PRINT ISSN 2284-7995, E-ISSN 2285-3952

# STUDIES CONCERNING THE DEVELOPMENT LEVEL OF AGRICULTURE IN ROMANIA

### Camelia MĂNESCU<sup>1</sup>, Teodor MATEOC<sup>1</sup>, Nicoleta MATEOC-SÎRB<sup>1</sup>

<sup>1</sup>University of Agricultural Sciences and Veterinary Medicine Timisoara, Calea Aradului 119, Timisoara, Romania, Phone 0040277430

#### Corresponding author: mateocnicol@yahoo.com

#### Abstract

Within this paper, the authors have analyzed the current state of agriculture development in our country with reference to the following aspects: land Fund, the typology of agricultural holdings, size and dimension of agricultural holdings, agricultural production, agricultural labor force, as well as the degree of equipment with agricultural machines and devices. After the year 1990, the Romanian agriculture has undergone profound changes in the structure of land ownership, large agricultural units disappeared as their communist organization way and therefore new types of holdings appeared: family households, family associations, agricultural societies. Following the conducted analysis, the authors underline the existence of a very large number of small farms in parallel with very large farms, which reveals structural imbalance affecting agriculture in our country and its competitiveness. From the performed analysis within this paper, there can be concluded that in Romania there are three types of agriculture - characterized by agricultural holdings to 10 hectares, representing a share of 97.7% of total holdings and occupy 38.7% of UAA; a middle type agriculture - defined by agricultural holdings of 10 to 100 hectares, representing a share of 1.9% of total holdings and occupy 48.9% of UAA.

Key words: agriculture, development, holdings, level

#### **INTRODUCTION**

Existing land structure in Romania is consistent quantitative and qualitative requirements of plant and animal development, to meet domestic demand drive food consumption and ensure availability for export. Agricultural area of the country is about 14.7 million hectares (61.7% of the total) of which 9.4 million hectares of arable land, pasture and hay covers an area of 4.8 million hectares, vineyards and fruit orchards have 418 000 hectares.

Of the 23.8 million ha as sums the territory of Romania, the agricultural area of the country is 14.7 million ha (61.7%), of which 9.4 million ha is arable land.

The paper goal was to analyze the current state of agriculture development in Romania with reference to the following aspects: land Fund, the typology of agricultural holdings, size and dimension of agricultural holdings, agricultural production, agricultural labor force, as well as the degree of equipment with agricultural machines and devices.

#### MATERIALS AND METHODS

In order to set up this paper, the empirical data have been collected from Romania's Statistical Yearbook regarding land Fund, the typology of agricultural holdings, size and dimension of agricultural holdings, agricultural production, agricultural labor force, as well as the degree of equipment with agricultural machines and devices. The data were processed based on index method.

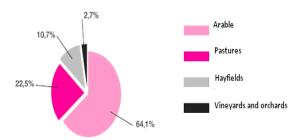


Fig. 1. Structure of agricultural area by category of use, in the year 2011

## Scientific Papers Series Management, Economic Engineering in Agriculture and Rural Development Vol. 14, Issue 1, 2014

#### PRINT ISSN 2284-7995, E-ISSN 2285-3952 RESULTS AND DISCUSSIONS

After the year 1990, Romanian agriculture has undergone profound changes in the structure of land ownership, large agricultural units disappeared as their communist organization, yet arising new types of exploitations: individual households, family associations, agricultural societies.

| Table 1. The | situation | of agricultura | al holdings  | 2010   |
|--------------|-----------|----------------|--------------|--------|
| ruore rine   | Situation | or agriculture | ai noranigo. | , 2010 |

| INDICATORS                         | U.M.    | Total<br>agricultural<br>holdings |        | Agr.hld. without  |       | Agr.hld. with |        |
|------------------------------------|---------|-----------------------------------|--------|-------------------|-------|---------------|--------|
|                                    |         |                                   |        | legal personality |       | legal         |        |
|                                    |         |                                   |        |                   |       | personality   |        |
|                                    |         | 2002                              | 2010   | 2002              | 2010  | 2002          | 2010   |
| No,<br>agricultural<br>holdings    | thsd    | 4.485                             | 3.856  | 4.462             | 3.825 | 23            | 31     |
| Used<br>Agricultural<br>area (UAA) | thsd ha | 13.931                            | 13.298 | 7.709             | 7.445 | 6.222         | 5.853  |
| -arable land                       | thsd ha | 8.774                             | 8.305  | 5.437             | 4.721 | 3.337         | 3.584  |
| -pastures and hayfields            | thsd ha | 4.644                             | 4.494  | 1.878             | 2.306 | 2.766         | 2.188  |
| -permanent cultures                | thsd ha | 344                               | 317    | 225               | 236   | 119           | 81     |
| - family gardens                   | thsd ha | 169                               | 182    | 169               | 182   | -             | -      |
| UAA /holding                       | ha      | 3,11                              | 3,45   | 1,73              | 1,95  | 274,43        | 190,84 |

Source: MARD, 2012

Holdings by size class structure of the agricultural area (UAA) in 2010 is as follows: -Farms to 10 hectares is 97.7% of total holdings and occupy 38.7% of OR;

-Farms between 10 and 100 hectares represents 1.9% of total holdings and occupy 12.4% of OR;

-Farms over 100 hectares represents 0.4% of total holdings and occupy 48.9% of the UAA.

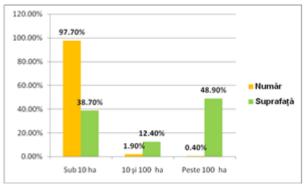


Fig. 3. Holdings by size class structure of the surface,  $2010\,$ 

The existence of a large number of small farms in parallel with very large farms reveals **198** 

the structural imbalance that affects agriculture in our country and its competitiveness.

