CAP and agricultural sustainability financial instruments

Joanna Pawłowska-Tyszko  
Agricultural Finance Department  
IAFE-NRI Warsaw  
tyszko@ierigz.waw.pl

Paper prepared for presentation for the 142nd EAAE Seminar  
Growing Success? Agriculture and rural development in an  
enlarged EU  

May 29-30, 2014  
Corvinus University of Budapest  

Budapest, Hungary  

Copyright 2014 by Joanna Pawłowska-Tyszko. All rights reserved. Readers may make verbatim copies of this document for non-commercial purposes by any means, provided that this copyright notice appears on all such copies.
Summary
The agricultural policy of the European Union increasingly focuses on sustainable development of agriculture. The CAP provides many ways and methods supporting implementation of the sustainable development concept. The purpose of this paper is to review and evaluate the effectiveness of financial instruments under the Common Agricultural Policy focused on implementation of the concept of sustainable agriculture.

A review of financial tools under the CAP indicates that the most widely used financial tool of the environmental policy encouraging agricultural producers to deliver public goods and internalise external costs are subsidies, especially agri-environmental payments as well as subsidies for LFA farms.

Key words: sustainable development, financial instruments, Common Agricultural Policy.

Introduction
One of the most important problems resulting from the economic and civilisation development is the environmental pollution and negative social changes which lead to the inefficient use of owned resources. The experience of the highly developed European Union countries shows that one of the reasons for this situation is the development of agriculture based on intensive agricultural production. Studies carried out by the European Environment Agency (Evaluation of the environmental protection integration..., 2006) show that agriculture is responsible for about 50% of the water consumption in southern Europe, contributes in ca. 50% to the pollution of rivers with nitrogen in the EU-15 countries, is responsible for ca. 10% of greenhouse gas emissions and for 94% of ammonia emissions in the EU-15 countries. Therefore, there is a need to make changes in the existing consumption and production patterns. Hence, the issue of the sustainable agricultural development is increasingly highlighted in the European Union agricultural policy as a response to the growing environmental and civilisation hazards. Under the CAP, we may find a lot of ways and methods conducive to the implementation of the concept of sustainable development. Among them, the special role is played by financial instruments. The literature of the subject includes a number of financial instruments recommended for use in the concept of sustainable development. They include, inter alia: subsidies, loans and credits for pro-environmental projects, ecological insurance, taxes.

The purpose of this article is to review and evaluate the effectiveness of financial instruments of the Common Agricultural Policy aimed at implementing the concept of the sustainable agricultural development. Studies conducted have a form of review and theoretical reflections and are a contribution to further analyses.

The main source of data were the statistical summaries and literature concerning the problem in question. For the analysis and presentation of the collected material, the methods of comparisons, induction, deduction and synthesis have been used.

Financial aspects of balancing agriculture against the background of the CAP reforms
Representatives of the neoclassical economics movement reject the state intervention in the market and are of opinion that the market mechanism is able to allocate goods and services in the optimal manner. However, there are areas which require state regulation and intervention, and we may mention here, inter alia:

- maintenance of the overall balance and ability of the economy to grow,
- regulation of the labour market relationships, preventing excessive unemployment,
- responsibility for the qualitative and structural effects of the energy, transport, ecological policy,
- environmental protection (Kaczmarek: 2004).
The above indicates that the state intervenes in case of the occurrence of externalities in areas which may significantly affect the social and environmental balance. It happens so because the market cannot cope on its own with the occurrence of externalities as it does not show preferences as to the socially acceptable level of the environmental quality. Moreover, the market deprived of regulation does not create a microeconomic mechanism for collecting and spending funds on the protection of the environment against the negative effects of the business activity (Kożuch: 2010). Hence, the state intervention in this area seems necessary. However, the problem lies in the detailed diagnosis, quantification and valuation of environmental components and environmental services. Currently, this task is extremely difficult, especially when it comes to building pay rates for farmers for providing this kind of services. This problem is highlighted by the authors of the report Calculation of pay rates for the measure Agri-Environmental-Climate Scheme (Niewiegłowska, scientific editing, 2013).

