
Camelia MĂNESCU¹, Ada-Flavia CRISTINA¹, Teodor MATEOC¹, Gheorghe Sebastian SÂRB², Alin POPESCU¹, Nicoleta MATEOC-SÎRB¹

¹Banat's University of Agricultural Sciences and Veterinary Medicine „King Michael I of Romania” from Timişoara, Department of Management and Rural Development, 119 Calea Aradului, Zip code 300645, Romania, Emails: cameliaoborocea2004@yahoo.com, ada_flavia@yahoo.com, mateocnicol@yahoo.com
²University of Oradea, Faculty of Environment Protection, 1 University Street, Oradea, Romania

Abstract

Lately, the forest surface was reduced from about 19 million hectares, as it was in the distant past, to 6.4 million hectares, while the Romanian geographical environment is increasingly subject to natural and anthropogenic hazards. Regarding the distribution of the forests by main landforms, there is a major imbalance, were is noticed a striking deficit of woodlands in the plains. Given the unbalanced distribution of the green coverage of Romania, in the context of climate changes, the authors point out that is of great importance to establish protective forest curtains. The authors highlight the need of reconstruction of the country's land patrimony, mainly through reforestation, by establishing more protective forest curtains. Thus, we consider that the need and desirability of setting the forest protective curtains on the Romania’s surface, are two particularly important factors in the sustainable development of the rural communities, for which RDP 2014-2020, through the funds allocated for the Measure M8 - 105 mil. Euro, is helping to achieve these objectives.

Key words: forest, measure, protection curtains

INTRODUCTION

Taking into consideration that over 56% of the population in the 28 Member States of the European Union is living in rural areas, which cover over 91% of the territory, rural development has become a vital policy. Moreover, Europe possesses a great regional diversity of landscapes ranging from mountains to plains, from impenetrable forests to steppes. Also at budgetary level there is a shift from Market support policy to the rural development aiming at diminishing the intervention mechanisms and stirring the economic, social and environmental development in the countryside. [5] In comparison with the relatively equal proportional distribution of the main landforms at the national land fund level; at the level of Forest National Fund there is an obvious imbalance in terms of their distribution on the main land forms, with the majority of the forests located in the mountain areas (52%) and in the hill areas (37%) and a striking deficit of surfaces covered with forest in the plains (11%). [6, 7] The counties where the forests represent less than 16% of the total area of the land fund are considered deficient in forest areas. To increase the area with forests is one of the main objectives of the National Strategy for Sustainable Development of Romania,...
Horizons 2013-2030 and the Romanian National Strategy on Climate Changes 2013 - 2020, as well as an obligation and national priority defined in the Forest Code. [10,11] Afforestation of agricultural and non-agricultural lands is a measure designed, primarily, to help the reduction of the concentration of the greenhouse gases in the atmosphere by capturing CO₂, to reduce the soil erosion, to increase the water retention in the soil, and to adapt Romanian agriculture to the climate changes, characterized by increasing average annual temperatures and decreasing the precipitation. Therefore, the forests, the protective forest curtains and cordons newly created on the agricultural and on the non-agricultural lands, especially in the plains, will have positive effects on the local climate, helping to fight the effects of excessive droughts, will improve the local climate and the water and edaphic regimes, will reduce the plant evaporation and transpiration. [6]

MATERIALS AND METHODS

The paper is based on a deep documentation by studying a large variety of important publications belonging to well known personalities along the time who had the courage to present their opinions in order to support the development of agriculture and rural areas and the possibilities of extension of the forest protection curtains. Analysis and synthesis, logical deduction and critical approach are the main instruments used by author who tried to present in his manner and logical thinking his own opinions on role of forest protection curtains for sustainable development of agriculture and rural areas in Romania.

RESULTS AND DISCUSSIONS

In 2007-2013, the contribution of the Measure 221 "First afforestation of agricultural land" in the National Rural Development Programme (RDP) 2007-2013 could obtain the grant for the establishment of the protective forest curtains.

The purpose of this measure was to increase the national forest area by afforestation of the agricultural lands. This measure was intended to compensate. The support through this measure was to establish an amount of money for the forest plantations (standard costs), according to the technical project, an annual amount of money for the completion works and the maintenance of the plantation for a period of five years, and an annual fixed amount of money (standard) as an income for the income loss due to afforestation, per year and per ha for a period of 15 years.

