PROGRAMME BOARD


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COMMON AGRICULTURAL POLICY AND ENVIRONMENTAL ACTIONS

Introduction

In terms of classical economics, the natural environment was treated as the basis for the main types of production, as well as a way of production. Some of the constituent elements of nature was treated as free goods that are not subject to degradation and depletion. This approach was highlighted by J.B. Say, who divided natural resources into two categories at the beginning of the 19th century; the first is useful raw materials, and the second is free goods known as universal (Górka in 2001). Established over the years, the perception of the natural environment has left a negative sign on societies around the world. The effect of this approach was and often still is the use of the environment in a way that leads to irreversible qualitative changes and progressive degradation.

Human activity is one of the most important factors affecting the state of the natural environment. In this study, the author focuses on the natural environment of rural areas, which condition is determined by agricultural production. The intensification of this production carried out by agricultural producers contributes to environmental degradation of contaminating surface waters by improper use of synthetic fertilizers, water and soil are contaminated with pesticide residues. Sewage from leaking non-drainage tanks to the soil is also
important. Due to agricultural production, gaseous substances accompanying animal production (ammonia, methane, carbon dioxide and hydrogen sulfide) are emitted. In addition, agriculture causes soil erosion and reduces their fertility (Kajdan - Zysnarska 2010). In the document entitled *Overview of the implementation of the environmental policy 2019*, which was developed by the European Commission, attention was drawn to the fact that the agricultural sector also contributes to reducing and limiting the area of many types of ecosystems and landscape elements in the form of ponds, oxbow lakes, wet meadows, xerothermic grasslands or alluvial forests (Overview ... 2019).

The purpose of the study is to present in a historical perspective pro-environmental activities implemented under the Common Agricultural Policy of the European Union. It is assumed that the most common and effective CAP tool in the field of environmental protection are agri-environmental programs, whose long-term implementation leads to achieving measurable environmental and economic effects (Donald et al. 2006, Primdahl et al. 2003, Whittingham 2007). In the study, the author will present the importance of supporting farms with cash due to the implementation of agri-environmental programs, the implementation of which is part of the concept of sustainable development, which ensures the economic development of societies while respecting the aspects of environmental protection.

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This study was based on materials from scientific centers dealing with issues of pro-environmental activities in rural areas. A valuable source of research material were data made available by the Agricultural Accounting Department of the Institute of Agricultural and Food Economics - National Research Institute. Data processing uses the DEA - Data Envelopment Analysis method, as well as index analysis and comparative analysis methods. While obtaining materials, the documentary method and the literature study method were implemented. Research results are presented using descriptive, tabular and graphic techniques.

**Environmental issues in the Common Agricultural Policy of the European Union**
Pursuant to European Union legislation, agriculture and environmental protection are separate, very important areas of activity that are of interest to the Community and constitute a shared competence shared by the European Union with its Member States. Article 33 of the Treaty on European Union assumes that the Community works for the sustainable development of Europe based on balanced economic growth and price stability, a highly competitive social market economy aiming at full employment and social progress, as well as a high level of protection and improvement of the quality of the environment (Prutis 2015).

The foundations for the creation of the Common Agricultural Policy of the European Union were the provisions of the Treaty of Rome of 25 March 1957, which established the European Economic Community (EEC). One should be aware that the legal regulations did not refer to issues related to environmental protection. The Mansholt Plan developed at the end of the 60’ contained some symptoms of pro-environmental activities, as it assumed a reduction of the arable land area by five million hectares; so obtained land was to be intended for afforestation (Markiewicz 2001). Issues related to environmental protection were introduced into Community legislation by means of the Single European Act (SEA) dated 1986. The cited document in part III of the Treaty establishing the European Economic Community added Title VII Natural environment, which covered articles 130 r - 130 t. (Prutis 2015). The Uniform European Act has adopted that issues related to broadly understood environmental protection would be an important component of other policies, in particular the Common Agricultural Policy. An outline of pro-environmental activities was found in a document adopted on July 13, 1985 by the European Commission, which was entitled The Perspective of the Common Agricultural Policy - the working version of the document is the Green Paper. One should be aware that the effectiveness and universality of applying the proposed solutions were insufficient.

