

ASPECTS CHARACTERIZING THE LABOR FORCE FROM ROMANIAN AGRICULTURE

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***Abstract:** The functioning of production systems cannot be conceived without the presence and intervention of man. The processes of production of economic goods and provision of services, designed to meet human needs, cannot be achieved without work. The economic importance of labor lies in the fact that it plays a key role in enhancing the other two resources in agriculture: land and capital. The labor market in this sector is defined by a large share of farmers in the total employed population, as well as a large number of elderly farmers, by an excessive dependence on agricultural activities of the rural population, a low level of education and an accentuated decline of real income of the population.*

Key words: labor force, agriculture, rural environment

INTRODUCTION

In agriculture, work has a series of characteristics and peculiarities, which differentiate it from work in other economic sectors of activity. Work, specific to the primary sector, is inhomogeneous and uneven. The complex structure of agricultural work processes, determined by the complexity of agricultural activities, the processes of growth and development of plants and animals, the variety of production systems and climatic conditions, imprints on agricultural work a series of technical and economic and social specific features [1, 6].

The efficient use of human resources in agricultural activity involves both increasing employment in rural areas and achieving an optimal ratio between labor productivity and rewarding agricultural workers, whether they are employees of companies or other agricultural units or family workforce.

Although the share of the population employed in agriculture has been and remains relatively high, the level of education is low, the enrollment rate in agricultural and forestry technical education being reduced at all levels of education [4, 13]. Thus, it is obvious the need to optimize and adapt the human potential that operates in agriculture, forestry and agri-food industry.

Basic training of qualified workforce for agriculture is carried out within the national network of specialized education, with an old tradition, although in recent years the number of graduates of agricultural studies is declining [5,10].

Human potential is the key factor in the development of rural areas, in many European countries, the level of education is lower in rural areas compared to urban areas, even if this is not a general situation [11, 14]. The low level of training of the rural population is reflected by the quality of the labor force, representing a significant constraint, for the prospects of economic development of the rural area [9, 12]. Currently, the diversification of economic activities is not supported by specialists, with training in the field, or experience in various non-agricultural activities. In close correlation, with the low level of education of the population, is the development of entrepreneurial activity, an activity still very poorly represented, in rural area of Romania [7].

MATERIALS AND METHODS

This paper aims to make a clear x-ray of the current situation of the existing workforce from rural areas. The research undertaken is based on a series of existing statistical data at national or European level. The processing of statistical data allowed the radiography of the actual situation of the employed population in rural areas and especially in Romanian agriculture.

RESEARCH RESULTS

The reform of the national economy and the disappearance of the Agricultural Production Cooperatives since 1990 have determined an important increase of the employed labor force in the Romanian agriculture (Table 1) [2].

During the analyzed period, a decrease of the total population of Romania can be observed by 16.1%, meaning by 3,780 thousand people. A similar situation is encountered in the case of the rural population, which decreased by 14.8% (1,571 thousand people). The employed population shows a sinuous evolution marked by both decreases and increases. In the period 1990-2000, the average decrease rate was 20.4%. Until 2010, there is a slight increase of this indicator by 7.1%, continuing in the following years, with the reduction of the number of employed people, reaching in 2018, a value approximately equal to that of 2010 (8,689 thousand people).

Table 1.

The evolution of the main indicators of human resources in Romanian agriculture, 1990-2018

The year	Total population	Rural population	Employed population	Population employed in agriculture	The share of the rural population in the total population	The share of the population employed in agriculture in the total employed population	The share of the population employed in agriculture in the total rural population
	thousands of people	thousands of people	thousands of people	thousands of people	%	%	%
1990	23207	10598	10840	3055	45.7	28.2	28.8
1995	22681	10224	9493	3187	45.1	33.6	31.2
2000	22435	10190	8629	3523	45.4	40.8	34.6
2005	21624	9744	9147	2939	45.1	32.1	30.2
2010	20247	9214	9240	2612	45.5	28.3	28.3
2015	19822	9150	8535	2184	46.2	25.6	23.9
2016	19706	9124	8449	1952	46.3	23.1	23.9
2017	19591	9112	8671	1947	46.5	22.4	21.4
2018	19472	9027	8689	1938	46.3	22.3	21.5

Source: *Statistical Yearbook of Romania, [15]*

Analyzing the data presented in the table above, we can see that by 2000, the population employed in agriculture increased compared to 1990, by 15.3. Starting with 2001, the number of persons employed in agriculture gradually decreases, reaching in 2018, the value of 1,938 thousand persons, the decrease rate, over the period 2000-2018, being 36.6% [3]. This is due on the one hand to the diversification of economic activities carried out in rural areas, as well as to the investments made in agriculture, which have allowed the replacement of manual labor with the technical means of production.