The sustainable agricultural development is based on agricultural production ensuring deliveries of safe food to current and future generations, while maintaining satisfactory ecological, economic and socio-cultural standards within the maintenance of the stability of ecosystems whose status depends on the agricultural activity (Kociszewski: 2013). The concept of sustainable development is closely linked with the state of the economy, level of consumption and, what seems to be of crucial importance, awareness of citizens in each country. In poor societies, the sustainable development often means activities to achieve the growth of consumption rates. In rich and technologically developed countries, the sustainable development is perceived rather as the protection of the environment along with the rationalisation of the production and consumption level and structure. However, it should be stressed that, regardless of the economic development level of the given country, the majority of the EU states see, apart from aiming at improving the economic prosperity, also a need to manage environmental resources in a rational manner. Finding the optimum between these areas requires, however, the institutionalisation of the activities.

In the European Union, agriculture has a strong impact on the environment, both in positive and negative terms. An important role in the effective implementation of the sustainable agricultural and rural development in the EU countries may be played by the Common Agricultural Policy. Using the available instruments, it designates and creates the conditions for the sustainable agricultural development, *inter alia*, by limiting the harmful impact of agriculture on the environment, protection of rural areas against the negative effects of the industry, dissemination of environment-friendly agricultural production methods. The state may influence the sustainable development of the economy using three groups of financial tools such as: regulations and controls, taxes (Pigovian tax) and public expenditure and transfer payments. Depending on the method of their functioning, they may be divided into direct regulatory instruments (hard) and indirect regulatory instruments (soft) (Poskrobko: 2001). Indirect regulatory instruments usually perform an auxiliary function in relation to hard tools such as standards, prohibitions or taxes. The reasonableness of applying this type of instruments, wherever possible, is determined by the theoretical, economic argument of the cost-effectiveness of this type of regulations (Śleszyński: 2004).

The first years of the functioning of the Common Agricultural Policy contradicted the concept of the sustainable development. Until the 80s, the Common Agricultural Policy has focused mainly on economic issues. The environmental aspect virtually was not taken into account and social circumstances were considered indirectly as a derivative of income growth. However, the first attempts to make changes emerged as early as in 1969 when the Mansholt Plan was introduced. The pro-environmental measures taken included the afforestation campaign, expansion of nature protection areas, conversion of land for recreational purposes. These activities, however, were very inefficient and, what is more, by the fact that they were initiated together with the existing market intervention instruments, they contributed to the
further intensification of production. In 1975, there was the first attempt to support less-favourable areas (LFA), which was a manifestation of the activities to promote the multifunctionality of agriculture (Van Huylenbroeck, Durand: 2003). A tool that was to support the development of that activity were subsidies. In 1984, in order to reduce the supply of milk in the market, national and individual milk quotas were introduced. An indirect effect of that activity was the limitation of the influence of harmful substances on soils (nitrogen) through the application of financial penalties for exceeding the determined limits. Those activities did not lead to the radical improvement in the functioning of the CAP, however, they showed the direction of the EU policy for the protection of the environment and resources of rural areas.

The full concept of the environmental protection appeared in the Common Agricultural Policy only in the mid-80s of the last century and was initiated by the so-called “Green Paper”, adopted in 1985. Looking through the prism of the concept of the sustainable development, it introduced new structural policy instruments encouraging agricultural producers to reduce the use of basic production factors in agriculture (e.g. set-aside, subsidies, extensification, land afforestation, etc.). In 1992, when the McSharry reform was introduced, there was a breakthrough in the concept of making agriculture sustainable. For the first time, the need to protect the environment by means of the CAP instruments, including financial instruments such as agri-environmental subsidies, was clearly emphasised. A prerequisite for the farmer to receive payment was the meeting of basic environmental standards and making an obligation to take additional measures for the environmental protection (which go beyond the provisions of law applicable in the given area or basic standards of good agricultural practices).

