

## INSTRUMENTS AND MECHANISMS FOR FINANCING THE ROMANIAN AGRICULTURE (CASE STUDY ON FARMERS' PERCEPTION IN THE SOUTH OF GALAȚI COUNTY)

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### Abstract

The year 2007, the date of Romania's accession to the European Union, marked a new era in agriculture and rural economy of our country and created the context in which Romania had to adapt in order to integrate into the E.U. internal market and fully adopt the Common Agricultural Policy. 6 years after Romania's accession to the European Union, Romanian agriculture continues to face a structural imbalance, the existence of a large number of small farms along with a small number of large farms, aspects that influence performance and competitiveness. After the 2010 General Agricultural Census, Romania has the following structure of agricultural holdings :

- Holdings of 1-10 ha, which represent 93.40 % and 32.40 % of the eligible charge;
- Farms of 10 -100 ha, representing 5.50% and 15.50 % of the eligible charge;
- Holdings of more than 1,000 ha, representing 1.10% and 52.10 % of the eligible charge.

In order to obtain a view over the perception of farmers about the tools and mechanisms for financing the agriculture, statistical sampling method was used, based on a questionnaire. The target group was represented by the farmers in the south of Galați county, made up by the administrative territory of 16 municipalities.

In order to determine the sample size, we chose the simple, unrepeatable, survey method and alternative feature for a relative error of 3% and a 95% probability of guaranteed results. The statistical series on the distribution of population by sex/gender feature looks like this: 1-13130 and 0-12923, where 1 is the characteristic value assigned to sex, male version and 0 is the characteristic value assigned to sex, female version. Limit error in absolute form is obtained by applying the following formula:

$$\Delta x = (R_x * X_{max}) / 100 = 3 * 1 / 100 = 0.03 \text{ where:}$$

$\Delta x$  is the error limit in absolute form;

$R_x$  is the error limit in relative form;

$X_{max}$  is the maximum value of the feature.

The sample size ( $n$ ) was determined on the basis of the dispersion:

$$\sigma^2 x = p(1-p), \text{ wherein:}$$

$\sigma^2 x$  represents dispersion and  $p$  is the average male persons.

The data being grouped by an alternative feature, the mean equals the relative frequencies:

$$p_i = N_j / N = 13130 / 26053 = 0.50$$

$$\text{and dispersion: } \sigma^2 x = p(1-p) = 0.50(1-0.50) = 0.25$$

The sample size was determined based on the following relationship:

$$n = k^2 * p(1-p) / \Delta^2 x + (k^2 * p(1-p) / N) = (1.96)^2 * 0.25 / [(0.03)^2 + (1.96)^2 * 0.25 / 26053] = 1067 \text{ people, where } n \text{ is the sample size, } k \text{ – the guaranteed probability limit.}$$

In this research, the used investigative method was individual survey technique, in particular, for each respondent.

**Key words:** agriculture, financing, Common Agricultural Policy

## INTRODUCTION

The European model of agriculture is based on a competitive, market-oriented sector, also able of performing other public functions such as: protecting the environment, providing more convenient resi-dential settlements for the rural population and also integrating agriculture with the environment and forestry. C.A.P.is moving its focus from direct subsidies to agriculture (**Pillar I**) to the integrated development of the rural economy and to environment protection (**Pillar II**). In Romania, the farm structure policy aims, on the one hand, towards the creation of employment opportunities in the sphere of non-agricultural labor and, on the other hand, towards supporting and increasing farm viability.To determine the perception of farmers on the funding mechanisms of the Common Agricultural Policy, a survey has been used, on a sample of family farms (*individual households*).

The economic status of the family farms in our agriculture makes the results' evaluation process more difficult, although it is very necessary. Farm guidance is equally useful in order to keep track, with simple means, of what is spent and what is earned.

## MATERIAL AND METHOD

Based on the above objectives, the authors have proposed to highlight means of financing the agricultural production, based on current legislation, and to obtain a view on farmers' perceptions on funding instruments and mechanisms, focusing on farmers in the south area of Galați county.

The used research method was the statistical survey, based on a written questionnaire.

The target group was represented by small farmers in the south of Galați, which includes the ad-ministrative territory of 16 municipalities.

To determine the sample size, the simple, unrepeatable and alternative featuresurvey method was chosen,with a relative error limit of 3% and a results guarantee probability of 95%.