Economic reforms have led to a decrease of the population employed in agriculture. Agriculture served as an occupational buffer for the socio-economic effects of the transition, absorbing the labor released by the other economic branches, thus indicating a low productivity per worker and suggesting a masked unemployment, increasing in rural areas.

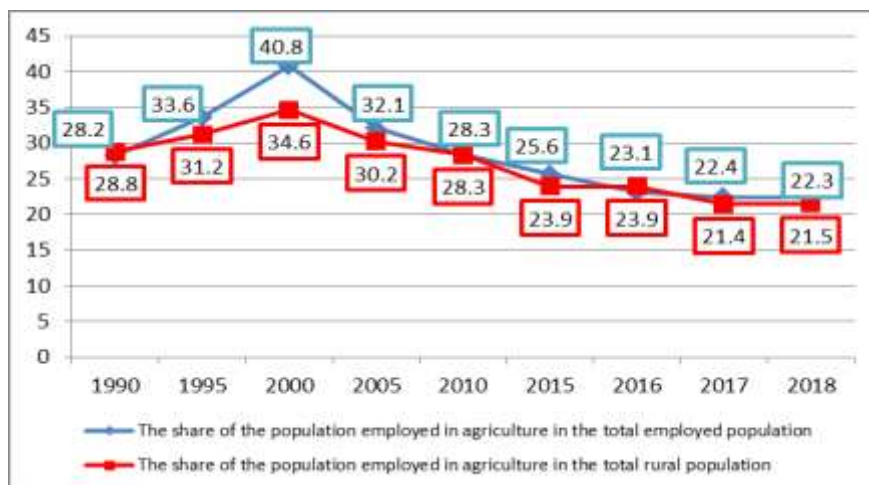


Figure 1. The share of the population employed in agriculture in the total employed population, 1990-2018

Source: [15]

In the Figure 1, it is presented the evolution of the population employed in agriculture in total employed population as well as the evolution of the population employed in agriculture in total rural population. It can be seen that the two indicators have a similar evolution.

Both indicators presented above indicate an upward trend in the period 1990-2000, after which there are significant decreases. The increase in employment in the agricultural sector is based on:

- the absence of other employment options for the rural population;
- the high degree of fragmentation of agricultural holdings and the development of production activities based mainly on manual labor.
- the high unemployment rate, in the urban area, made a part of the population left without a job, to find new opportunities, employment in rural areas or, to focus on agricultural activity.

In 2018, the structure of the population employed in agriculture, by age groups, indicates a high, increasing share, compared to previous years, of the age group 45-54 years (Figure 2) [8]. A significant share is also represented by the age group 35-44 years, 20.4%, although, in decrease, compared to 2010. There is an involvement of young people in agriculture, due to the financial support of the EU, for young farmers.

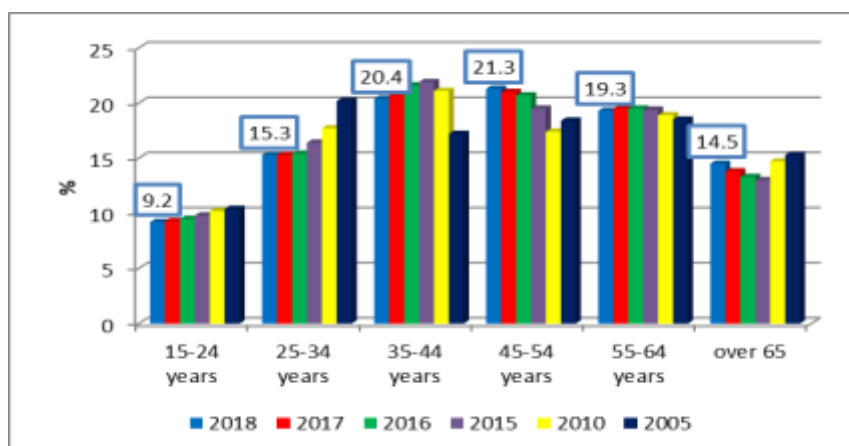


Figure 2. Structure by age groups of the population employed in agriculture, 2005-2018

Source: [15]

In order to be able to make a correct assessment of the agricultural labor force, in Figure 3, a comparison of this indicator between EU-28 member countries is presented.

