STUDIES ON THE SITUATION OF INVESTMENTS MADE WITH PUBLIC FUNDS UNDER 123 MEASURE "INCREASING THE ADDED VALUE OF AGRICULTURAL AND FORESTRY PRODUCTS" OF THE NATIONAL RURAL DEVELOPMENT PROGRAM, IN THE SOUTH-WEST OLTENIA DEVELOPMENT REGION IN ROMANIA

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ABSTRACT

European funds are financial instruments created by the European Union, for member states, private and/or public sector, in order to develop certain areas, and to support countries to achieve certain standards of economic, social or cultural development. The grants are the financial aid which is granted without being returned, and target many activities and investments.

The paper makes a practical analysis on the absorption of structural and cohesion funds in Oltenia county for the 2007-2013 time frame, their impact on the regional economy, as well as on the factors that have influenced the accession process.

NRDP is a complex program drawn up by representatives of the Ministry of Agriculture and Rural Development following consultations with representatives of bodies, organizations and social partners working in this field, and approved after several rounds of negotiations by the European Commission. The measures are aimed at helping the development of agriculture in Romania. These measures cover all areas of activity in rural areas, except the acquisition of land and animals.

123 Measure "Increasing the added value of agricultural and forestry products" has as general objectives to increase the competitiveness of agrifood and forestry processing enterprises by improving the general performance of enterprises in the processing and marketing sector of agricultural and forestry products, through better use of human resources and other factors of production.

Key words: agriculture, food production, regional economy, program, European funds.

INTRODUCTION

The agricultural sector can contribute to development in many ways, having a multifunctional role in the economy (OECD 2001), being “an inevitable activity for the human life” (Özçelik and Er, 2014).

Moving towards sustainable agriculture implies that economic activities need to meet the requirements of protecting and preserving the ecological balance and quality of life (Tudor et al., 2014).

Agriculture also serves as a stabiliser for the internal political balance and, from the point of view of the food-stuff production, it can be seen as a branch with an important social function (Vošta, 2012).

Social and economical problems that occurred into rural areas are, generally, the ones related to dramatic changes in sharing of agricultural land and, as a consequence, the decrease of agricultural production (Arion, 2006).

Subsidizing itself has constituted an incentive for the agricultural production capacity expansion and for the increase of the subsidized areas (Toma et al., 2012).

The regional policy instruments are the so-called structural funds that are part of the EU budget. Through them, the economic and social balance in the EU is reached. The main tools of the EU structural policy are the European Social Fund (ESF), the European Agricultural Guidance and Guarantee Fund (EAGGF), the European Cohesion Fund (ECF) and the Financial Instrument for Fisheries Guidance (FIFG) (Vosejpková, 2002).

The agriculture’s ability to contribute to the development and lifting people out of
poverty is conditioned by the improvements in productivity (WTO, 2014). The ILO experts (Ilo 2011) argue that the productivity growth is an essential ingredient.

The food security relates to both the quality and the quantity. The literature related to the food security seldom takes substitutability into consideration. As we know, there exists a high degree of product substitutability in the food industry, while food producers are always asymmetric (Yang and Nie, 2016).

In the modern market economy, agrifood chains were imposed and strengthened due to unprecedented evolution recorded by supply and demand of food in recent decades (Boboc et al., 2017).

NRDP is a complex program drawn up by representatives of the Ministry of Agriculture and Rural Development following consultations with representatives of bodies, organizations and social partners working in this field and approved after several rounds of negotiations by the European Commission. The measures are aimed at helping the development of agriculture in Romania. These measures cover all areas of activity in rural areas, except the acquisition of land and animals.

123 Measure "Increasing the added value of agricultural and forestry products", falls under Axis I - "Increasing the competitiveness of the agricultural and forestry sector" and has as a general objective the increase of the competitiveness of the agrifood and forestry processing enterprises, by improving the overall performance of enterprises in the processing and marketing sector of agricultural and forestry products, through better use of human resources and other factors of production (Applicant's Guide, 123 Measure, "Adding value to agricultural and forestry products").

Beneficiaries eligible for support under 123 Measure are authorized persons and legal entities registered under Romanian legislation as micro-enterprises, small and medium-sized enterprises (according to Recommendation (European Commission) No 361/2003) and other enterprises (Ministry of Agriculture and Rural Development 2013).