The real emergence of the problem of environmental protection in the Common Agricultural Policy of the European Union should be dated on 1992, when the assumptions of the McSharry Plan were presented. The cited document assumed the introduction of the so-called instruments accompanying the CAP, whose task was to be to support the structural policy and the environmental policy functioning within it (Oleszko-Kurzyna 2008). Accompanying activities should have been understood as the implementation of the agro-ecological projects package encouraging agricultural producers to implement solutions that protect the environment in the areas of plant and animal production, and also assumed support for the afforestation process, which was to contribute to improving the state of forest resources, and was also to create a rural space in accordance with the environmental sustainability (Kowalski 2017). McSharry’s plan envisaged support for agricultural production in line with environmentally friendly principles, as well as assistance in afforestation of agricultural land. It should be in mind that before the introduction of the McSharry reform plan, the weakness
of the implemented agricultural policy was the lack of coherence of economic, environmental and social goals, and in principle the implementation of the production function at the price of deteriorating its base which is the natural environment (Łuczka-Bakula 2006).

An important issue for the protection of the natural environment of rural areas was the adoption of the Maastricht Treaty on February 7, 1992, which introduced new mechanisms of the Common Agricultural Policy in the form of rural development programs applicable to all EU Member States. The Amsterdam Treaty of 2 October 1997 introduced a provision stating that "... environmental protection requirements must be taken into account in the definition and implementation of all Community policies, in particular those aimed at sustainable (harmonious) development ...". (ABC ... 2004).

The strengthening of the changes implemented by the McSharry reform was the adoption in March 1999 during a meeting of the Berlin European Council a document entitled Agenda 2000. The cited document strengthened and strengthened the objectives set out in the Treaty of Rome while adapting them to social and economic realities. Not without significance is the fact that Agenda 2000 strengthened pro-environmental tools and aimed at separating the level of direct payments from the volume of production received on the farm, replacing them with the need to meet environmental standards known as cross-compliance. The adoption of Agenda 2000 was also associated with the introduction of the term European Agriculture Model - EAM into European legislation (Kowalczyk, Sobiecki 2011). Apart from the production of good quality food, the model also assumes the need for the agricultural sector to provide services to society, as well as shaping rural communities, environmental protection, building infrastructure and ensuring sustainable and ecological development of agriculture (Tomczak 2009).

The shape of the Common Agricultural Policy of the European Union was also influenced by Regulation EC No 1782-1788 / 2003 (OJ L 270 of 21.10.2003), adopted in Luxembourg (26.06.2003) by the ministers of agriculture of 15 Member States of the Community. Among the many new mechanisms introduced by them, the fact that the receipt of financial aid by farms depends on meeting a number of standards in the field of environmental protection, public health and animal welfare (cross-compliance), as well as decoupling the amount of payments from the production volume.

It was a result of the Luxembourg reform that agricultural producers were tasked with producing many high-quality, healthy and safe food. They were obliged to be involved in environmental protection, as well as strict compliance with standards and norms in the field of plant health, animal welfare and public health. They were obliged to care for the cultural resources of rural areas and protect the rural landscape. The introduction of the cross compliance rule mentioned above has integrated the support of agricultural incomes with the
obligatory compliance with environmental standards, and in particular with maintaining the land in good agricultural and environmental culture without increased production (Adamowicz 2008).

The next step in reforming the CAP was the creation, under Council Regulation EC 1290/2005 of 21 June 2005 on the financing of the common agricultural policy of two funds, i.e. the European Agricultural Guarantee Fund (EAGF) and the European Agricultural Fund for Rural Development (EAFRD).

The Common Agricultural Policy of the European Union was checked (health check) in 2008. Based on its conclusions, it has been implemented a process of modification of selected CAP tools and instruments without changing its structure. The most important conclusions of the review concerned maintaining the direction of CAP changes in the area of decoupling direct payments and linking payments with environmental protection, food safety and animal welfare requirements. In addition, decisions were made to promote and simplify the single payment scheme, and the use of the single area payment was only possible until 2013 (Skrzypczyńska 2011).

Undoubtedly, green agricultural policy sanctioned on the basis of Regulation 1307/2013 was and still is an important determinant of agricultural development in the European Union. According to the introduced regulations, a farmer must implement on the farm practices that reduce the diversification of crops, permanent grassland, as well as maintaining ecological farmland and implementing practices beneficial for the environment (Niewiadomski 2017).

