Sztum (PLN 10586.4 thousand), Malbork (PLN 12260.0 thousand) and Tczew districts (PLN 13180.9 thousand) in the Pomorskie voivodeship and in the Pyrzycy district (PLN 13115.7 thousand), Zachodniopomorskie voivodeship.

The average grant per application in excess of PLN 100,000 was recorded in as many as 17 districts of the region (50%). However, this group included only 2 districts from the Pomorskie voivodeship: Lębork (PLN 108.3 thousand) and Słupsk (PLN 107.5 thousand). The highest rate (PLN 259.2 thousand) was recorded in the Police district. In turn, levels of up to PLN 60 thousand were reported in five districts of the Pomorze region, with the lowest amounts (PLN 44.8 thousand) being disbursed in the Kościerzyna district (Fig. 5). The level of financial support per hectare of agricultural land also shows significant disproportions. In the Pomorze

**Fig. 3.** Ratio of the average number of applications for agri-environmental payments to the total number of farms in the Pomorze region (as at December 31, 2015)  
Source: own elaboration based on data from the Central Statistical Office (n.d.).

**Rys. 3.** Średnia liczba składanych wniosków o płatności rolnośrodowiskowe w stosunku do ogólnej liczby gospodarstw na Pomorzu (stan na 31.12.2015 r.)  
Źródło: opracowanie własne na podstawie GUS (b.d.).

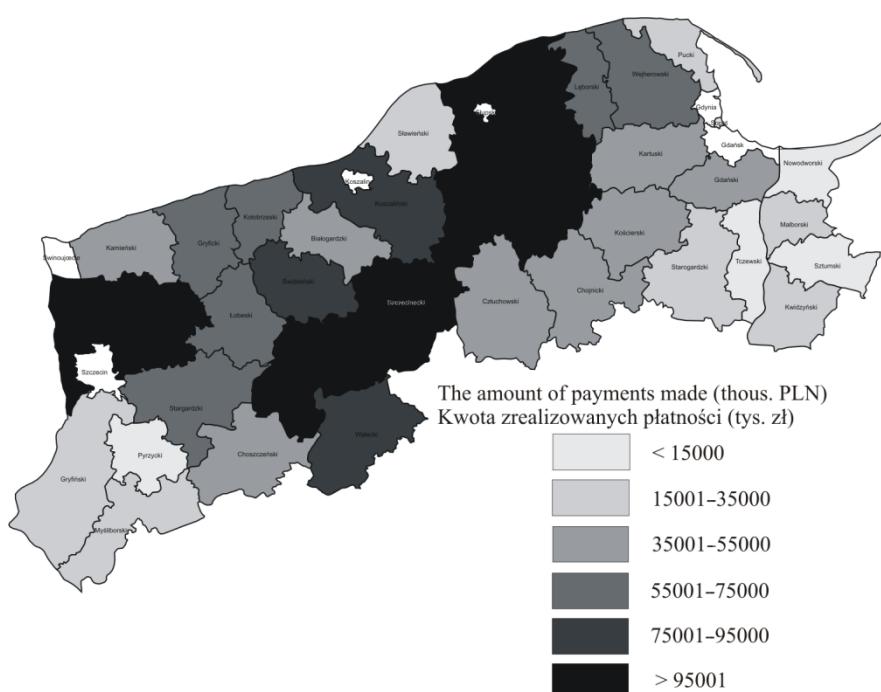


**Fig. 4.** Payments under the agri-environmental programs in the Pomorze region (as at December 31, 2015)

Source: own elaboration based on data from the Central Statistical Office (n.d.).