The next stage of changes was provided by Agenda 2000 being a continuation of the 1992 reform, expanded by new support instruments, inter alia, obligatory support for less-favourable areas (LFA) or financial support for pro-environmental investments in agricultural holdings. A number of institutional and legal activities have been initiated and they were actually implemented in the further stages of the CAP reform. Among them, we should mention: cross-compliance principle, Code of Good Agricultural Practices (CGAP), modulation mechanism.

Further changes were introduced in 2003 by the Fischler reform whose main achievement, in terms of achieving the environmental objectives, was the introduction of the cross-compliance principle. It means an obligation to respect the environmental and hygienic minimum as a prerequisite to receive direct payments. Those changes made support for agricultural holdings conditional upon the keeping of environmental standards and it seems that they clearly affected the improvement in the environmental status. However, it should be stressed that instruments of this type do not solve the problem as a whole. In case of holdings involved in intensive animal production (e.g., fattening of swine), such support is virtually invisible, which results from the low demand of this type of activity for land, to which direct payments relate.

As part of the 1st pillar, they also introduced, inter alia, the possibility to exclude (up to 10%) and change the purpose of direct payments, obligatory modulation (3-5% of direct payments); implemented decoupling; initiated subsidies for crops for production of biofuels. An important step for the sustainable development under that reform was to extend the scope and increase the effectiveness of the 2nd pillar. The most important changes in this area include: replacing the Code of Good Agricultural Practices (CGAP) with the requirements of the cross-compliance principle and linking this principle with direct payments; increasing the number of measures from 22 to 37 and dividing them into three thematic axes; raising the importance of environmental protection activities.
In 2008, the Health Check of the CAP was carried out which was a summary of the implementation of the 2003 reform and determined the lines of action for the following years. Within the framework of financial instruments used in the sustainable development, the following was recommended, *inter alia*: abolition of subsidies for energy crops, introduction of progressive modulation in the EU-15 (linking the relocation of direct payments to the 2nd pillar with the level of subsidy per holding) and the extension and simplification of the cross-compliance principle using subsidies through the introduction of an obligation of Good Agricultural and Environmental Conditions (GAEC) on all land, protection requirements of characteristic features of the landscape and improvement in water resources management.

In the 2014-2020 reform, a number of essential changes in terms of financial instruments supporting sustainable agriculture (*Proposal for regulation...*; 2011) were introduced. Particular changes took place in the 1st pillar, where the scope of the impact of direct payments on sustainable production was increased (30% of their value, the so-called national envelope will be granted for the provision of environmental “greening” services, additional in relation to the cross-compliance principle). The possibility to supplement LFA payments with a pool of direct grants (up to 5%) for farmers in areas facing specific natural constraints (AFSNC) was introduced.

The above review indicates that the Common Agricultural Policy covers the increasing range of financial instruments of the agri-environmental policy (table 1). However, their impact on the sustainable agricultural and rural development will depend on how effectively they will be implemented at the national and regional levels.