Starting from Agenda 2000, we are dealing with the third financial programming period of the Common Agricultural Policy of the European Union, which covers the years 2014-2020, and currently we are witnessing a discussion on the shape of the next budget for 2021-2027. In each financial perspective, support for agricultural holdings under the first and second pillar of the CAP was conditioned by meeting environmental requirements. The aforementioned regulations were incentives for pro-environmental measures, which could be implemented voluntarily by agricultural producers (agri-environmental programs / agri-environment-climate action) or were obligatory (cross-compliance requirements). Undoubtedly, along with subsequent budgeting periods, there is an increase in pro-environmental requirements, and, consequently, an increase in the scope of obligations in this area imposed on agricultural producers.

In Polish reality, it was important to develop the National Strategic Plan for Rural Development for 2007-2013. The recalled vision for the development of domestic agriculture and rural areas included four priority axes of actions, among which axis II entitled The environment was oriented towards projects in the form of biodiversity protection, soil and water protection, counteracting negative climate changes (Community priorities), as well as biodiversity protection,
environmental protection and increasing forest cover (national priorities) (Tomczak 2009).

The financial perspective of the European Union for the years 2014-2020 in the area of the Common Agricultural Policy is based on an integrated land-based approach, which is supposed to promote more competitive and sustainable agriculture (Overview of CAP Reform ... 2013). The policy thus defined has been assigned three long-term goals: profitable food production, sustainable management of natural resources and climate impact, and balanced territorial development (Majchrzak 2014).

Issues related to environmental protection and ecology are a priority in many European Union policies. Confirmation of such an assessment are documents raising the issues discussed, and they include, among others "Horizontal policies of the European Union" or "Europe 2020 Strategy".

**Agri-environmental program as a pro-environmental instrument of the Common Agricultural Policy of the European Union**

It is assumed that the main tool for protecting the natural environment of rural areas is currently the implementation of agri-environment-climate actions (RDP 2014-2020), which are a continuation of the Agri-Environmental Program which is an action of the Rural Development Program for 2007-2013, implemented under the axis Improving the natural environment and rural areas. The implementation of the Agri-Environmental Program, and currently agri-environmental and climate are part of the concept of sustainable development, which in rural areas consists of multifunctionality, ensuring the right quality of life for the agricultural population and production. The agri-environmental program was legally sanctioned pursuant to Regulation 2078/92 of the European Community of 1992, as well as Regulations 1257/99 and 1698/2005, which granted it the status of a legal instrument that in the area of the CAP pursues an environmental goal throughout the European Union. Implementation of the agri-environmental program "... gives the opportunity to preserve valuable assets of the natural environment, in particular to protect agricultural land and landscape against devastation ... (Kutkowska 2008), which is part of their main goal, which is" ... reducing the negative impact of agriculture on the environment and maximizing its positive impact on biodiversity and the landscape of rural areas ... "(Kucharska 2012).

In relation to Poland, the agri-environmental program aims to stop the process of uncontrolled and unintentional transformation of permanent grassland into wooded areas, and is also intended to limit the excessive intensification of grassland and pasture management. In addition, its purpose is to eliminate and postpone ecologically disorderly agrarian transformations occurring as a result of the introduction of monocultures; the task of the agri-environmental program is also to prevent the liquidation of valuable plant and animal lands (Musial 2005).
It has been proven that the natural benefits arising from the implementation of agri-environmental program packages result from the adaptation of agricultural production methods to the requirements of environmental protection (Bartoszuk et al. 2004). This opinion is confirmed by the more than 20 years of experience of EU producers in this area, which show that the implementation of agri-environmental programs can bring measurable effects for the environment, and also contributes to the responsibility of farmers for the state of the environment. The effectiveness of these activities, as the example of Austria and Ireland shows, depends mainly on the adaptation of agri-environmental packages to the natural conditions of the region in which they are implemented (Brodzińska 2008; Kruszyński 2019).

The history of implementing agri-environmental program packages in the European Union dates back to 1993; then they began to function as part of McSharry's reform. In Kucharska's opinion (2012), the agri-environmental program is one of the most important, if not the most important, pro-environmental instrument of the CAP.