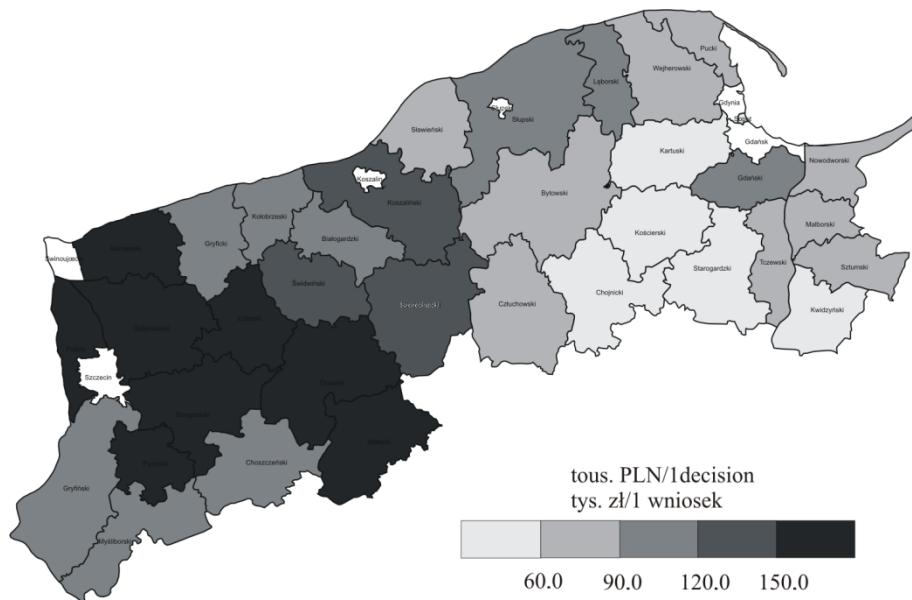
**Rys. 4.** Płatności z tytułu realizacji programów rolnośrodowiskowych na Pomorzu (stan na 31.12.2015 r.)

Źródło: opracowanie własne na podstawie GUS (b.d.).



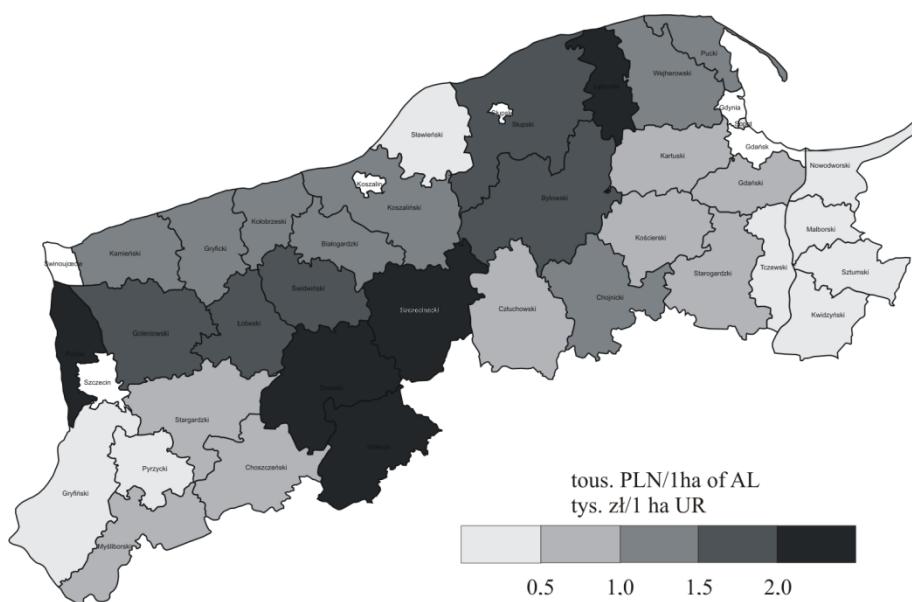
region, the highest rate (beyond PLN 9 thousand) was recorded only in the Police district (9,060.4 PLN/1 ha of agricultural land). Meanwhile, financial resources of less than PLN 3 thousand per hectare of agricultural land were allocated to farmers in three districts of the Pomorskie voivodeship: Sztum (222.7), Nowy Dwór (261.9), Malbork (284.1) and Tczew (298.2), and in

the Police district in the Zachodniopomorskie voivodeship (273.7). This region demonstrates the best quality of soils, the preferred arrangement of land and a large percentage of agricultural land (over 70%): factors that are conducive to the development of intensive farming. Note also that 50% of rural area payments ranged from PLN 1,000 to PLN 2,600 (Fig. 6).



