

ANALYSIS OF THE WORKFORCE IN AGRICULTURE IN THE CONDITIONS OF A SUSTAINABLE DEVELOPMENT

Simona Cristina COSTEA, Mihaela PĂTRAȘC
„TIBISCUS” UNIVERSITY OF TIMIȘOARA, FACULTY OF ECONOMICS

Abstract:

Effective use of human resources in agriculture would require increased employment in rural areas, and also achieving the best possible combination between labor productivity and rewards given to agricultural workers. In what regards our country's agriculture the labor force has a different evolution concerning the economy and the European development. In the following years Romania should focus on rural employment. Training young people to use and implement modern technologies is a necessity in what concerns sustainable development of agriculture and the rural environment.

Key words: analysis, economic efficiency, workforce

JEL classification: R58 - Regional Development Policy

Human resources in agriculture include the labor force required to carry out agricultural works, but also the one who provides technical coordination, organization and management of agricultural resources. In what regards the production factors in agriculture, human resources have a major influence on economic activities, so much in what regards quantity, but especially in what concerns quality.

Employment in agriculture includes all active persons that have certain physical and intellectual capacities, experience and professional qualification, which in given economic and social conditions are used depending on the level of mechanization provide [7].

Effective use of human resources in agriculture would require increased employment in rural areas, and also achieving the best possible combination between labor productivity and rewards given to agricultural workers. The existing labor force in agricultural households must be trained in order to use - efficiently and with a minimal cost of physical and mental effort - machines and technical equipment [3].

The improvement of human resource management within agricultural units requires the achievement of a balance between the existing human resources working at a time and the requirements of the manufacturing process. With this end in view, the labor process and the real labor needs, but also the prospect of replacing work with machines, the estimation of the available time of work on agricultural unit, per hectare, animal and on produce unit, the improvement of the working conditions, their scientific organization, should be identified [7].

In modern economics, the employment in agriculture represents between 2,3% in USA and up to 17% in some Member Countries of the European Union. In our country, the agricultural population held in 1989 about 27, 5% of the entire employed population, and in 2000 reached 42, 5%. This structure expresses the diminished level of agricultural labor productivity, a decreased general efficiency of this branch of the national economy and a poor diversification of rural activities to absorb the unemployed or the partially employed.

The number and the share of employees in Romania's agriculture

Specification	1990	1995	2000	2005	2006	2006/1990 (+/-)
The average number of employees in agriculture (thousand)	655,0	420,0	196,0	144,0	133,0	-522
Share of employees in the rural population	21,4	13,2	5,0	5,0	5,2	-16,2
- Workers (%)	86,9	80,5	80,0	69,0	69,1	-17,8
- Other staff (%)	13,1	19,5	20,0	31	30,9	17,8

Source: Calculated on the data from Romania's Statistical Yearbooks 1991, 2001, 2006, 2007

The main issue of the Romanian agriculture, with a view to provide food safety and advantageous integration into the agricultural structures of the European Union, is represented by the growth of labor productivity. Unlike the European Union, where the tides are about the reduction of the employed population in agriculture, in the conditions of an absolutely high level and increasing labor productivity, in Romania the situation is reverse. The disparity of productivity between different economic sectors and between agriculture and other economic branches are about 1:3 and 1:10, compared to some Member Countries of the European Union.

In Romania, an employed person in agriculture produced in 2000 food for 6,4 other persons, toward 7,6 in 1989. The disparity with the European Union is about 1:7,8.

The percentage of the agricultural population in the entire employed population increased from 28,2% in 1990 to 42,5% in 2000, and in the next years had a slow decrease. Nevertheless, this percentage is being maintained at a high level, making Romania to hold the penultimate place in the European countries, after Albania. The majority of the employed population in agriculture has over 50 years old, while the youth has a decreasing, reduced percentage.

The evolution of the main indicators of the human potential in agriculture and in the countryside in the period 1990-2006

Year	Total population (thousand pers.)	Rural population (thousand pers.)	Population occupied (thousand pers.)	Population employed in agriculture (thousand pers.)	The share of rural population in total population (%)	Share of population employed in agriculture in total rural population (%)	Share of population employed in agriculture in the total population occupied (%)
1990	23.207	10.598	10.840	3.055	45,7	28,8	28,2
1995	22.681	10.224	9.943	3.187	45,1	31,2	33,6
2000	22.414	10.191	8.135	3.460	45,4	34,0	42,5
2005	21.624	9.744	9.147	2.939	45,1	30,2	32,1
2006	21.584	9.670	9.313	2.840	44,8	29,4	30,5

Source: Calculated on the data from Romania's Statistical Yearbooks, 1991, 2002, 2006, 2007

In what regards our country's agriculture the labor force has a different evolution concerning the economy and the European development. The growth of the labor force in agriculture took place, mainly, on local population in rural areas and the reactivation of people able to work, pensioners or unemployed persons from urban

areas. There is a developed tendency of an ageing population with a larger number of women in rural areas.

