Revitalization Measures of Vegetal Agricultural Production in Galati Agroeconomic Area by Attracting European Funds

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Abstract. The diagnosis of Romanian rural area indicates the need for sustainable rural development, which means the promotion and implementation of cohesion policy, which can develop in a balanced and efficient way the urban and rural areas in Romania. In the Galați agro economical area, in the last decade, due to the negative influence of many external factors, the vegetal production has decreased dramatically and in some years, has been declared a state of natural disaster. For example, in 2007 were affected by extreme drought and high temperatures, the fall crops, spring crops, plantations of vines and fruit trees. Thus, the autumn wheat, 15.3% of cultivated surfaces was full damaged and 57.4% partially. In barley and spring barley, an area of 341 hectares (3%) was full damaged, and 3037 hectares (26.6%) partially, while at the corn for grain, 36.7% of the cultivated surfaces were full damaged and 55.7%, partially, etc. In arid areas, where deficit of water in soil is permanent, it is necessary the crop irrigation and the use of specific technologies. In addition, the soil salt phenomenon affects over 35.4 thousand hectares of agricultural area of Galați County, of which 40.4% are in the Galați agro economical area. To revitalize the agricultural vegetal production, the authors highlight the main measures to be undertaken which will require a very high volume of investment. To carry out the planned investment, the authors insist on development of viable projects, with the finishing point 2012, based on the internal sources, attracting EU funds, in accordance with the National Plan for Rural Development (PNDR).

Keywords: revitalization, vegetal production, investments, European funds

INTRODUCTION

Common Agricultural Policy aims to maintain and develop a modern agricultural sector, capable of ensuring a decent standard of living for the agricultural community and the offer of agricultural products at reasonable prices for consumers and the free movement of goods within the European Union.

For the period 2007-2009, the amounts obtained in the negotiations on agriculture amounted to over 4.7 mild. € of which 3.921 mild. € are for P.A.Č. mechanisms and rural development, and about 0.8 mild. € is expected for projects financed from structural funds.

With European integration, the Romanian peasant must give up the rudimentary technology, to acquire tractors and other agricultural machinery, to give up the production for self consumption and to capitalize the surplus of production on the market, i.e. to transform their own household farm in a commercial farm.

The short and long term strategy and proposed by National Plan for Agriculture and Rural Development has the following strategic objectives:

• sustainable development of a competitive agricultural sector;
• increase the standard of living in rural areas;
- development of rural economy through the establishment and modernization of properties for agricultural and forest private exploitations;
- development and diversification of economic activities in order to maintain and/or create some alternative/supplementary income and new jobs;
- human resources development by improving the professional training of farmers and owners of forest land and by building and strengthening the institutional capacity.

MATERIALS AND METHODS

The study was conducted in Galați agro economical area, which includes 8 localities, with an agricultural area of 51.4 thousand hectares, of which 46.4 thousand hectares (90.3%) is arable land, 3.6%, vine and trees plantations and 6.1%, natural pastures.

The period of analysis was 2002-2006, and analyzed problems were referred to the following: the cultivated area, the total vegetal production (on culture), negative factors that have influenced the evolution of vegetal production, agricultural restructuring and revitalization of agricultural vegetal production, the specific objectives for development the vegetal production, investments, the domains and the achievement sources, European funds.

RESULTS AND DISCUSSION

During 2002-2006, in the agro economical Galati area, the evolution of cultivated surfaces in the arable land is as follows (tab. 1).

Analyzing the structure of crops in 2002 - 2006 results that the agro economical Galati area is an area where it can be practiced performance agriculture.

However, during 2002-2006, the cultivation surface in the agro economical Galati area had a decrease tendency, the biggest reductions recorded at vegetable / total, legumes for beans, total potatoes etc.