Investments represent the total costs of acquiring fixed capital goods, developing, recovering and modernizing the existing fixed capital. Investments produce economic effects over periods of more than one year and bear the name of capital expenditures (Ştefan et al., 2006).

Near the end of 2013, Romania recorded a structural fund absorption rate of 26.49%, financing projects worth over 5 billion euros. The contracting rate of the structural funds was almost 93%, with a value of about 80 billion lei (http://www.fonduri-structurale.ro/stiri/13254/la-finalul-lui-2013-rata-de-absorbtie-curenta-a-fondurilor-structurale-si-de-coeziune-a-depasit-33).

To begin with, particular attention should be paid to basic issues related to system upgrading and development. For this, it is essential to accelerate the process of public administration reform by creating a body of politically independent, competent and specialized civil servants at the expense of the malfunctioning system currently operating in Romania.

Of course, this is a complex and lengthy process involving the creation of a partnership between all decision makers and this is almost impossible in the context of permanent conflicts between state institutions. However, at the level of the decision-makers, it is necessary to be aware that only by building a performance management system and by adopting effective measures to simplify the process of accessing, managing and preventing events that may affect it, a significant performance in the upcoming programming period can be recorded. We can say that Romania has a great responsibility in reducing and eliminating the major problems that cause difficulties in absorbing the structural funds.

MATERIAL AND METHODS

This study was conducted on projects submitted by private beneficiaries under Measure 123 of the PNDR in the Oltenia region - Dolj, Gorj, Mehedinţi, Olt and Vâlcea counties.
Projects were submitted in 2007 and 2013, the last financing contracts were signed in 2013 and the last installment payment was conducted in 2016 (n+3, n – year of submitted project).

The data used for this study was obtained from the selection reports published by the Contracting Authority.

The methodology used for the elaboration of this paper is quantitative, represented by the secondary analysis of the data extracted from the national and European reports on the state of absorption of structural funds: Ministry of European Funds, Government of Romania. Thus, the following types of documents were studied:

1. Reports on the state of absorption of Structural and Cohesion Funds, on each Operational Program, Ministry of European Funds;
2. Reporting on the status of submission and approval of projects, signing financing contracts and making payments to beneficiaries, - Authority for the Coordination of Structural Instruments (ACSI);
3. Data on GDP and the population of Romania - Eurostat and the National Institute of Statistics;

The objectives of the measure are achieved through corporate and intangible investments in enterprises for: processing and marketing of agricultural products processing raw materials, included in Annex I to the Treaty Establishing the European Community, with the exception of fishery products and products not included in Annex I and which are subject to a State aid Scheme.

Under 123 Measure, three State aid schemes were applied, namely:
- State aid scheme - XS 13/2008 to stimulate SMEs that process agricultural products to obtain food, other than those listed in Annex I to the EC Treaty, as well as those engaged in processing agricultural products for the purpose of obtaining and using renewable energy sources and biofuels;
- State Aid Scheme - XS 28/2008 for the stimulation of micro-enterprises in the field of primary processing of forest and non-wood forest products;
- State aid scheme - N578/2009 to stimulate regional development by making investments for the processing of agricultural and forestry products in order to obtain non-agricultural products.

During the period 2007-2013, 25 sessions for the submission of projects during which 2,639 projects with a public value of \(2,274,718.52\) thousand Euros were submitted. A total of 1,587 projects were selected, of which 1,017 projects were contracted (the number reflects the remaining contracts in the system due to the operation of the terminated contracts), respectively 31.73% of the target of 3,205 projects with a total investment volume of \(1,924,690.96\) thousand Euro (80.52% of the target of \(2,390,285.31\) thousand Euro) and with a public value of \(709,019.86\) thousand Euro. Approximately 84.17% out of the total of 1,017 approved projects target investments in the food sector sector (856 approved projects), mainly with the type of conventional production with a total investment volume of \(1,646,177.20\) thousand Euro and a public value of \(602,762.96\) thousand Euros. (Annual Progress Report on the Implementation of the National Rural Development Program in Romania in 2014).

