

## **REALIZATION OF AGRI-ENVIRONMENTAL PROGRAM IN WESTERN POMERANIA IN THE YEARS 2007-2013**

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**Abstract.** This article presents the assumptions of agri-environmental program implemented in 2007-2013 on the example of West Pomeranian Province. The study presented the most important data on the number and amounts of applications for agri-environmental packages available, the number and amounts of decisions, the number of beneficiaries implementing various packages and the data on the area where the discussed packages were implemented. Available data indicate that of the 24 598 applications submitted in Western Pomerania, the package 2 - organic farming - gained the greatest interest among farmers but the package 9 - buffer zone - the least interest. The basic data used in the article were obtained from the West Pomeranian Regional Branch of ARMA and Management Information System (ARMA).

**Key words:** package, agri-environmental program, agriculture, organic farming, farmer.

**JEL code:** Q18

### **Introduction**

At the moment of Poland's accession to the European Union, Polish agriculture largely was shaped by the Common Agricultural Policy. Currently, the Common Agricultural Policy largely pays attention to environmental protection and the preservation of biodiversity in rural areas.

The countryside and agricultural landscape of Poland are a part of Europe's particularly unique spaces owing to the natural landscape, the diversity of crops and living plant and animal species, the traditional methods of cultivation and uncontaminated soil. The enormous wealth of our agricultural landscape largely depends on maintaining extensive farming methods and the traditional landscape of Poland's countryside. This goal is achievable through implementation and realization of agri-environmental program. Implementing it in the farms ensures the maintenance of the surrounding agricultural landscape and helps to avoid the negative effects of the intensification of agricultural production.

Agri-environmental program is implemented under Axis 2 of the RDP 2007-2013 "Improving the environment and rural areas" and consists of 9 packages, which were divided into 49 variants.

The main objective of agri-environmental program is to improve the natural environment and rural areas, in particular (Rural Development Programme for 2007-2013):

- restoring the values or the maintenance of valuable habitats for agriculture and the preservation of biodiversity in rural areas;
- promoting sustainable management system;
- appropriate use of soil and water protection;
- protection of endangered local breeds of farm animals and local crop varieties.

The recipient may be a natural person, legal person or organizational unit without legal personality, engaged in farming in the production of plant or animal.

Applicants can apply for agri-environment payment if (Step-by-step..., 2011):

- are agricultural producers;
- are the holders of spontaneous or dependent farm located in the territory of Poland, with an area of agricultural land not less than 1 ha,
- implement agri-environmental business plan for a period of 5 years;
- keep a record of agri-environmental activities;
- retain the existence of the farm and maintain permanent grasslands and landscape elements not used for agricultural purposes, creating wildlife refuges as specified in the agri-environmental plan;
- observe the basic requirements on the whole farm;
- comply with other requirements arising from the various agri-environmental packages.

Farmers are required to use farming practices that are more than mere good agricultural

practices used on the farm. The program applies to common values and constantly enables to protect nature; therefore it is worthwhile to participate in it. The maintaining of traditional farming can save a lot of valuable habitats of high natural and landscape values, which were created over many years of use by humans (Gotkiewicz, Mickiewicz, Koszykowska, 2009, p. 545). In Europe, nature and landscape in rural areas are perceived as increasing value and thus is our pride showcase.

The perception of the agricultural landscape in recent years undergoes a significant evolution, mainly due to the global effort to slow down biodiversity loss. Agricultural areas are increasingly being regarded not only as a place of food production, but also as areas of conservation of genetic, species and ecosystem diversity, thus because of the pressure agricultural technology is particularly vulnerable to adverse effects (Fisher, Lindenmayer, 2007, pp. 265–280).

Threats to biodiversity in agricultural landscapes of Poland markedly deepened after the accession of our country to the European Union and adoption of the dominant model of agriculture in the Member States. Chmielewski and Wegorek (Chmielewski, Węgorek 2003, p. 203-210) as the main adverse factors have mentioned as follows:

- increasing surface area of farms and therefore increase in the surface area of fields and agricultural monocultures and the elimination or reduction of natural ecosystems and semi-natural systems, which are characterized by richness of species and ecosystem diversity;
- increasing chemicalization of agriculture, having an extremely negative impact on flora and vegetation segetal, companion crops, and edaphon, or soil fauna and numerous groups of species, representing both the level of herbivores and entomophagous;
- the use of heavy farm equipment, degrading the soil and destroying its biological life;

- collapse of pastoralism due to closed farming and thus - abandoning the use of meadows and pastures, causing the extinction of meadow and pasture with their specific flora, fauna and the world of mushrooms;
- cultivation of a few, carefully selected varieties of crops, leading to the gradual impoverishment of their gene pools.

The primary objective of this study was to present the objectives of agri-environmental program for 2007-2013 and its implementation in Western Pomerania.

For research, the author used materials from the Agency for Restructuring and Modernisation of Agriculture in Warsaw (mainly from the Regional Branch in Szczecin and Management Information System).