This type of investments could be applied to agricultural areas, at least 0.5 hectares, on which they could establish a forest plantation. The established forest had to be preserved until the age of exploitation, which could reach up to 40 years.

The problem of sustainable agri-zoo-forest development belongs to the state authorities and scientists. [1]

Table 1. The indicative allocation for rural development measures RDP 2007-2013 (Euro)

<table>
<thead>
<tr>
<th>Measure</th>
<th>Public expenditure</th>
<th>Private expenditure</th>
<th>Total cost</th>
</tr>
</thead>
<tbody>
<tr>
<td>221 First afforestation of the agricultural land</td>
<td>3,226,656</td>
<td>482,144</td>
<td>3,708,800</td>
</tr>
<tr>
<td>Total RDP</td>
<td>9,324,804,232</td>
<td>2,635,436,614</td>
<td>11,960,240,846</td>
</tr>
</tbody>
</table>

Source: Own research based on the RDP 2007-2013, September 2014 version

In the RDP 2007-2013, 52 projects were submitted under the Measure 221 First afforestation of the agricultural lands, of which 40 were selected and contracted only 20. Altogether, up to 01.10.2015, were made the payments of Euro 447,299 from which Euro 11,452 million are payments made for the transferred SAPARD Programme projects. The RDP 2007-2013 programming period finished at the end of 2013 and later, followed in 2014 to operate a new program, the RDP 2014-2020.
Table 2. The situation on the projects within the RDP session recorded in the monitoring tables on 10.01.2015 (Euro)

<table>
<thead>
<tr>
<th>Measure</th>
<th>Submitted projects</th>
<th>Selected projects</th>
<th>Contract / financing of decisions concluded</th>
<th>Payments made</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>No.</td>
<td>Public value</td>
<td>No.</td>
<td>Public value</td>
</tr>
<tr>
<td>221</td>
<td>52</td>
<td>4,354,839</td>
<td>40</td>
<td>3,775,661</td>
</tr>
<tr>
<td>RDP</td>
<td></td>
<td></td>
<td>20</td>
<td>1,494,204</td>
</tr>
<tr>
<td>Transferred from SAPARD</td>
<td>-</td>
<td></td>
<td>3</td>
<td>13,796</td>
</tr>
<tr>
<td>Total RDP</td>
<td>150,944</td>
<td>18,533,168,276</td>
<td>98,249</td>
<td>7,363,836,852</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>84,507</td>
<td>5,658,386,655</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>7,830,993,770</td>
</tr>
</tbody>
</table>

Source: Own research based on AFIR, the RDP 2007-2013 implementation stage

In the RDP 2007-2013, 52 projects were submitted under the Measure 221 First afforestation of the agricultural lands, of which 40 were selected and contracted only 20. Altogether, up to 01.10.2015, were made the payments of Euro 447,299 from which Euro 11,452 million are payments made for the transferred SAPARD Programme projects. The RDP 2007-2013 programming period finished at the end of 2013 and later, followed in 2014 to operate a new program, the RDP 2014-2020.

Based on the analysis conducted by the Ministry of Agriculture and Rural Development it was decided to keep the RDP 2007-2013 successful measures. Thus, in the 2014-2020 programming period will be supported the following measures:

**Modernizing and increasing the viability of the agricultural exploitations by strengthening them and by opening them to the markets and to the processing of the agricultural products**

In order to develop the Romanian agriculture to the European standards, MARD plans to fund further investment measures on farms. Increasing the competitiveness of the agriculture will allow covering the necessary food products and will increase the exports, especially of the manufactured products. Encouraging the niche agriculture will also lead to the increased competitiveness of the agriculture.

**Encouraging younger farmers into agriculture**

The support given in 2007-2013 will be continued in the future, in order to rejuvenate the rural population and to facilitate the process of modernization of the farms. From this perspective, young farmers who want to develop their business in the agriculture, will make an important contribution to the modernization and refurbishment of this sector, as well as, to the introduction of the innovative technologies in agriculture. Therefore, it was proposed the increasing to the maximum amount of support, at Euro 50,000/farm.

**Rural infrastructure**

It was acknowledged the need for basic infrastructure to attract the investment in the rural areas and to lead to the creation of new jobs and, thus, to the development of the rural areas. Therefore, the priority will be to create/develop local infrastructure, including irrigation infrastructure as a precondition for economic development of the rural areas.

**Promoting the creation and the development of micro and small non-farm businesses**

A priority for future rural development policies is to promote the creation and the development of non agricultural micro and small enterprises in rural areas.