Tab. 1

<table>
<thead>
<tr>
<th>Groups of crops</th>
<th>2002</th>
<th>2003</th>
<th>2004</th>
<th>2005</th>
<th>2006</th>
<th>%/2002</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cereals grains -total</td>
<td>277934</td>
<td>28597</td>
<td>25083</td>
<td>23446</td>
<td>22916</td>
<td>82.0</td>
</tr>
<tr>
<td>Grain legumes -total</td>
<td>332</td>
<td>283</td>
<td>293</td>
<td>353</td>
<td>221</td>
<td>66.6</td>
</tr>
<tr>
<td>Oil plant</td>
<td>11552</td>
<td>10753</td>
<td>15862</td>
<td>16467</td>
<td>15401</td>
<td>133.3</td>
</tr>
<tr>
<td>Other plants for industry - total</td>
<td>254</td>
<td>615</td>
<td>68</td>
<td>68</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Potatoes -total</td>
<td>580</td>
<td>604</td>
<td>616</td>
<td>664</td>
<td>394</td>
<td>67.9</td>
</tr>
<tr>
<td>Vegetables -total</td>
<td>1930</td>
<td>1446</td>
<td>846</td>
<td>846</td>
<td>529</td>
<td>27.4</td>
</tr>
<tr>
<td>Fodder plants -total</td>
<td>2134</td>
<td>2471</td>
<td>2582</td>
<td>2664</td>
<td>2038</td>
<td>95.5</td>
</tr>
<tr>
<td>Other plants</td>
<td>1329</td>
<td>1334</td>
<td>825</td>
<td>2230</td>
<td>4791</td>
<td>360.5</td>
</tr>
<tr>
<td>Land not cultivated</td>
<td>305</td>
<td>287</td>
<td>228</td>
<td>165</td>
<td>212</td>
<td>69.5</td>
</tr>
<tr>
<td>Total arable</td>
<td>46350</td>
<td>46390</td>
<td>46403</td>
<td>46502</td>
<td>46502</td>
<td>100.3</td>
</tr>
</tbody>
</table>

Source: data processed after D.A.D.R. Galați statistics

In the analysed period, total production for the main crops in the agro economical Galati area, had an uneven development (tab. 2).

Thus, from the presented data, it is found that in 2006, compared with the reference year, only the total sunflower production had an increasing trend, other cultures had a
decrease of the total production recorded between - 88.4% (tomatoes - total) and - 2.5% (wheat and rye).

The evolution of the total production achieved at the main crops in the agro economical Galaţi area during 2002-2006 – tonnes

<table>
<thead>
<tr>
<th>Groups of crops/Crop</th>
<th>2002</th>
<th>2003</th>
<th>2004</th>
<th>2005</th>
<th>2006</th>
<th>%/2002</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cereals grains - total of which:</td>
<td>101152</td>
<td>81865</td>
<td>93307</td>
<td>95198</td>
<td>71928</td>
<td>71.1</td>
</tr>
<tr>
<td>Wheat and rye</td>
<td>30193</td>
<td>7058</td>
<td>33948</td>
<td>35876</td>
<td>29424</td>
<td>97.5</td>
</tr>
<tr>
<td>Grain corn</td>
<td>61498</td>
<td>71683</td>
<td>47533</td>
<td>47419</td>
<td>35136</td>
<td>57.1</td>
</tr>
<tr>
<td>Grain legumes - total, of which:</td>
<td>601</td>
<td>329</td>
<td>564</td>
<td>758</td>
<td>324</td>
<td>53.9</td>
</tr>
<tr>
<td>Pea beans</td>
<td>341</td>
<td>93</td>
<td>241</td>
<td>413</td>
<td>210</td>
<td>61.6</td>
</tr>
<tr>
<td>Oil plants, of which:</td>
<td>21332</td>
<td>17501</td>
<td>31453</td>
<td>33990</td>
<td>16725</td>
<td>78.4</td>
</tr>
<tr>
<td>Sunflower</td>
<td>8827</td>
<td>11636</td>
<td>13968</td>
<td>15302</td>
<td>11866</td>
<td>134.4</td>
</tr>
<tr>
<td>Other plants for industry - total</td>
<td>8138</td>
<td>21146</td>
<td>1246</td>
<td>1265</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Sugar beet</td>
<td>8138</td>
<td>21146</td>
<td>1246</td>
<td>1265</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Potatoes- total, of which:</td>
<td>11555</td>
<td>604</td>
<td>13156</td>
<td>14004</td>
<td>7009</td>
<td>60.7</td>
</tr>
<tr>
<td>Legumes- total, of which:</td>
<td>18526</td>
<td>1446</td>
<td>16881</td>
<td>17537</td>
<td>15267</td>
<td>82.4</td>
</tr>
<tr>
<td>Tomatoes- total</td>
<td>12666</td>
<td>909</td>
<td>4428</td>
<td>4612</td>
<td>1464</td>
<td>11.6</td>
</tr>
<tr>
<td>Pepper</td>
<td>680</td>
<td>64</td>
<td>577</td>
<td>603</td>
<td>439</td>
<td>64.6</td>
</tr>
<tr>
<td>Fodder plants – total, of which:</td>
<td>44170</td>
<td>2471</td>
<td>35313</td>
<td>37456</td>
<td>33739</td>
<td>76.4</td>
</tr>
<tr>
<td>Lucerne</td>
<td>30555</td>
<td>1536</td>
<td>13207</td>
<td>14160</td>
<td>26658</td>
<td>87.2</td>
</tr>
<tr>
<td>Corn for silage</td>
<td>4068</td>
<td>341</td>
<td>10082</td>
<td>10647</td>
<td>1130</td>
<td>27.8</td>
</tr>
</tbody>
</table>