**Fig. 5.** Value of financial support for agri-environmental programs in the Pomorze region per application (as at December 31, 2015)  
Source: own elaboration based on data from the Central Statistical Office (n.d.).

**Rys. 5.** Wartość wsparcia finansowego na realizację programów rolnośrodowiskowych na Pomorzu w przeliczeniu na 1 wniosek  
Źródło: opracowanie własne na podstawie GUS (b.d.).



**Fig. 6.** Value of financial support for agri-environmental programs in the Pomorze region per hectare of agricultural land (as at December 31, 2015)

Source: own elaboration based on data from the Central Statistical Office (n.d.).

**Rys. 6.** Wartość wsparcia finansowego na realizację programów rolnośrodowiskowych na Pomorzu w przeliczeniu na 1 ha użytków rolnych (stan na 31.12.2015 r.)  
Źródło: opracowanie własne na podstawie danych GUS (b.d.).

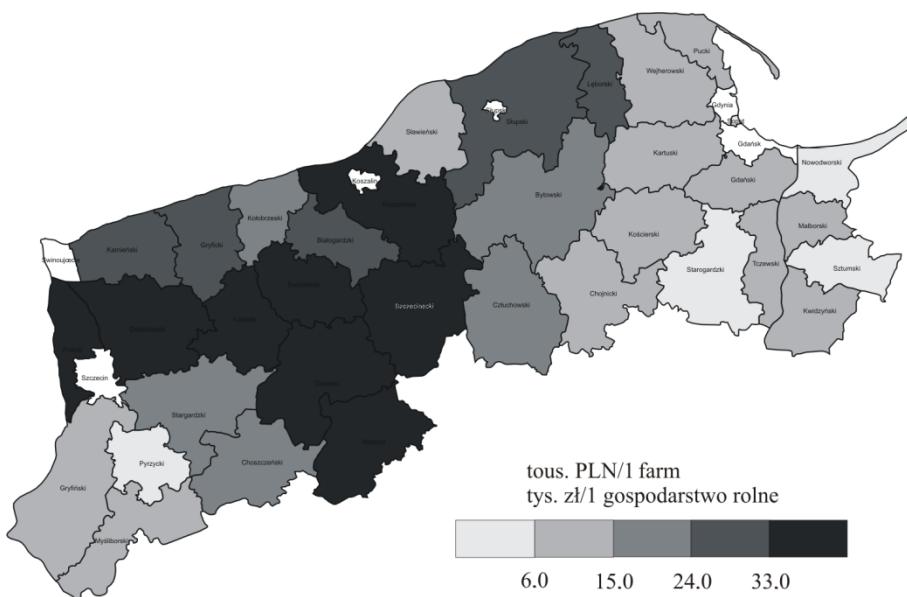
When analyzing the amount of support per farm with an area beyond 1 hectare of agricultural land, considerable intraregional variation is also noted. The highest amounts of financial support per farm, in excess of PLN 50 thousand, were received by farmers from three districts of the Zachodniopomorskie voivodeship: Police (PLN 71.9 thousand), Łobez (PLN 52.3 thousand) and Drawsko (PLN 51.1 thousand). This is because of the large amounts of support received (Drawsko and Police district) and the small number of farms (Łobez district).

The average grant per farm in the Pomorskie and Zachodniopomorskie voivodeships was about PLN 12 thousand and PLN 30 thousand, respectively. The lowest levels of funding, not exceeding PLN 5 thousand per farm, were reported by two districts: Pyrzyce (PLN 4.8 thousand) in the Zachodniopomorskie voivodeship and Sztum (PLN 4.8 thousand) in the Pomorskie voivodeship (Fig. 7). Thus, the analysis shows large disparities in the level of support for agriculture under the analyzed CAP instrument as regards both the per hectare and per farm ratio.

**Fig. 7.** Value of financial support for agri-environmental programs in the Pomorze region per farm (as at December 31, 2015)

Source: own elaboration based on data from the Central Statistical Office (n.d.).

**Rys. 7.** Wartość wsparcia finansowego na realizację programów rolnośrodowiskowych na Pomorzu w przeliczeniu na 1 gospodarstwo rolne (stan na 31.12.2015 r.)  
 Źródło: opracowanie własne na podstawie GUS (b.d.).