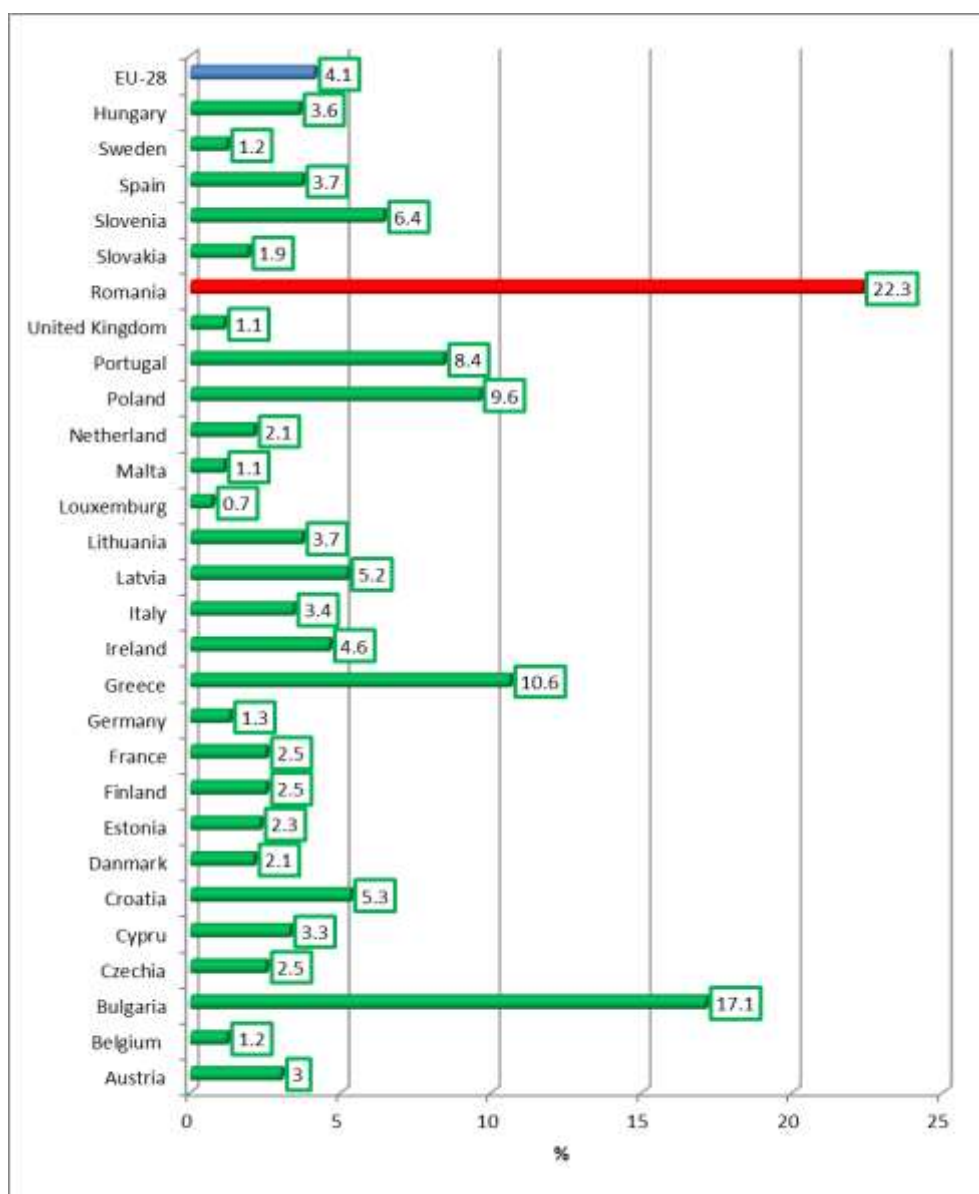


Figure 3. Share of employment in agriculture, total employed population, EU-28, 2018

Source: [17]

It is observed that Romania has by far the largest share of the population active in agriculture (22.3%). Less developed countries have high values of this indicator such as Bulgaria-17.1%, Greece-10.6%, Poland 9.6% and Portugal-8.4%. In contrast, are the states with a developed economy such as Germany, France, Belgium, the Netherlands, and Italy having values below the European Union average-4.1%.

Romanian agriculture acted as a "buffer" from an occupational point of view, when the performance of the other two economic branches was low. The low opportunity cost of labor in Romania has stimulated an agricultural production based on the extensive use of labor, thus leading to a decrease in labor productivity. Thus, the actions of restitution of land and privatization of state farms, had repercussions both on the labor force employed in agriculture and on the distribution of agricultural income.

The socio-economic characteristics of the human factor in agriculture highlight the fact that the typical family farm consists of an elderly farmer, self-employed, with a below average level of education, and members of his family. In general, the population employed in agriculture can be divided into three categories:

- ❖ people working full time in agriculture;
- ❖ persons employed in other sectors but also working in agriculture;
- ❖ people who are not employed in other sectors and work only part-time in agriculture.