Source: data processed after D.A.D.R. Galaţi statistics

In this context, due to relatively low average production of sugar beet in 2004 and 2005, since 2006, the sugar beet has been removed from the culture.

Farmers' vulnerability to adverse climatic conditions has increased do to reduce application of pesticides and fertilizers and the deterioration of the used technologies.

Existing irrigation infrastructure and the access to it should be improved to combat the risks caused by climate changes. In the last 18 years was not made investments in rehabilitation/modernization of irrigation systems, but there were costs for annual maintenance and repair of irrigation systems, particularly the systems that have made applications for water from farmers.

Since 20 February 2008, it was developed and approved by the European Union, the rural development program "National Program of Rural Development 2007 - 2013", a unique program covering the entire Romanian territory.

In this program is specified the Romania situation for present and the measures to be taken to achieve the desired objectives.

Thus, in Chapter 3 - The analysis of current situation, characterized by strengths and weaknesses, the chosen strategy and ex-ante evaluation, is made a radiology of the current situation as follows:

- Romania enjoys a significant growth potential, but unused;
- investments and competitiveness in Romania are still elements that need to be improved;
- rural areas have a potential for substantial growth and a vital social role;
- the average population density in rural areas remained relatively constant;
- the rural population is not evenly distributed;
- the restructuring of agriculture and revitalizing rural economy can be important levers of development;
- the contribution of agriculture to GDP has always been high;
- the restructuring of agriculture will have a great impact on the rural economy;
- the aging process and natural decreasing of population;
- the non-agricultural rural economy uses only 24.5% of active rural population;
- on the labour market in rural areas is observed regional differences;
- the rural incomes are relatively low and the difference against urban areas increases ever more.

The structural disadvantages of agriculture are motivated by the following:
- the privatization of agricultural land in Romania agriculture generated more structural main disadvantages:
  - large area of land and many small farms;
  - large area of land owned by a large number of farmers who are approaching or have passed retirement age, especially in the smaller farms;
  - almost half the total area and total number of animals are in the subsistence farms;
  - most subsistence farms are not considered farms;
  - the subsistence farms diminish the agricultural sector performance in general, but by ensuring the food needs of vulnerable groups of population, they play an essential socio-economic role;
  - the agriculture sector faces a severe problem on the age structure of farmers, particularly in semi-subsistence segment;
  - large farms use resources effectively, although there are still discrepancies in terms of competitiveness, which should be reduced;
  - the number of tractors and agricultural machinery in Romania has decreased at the beginning of the transitional period, then began to increase, but is still low.

The National Strategic Program is focused on three key issues namely:
- facilitating the transformation and upgrading the dual structure of agriculture and forestry and related processing industries;
- improving and maintaining environmental quality in rural areas of Romania;
- managing and facilitating the transition of labour from agriculture to other sectors.

Considering the necessity to adapt the Romanian agri-food sector to the European Union requirements by promoting an efficient and viable sector from the economical and social point of view, in the context of next period of accession, the strategy sets out the main directions (axes) for the development of agriculture, forestry and rural development:
- Axis 1 – The increase of competitiveness in agricultural and forestry sectors;
- Axis 2 - Improving the environment in rural areas;
- Axis 3 - Quality of life in rural areas and diversification of rural economy;
- Axis 4 - Improving local governance and promote the endogenous potential of the rural area.