Near the end of 2013, Romania recorded a structural fund absorption rate of 26.49%, financing projects worth over 5 billion euros. The contracting rate of the structural funds was almost 93%, with a value of about 80 billion lei.

The study used a number of indicators: Number of selected projects; The total value of selected projects; The public value of the selected projects (non-reimbursable financing), the value of public investments relative to the employed population in
agriculture and forestry in Oltenia using the following formula:

$$I_{op} = \frac{\sum_{i=1}^{n} V_{pe}}{N_{op}}$$

$I_{op}$ - Public investment reported to the occupied person (euro);

$V_{pe}$ - The value of the target and the number of persons employed in agriculture and forestry;

$N_{op}$ - Number of occupied persons;

$N$ - Number of projects ranging from 1 to 74.

To highlight the correlation between the public investment value and the number of persons employed in agriculture and forestry, we used:

- the Equation for the correlation coefficient:

$$\text{Corr}(X,Y) = \frac{\sum (x-\bar{x})(y-\bar{y})}{\sqrt{\sum (x-\bar{x})^2 \sum (y-\bar{y})^2}}$$

where

$\bar{x}$ și $\bar{y}$ are the averages for samples, AVERAGE (matrix1) and AVERAGE (matrix2).

RESULTS AND DISCUSSION

Like the other development regions, the South-West Development Region does not have administrative powers, its main functions being the coordination of regional development projects and the absorption of funds from the European Union. It consists of 5 counties: Dolj, Gorj, Mehedinți, Olt and Vâlcea, which form 82.4% from the Oltenia Historical Region. It ranks 7th among the regions of the country, with 1,797,633 hectares, representing 12.32% of the national agricultural area. In the SV Oltenia Region there are 872.508 ha of forests, representing 12.83% of the national average, these being managed by the Forestry Directorates or belonging to the individual owners (http://www.dolj.insse.ro/cmsdolj/rw/pages/index.ro.do).

From the point of view of the regional distribution, the South-West Oltenia Region has a weight of approximately 7.1% with 74 projects approved by measure 123, public value 44,769,689 thousand EURO, suggesting that in the South West Oltenia region there is a relatively small number of agrifood and forestry processing enterprises, or that the existing enterprises, were unaware of the opportunity offered to human resource development and production factors, or were not interested in this opportunity, for various reasons.

Regarding the regional distribution of approved projects (committed values), as well as payments made, the situation is presented below.

The Table 1 shows that most of the projects financed in the South-West Oltenia Region, measure 123, were registered in Olt (32) and Dolj (19) counties, which were more interested in increasing the added value of agricultural products.

On the third place is Vâlcea county with 14 approved projects, where there is interest in increasing the added value of forestry products, and the lowest number of projects financed under this measure is found at the level of Mehedinți (5) and Gorj counties with only 4 projects.
Synthesizing all the information resulting from this survey, we note that although Romania has made significant progress in absorbing structural funds in recent years, the absorption is still low.

The large discrepancy between the projects submitted and the absorption rate is justified by the serious problems encountered in managing the projects.

In the South-West Region of Craiova, through the county offices in Dolj, Gorj, Olt, Mehedinţi and Vâlcea, payments were made in a total non-reimbursable amount of over 44.7 million euros.

At the level of Oltenia region, in the completed submission sessions, a number of 74 projects selected for payment were registered. The following table shows that the South-West Oltenia Region has a weight of approximately 7.1% with 74 projects approved by measure 123, public value 44,769,689 thousand Euro.

As can be seen in Table 1, 2008 had the highest rate of funds with a total allocation of 24,113,322 Euros for the 35 approved projects, followed by 2010 when the number of projects dropped to 16.

Table 2 highlights the fact that on the first place is the county of Olt as invested public value and number of projects, and in the amount invested on persons working in agriculture and forestry. Dolj County is the second largest county in terms of number of projects and value, while the public value invested by the person working in agriculture and forestry occupies third place with the amount of 92.63 EURO, which is directly influenced by the higher number of workers in agriculture. Vâlcea County ranks second in terms of the public value invested per person in the agricultural sector, although at the level of the number of projects and the total invested amount occupies only the third place.