**Table 1. Sustainable development financial instruments applied within the CAP**

<table>
<thead>
<tr>
<th>Year of introduction</th>
<th>Type of intervention</th>
<th>Type of financial instrument</th>
<th>Potential impact on sustainable development</th>
</tr>
</thead>
<tbody>
<tr>
<td>1975</td>
<td>Support for LFA</td>
<td>Subsidies</td>
<td>- development of multifunctional agriculture</td>
</tr>
<tr>
<td>1984</td>
<td>Milk quotas</td>
<td>Financial penalties</td>
<td>- reduction of nitrogen in soil</td>
</tr>
<tr>
<td>1985</td>
<td>Set-aside, production extensification, land afforestation</td>
<td>Subsidies</td>
<td>- reduction in the use of basic production factors in agriculture</td>
</tr>
<tr>
<td>1993 – McSharry reform</td>
<td>Agri-environmental programmes (AEP)</td>
<td>Agri-environmental subsidies</td>
<td>- protection of the environment and the landscape - reduction in the production volume - reduction in the supply surplus</td>
</tr>
<tr>
<td>2003 – Mid-term review</td>
<td>Cross compliance (CC) principle Modulation – change in the direct payment scheme Promotion of renewable energy Prohibition of using harmful substances</td>
<td>Direct payments, Payments for energy crops Agri-environmental subsidies Financial penalties</td>
<td>- reduction in the environmental pollution - diversification of the business activity - protection of endangered resources environment - protection of endangered breeds of animals (goats, sheep), - maintenance of soils in good agricultural condition</td>
</tr>
</tbody>
</table>
From Table 1, it results that among financial instruments used within the CAP and conducive to the sustainable agricultural development, we should mention: direct payments, subsidies to agri-environmental programmes, subsidies to LFA, ecological taxes, financial penalties. These instruments perform two independent functions: stimulating and fiscal. The knowledge of this fact is of great importance in developing national sustainable development policies. In case of agriculture, which due to its specific nature plays a special role in the economy, the drastic “rise in costs” of the activity harmful to the environment is not possible and acceptable. Hence, among the above-mentioned instruments, the most commonly used are all types of subsidies (agri-environmental payments, direct payments, subsidies to LFA, etc.). Ecological taxes are of marginal importance. It should be added that the next financing period 2014-2020 will foster the development of new instruments such as mutual funds or insurance, which may complement traditional financial instruments applied in the sustainable development policy.

Subsidies are a specific state intervention instrument, which significantly affects the change in the management conditions and may be used to shape the sustainable development policy. Subsidies may implement, however, many functions, as indicated by the CAP policy. They may be compensation to producers due to reduced prices of agricultural products, perform a profit-making function in EU agriculture or possibly a social function in case of small holdings or have an impact on the sustainable rural development. Subsidies do not make users of the environment (farmers) carry out pro-environmental activities, however, they are an economic incentive, inducing them to take greater care of nature. Nevertheless, the problem of adequate subsidies to agriculture still remains unresolved. Therefore, subsidies should be designed and introduced into the sustainable development policy in an exceptionally careful manner.
Evaluation of the CAP financial instruments in terms of the sustainable agricultural development

Agricultural areas within the EU are of indisputable importance for present and future generations, which results from their specific natural, cultural and social values. This is also stressed by the Cork Declaration of 1996, which indicates that agriculture, despite its declining importance in the economy, plays an important role with respect to maintenance of natural resources in rural areas (Buckwell: 1997). They largely determine the shape of the policy addressed to agriculture. In Kociszewski’s opinion, these unique resources and agricultural conditions are a reason for which state interventions in its area are legitimate and support for rural areas under the CAP remains one of the most important elements of the EU policy (Kociszewski: 2013).

The CAP financial instruments affect the agricultural sustainability in a very diversified way. They may have a negative, positive or neutral impact and they are analysed in this paper in such terms. In order to present the impact of the CAP on the sustainable agricultural development, the structure of the expenditure of this policy was presented (Table 2). In the analysed periods, the share of both pillars in the CAP expenditure in the EU-15 is at the similar level and amounts to ca. 83% in the 1st pillar and 17% in the 2nd pillar. In the new Member States, the 2nd pillar plays a much greater role in the agricultural policy than in the EU-15. However, we may notice a change in proportions, which is unfavourable to the 2nd pillar (a decrease by 15.2 p.p.). Despite this fact, we may recognise that in the EU-12, the CAP is much more strongly geared towards support for the sustainable development than in the EU-15 (Kociszewski: 2013).

Table 2. Breakdown of the CAP financing between the main groups of instruments (in %)

<table>
<thead>
<tr>
<th>Groups of countries</th>
<th>2004-2006</th>
<th>2007-2013</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>1st pillar</td>
<td>2nd pillar</td>
</tr>
<tr>
<td>EU-15</td>
<td>82.5</td>
<td>17.5</td>
</tr>
<tr>
<td>EU-10 (EU-12*)</td>
<td>37.8</td>
<td>62.2</td>
</tr>
<tr>
<td>EU-25 (EU-27*)</td>
<td>77.5</td>
<td>22.5</td>
</tr>
</tbody>
</table>