In 2016, at the level of the European Union in 89.5% of agricultural holdings, the employed labor force was represented by family members, in a proportion of over 50% (Figure 4). 71.5% of the managers of the 140.5 million farms, existing in the EU-28, in 2016, were male and a majority of 57.9% was 55 years old. Only 10.6% of farm managers are young farmers under 40 years of age. This age group structure of farm management emphasizes the continuity of succession in farm management and the need to encourage the new generation of farmers.

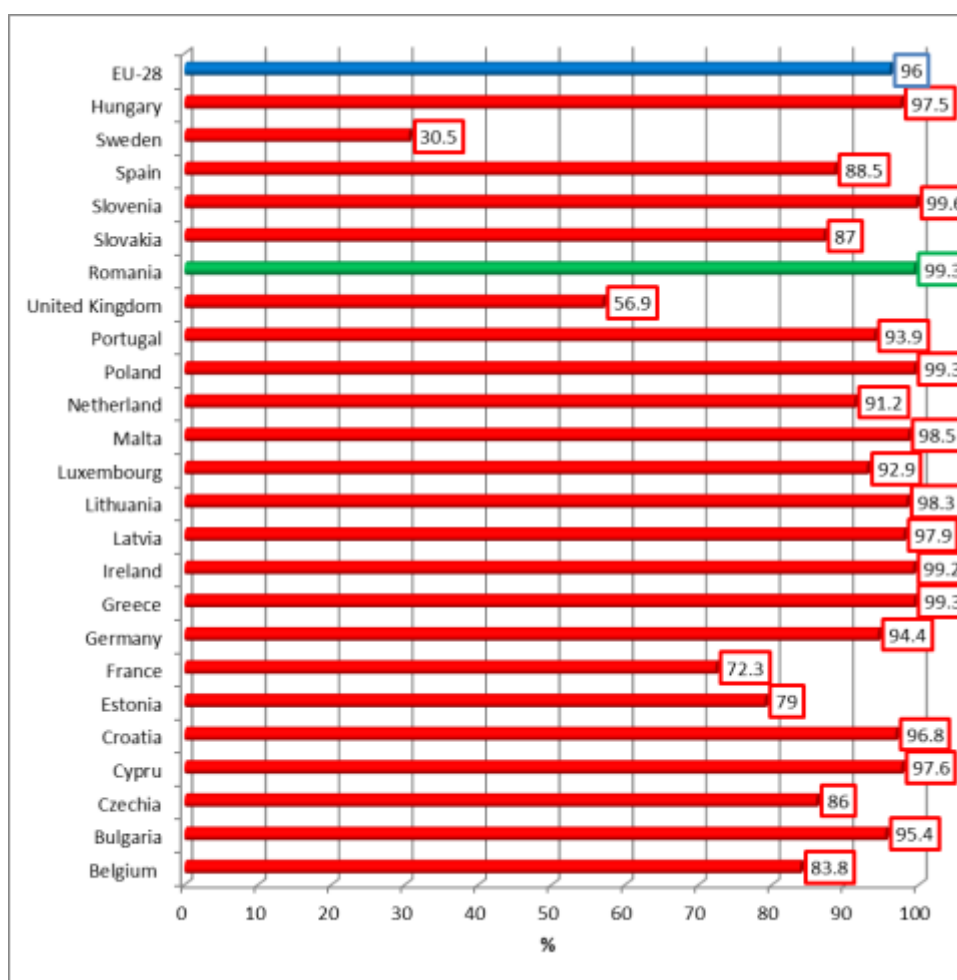


Figure 4. Share of farms using family labor, more than 50%, EU-28, 2016

Source: [16]

Another aspect concerns the gender imbalance among farmers. Thus, in 2016, in the Netherlands, the largest imbalance was registered, only 5.2% of farmers were women, followed by Malta, with 6.0%, Denmark 7.7% and Germany 9.6%.

In figure 5 is presented the evolution of the average number of employees in agriculture. In 1990, about 655 thousand people, 8.03%, were employed in agriculture. In

the period 1990-2018, the evolution of the number of people employed in agriculture has two opposite directions. Thus, until 2010, there is a decrease in the number of employees, followed by a steady increase so far. This is possible for the financial support of the development of viable farms by young people. In 2018, the number of employees in Romanian agriculture was around 124 thousand, increasing by 12.7%, compared to 2010, representing 2.4% of the total number of employees registered at national level.