Findings

The results of the research carried out by the author of the study in 2008-2012 indicate that farms that are beneficiaries of agri-environmental program packages implemented under RDP 2007-2013 are characterized by much larger areas of arable land compared to farms not participating in the implementation of such projects. In the case of farms with an economic size in the range of 4 - <8 ESU, this difference is 20.6%, in the upper class including the range 8 - <16 ESU, the situation is similar, the difference in the area of arable land is 22.2%. In the last examined group (16 - <40 ESU) it is 24.4% [Kruszyński 2019]. The economic potential of farms, apart from land (area of farms expressed in hectares of arable land) is also determined by capital and workload. In relation to capital, it is noted that the farms of farmers participating in the implementation of pro-environmental projects are characterized by greater equity. The exception is the class comprising farms in the range 8 - <16 ESU, where expenditure for Poland is higher on farms not participating in the implementation of the agri-environmental program (Table 1).

When characterizing the economic potential of farms implementing agri-environmental packages, reference should be made to the work expenditure. The research results clearly show that the described entities achieve higher values in relation to those units that do not implement the agri-environmental program. In the structure of workload inputs of farms representing the 4 - <8 ESU class, the share of own workload ranged from 77.1% to 95%, while in the others it was higher and amounted to 93.7% on average.
Table 1. Capital value of farms

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<thead>
<tr>
<th>Year</th>
<th>A farm benefiting from agri-environmental payments [PLN]</th>
<th>Other farms [PLN]</th>
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<tr>
<td></td>
<td>Gospodarstwa korzystające ze wsparcia w ramach płatności rolnośrodowiskowych [PLN]</td>
<td>Gospodarstwa pozostałe [PLN]</td>
</tr>
<tr>
<td></td>
<td>4 - &lt;8</td>
<td>8 - &lt;16</td>
</tr>
<tr>
<td>2005</td>
<td>198026,8</td>
<td>255612,2</td>
</tr>
<tr>
<td>2008</td>
<td>243559,4</td>
<td>385494,6</td>
</tr>
<tr>
<td>2012</td>
<td>310942,3</td>
<td>497434,8</td>
</tr>
<tr>
<td>Average</td>
<td>250842,8</td>
<td>379513,9</td>
</tr>
</tbody>
</table>

Source: Own study based on FADN data

The basic measure enabling the assessment of the economic situation of farms is agricultural income, which is a source of cash inflow to the farm (Bórawski et al. 2006). The research showed that the income obtained by all three economic size classes of farms that are beneficiaries of the agri-environmental program are much higher than for farms not participating in the implementation of the instrument (Table 2).

Table 2. Income from a family farm

<table>
<thead>
<tr>
<th>Year</th>
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<td>4 - &lt;8</td>
<td>8 - &lt;16</td>
</tr>
<tr>
<td>2005</td>
<td>23861,1</td>
<td>39907,7</td>
</tr>
<tr>
<td>2008</td>
<td>20959,6</td>
<td>39785,4</td>
</tr>
<tr>
<td>2012</td>
<td>33470,0</td>
<td>68421,4</td>
</tr>
<tr>
<td>Average</td>
<td>26096,9</td>
<td>49371,5</td>
</tr>
</tbody>
</table>

Source: Own study based on FADN data

An important parameter illustrating the economic situation of farms is the gross value added, which is defined as the value of total production produced on the
farm, reduced by intermediate consumption, as well as the balance of subsidies and taxes. It should be noted that gross value added plays the role of the basic income category in a farm, being at the same time the basic criterion for assessing the efficiency of inputs of production factors (Mrówczyńska-Kamińska 2013). As a result of the conducted research, it is noted that farms - beneficiaries of the agri-environmental program are characterized by higher gross value added in all economic size classes - Table. 3 (Kruszyński 2019).

For the functioning of farms, production efficiency is of great importance, which is defined as a positive feature of economic enterprises with a positive effect (Pszczołowski 1978). The author attempts to determine the technical and environmental performance of farms occurring in the Lower Silesian and Poland. Farms were grouped according to economic size classes and the criterion of participation in the implementation of the agri-environmental program; the analysis covers 2008 and 2012. Both types of efficiency were determined using the DEA - Data Envelopment Analysis method. The model taking into account variable scale effects focused on inputs was used; the objective's function is to minimize expenses while maintaining a given effect level. The technical efficiency study included three expenditure: the number of man-hours, the total cost value and the amount of land expressed in the area of own and leased land; the result was the value of final production, including operating subsidies. In the case of environmental efficiency, three expenditures were adopted: the value of purchased mineral fertilizers, the value of purchased plant protection products and livestock density expressed in units per hectare. The effect in the case of

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<td>2005</td>
<td>41214,4 58474,9 25354,2 88221,0</td>
<td>We do not have data</td>
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<tr>
<td>2008</td>
<td>35678,3 64574,8 31854,6 115515,2</td>
<td>125665,9</td>
</tr>
<tr>
<td>2012</td>
<td>50743,1 98713,7 42203,2 173261,4</td>
<td>167437,3 62195,0</td>
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<tr>
<td>Average</td>
<td>42545,3 73921,2 33137,3 125665,9</td>
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environmental efficiency was the value of final production per 1 ha of UAA (Kruszyński M., 2019).