* data for the years 2007-2013


An overview of financial tools applied within the CAP indicates that the most commonly used financial tool for the pro-environmental policy encouraging agricultural producers to deliver public goods and internalise external costs are subsidies, especially agri-environmental payments and subsidies to holdings in LFA. The objective of agri-environmental payments and subsidies to LFA is financial support for farmers, who, by means of appropriate production methods, proper use of soils, water, etc. reduce the negative impact of agricultural activities on the rural environment as well as contribute to the preservation and enhancement of ecological values of the countryside and to the protection of its unique landscape. The value of funds allocated from the CAP for the environmental protection determines the direction of the development of the agricultural policy. The analysis of the expenditure under the 2nd pillar on the individual axes indicates that in the years 2007-2013 in all groups of the Member States the larger part of the 2nd pillar was allocated for the environmental protection (Table 3).
Table 3. Allocation of funds among the priority groups of the CAP 2nd pillar instruments by rural development plan for the years 2007-2013 (in %)

<table>
<thead>
<tr>
<th>Axis of the 2nd pillar</th>
<th>Group of countries</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>EU-27</td>
</tr>
<tr>
<td>Axis 1</td>
<td>33.2</td>
</tr>
<tr>
<td>Axis 2</td>
<td>46.8</td>
</tr>
<tr>
<td>Axis 3</td>
<td>17.2</td>
</tr>
</tbody>
</table>


Axis 2 (Improvement of the natural environment and rural areas) is the largest part of the 2nd pillar in terms of value. A rise in the expenditure under this axis in the years 2004-2006 in relation to the 2007-2013 period was significant and amounted to 72.8% (from EUR 26.1 billion to EUR 45.1 billion) in nominal terms. Kociszewski says that according to the data from 2012, the largest share of Axis 2 in the value of the RDP 2007-2013 took place in Ireland (80.2%), the United Kingdom (75.4%) and Austria (73.9%), while the lowest was in Bulgaria (23.2%) and Romania (25.5%) (Kociszewski: 2013).

Many studies indicate that agri-environmental payments contribute to reducing external environmental costs (reduction in water and soil pollution, degradation of biodiversity, climate change) and also to generating external benefits (creation of conditions for the preservation and enhancement of biodiversity and landscape, absorption of soil, water and air pollution coming from other sectors) (Kociszewski: 2013). Environmental payments also bring positive effects in the social dimension, because as a basis of remuneration for green services, they also play a profit-making role, which is of particular importance in small, extensive holdings being main beneficiaries of these programmes (Evaluation of agri-environmental measures..., 2005). However, there is a problem with adequate subsidies for farmers for delivering public goods and internalising externalities. It turns out that the impact of subsidies on taking environmental actions is overrated. In other words, some farmers are excessively subsidised, while others are insufficiently remunerated, which translates into their lower motivation and reluctance to involve in voluntary agri-environmental projects. This is confirmed by the studies by S. Chabe-Ferret and J. Subervie, who noted that as a result of support for agri-environmental activities, two effects emerged: additional – value added generated by the implementation of an obligation and windfall - extraordinary, unexpected income (Chabe-Ferret, Subervie: 2012). The farmer should actually receive remuneration from the budget for achieving the additional effect only. Meanwhile, after receiving the subsidy, the producer’s marginal private costs decrease and its benefits increase. Thus, subsidies are cost-ineffective and hence producers do not incur full social costs of their activities.

One of the main reasons for this situation is a problem to identify and measure the additional effect, which, according to the authors of these studies, results from the complexity of identifying the nature and direction of causality. The studies by S. Chabe-Ferret and J. Subervie are confirmed by the report of the European Court of Auditors (Is the agri-environmental support system..., 2011). According to its authors, agri-environmental payments have brought environmental benefits by helping in maintaining extensive farming practices but failed to encourage the transformation of intensive farming into environment-friendly agricultural methods. Moreover, they noted that aid amounts were inadequate to the needs and environment-friendly agricultural practices applied (they were either inflated or depressed). Due to this situation, the intended effect of economy in the field of the
environmental protection was smaller than it should be. For example, when calculating aid amounts, usual calculation errors of up to 8.5% of these amounts appear, as found in Andalusia, Piedmont and Sweden. Some Member States, including Poland, used outdated data to calculate the key elements of aid amounts. There are also several errors appearing during payment of agri-environmental payments. The most common of them include payment of amounts for agricultural practices which have already been applied by the beneficiaries. Such a situation took place, inter alia, in Andalusia (double registrations roving the cost local needs, the same amount lay towards the pressure on the crops for economic and social crops.