In this research we chose the individual survey technique, in particular, for each respondent. The main tool was the written questionnaire, comprising 21 questions, taking into account the benefits of its use: obtaining unitary information that enables encoding responses for subsequent analysis, the relative ease of implementation, etc. After the interviews were conducted,out of the 1100 questionnaires that were administered, 985 were validated.

## RESULTS AND DISSCUSIONS

Highlighting the results will allow an assessment of the farms' econo-

mic power, their consolidation degree, which fosters the practice of sustainable agriculture and the contribution they have to the overall development.

Deviations observation reveals causes that need to be identified, especially when deviations are negative, and it is very useful to know what generated them and, thus, where can an intervention take place, so that, in the same management cycle, or in the next one, control measures can be adopted. On this basis, malfunctions are eliminated and chances of achieving the desired economic performance are maintained.

Thus, the calculation was based on data regarding the Galați county population at January 1st 2011, from the National Statistical Institute of Romania, as well as data collected from the official websites of Galați county municipalities. The calculation is focused on the population in the area south of Galați county, by age categories.

An item considered to be important for respondents' profile description refers to the level of education of the target group (Fig. 1):

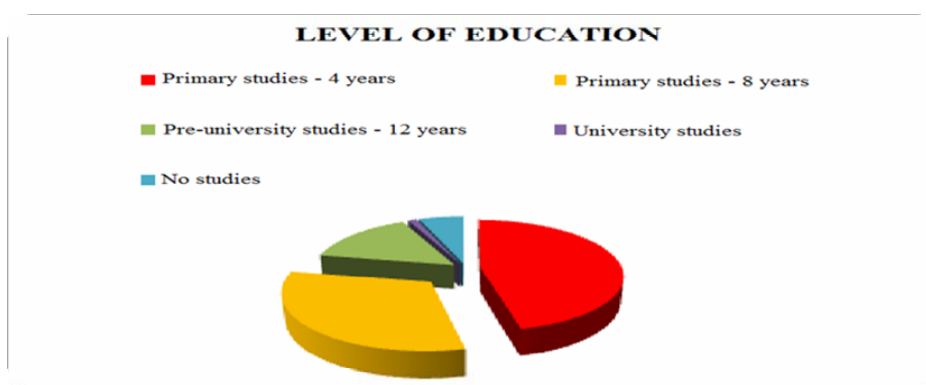


Fig. 1- Structure of respondents by education level

Regarding the situation of owned agricultural land, large differences are found in surface size. A percentage of 39.13% of respondents have between 0.3 and 0.5 ha (Fig. 2):

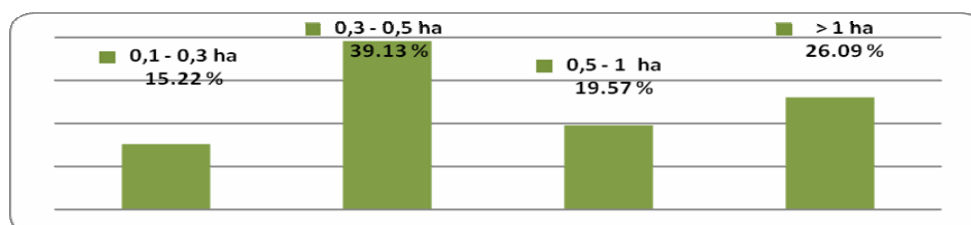


Fig. 2- Structure of agricultural land owned

Regarding that the county level, 5.86% of respondents did not complete any form of education, 46.25% have completed only primary

education, 31.73% of respondents have secondary education, 15.06% of the respondents have completed secondary and higher education, while respondents with university studies represent 1.1% of the total population. In terms of the possibility of knowing the financial support available to them, 31.50% of the subjects answered that they have no information (Fig.3):

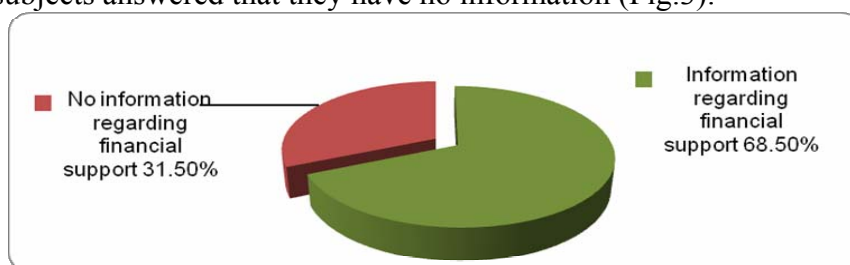


Fig. 3-Structure of respondents by information held

In previous years, 61.56 % of respondents were the beneficiaries of some form of financial support (Fig.4).