When it comes to the determinants of EU funds absorption, attention also needs to be paid to factors beyond the control of the beneficiaries, including natural, economic, historical and urban conditions as well as social conditions, including the region's institutional development (Bułkowska, 2011; Kozera, 2011; Pie- trzykowski and Wicki, 2011; Satoła, 2009). The level of aid utilization also depends on the beneficiaries' individual decisions, activity and ability to cooperate (Kut- kowska and Hasiński, 2013).

## CONCLUSIONS

The Polish accession to the European Union resulted in the emergence of new support instruments for the development of sustainable agriculture and rural areas. The agri-environmental program is the key instrument of financial support under the Common Agricultural Policy, and consists in awarding the farmers who meet basic environmental standards while deploying environmentally friendly production methods. Also, it is considered to be among the most important measures of sustainable rural development.

In Pomorze, both the natural and socio-economic conditions have a favorable impact on the development of agriculture. The Pomorze region is one of the country's largest areas where the agri-environmental program was implemented. Between 2004 and 2015, about 20.9% of the total amount was disbursed to farmers from

the Pomorskie and Zachodniopomorskie voivodeships (PLN 2 billion). When considering the financial support for the rural areas covered by this survey, significant intraregional variation becomes evident. The smallest number of beneficiaries and the lowest amounts of payments made are reported by district with the highest agri-environmental potential in the region. Conversely, the majority of applications for agri-environmental payments were submitted by farmers based in districts with potentially least favorable conditions for the development of high-yield agriculture. At the same time, they received the highest amounts of financial support. In the Pomorze region, the number of beneficiaries and the amount of payments made under agri-environment programs have increased. This suggests that such support represents important resources that can be properly invested in agricultural holdings. As clearly shown by the farmers' statements, most of them have opted to participate in agri-environmental measures for purely economic reasons, valuing financial benefits over those provided by the quality of the natural environment<sup>5</sup>. It can be argued that thanks to the compensation received in the form of subsidies for the area where the protection program is implemented, the economic efficiency of the

<sup>5</sup> In their studies, other researchers also point to the economic motives for undertaking agri-environmental measures by farmers (Borkowska et al., 2013; Gotkiewicz, 2005; Kazimierczyk et al., 2010; Pondel, 2007).

farm will not be diminished, which is a sufficient incentive for farmers. The long-term non-economic effects that can be achieved through the implementation of agri-environmental payments are as follows: the elimination of the use of mineral fertilizers and plant protection products; the extensive production of meadow and pasture; and first of all, the renewal and preservation of traditional rural landscapes. Bearing in mind the role of the agri-environmental program in the development of environmentally-friendly attitudes of farmers, this should be regarded as an effective tool for the Common Agricultural Policy.