The low number of salaried workers in agriculture, only 12.7% of the total employed population is a problem faced by Romanian agriculture, as the skill level of small holders is extremely low and labor productivity and production results are relatively low.

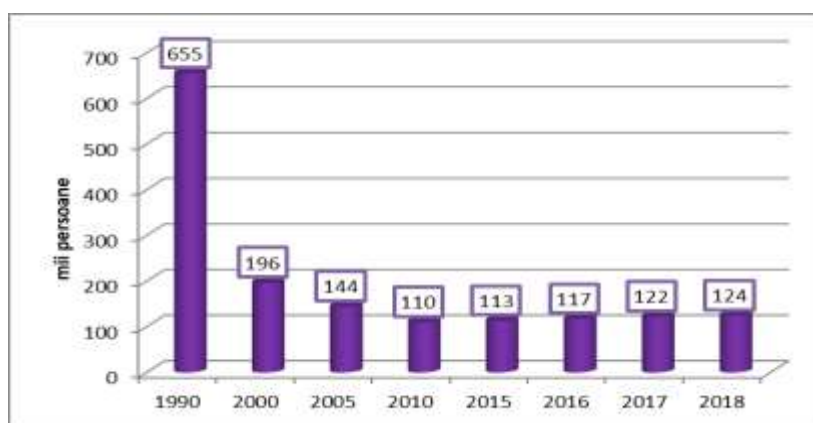


Figure 5. The evolution of the number of employees in agriculture, 1990-2018

Source: [15]

The fundamental problem of Romanian agriculture, in order to ensure food security and advantageous integration in the agricultural structures of the European Union, is the increase of labor productivity. Unlike the European Union, where the tendencies are to reduce the share of the population employed in agriculture, in the conditions of an absolutely high level and of the increase of labor productivity, in Romania the situation is reversed.

However, the decline in the population employed in agriculture cannot be considered a real one, as a large part of the population working in agriculture, as self-employed, is not registered as employed in this sector. This can be easily verified by the fact that most self-employed workers appear, in statistics, in rural areas in all regions of the country.

The idea that the Eastern bloc countries are true "gold mines" for Western investors has long been credited. The labor force is cheap and well-qualified, and the prospect of a cost gain was obvious.

Due to the mono-employment of the rural population, in self-employed agricultural activities, the unemployment rate in rural areas is lower than in the case of the urban population.

The number of unemployed from rural areas represents 51.03% from the total number of unemployed in Romania. The highest values, in terms of the rural unemployment rate, are registered in the South-West Region (3.3%) and South-East Region (3.1%), and the lowest values, in the North-East Region (0.7%), North-West (1.1%) and West (1.2%), values that are lower than the national average, 2.0%. The share of unemployed women is much lower than that of men, due to the fact that the employment rate of women is also lower.

Table 2.**The evolution of the unemployment rate, by areas of residence, 2018,%**

The region	Urban	Rural
Northwest	1.2	1.1
Center	1.2	2.9
Northeast	1.0	0.7
South East	2.2	3.1
South	2.6	2.8
Bucharest - Ilfov	0.9	2.1
Southwest	4.0	3.3
West	2.0	1.2
Romania	1.7	2.0

Source: Statistical Yearbook of Romania, 2019, [15]

Masked unemployment, it is a phenomenon present in rural areas as well, one of the arguments being that almost 85% of the rural population works in agriculture, as a second activity, which implies the development of another previous occupational activity.

In reality, the long-term unemployment rate is a problem that mainly affects the urban environment, while in rural areas the major problem is the underemployment that conditions the viability and economic size of agricultural holdings.

CONCLUSIONS

Current characteristics of the agricultural workforce such as: high degree of aging of the population working in agriculture, low level of education in rural areas, the particular use of family labor force, lack of entrepreneurship, poverty, practice in large part of a subsistence agriculture, are constituted as impediments in the practice of a modern and competitive agriculture.

In order to overcome this situation, it is necessary to take measures, mainly aimed at developing rural areas, by supporting the development of agriculture and supporting small producers. In this sense, it is necessary:

- ❖ attracting and stabilizing young people in rural areas;
- ❖ creation of producer groups;
- ❖ improving production technologies;
- ❖ use of quality inputs;
- ❖ land concentration;
- ❖ development of viable agricultural farms;
- ❖ supporting the development of alternative activities in order to capitalize on the resources of the rural area and increase the incomes of farmers.

At both European and national level, it is proven that, at present, agricultural activity cannot fully support the income of the rural population. New ways of responding to the new objectives of rural development must be identified, and the political class must articulate a vision of the long-term future of the Romanian rural society and develop a global policy strategy, including institutional arrangements, to facilitate the achievement of these objectives in perspective.

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