2013). Fixing the rates fixed individually on the basis of the auction system regional Sauer and Slangen: 2007). They suggest that if the allocation of funds for agri-environmental programmes was focused geographically, taking into account local needs, the same amount was used more efficiently rather than in places where funds were also spent in areas without any environmental problems.

An example would be France, which focuses its environmental submeasures on Natura 2000 areas or areas affected by specific problems (water pollution, soil erosion). These areas are strictly defined and they are only areas eligible for support. It turns out that the level of participation in the programme is low in submeasures focused on the water pollution in regions with intensive agriculture, because this requires changes in agricultural practices, in particular in the application of plant protection products. For example, in Polish agri-environmental programmes for the years 2007-2013, deterioration in the quality of the environment was found (in terms of the high stocking density of animals affecting the quality of water, sensitivity of various types of soils to erosion, etc.) in some areas. It turns out that in the years 2007-2013 Poland discontinued allocating the funds based on the zone approach applied in the years 2004-2006 and carried out agri-environmental measures across the country. It should be added that the discontinuance of the previous approach was not supported by a cost-benefit analysis. The need to apply marginal accounting in designing agri-environmental contracts and thus the principles of remunerations for farmers is stressed by J. Sauer and A. Wossink. They think that the marginal analysis is, therefore, essential for the regional diversification of rates of agri-environmental payments, their clearer focus, until the rates fixed individually on the basis of the auction system are reached (Sauer, Wossink: 2013). Fixing the individual rates is a starting point for improving the cost-effectiveness of agri-environmental programmes and counteracts payments of excessive compensation to certain farmers and thus public funds are better used, but it will also generate higher administrative and transactional costs (especially in the first phase) (Niewiegłowska et al.: 2013).

Another financial tool applied within the CAP until 2009 were subsidies to energy crops. By definition, they were to promote the development of sustainable agriculture. As noted by Kociszewski (Kociszewski; 2009), they caused huge damage in ecological, economic and social terms. In his opinion, energy crops, mainly rapeseed and maize, ousted crops for food and contributed to the excessive intensification of production and increase in the pressure on the environmental status – especially when it took place in set-aside areas. For example, in the entire EU, on average, 20% of these areas were used for energy purposes (from 6% in Germany to 33% in Spain). Abolition, in 2009, of this type of subsidies seems to be an important step towards the marketisation of the bioenergy policy and more rational use of environmental resources.

An important role in the implementation, unintentionally or indirectly, of the concept of the sustainable development is currently played also by direct payments which are increasingly stronger related to the obligation to meet the specific standards by the agricultural holding, i.e. the implementation of the cross-compliance principle and the
protection of animal welfare and the environment. However, it should be noted that these subsidies contributed and still contribute to the intensification of production and generating external costs. For example, in the years 1992-2004, payments to crops of cereals, oilseeds and protein plants contributed to an increase in their area by about 5%, while the area of permanent grassland decreased by about 3% (Environmental impact assessment of CMO measures...: 2007). The areas for crops were increased in a rapid manner dictated by payments, at the expense of removing permanent landscape features (e.g. hedges, woodlots). Changes introduced under the 2003 reform (decoupling) slightly mitigated this problem and contributed (to a small extent) to limiting damage to the environment.