### Table 1. Annual structure of investments made with funds allocated through Measure 123 (public value - Euros)

<table>
<thead>
<tr>
<th>County</th>
<th>Specification</th>
<th>Year</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>2008</td>
<td>2010</td>
</tr>
<tr>
<td>Dolj</td>
<td>Projects No.</td>
<td>7</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td>Public value</td>
<td>3,524,025</td>
<td>1,285,811</td>
</tr>
<tr>
<td>Gorj</td>
<td>Projects No.</td>
<td>2</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>Public value</td>
<td>1,184,782</td>
<td>420,486</td>
</tr>
<tr>
<td>Mehedinţi</td>
<td>Projects No.</td>
<td>1</td>
<td>4</td>
</tr>
<tr>
<td></td>
<td>Public value</td>
<td>308,910</td>
<td>564,717</td>
</tr>
<tr>
<td>Olt</td>
<td>Projects No.</td>
<td>12</td>
<td>8</td>
</tr>
<tr>
<td></td>
<td>Public value</td>
<td>12,767,374</td>
<td>6,432,947</td>
</tr>
<tr>
<td>Vâlcea</td>
<td>Projects No.</td>
<td>13</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>Public value</td>
<td>6,328,231</td>
<td>1,561,924</td>
</tr>
<tr>
<td>Total</td>
<td>Projects No.</td>
<td>35</td>
<td>16</td>
</tr>
<tr>
<td></td>
<td>Public value</td>
<td>24,113,322</td>
<td>10,265,885</td>
</tr>
</tbody>
</table>

### Table 2. The public value (euros) of the investments related to the occupied population in agriculture and forestry in Oltenia

<table>
<thead>
<tr>
<th>County</th>
<th>Projects No.</th>
<th>Project value</th>
<th>Population occupied in agriculture and silviculture*</th>
<th>Public value invested per occupied person</th>
</tr>
</thead>
<tbody>
<tr>
<td>Olt</td>
<td>32</td>
<td>24,112,094</td>
<td>76,610</td>
<td>314.73</td>
</tr>
<tr>
<td>Dolj</td>
<td>19</td>
<td>9,810,377</td>
<td>105,900</td>
<td>92.63</td>
</tr>
<tr>
<td>Vâlcea</td>
<td>14</td>
<td>7,890,155</td>
<td>56,000</td>
<td>140.89</td>
</tr>
<tr>
<td>Mehedinţi</td>
<td>5</td>
<td>873,627</td>
<td>47,800</td>
<td>18.27</td>
</tr>
<tr>
<td>Gorj</td>
<td>4</td>
<td>1,655,898</td>
<td>37,000</td>
<td>44.75</td>
</tr>
<tr>
<td>Total</td>
<td>74</td>
<td>44,769,689</td>
<td>323,300</td>
<td>138.47</td>
</tr>
</tbody>
</table>

*http://statistici.insse.ro/shop/
The hierarchy is thus overturned by the much smaller number of people employed in the agricultural sector. In the case of the Mehedinți and Vâlcea counties, the proportion between the number of projects and the sum of the projects was respected.

Applying the equation for the correlation coefficient, the result was 0.907835, roughly equal to 1, resulting in a direct correlation between the public value of the projects and the population occupied in agriculture and forestry.

The second-order polynomial function ($y = 2E-10x^2-0.0021x+58565$) was as seen in Figure 2.

As $R^2 = 0.9284$ is roughly equal to 1, we can state that the application of the 2nd order polynomial function, also shows a direct correlation results between the public value of the projects and the number of persons employed in agriculture and forestry.

**Figure 2. The second-order polynomial function**

**CONCLUSION**

The total amount of the NRDP 2007-2013 was € 9.32 billion, of which € 6.14 billion was allocated to investment projects through 12 measures and three state schemes and € 3.18 billion for payments Direct through four measures.

One worrying concern is that only 35.72% of the submitted projects were approved, and 79.13% of the approved projects were contracted. The large discrepancy between the projects submitted and the absorption rate is justified by the serious problems encountered in managing the projects.

The South-West Oltenia Region has a weight of approximately 7.1% with 74 projects approved under measure 123, public value 44,769,689 thousand EURO.

A strong direct correlation between the public value of the projects and the population occupied in agriculture and forestry was shown both by the correlation coefficient (0.907835) and by the coefficient of determination of the 2nd order polynomial function ($R^2 = 0.9284$).

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