An emphasis of the agricultural tendency of the country took place as a result of reducing economic activities within the industry, the existence of a low mechanization degree of agricultural projects, as well as due to the lack of labor in rural areas [2].

The economic underdevelopment in rural areas is being maintained as the result of the low qualification level of the majority of the rural population, the division of activities in the primary sector of old family members, and the youth being less active. Major difficulties are about the implementation of renovation programs in agriculture [6].

In the following years Romania should focus on rural employment. This low employment rate will increase in the conditions in which there are no measures to create jobs, as the result of the accelerating process of restructuring agriculture and changing the agricultural sector.

Training young people to use and implement modern technologies is a necessity in what concerns sustainable development of agriculture and the rural environment. The fact that in Romania the number of agricultural workers is decreasing (133.000 in 2006, 175.000 in 2000 compared to 655.000 in 1989), following the privatization of land and the emergence of family subsistence farms, the reduction in agricultural service companies and agricultural companies activities reveals not only a decreased number of unskilled workers, but also the loss of trained staff and high qualified experts.

Measures to protect the incomes of farmers aim at their parity with the income earned by the personnel in other sectors and improving their variations, as the result of annual variations of agricultural production and agricultural price fluctuations. Solutions regarding the growth and stability of farmers' incomes have an important role for the safety, but also rural and urban strength. The average income of farmers is lower than other income rates, and this is even more obvious when comparisons between different areas or households are made [7].

The development of the total incomes of the peasantry after 1989 reflects a lower average wage in the economy, especially those achieved from the sale of agricultural produce. A survey conducted by the World Bank in a significant number of peasant households in Romania revealed a clear growth of farmers' incomes.

The nominal average income of peasant families and their structure (lei/month/family)

Income	1990	1995	1997	2006
Total nominal income	5,83	353,7	1.178,3	1.386,3
Financial income:	3,09	168,5	482,0	1.118,7
- of agricultural labor	4,55	256,7	916,5	49,9
- of salaries	0,45	31,28	67,2	683,4
- other jobs	0,28	31,3	86,50	42,9

Source: Survey of the World Bank December 1996, Romania's Statistical Yearbook, 2007

The dynamics and structure of farmers' incomes show an income gap compared to other categories, a lower nominal wage growth on average savings, a reduction in income from wages, a higher share of income from pensions and a positive development of income from other jobs. Pensions are the main income source of farmers, followed by salaries, sale of agricultural produce, ownership of agricultural companies, agricultural associations, other sources, funds from the state, etc.

Farmers' incomes rely on the costs and prices of agricultural produce. Increasing costs of agricultural produce has the effect of large increases in food prices [1].

The structure of consumption expenses of the peasantry as a synthetic indicator of the living standard is given by the income level and specific conditions of domestic

consumption in rural areas. Differences in consumption of rural families to those of employees are present. Thus, the expenses made for food, culture, studies and education are lower.

Economic reform strategies should focus on stimulating the development of services and small industries in rural areas, to increase employment, to create new jobs for the surplus population in rural and urban regions, in order to ensure growth and stabilize income for farmers [5].

It is essential to elaborate a strategy on attracting young people because most of the existing farmers will disappear due to old age. Farmers should prepare young agricultural workers and keep them in rural areas. Depopulation of villages due to migration of young people outside the country can become a big problem in the future, not only for agriculture but also rural areas in general [4].

During the innovation process of agriculture a large number of farmers will be issued, and this requires a complex rural development for the labor force to be used fully and effectively so that it will provide the necessary income for an improved living standard [8].

REFERENCES

1. Chiș M., Merce E., *Agricultura spre economia de piață*, Ed. Aletheia, Bistrița, 1999.
2. Cojocaru C., *Analiza economico-financiară a exploatațiilor agricole și silvice*, ediția a doua, Ed. Economică, București, 2000.
3. Cojocaru Aurelia Guadalupe, Cojocaru C., *Analiza productivității muncii în exploatațiile agricole în condițiile dezvoltării durabile*, Ed. ASE, București, 2004.
4. Moga T., Rădulescu Carmen Valentina, *Dezvoltarea complexă a spațiului rural Partea I*, Ed. ASE, 2004.
5. Otiman P.I., *Dezvoltarea rurală durabilă în România*, Ed. Academiei Române, București, 2006.
6. Rădulescu Carmen Valentina, *Dezvoltarea durabilă și implicațiile economico-financiare ale organizării exploatațiilor agricole*, Ed. Ase, București, 2003.
7. Zahiu Letiția, *Management agricol*, Ed. Economică, București, 1999.
8. Zahiu Letiția, Toncea V., Lăpușan A., *Structurile agrare și viitorul politicilor agricole*, Ed. Economică, București, 2003.