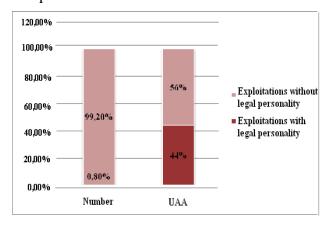


Fig. 3. The structure of agricultural holdings based on their legal status (%)

The holdings without legal personality hold 99.2% of total number of agricultural holdings and 56% of utilized agricultural area, and those with legal personality, although numerically hold only 0.8% of total holdings, these occupy 44% of the utilized agricultural area.

Agricultural production in Romania not only suffer from lack of volume or production costs comparable to European ones because of technical effort useless and extremely expensive, but suffer from lack of quality first. Most farms are specialized, with a combined production profile of both plant and animal, and focused on a variety of crops and animal species.

Another problem of the Romanian agriculture, which concerns both crop production and livestock production refers to the uniformity of products. Achieving a high quality standard is as important as maintaining it. Market presence depends primarily on the ability to group productions in different locations within an agreed quality standard.

The average yields per hectare are an essential element of economic efficiency, respectively of profitability. Average production level is dependent, on one hand, on the natural fertility of the soil and, on the other hand, on the applied production technologies.

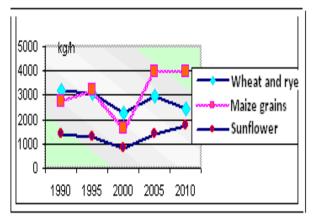


Fig. 4. Evolution the average yield of main crops

All these per hectare in our country are incomparably lower to average yields obtained in some European Union countries (Table 3.6.).

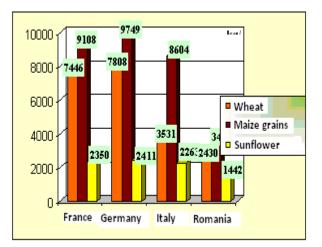


Fig. 5. Average yields obtained for main crops in some EU countries, 2009

The average yield of wheat produced by France in 2009 was of 7,446 kg /ha while in Romania the average yield per hectare was 2,430, in Germany it is even higher – 7,808 kg /ha and in Italy of 3,531 kg /ha, considering that this is not a large grain cultivator. In what concerns corn, the average yields are more than twice as high in France, Germany and Italy, respectively over 9,000 kg /ha, compared to Romania where the average yield per hectare is 3,416 kg /ha.

Livestock farming has an important share in Romanian agriculture and represents one of the core activities in the rural sector. Except sheep and goats where increases of livestock farming were recorded, while in other livestock sectors there were recorded decreases of livestock.

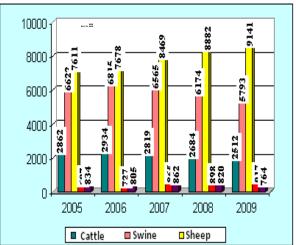


Fig. 6. Evolution of livestock, during the period of 2005-2009

Within the yield structure of agriculture branch, crop production sector is predominant, holding, in 2011, 70.8% of total yield, compared to 28.5% as livestock sector represents and about 0.7% by agricultural services.

Regarding the evolution of the labor force in Romania's agriculture, it is noted that employment in agriculture falls under the general tendency in all countries in course of modernization, meaning of reducing until 2007, after which due to the emergence of the economic crisis, it began again to increase slightly, noting that decreased to 28.5% in 2011.

## CONCLUSIONS

From the conducted analysis in this paper, there can be concluded that in Romania there are three types of agriculture:

- **Subsistence agriculture** - characterized by agricultural holdings up to 10 hectares represent 97.7% of total number of holdings and occupy 38.7% of UAA;

- **Middle agriculture** - characterized by agricultural holdings between 10 and 100 hectares represent 1.9% of total number of holdings and occupy 12.4% of UAA;

- **Agro-industrial agriculture** - agricultural holdings over 100 hectares represent 0.4% of total number of holdings and occupy 48.9% of UAA.

The existence of a large number of small farms in parallel with very large farms reveals the structural imbalance that affects agriculture in our country and its competitiveness.

The gaps on the average size of farms in Romania to most of EU Member States are a major impediment in ensuring a high level of efficiency because there be no investments and can not organize any activity on modern basis. The territorial average size of farms from the old EU Member States exceeds 20 hectares. In France in 2007 the average size was 52.64 ha, in Spain 24.17 ha, in the Netherlands 25.54 ha etc.

# REFERENCES

[1]Mateoc-Sîrb Nicoleta, Mănescu Camelia-Maria, 2012, Rural development and territory organization, Mirton Press House, Timișoara

[2]Otiman, P.I., 2006, Dezvoltarea rurală durabilă în România, Editura Academiei Române, București

[3]Vincze Maria, 2000, Dezvoltarea regională și rurală – Idei și practici, Presa Universitară Clujeană, Cluj-Napoca

[4]Guvernul României, Planul Național Strategic pentru Dezvoltare Rurală 2007 – 2013

[5]Ministerul Agriculturii și Dezvoltării Rurale – Planul Național de Dezvoltare Rurală 2007 –2013 [6]MADR, Program Național pentru Dezvoltare Rurală 2007-2013,

[7]Perspective financiare 2007–2013, Consiliul UE, Bruxelles, 19 decembrie 2005.

[8]Anuarul statistic al României 1990-2012, Institutul Național de Statistică