### **Characteristics of West Pomeranian Province**

West Province is located in the north-western Poland, on the Baltic Sea and Szczecin Lagoon. The area of West Pomeranian Province is 22892.5 km<sup>2</sup> (7.3 % of the total area of the country), which is the fifth largest region of the country in terms of size and population (1 18 861 inhabitants).

In the west area of the province, it borders with Germany - the federal states of Mecklenburg-Western Pomerania and Brandenburg. The northern border of the province is the coastline of the Baltic Sea, which extends from Swinoujście in the west to the village of Wicko Sea in the east. From the south, the province borders on the Lubuskie and Wielkopolskie and to the east—with the province of Pomerania. The capital of the province is the city of Szczecin with a population of 408 172 (CSO data as at 31.12.2013.). The second largest city in terms of population is Koszalin (109 170 inhabitants - as of 31.12.2013.) (Szatkowska-Conon, 2014).

Administratively, the area of the province is divided into 18 land districts, 3 cities with district rights (Szczecin, Koszalin, Swinoujście), and 114

municipalities (including 11 urban, 50 rural-urban and 53 rural). Municipal Law obtain 63 localities.

The main branch of the economy in Western Pomerania is agriculture and the food industry. Important industrial branches are also wood industry, metal, chemical, shipbuilding and the production of electricity. Of great importance for the region are four commercial seaports: Szczecin, Swinoujscie, Kolobrzeg, and Police and several smaller ports and harbours that are also located on the territory (Report on the state... 2013, p. 6).

In 2013, the total area of farms in West Pomerania province amounted to 891.2 thousand ha. Individual holdings held 670.5 thousand ha, which accounted to 75.2 % of the total area of farms in Western Pomerania. The area of agricultural land of farms in Western Pomerania amounted to 836.8 thousand ha.

The overall agricultural area was dominated by sown area, whose share was 71.9 % (602.0 thou. ha). Permanent meadows occupied 13.2 % of the arable land (110.1 thou. ha) and permanent pastures - 4.4 % (36.7 thou. ha). Land left fallow accounted for 5.9 % (49.6 thou. ha) of the total agricultural land area. The share of permanent crops was 3.1 % (26.0 thou. ha); the area of orchards accounted for 2.5 % (21.0 thou. ha) of the total area of arable land and the area of home gardens was 0.1 % (0.7 thou. ha) of the total agricultural land area (Agriculture in Western Pomerania... 2014, p. 25).

The West Pomeranian region has exceptional natural value and economic value, because in this area there are:

- primeval forests: Goleniowska, Beech, Sand, Barlinek, Wkrzańska and Drawska;
- protected areas: Wolin National Park and Drawa National Park; 7 landscape parks; 116 nature reserves.

In scope of European network Natura 2000, within the province there were established 66 special areas of conservation of habitats and 23

special bird protection areas, thus aiming to preserve certain types of natural habitats and species that are considered rare and endangered (Szatkowska-Conon, 2014).

Certainly, energy is important aspect for the future development of the region, in particular renewable energy sources. Voivodeship is the national leader in the production of wind energy. In a seaside lane and in the direct vicinity of his reign, there are the best wind conditions in Poland. The share of renewable energy of the region in the total electricity production of Poland is twice higher than the average in the country (Strategic Program Economy, 2013, p. 12).

### **Agri-environmental program in Western Pomerania**

In 2007-2013, agricultural producers had the opportunity to participate in 9 agri-environmental packages. There were the following types of packages available:

- PACKAGE 1. Sustainable farming;
- PACKAGE 2. Organic farming;
- PACKAGE 3. Extensive permanent grassland;
- PACKAGE 4. Protection of endangered bird species and natural habitats outside Natura 2000 areas;
- PACKAGE 5. Protection of endangered bird species and natural habitats in Natura 2000 areas;
- PACKAGE 8. Protection of soil and water;
- PACKAGE 9. Buffer zones.

In total, in Western Pomerania there were accepted 24 598 applications, of which 23 836 applications received a positive decision (Table 1). Most proposals have been adopted in 2013, more than 5.7 % of all applications filed in the country. The amount of aid requested by farmers in the western region amounted to 708 774 454.43 PLN, of which 643 138 189 PLN was the amount of aid paid.

Table 1

**Number and amount of applications and the number and amount of decisions issued under Measure "Agri-environmental program" in Western Pomerania during the implementation of the RDP 2007-2013 \***