Given all the above, Romania has to align to the EU Rural Development policies and especially in agriculture, promoting and supporting all programs and sources of financing, internal and external ones, so in the perspective of year 2013, to attenuate or even disappear some gaps towards countries with developed agriculture from the European community, of which Romania is part.

From the farmers is expected to be competitive and targeted to the market - to produce what is required, subsidies for products being gradually replaced by direct payments to farmers. These payments are intended to supplement farmers' incomes, but they are
nevertheless subject to the fulfilment of certain conditions, such as: standards of hygiene and food safety, animal safety, preservation of traditional rural environment.

Therefore, the European Union has proposed a series of financial measures to help those farmers who have to face the common market: encouraging early retirement, support for less-favoured areas, environmental protection, support for alignment to European Union standards etc.

For 2007-2013, the General Directorate for Agriculture and Rural Development dispose two financial instruments for implementation of agricultural policy and rural development:

- The European Fund for Agricultural Guarantee (for direct payments to farmers and market measures);
- The European Agricultural Fund for Rural Development (for rural development measures).

Structural Funds and Cohesion Fund are part of the structural policy of Community, which aims to reduce differences in development between different regions and Member States of the European Union and to promote economic and social cohesion.

The development strategy of the vegetal production in Romania has as priority objective, the increasing of productivity, improving quality of harvested products with impact for domestic consumption and creation of availability for export.

The implement of financial support measures the vegetal activities will cause: the revitalization of fresh fruit and vegetables sectors, vines and three plantings, vegetables produced in greenhouses heated and industrialization of fruit and vegetables, tobacco, hops, medicinal herbs, potato – the improve of performance for producers associations forms under the laws in force and the gradual reduction of existed difference in performance between the producers in Romania and the Member States.

It will also ensure the diversification of production, and also the development of marketing networks, production of quality raw materials for processing industries, creating jobs in rural areas and also an optimum delivery to the consumer.

Following the analysis of the vegetal sector situation, were identified the priority directions and specific problems:

- absorption of EU funds to finance specific areas of activity. Romania has chosen to implement the single payment Scheme surface-SAPS. To offset the impact of the gradual introduction of direct payments is supplemented the allocated direct payments (SAPS) to complementary national direct payments (CNDP);
- supporting optimal recovery of agricultural production through the efficient allocation of budgetary resources and promoting measures to increase the competitiveness of Romanian products.

The specific objectives of vegetal production development mean the following aspects:

- implementation of directly support schemes on the surface and complement national support through:
  - application of common rules for direct support schemes under the common agricultural policy and establishing other arrangements for support to farmers;
  - implementation of the national legislative scheme for the implementation of direct payments and direct complementary national payments, which are granted in agriculture since 2007.
- the efficient allocation of budgetary resources to support farmers in the vegetal sector;
the application of market mechanisms specific for common market organizations in order to arrange agricultural markets (the mechanism of intervention for grain, private storage, other market measures):
  • stabilize prices of agricultural products obtained from the producer;
  • maintenance of cultivated areas;
  • ensuring that consumer needs for consumption;
  • improving the trade balance by relaunch the supply of national products.

In accordance with the Provisions of HG 923/2007 regarding the approval of the measures for developing the National Strategy to reduce the effects of drought in the short, medium and long term, the strategy at the level of Galați County has as main objective the following:
  - rehabilitation the existing irrigation arrangements and realized new arrangements through rehabilitation investments in ANIF administration and expansion of irrigation areas in areas of meadow (Prut and Siret) involving low consumption of electricity;
  - restoring anti erosion plantations which are designed to hold and defend the land affected by surface erosion and to limit soil loss in torrential rains.

In the agro economical Galati area, facilities for irrigation, draining and combating soil erosion is as follows (tab. 3).