However, the most important positive effect of direct payments, when looking through the prism of the sustainable development, is the improvement in the economic situation of agricultural holdings. In the longer term, this may result in the increased care of the improvement in the conditions of management, not only in economic but also in environmental terms. Kociszewski notes that the problem of the environmental impact of direct payments is ambiguous (Kociszewski: 2013). On the one hand, it contributes to the intensification and increase in the environmental pressure (depending on the payment system adopted in the country concerned), and on the other hand protects agriculture from becoming increasingly unsustainable. Direct payments are, in fact, guarantees of the existence of small, extensive holdings being main suppliers of public goods. A justification for the agriculture subsidisation policy in the field of the environmental protection may be: necessity of and striving for the fastest possible removal of the particular pressure on the environment, the need to protect natural resources necessary to preserve welfare of the environment or the implementation of a strategy to maintain jobs in agriculture for the purpose of eliminating social tensions.

Member States have at their disposal a number of other instruments serving the sustainable development policy, e.g. establishing the legislation, specific taxes or improving advice and training. From a review of pro-environmental tools applied in seven EU countries it results that only France and Sweden apply alternative financial instruments clearly included in rural development programmes. For example, in Sweden, legal provisions are among the most important tools reducing the negative impact of the use of fertilisers and plant protection products. In France, agri-environmental payments are only one of the tools governing the issues of biodiversity, water, etc. Apart from them, national regulations and taxes are mentioned, on equal terms. The tax system is a tool determined by the behaviour of the entities in the market and thus it can be used to achieve the objectives of sustainable development. Its role consists in providing the state with funds for public expenditure. Agricultural tax systems in the EU countries are very diversified and in some Member States, ecological taxes are used to reduce the effects of externalities.

From a review of the literature it results that only few countries use this kind of taxes in agriculture, what is more, the CAP does not refer to this kind of instruments. It turns out that a prerequisite for achieving intended externalities (agri-environmental and social) using the tax system is its transparency in the context of the advisability of its use. The Government may use its influence to control harmful externalities, by imposing taxes on these types of activities which give rise to external public costs. Another way to implement the concept of the sustainable development are tax reliefs for donations to the protection of the environment. The CAP does not provide the guidelines regarding the necessity and method of applying this type of tools, nevertheless, in some EU Member States special solutions to foster the concept of the sustainable development have been included in tax systems. An example may be Belgium, where the farmer may deduct, from his income, 13.5% of expenses incurred for the implementation of energy-saving and pro-environmental technologies in his holding. Similar reliefs are applied in the Netherlands (Pawłowska-Tyszko: 2013).
Conclusions

A review of financial tools under the CAP indicates that the most widely used financial tool of the environmental policy encouraging agricultural producers to deliver public goods and internalise external costs are subsidies, especially agri-environmental payments as well as subsidies for LFA farms. There is, however, a problem of adequate subsidising for delivering public goods and internalising external effects.

Direct payment implemented through the 2nd pillar foster the development of industrial agriculture to a larger extent, while financial instruments of the 2nd pillar – the development of sustainable agriculture. This means that the 2nd pillar is more desirable in terms of the concept of the sustainable development and its share in the CAP budget should be increased.

Agri-environmental payments are one of many instruments used in the sustainable development policy. The Member States may also implement its objectives in a different way, e.g. through the establishment of legislation, training and advice or the introduction of specific taxes. Consideration of such alternatives would allow for the efficient use of financial instruments for the environmental protection. It may be assumed that measures focused on non-financial support, i.e., agricultural education, advice on the use of environment-friendly techniques, innovation in holdings, can give better results than support in the form of payments.

In order to increase the effectiveness of subsidies, they must be focused in a clear and proper manner. Preferably, they should be individualised, with the properly defined purpose, which would enable their appropriate use. At present, subsidies are focused in an objective manner which entails the larger difficulties in the area of financial administration and supervision, especially where there are too many beneficiaries. It emerges that the impact of subsidies on undertaken pro-environmental activities is overrated.

Factors justifying the policy of subventions for agriculture in the field of environmental protection may include: the need for and pursuit of immediate removal of particular environmental pressure, the need for protection of natural resources necessary to preserve environmental welfare and implementation of the strategy to maintain workplaces in agriculture in order to eliminate social tensions.

Bibliography


European Court of Auditors, *Is the agri-environmental support system well developed and managed properly*, Special Report No 7, Luxembourg 2011.