|               | Number of applications submitted |         | The requested amount of aid (PLN)        |                  |
|---------------|----------------------------------|---------|------------------------------------------|------------------|
|               | Province. West Pomeranian        | Country | Province. West Pomeranian                | Country          |
| Campaign 2008 | 1 045                            | 21 726  | 19 330 081.61                            | 184 398 869.67   |
| Campaign 2009 | 1 660                            | 37 395  | 37 351 207.53                            | 369 178 936.35   |
| Campaign 2010 | 3 457                            | 65 667  | 96 296 588.70                            | 776 474 990.97   |
| Campaign 2011 | 4 952                            | 88 692  | 147 273 664.19                           | 1 123 815 758.60 |
| Campaign 2012 | 6 623                            | 116 247 | 198 605 274.59                           | 1 508 141 270.43 |
| Campaign 2013 | 6 861                            | 120 315 | 209 917 637.81                           | 1 649 118 172.64 |
|               | The number of decisions issued   |         | The amount of the issued decisions (PLN) |                  |
|               | Province. West Pomeranian        | Country | Province. West Pomeranian                | Country          |
| Campaign 2008 | 977                              | 20 557  | 17 813 129.50                            | 169 193 889.94   |
| Campaign 2009 | 1 622                            | 36 406  | 35 500 149.18                            | 345 929 746.22   |
| Campaign 2010 | 3 329                            | 63 668  | 88 399 113.94                            | 727 429 596.71   |
| Campaign 2011 | 4 810                            | 86 358  | 139 486 086.75                           | 1 074 893 875.23 |
| Campaign 2012 | 6 480                            | 113 691 | 190 010 596.16                           | 1 439 189 853.22 |
| Campaign 2013 | 6 618                            | 117 156 | 189 742 243.40                           | 1 528 454 620.27 |

\* new findings and conclusions for the continuation of RDP 2007-2013

Source: Management Information System ARMA (data as of 31.10.2014)

Table 2

**Number of beneficiaries of individual agri-environmental packages in the years 2007-2012 in Western Pomerania**

| Agri-environment package | Number of beneficiaries          |                |
|--------------------------|----------------------------------|----------------|
|                          | In the province. West Pomeranian | In the country |
| Package 1                | 1 239                            | 35 962         |
| Package 2                | 4 115                            | 30 887         |
| Package 3                | 2 521                            | 48 350         |
| Package 4                | 721                              | 12 190         |
| Package 5                | 743                              | 10 351         |
| Package 6                | 229                              | 4 585          |
| Package 7                | 52                               | 3 630          |
| Package 8                | 2 192                            | 65 533         |
| Package 9                | 2                                | 173            |
| <b>Total</b>             | <b>11 814</b>                    | <b>211 661</b> |

Source: author's study based on the data from the West Pomeranian Regional Branch of ARMA

In the country during the analysed period, according to the data from the West Pomeranian Regional Branch of ARMA (Table 2), the most frequently chosen package concerned the protection of soil and water (package of 8). In the province of West Pomerania, farmers' interest was focused on farming aspects (package 2). This means that farmers were willing to convert their farms to organic farms, and participation in agri-environmental program provides applying for a subsidy per hectare of organic production, which ranges from 260 PLN/ha to 1800 PLN/ ha, depending on the variant of the agri-environmental choice. In addition, farmers' growing knowledge and awareness of management, which is as part of the package 2, made them to choose this package that provided opportunity to apply for agri-environment payments in the area of the province investigated.

Homesteads, which joined the realization of the Programme in 2007-2012 in Western Pomerania, implemented all available packages in the area of over 345 (Table 3). In the study area coincided with the most hectares of farms

implementing Package 2. Organic farming was implemented in more than 138 thou. ha (1.72 % of the total area of implementation of packages in the country), while the smallest area had a buffer zone in the package 9.

Table 3

**Total area of the implementation of individual packages in scope of agri-environmental program in 2007-2012**

| Agri-environment package | Area of farms (ha) that joined the realization of the Programme in the years 2007- 2012 |                     |
|--------------------------|-----------------------------------------------------------------------------------------|---------------------|
|                          | in the province. West Pomeranian                                                        | in the country      |
| Package 1                | 75 489.63                                                                               | 1 207 309.75        |
| Package 2                | 138 097.06                                                                              | 250 188.99          |
| Package 3                | 33 874.71                                                                               | 953 371.77          |
| Package 4                | 13 755.86                                                                               | 1 044 567.97        |
| Package 5                | 19 658.23                                                                               | 1 400 400.02        |
| Package 6                | 7 879.37                                                                                | 666 631.11          |
| Package 7                | 1 867.83                                                                                | 680 609.34          |
| Package 8                | 55 231.14                                                                               | 1 408 660.13        |
| Package 9*               | 1 280.00                                                                                | 420 994.63          |
| <b>Total</b>             | <b>345 853.83</b>                                                                       | <b>8 032 733.71</b> |

\* the total length of the buffer zone in the package

Source: author's study based on the data from the West Pomeranian Regional Branch of ARMA

## Conclusions

1) Within the 9 available packages of agri-environmental program implemented in 2007-2013 in Western Pomerania, most

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- 2) The lowest interest both in the country and in the test region concerned the package associated with the creation of buffer zones (package 9). This package requires the fulfilment of a number of complex requirements, but on the other hand, it plays an important role in the environmental protection.
- 3) The author's research leads to the conclusion that it is very important to conduct information and education campaigns on agri-environmental programs, which will greatly enhance the environmental knowledge of farmers.
- 4) Throughout the 5-year cycle of the agri-environmental program it can be seen that the interest in this program is a growing trend, which confirms the introduction of this type of activity in West Pomerania province.