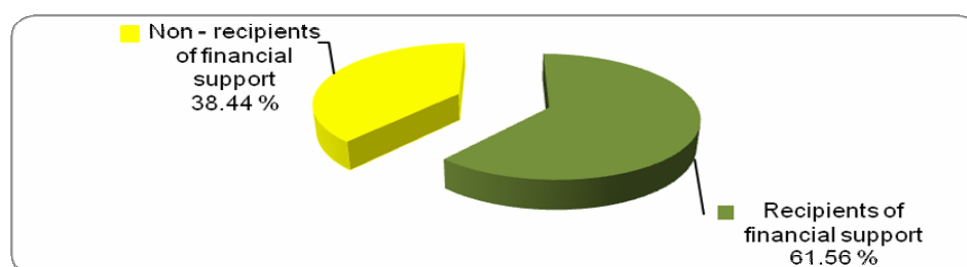


Fig.4- Structure of beneficiaries of financial support

Regarding the situation of the beneficiaries of financial support, we find differences on use categories. A percentage of 89.90% of respondents said they received financial support for arable land. Also, 43.47% of the respondents in the area south of Galați said they were satisfied with the financial support (Fig. 5):

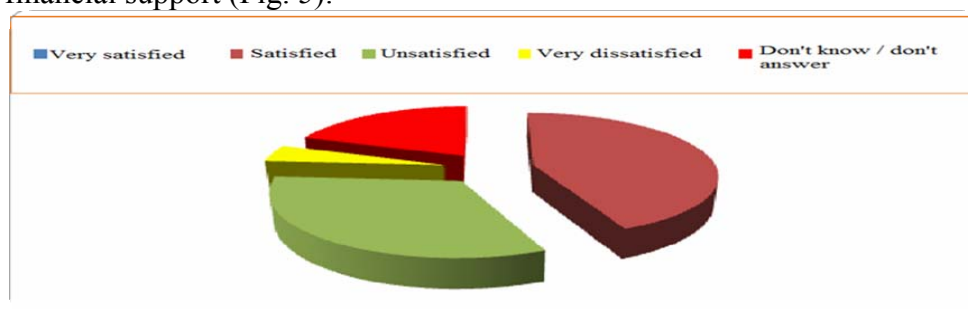


Fig. 5 Structure of beneficiaries of financial support by level of satisfaction

Most of the funds (71.74 %) were for the establishment and maintenance of cultures (Fig. 6):

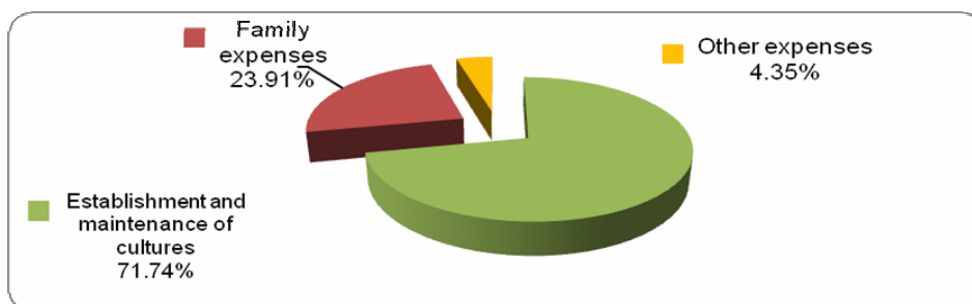


Fig. 6 Structure of beneficiaries by destination of financial support

Following the financial support that was obtained, 74% of respondents said they do mechanized farming operations carried out either in-house or leased, but also by appealing to service providers (Fig. 7):

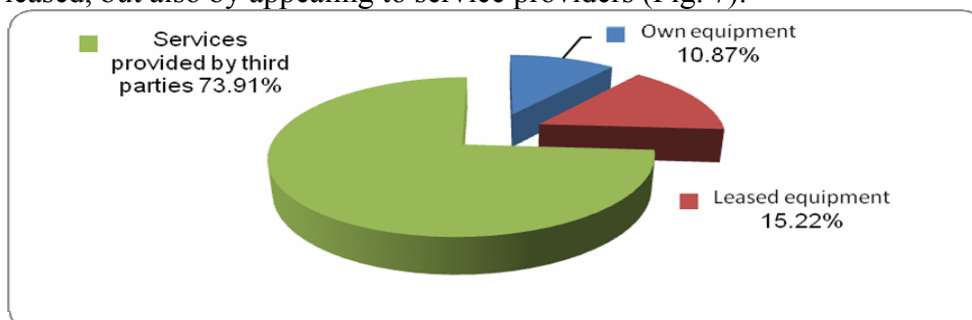


Fig.7 Structure of respondents by manner of performing the mechanized agricultural work