## REFERENCES

- Bołtromiuk, A. (2010). Ocena wpływu instrumentów Współnej Polityki Rolnej na środowisko i zrównoważony rozwój obszarów wiejskich w okresie programowania 2004–2013. In: Wpływ funduszy współfinansowanych ze środków Unii Europejskiej na rozwój rolnictwa i regionów wiejskich. Raport końcowy. Warszawa: IERiGŻ-PIB.
- Borkowska, M., Golinowska, M., Kruszyński, M. (2013). Program rolnośrodowiskowy – doświadczenia i opinie rolników. *J. Res. Appl. Agric. Eng.*, 58(3), 46–49.
- Brodzińska, K. (2009). Kierunki i perspektywy rozwoju programu rolnośrodowiskowego w Polsce po 2013 roku. *Woda Środ. Obsz. Wiejs.*, 9, 3(27), 5–18.
- Bulkowska, M. (2011). Regionalne zróżnicowanie wykorzystania funduszy unijnych przez gospodarstwa rolne w Polsce. *Rocz. Nauk. SERiA*, 8, 3, 51–56.
- Cymerman, R., Ogryzek, M. (2014). Oddziaływanie programów unijnych na proekologiczny rozwój rolnictwa w Polsce. In: R. Rudnicki, M. Kluba (Eds.), Zintegrowany rozwój obszarów wiejskich w świetle polityki Unii Europejskiej (vol. 1, p. 105–119). Toruń: Wyd. Nauk. UMK.
- Czapiewska, G. (2015). Impact of Poland's accession to the European Union for the development of organic farming of the Pomerania. *Intercathedra*, 31(4), 17–27.
- Czapiewska, G. (2016). Ocena trendów rozwoju obszarów wiejskich Pomorza w pierwszej dekadzie po akcesji do Unii Europejskiej. *Stud. Obsz. Wiejs.*, 42, 37–53.
- Gotkiewicz, W. (2005). Uwarunkowania i możliwości aktywizacji właścicieli gospodarstw rolnych na obszarach prawnie chronionych. Olsztyn: Wyd. UWM.
- GUS (n.d.). Bank Danych Lokalnych. Retrieved May 22nd 2017 from: [www.gus.gov.pl](http://www.gus.gov.pl).
- Jończyk, K. (2014). Rozwój rolnictwa ekologicznego w Polsce. *Zesz. Nauk. WSEiL Lublin. Ser. Ekon.*, 8(1), 129–140.
- Kołodziejczak, A., Rudnicki, R. (2012). Instrumenty Wspólnej Polityki Rolnej ukierunkowane na poprawę środowiska przyrodniczego a planowanie przestrzenne rolnictwa. *Acta Sci. Pol. Admin. Loc.*, 11(2), 117–133.
- Kazimierczyk, B., Skapska, W., Rembiałkowska, E. (2010). Ocena świadomości ekologicznej oraz postaw prośrodowiskowych wśród rolników ekologicznych i konwencjonalnych w powiecie grajewskim. *J. Res. Appl. Agric. Eng.*, 55(3), 171–178.
- Kozera, M. (2011). Regionalne zróżnicowanie wykorzystania środków pomocowych Unii Europejskiej. *Rocz. Nauk. Roln. Ser. G*, 3, 98, 118–125.
- Kożuch, M. (2011). Pomoc publiczna jako narzędzie realizacji założeń zrównoważonego rozwoju. In: B. Kryk (Ed.), Trendy i wyzwania zrównoważonego rozwoju. Księga Jubileuszowa dedykowana Profesorowi Marianowi Małickiemu (p. 71–90). Szczecin: Uniwersytet Szczeciński.
- Kucharczyk, K., Różańska, E. (2012). Programy rolnośrodowiskowe jako instrument WPR dla ochrony środowiska w UE i Polsce. *Ochr. Środ. Zas. Natur.*, 54, 26–38.
- Kucharska, A. (2005). Programy rolnośrodowiskowe z udziałem zwierząt trawożernych szansą na utrzymanie naturalnych i półnaturalnych łąk i pastwisk oraz ich bioróżnorodności. *Chemia Dydakt. Ekol. Metrol.*, 10, 1/2, 29–32.
- Kukuła, S., Krasowicz, S. (2007). Główne problemy i uwarunkowania zrównoważonego rozwoju rolnictwa w Polsce. *Probl. Inż. Roln.*, 1, 5–15.
- Kutkowska, B., Hasiński, W. (2013). Znaczenie instrumentów WPR w wewnętrzregionalnym różnicowaniu się funkcji obszarów wiejskich na przykładzie województwa dolnośląskiego. *J. Agribus. Rural Dev.*, 30 (4), 137–147.
- Michałowski, K., Wiśniewski, E. (2010). Uwarunkowania realizacji programów rolnośrodowiskowych na obszarach wiejskich środkowo-wschodniej części województwa podlaskiego In: R. Rudnicki (Ed.), Fundusze Unii Europejskiej jako czynnik modernizacji rolnictwa polskiego (p. 161–169). Poznań: Wyd. Nauk. Bogucki.
- Pajewski, T. (2014). Programy rolnośrodowiskowe jako forma wspierania ochrony środowiska na terenach wiejskich. *Zesz. Nauk. SGGW Ekon. Org. Gospod. Żywn.*, 107, 69–80.
- Pawlewicz, A., BórAWSKI, P. (2013). Realizacja programu rolnośrodowiskowego w Polsce. *Rocz. Nauk. SERiA*, 2, XV, 271–282.
- Pietrzykowski, R., Wicki, L. (2011). Regionalne zróżnicowanie wykorzystania środków z programów Wspólnej Polityki Rolnej na modernizację rolnictwa. *Rocz. Nauk. Roln. Ser. G*, 4, 7–22.
- Pondel, H. (2007). Proekologiczna działalność wielkopolskich producentów rolnych. *J. Res. Appl. Agric. Eng.*, 52(4), 27–31.
- Powszechny Spis Rolny 2010. Zróżnicowanie przestrzenne rolnictwa (2014). Warszawa: GUS.