**LEADER**

It is another measure which will continue in 2014-2020 with the local development objective.

**The financial allocation within the RDP 2020**

EU financial allocation from the European Agricultural Fund for Rural Development (EAFRD), granted to Romania for the implementation of the National Rural Development Programme 2014-2020, the sum of Euro 8,015.6 million.

The proposals of the intervention and indicative EAFRD allocations target a first set of investments in farm and rural businesses, as follows:

- Euro 2,057 billion for investments in physical assets;
- Euro 800.36 million for the development of the farms and the businesses;
Euro 1.1 billion for the basic services and village renewal in the rural areas

A second set of measures for funding in the new RDP is relating to the environment and the climate, with a total allocation of Euro 2,387 billion.

This series of measures includes:
- afforestation and creation of the woodlands and forest curtains - Euro 105 million;
- agri-environment and climate measure - Euro 850 million;
- ecological farming - Euro 200 million;
- delimitation of the areas which are faced with natural or other specific constraints - Euro 1,232 billion.

The last proposed set:
- measures regarding the knowledge transfer and the information actions with an allocation of Euro 25.40 million;
- counseling services with Euro 25.40 million allocated;
- cooperation with an allocation of Euro 28.01 million;
- risk management (mutual fund) with Euro 200 million.

For LEADER programme will be allocated Euro 625 million, and for the technical assistance, including the National Network for Rural Development, is prescribed an amount of Euro 178 million.

New measures introduced in the RDP 2020

The National Program for Rural Development for the 2014-2020 focuses on a limited number of measures that meet the identified needs on the basis of the sectoral analysis, of the socio-economic and of the environmental, as well as, of the SWOT analysis of the rural areas which reflect the courses of action in the agriculture and in the Romanian village development.

The focusing on the interventions in the 2014-2020 programming period aims to maximize the impact, to simplify the accessing process and to address the structural issues on the agriculture exploitations.

Hence, RDP 2020 is both a priority and a need identified by the socio-economic analysis of the rural areas. European funds assigned for this programming period help the management of the sustainable irrigation systems and the promotion of the harvesting patterns which are using water efficiently, and also the creation and the management of protective forest curtains against erosion.

The RDP for the 2014-2020 (financed by the European Agricultural Fund for Rural Development) supports the strategic development of the rural areas through the strategic approach of the following objectives: restructuring and increasing the sustainability of the agricultural exploitations, sustainable management of the natural resources and combating the climate changes, economic diversification, creating jobs, improving the infrastructure and the services to develop the quality of life in the rural areas.

The National Rural Development Programme for the 2014-2020, includes 14 measures for rural development, amounting to Euro 9,363 billion (Euro 8,015 billion EAFRD and Euro 1,347 billion national contribution).

The list of the measures from the National Rural Development Programme for the 2014-2020:
- Measure 1. Knowledge transfer and information actions
- Measure 2. Counseling Services
- Measure 4. Investment in physical assets
- Measure 6. Development of the farms and the businesses
- Measure 7. Basic services and village renewal in the rural areas
- Measure 8. Investments in the forest area development and improving the viability of the forests
- Measure 9. Support for the producer groups
- Measure 10. Agro-environment and climate
- Measure 11. Organic agriculture
- Measure 13. Payment for the areas facing natural or other specific constraints
- Measure 15. Forest - environmental and climate services and forest conservation.
- Measure 16. Cooperation
- Measure 17. Risk management
- Measure 19. LEADER local development (Art. 42-44) [2]

Within the National Programme for Rural Development for the 2014-2020, the forestry sector benefits from an allocation of over 105 million euros in the measure M08 Investments in forest area development and
improved viability of forests. Through this measure, it can provide funding for afforestation, both on agricultural lands and on the non-agricultural lands, and also, to create protective forest curtains. [2] According the situation of the sessions for the RDP 2014 – 2020 projects, until 10.02.2015, on the measure M8 was not filed any project, because this measure has not been released yet.

CONCLUSIONS

Given the unbalanced distribution of the green coverage of Romania, in the context of nowadays climate changes, the authors underline the importance of establishing the protective forest curtains. Thus, we consider that the need and desirability of setting the forest protective curtains on the Romania’s surface, are two particularly important factors in the sustainable development of the rural communities, for which RDP 2014-2020, through the funds allocated to the Measure M8 - 105 mil. Euro, is helping to achieve these objectives.

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