The results of the analysis indicate that all farms located in the province of Lower Silesia were fully effective for 2008, which participated in the implementation of the agri-environmental program. Four years later (2012) entities from the economic size class 8-<16 ESU have come close to full efficiency, but have not yet achieved it (0.99). In the country (the remaining fifteen voivodships) the economically strongest farms (16-<40 ESU) in both 2008 and 2012 achieved full technical efficiency. The situation was similar in the case of farms in the 4–4 ESU range, where farms representing these classes have reached or approached full technical efficiency (0.99). On the other hand, in farms with an economic size of 8-<16 ESU, technical efficiency in 2008 reached 0.94, while in 2012 it was 0.81.

When considering environmental efficiency, it is important to note the significant differences in the area of agricultural producers participation in implementing pro-environmental projects as well as their geographical location. The overall conclusion of the considerations indicates that the entities that are beneficiaries of the agri-environmental program packages are more effective than other agricultural holdings.

**Summary**
The conducted considerations allow to formulate the following conclusions:
1. The evolution of the European Union's Common Agricultural Policy indicates that more and more emphasis is being placed on issues related to environmental protection in the process of financing farms in the member states of the Community.
2. The economic potential of farms that are beneficiaries of pro-environmental measures results from the fact that in all economic size classes they are larger in area compared to entities not participating in the implementation of the agri-environmental program.
3. Farms that are beneficiaries of the agri-environmental program in all studied economic size classes achieve much higher income than entities not participating in the implementation of this measure.
4. Research on technical and environmental efficiency using the DEA method indicate that farms that are beneficiaries of pro-environmental measures are approaching full technical efficiency, as they reach indicators exceeding 0.8. In terms of environmental efficiency, the situation is most favorable for groups of farms that are beneficiaries of pro-environmental measures.
Bibliography
5. Brodzińska K., *Program rolnośrodowiskowy i jego zakres realizacji w aspekcie rozwoju rolnictwa i ochrony środowiska* [Agri-environmental program and its scope of implementation in the aspect of agricultural development and environmental protection], 2008, s. 83,86,90.
15. Majchrzak A., *Ewolucja Wspólnej Polityki Rolnej a zmiany zasobów i struktury ziemi rolniczej w państwach Unii Europejskiej* [The evolution of the Common Agricultural Policy and changes in
Streszczenie
Postępująca koncentracja produkcji roślinnej i zwierzęcej, a także wzrost chemizacji rolnictwa prowadzą do degradacji środowiska przyrodniczego obszarów wiejskich. Pogarszający się stan środowiska wymaga wprowadzenia mechanizmów naprawczych. W ramach Wspólnej Polityki Rolnej rolę przedsięwzięć prośrodowiskowych pełnią programy rolnośrodowiskowe, które w obecnej perspektywie finansowej określone są mianem działań rolnośrodowiskowo – klimatycznych. Stanowią one obligatoryjny mechanizm wsparcia działań prośrodowiskowych, który musi być opracowany przez każde państwo członkowskie Unii Europejskiej, ale to sami
produenci rolni decydują czy będę w nim uczestniczyć realizując odpłatnie wybrane pakiety środowiskowe.

Słowa kluczowe: programy rolnośrodowiskowe, wspólna polityka rolna, rolnictwo

**Summary**

The concentration of plant and animal production as well as the increase in agricultural chemisation lead to degradation of the natural environment of rural areas. The deteriorating condition of the environment requires the introduction of corrective mechanisms. As part of the Common Agricultural Policy, the role of pro-environmental projects is played by agri-environmental programs, which in the current financial perspective are referred to as agri-environment-climate measures. They constitute an obligatory mechanism for supporting pro-environmental activities, which must be developed by each Member State of the European Union, but it is the agricultural producers themselves who decide whether I will participate in it.

**Key words:** agri-environmental programs, common agricultural policy, agriculture

**JEL Classifications:** Q180, Q560

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