<table>
<thead>
<tr>
<th>The arrangement</th>
<th>Irrigations - net area</th>
<th>Draining</th>
<th>Combat soil erosion (CES)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Brateșul de Sus, of which:</td>
<td>5.083</td>
<td>12.097</td>
<td>-</td>
</tr>
<tr>
<td>- 4 OUAI</td>
<td>5.083</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>- ANIF</td>
<td>-</td>
<td>12.097</td>
<td>-</td>
</tr>
<tr>
<td>2. Câmpia Covurlui, of which:</td>
<td>115.416</td>
<td>39.161</td>
<td>146.348</td>
</tr>
<tr>
<td>- 24 OUAI</td>
<td>77.923</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>- ANIF</td>
<td>37.475</td>
<td>39.161</td>
<td>146.348</td>
</tr>
</tbody>
</table>

Source: data processed after Office for Land Improvements Galați records

Economical performance expected after proposed investments are:
  - reduce loss of water on channels and reducing consumption of electricity for pumping water to irrigation hydrants;
  - waterproof and reduction of water loss by infiltration;
  - rehabilitation of repumping station SRP1 Vânători: Brateșul de sus;
  - buried pipeline network, supply channels and pumping stations for the 4 OUAI and ANIF irrigation system „Brateșul de Sus” that provide buried network, supply channels and pumping stations;
  - extension of irrigation areas in areas of meadow (Prut and Siret) on 8583 hectares, involving low consumption of electricity (only one step of pumping).

Anti erosion plantations are designed to hold and to defend the land affected by surface erosion, to adjust the leakage area, to limit losses in case of soil torrential rain.

In arid areas, where soil water deficit is permanent, it is necessary to apply specific technologies.

The soil salt phenomenon affecting 35,428 hectares (10%) located within the county of Galati, of which 14,347 hectares in Galați (10,562 ha) and Frumusica (3,785 ha) localities.
Against the presented facts above is proposed the elaborating of soil fundamental projects for soil improvement, with completion by 2012. These strategies can be put into practice only by close collaboration between policy makers and the population that became aware of the fact that the decrease of vegetal and animal production resulting from the phenomenon of excessive drought not only affects their own households, but causes a decrease of the living and the smooth running of the whole society.

The budget programs from the field crop, concerns the application of direct payments schemes, supplementary payments and direct payment scheme for sugar, and the direct payment scheme on surface for energy crops.

The absorption of community funds is in itself an objective of the strategy after taking into account the significant contribution that these funds will have to recover the differences from the development of the EU Member States. The access to these funds by the European Cohesion Policy is one of the main economic benefits.

Out of the 117 projects in the county of Galati, for the Galati agro economical area, have been submitted and implemented 24 projects. Most of the projects that were approved were for the purchase of tractors, agricultural machinery and equipment.

With the integration of Romania into the European Union and approval PNDR, Romanian farmers have the opportunity to access projects through the EAFRD.

For the agro economical Galati area, the projects proposed by EAFRD had a value of over 5.5 million Euros.

CONCLUSIONS

1. The agro economical Galați area has soil and climatic conditions that ensure the practice of an upgrading farming. However, during 2002-2006, cultivated areas have a decrease tendency, which led to the achievement of a lower total production, except sunflower, in which the surface was increasing.

2. Decreased production of plants grown in the arable land is explained by the negative influence in some years of climatic conditions, especially through reductions in the application of pesticides and fertilizers, irrigation of crops and damage to applied technology.

3. Revitalization of the vegetal production in research area is closely related to investments, which should point out by the implementation of National Strategic Program, to facilitate the transformation and modernization of the structure of agricultural production and related processing industries, improvement of the environment in rural areas, increase the quality and competitiveness of agricultural products etc.

4. The development strategy of agricultural vegetal production has as main objective, increasing productivity and quality of harvested products, with an impact on intern consumption and creating availabilities for capitalization on external market.

5. Among the specific objectives of vegetal production revitalization, the measures will focus on the following areas: implementation of financial support schemes directly on the surface and complementary national direct payment; efficient allocation of budgetary resources to support farmers in the vegetal sector; application of market specific mechanisms in order to arrange agricultural markets (for the mechanism of grain intervention, private storage, stabilize prices and other market measures); maintain the planted surface and ensure consumer needs; improve the trade balance.

6. In the agro economical Galati area, investments will be targeted for priority rehabilitation of existing arrangements for irrigation, draining and combating soil erosion, and
to make further arrangements in Siret and Prut meadows, restoration anti erosion plantations and establishment of new plantations, etc.

7. The absorption of EU funds (design by the program EAFRD) is one of the key sources that will be at the basis of revitalizing the vegetal production, contributing to the reduction of disparities compared to the existing level of development in EU member states, of which Romania is part.

REFERENCES