34.48% of the respondents who have their own equipment possess tractors, 27.58% - plows, 20.68% - trailers and 17.24% - other agriculture machinery (Fig. 8):

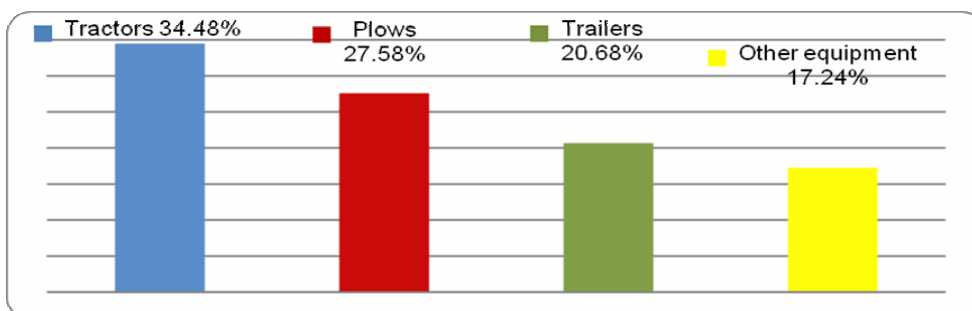


Fig. 8 Situation of owners of agricultural machinery

As for owned livestock, 93.48% of the respondents declared that they have animals, of which 87.43% had received financial support in previous years (Fig. 9, Fig. 10).

A relatively low percentage (7.31%) of the respondents has received financial support for rural development measures, of which about 69% for

the 141 measure (Fig. 11, Fig. 12):

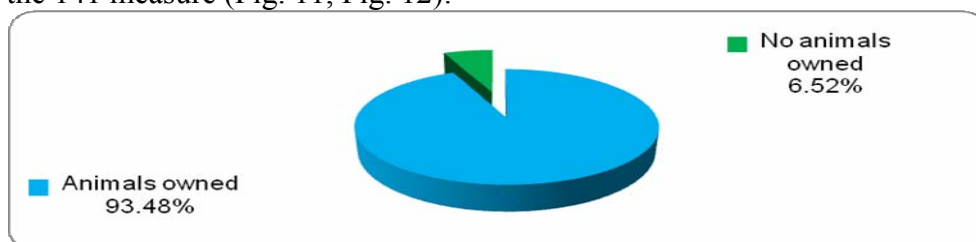


Fig. 9 Situation of livestock owners

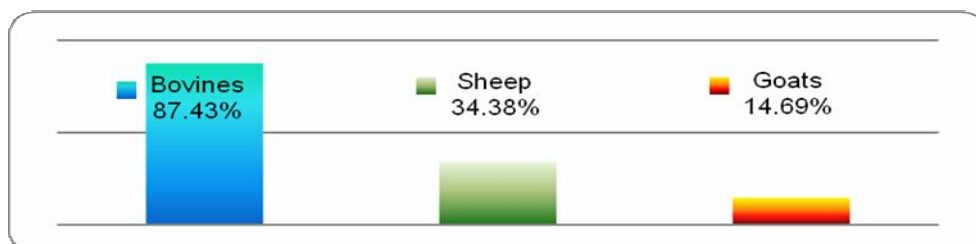


Fig. 10 Structure of beneficiaries of financial support, by animal categories

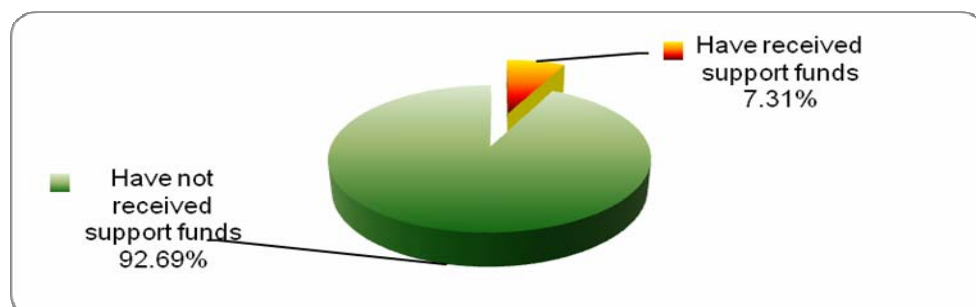


Fig.11 Situation of beneficiaries of financial support for rural development measures

Regarding the future of the CAP, a percentage of 67.39% of respondents said the Romanian agriculture will be poorly funded in the future (Fig. 13).