- Pradziadowicz, M. (2016). Realizacja programu rolnośrodowiskowego w wybranych aspektach problematyki środowiskowej w województwie zachodniopomorskim. *Folia Pomer. Univ. Technol. Stetin. Ser. Oecon.*, 329(84), 95–102.
- Racine, J. B., Reymond, H. (1977). Analiza ilościowa w geografii. Warszawa: Wyd. Nauk. PWN.
- Rozporządzenie Ministra Rolnictwa i Rozwoju Wsi z dnia 13 marca 2013 r. w sprawie szczególnych warunków i trybu przyznawania pomocy finansowej w ramach działania „Program rolnośrodowiskowy” objętego Programem Rozwoju Obszarów Wiejskich na lata 2007–2013 (2013). Dz.U. poz. 361 z 15.03.2013 r.
- Satoła, Ł. (2009). Przestrzenne zróżnicowanie absorpcji funduszy strukturalnych przeznaczonych na rozwój pozarolniczej działalności na obszarach wiejskich. *Zesz. Nauk. SGGW Probl. Roln. Świat.*, 7(22), 133–142.
- Sprawozdanie z działalności Agencji Restrukturyzacji i Modernizacji Rolnictwa za lata 2004–2015 (2005–2016). Warszawa: ARiMR.

## PROGRAM ROLNOŚRODOWISKOWY W ROZWOJU ROLNICTWA I OBSZARÓW WIEJSKICH POMORZA

**Streszczenie.** Akcesja Polski do Unii Europejskiej spowodowała, że pojawiły się nowe instrumenty wsparcia rozwoju zrównoważonego rolnictwa i obszarów wiejskich. Celem pracy było ukazanie poziomu realizacji programu rolnośrodowiskowego na Pomorzu (w województwach pomorskim i zachodniopomorskim) w latach 2004–2015. Zaprezentowano dotychczasowy stan, strukturę i zróżnicowanie przestrzenne wdrażania programu rolnośrodowiskowego w ujęciu lokalnym (powiaty). Badania dowiodły, że Pomorze należy do największych obszarów w skali kraju, na których realizowany był program rolnośrodowiskowy. Analiza wsparcia finansowego badanych obszarów wiejskich uwidacznia znaczne zróżnicowanie wewnętrzregionalne. Najmniejsza liczba beneficjentów, a zarazem najniższe kwoty zrealizowanych płatności charakteryzują powiaty o najwyższym potencjale agroekologicznym w regionie. Analogicznie najwięcej wniosków o płatności rolnośrodowiskowe składali użytkownicy gospodarstw zlokalizowanych na terenie powiatów o potencjalnie najmniej korzystnych warunkach dla rozwoju rolnictwa wysokotorwarowego i to do nich trafiło największe wsparcie finansowe. Do analizy wykorzystano wtórny materiał źródłowy – dane statystyczne Głównego Urzędu Statystycznego (GUS), sprawozdania z działalności Agencji Restrukturyzacji i Modernizacji Rolnictwa (ARiMR) oraz literaturę poświęconą podjętej problematyce badawczej. W pracy zastosowano metodę statystyki opisowej oraz analizę porównawczą, a uzyskane wyniki zaprezentowano w formie graficznej i tabelarycznej.

**Słowa kluczowe:** program rolnośrodowiskowy, region pomorski, obszary wiejskie, rolnictwo, Wspólna Polityka Rolna (WPR)

Accepted for print – Zaakceptowano do druku: 22.08.2017