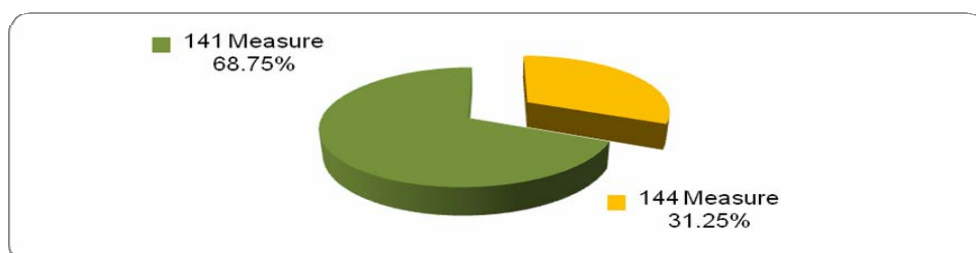


Fig. 12 Situation of beneficiaries of financial support for rural development measures, by types of measure

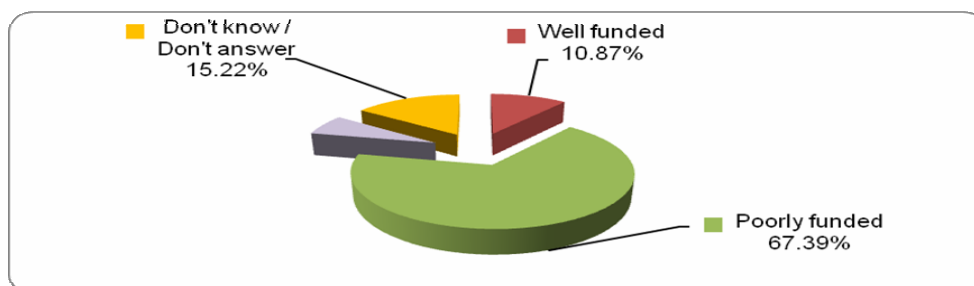


Fig. 13 Situation of respondents by perception on the future of CAP

## CONCLUSIONS

1. Expanding the organization and assuring the operation of producers groups or organizations is a necessary condition for farmers to benefit from financial support programs in order to: correlate the level of production and product quality with the market demand, stimulate the implementation of organic products and to ensure equal rights and duties for all food business operators in the system;

2. To ensure the healthy development of agriculture, according to the CAP, Romanian authorities must adopt measures for both land consolidation and the early retirement of older farmers, thus creating conditions for a higher involvement by young farmers;

3. In the peasant households, farming, horticulture and animal husbandry is conducted mostly for family needs, while the commercial activity is limited and the main income of these rural families in most cases does not come from agriculture, but from other activities (salary or pension income);

4. In the analyzed period, the planted areas in the south of Galați had a decreasing trend. Of the 19 main crops that were analyzed, for six types of crops (peas, soybeans, potatoes, root vegetables, alfalfa, annual forage) the production per hectare had a negative influence on the evolution of total output, while for the other cultures, whose average yield per hectare was increased, the influence was positive;

5. In animal husbandry, cattle are the species with the greatest impact on the population's food balance. Prospects of cattle improvement are dictated by the milk and meat consumption situation and the supply-demand ratio for these products. In the south of the county of Galați, most livestock farms are small.

6. To ensure the viability of farm livestock, concentration in a small number of farms, with a herd that is able to ensure durability and efficiency, is required. Achieving competitive performance from agriculture in Romania can be obtained through a policy in its favor, by creating facilities for farmers and by extending the integration between

agriculture and industries which are positioned upstream and downstream of it. In fact, agricultural development leads directly to an improved standard of living of the rural population and indirectly influences the growth of the living standard of the entire population.

7. Through the proposed measures for the future CAP, we mention: abolishing the demand of arable land set-aside from the agricultural circuit, a gradual increase in milk quotas until their abolition in 2015 and converting market intervention into a genuine safety net.

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