

THE SITUATION OF THE EMPLOYED IN AGRICULTURE**TIBOR BENCZE**

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ABSTRACT

Efficiency improvements result in reduced employment. Regarding the actual individual consumption per capital and the GDP per capita in the EU member states- Hungary is among the lasts. The main reason for this is the weak international competitive role. Competitiveness is one of the prerequisites for efficiency which requires skilled workforce. However, the unemployed from rural regions are generally low-skilled so their employment is not a viable option in the competitive industry or in the agricultural market.

In Hungary, the educational attainment level of agricultural workers is significantly lower than the employment of any other section's or the EU average. Agriculture cannot solve the employment problems of the rural population, it may only contributes modestly to the creation of new workplaces. GDP or gross domestic product is the sum of depreciation, wages and capital income. One of the main reasons of the low GDP per capita is the fact that the wages in Hungary are just a mere fraction of a Western European employee's with the same performance. The share of agriculture has been steadily decreasing in employment and in the production of gross value added, where the average wage of agriculture is significantly lower than the average of the national economy. It also plays a role in lowering the contribution of agriculture to GDP than the proportion of active workers. This explains the higher of a worker's level of education is, the chances they stay in the agriculture permanently is reducing significantly. The social recognition of agricultural activity can only be improved if the agricultural earnings or income of qualified young people reaches the average of the national economy.

Keywords: agriculture, economy, employment

INTRODUCTION

For a decade and a half, the labor market and labor market equalization issues have changed in Hungary. These are the values of employment policy, the labor market and the consideration of social exclusion, the expansion of employment, the conclusion of a missing or weak labor market agreement, the erosion of services, accessibility and social relations (CASTEL, 2005).

The trend in agricultural employment is determined by several factors: higher income in other sectors of the national economy results in an outflow of labor from agriculture. The mobility of the agricultural labor force is also influenced by the age and the level of education. Outside agriculture, employment opportunities are decreasing as farmers age. Education improves the quality of economic governance and the outlook for working outside agriculture (SWINNEN AND DRIES, 2003).

The proliferation of large-scale industrial technology, results in significant labor savings. Increasing efficiency will release additional agricultural labor. The consequence of the employment of younger family members outside agriculture is the concentration process, which leads to a rapid decline in the number of small farms and an increase in the area of the remaining farms (HENKEL, 2004).

The share of agriculture continued to decline in employment and gross value added, while investment fluctuated. In terms of asset value per hectare, gross production value, value added and gross operating income, there is also a significant backlog in the EU. A higher production cost per euro is required than the EU-15 average.

GDP is the gross domestic product of depreciation + wage + capital income (profit, interest, annuity). 65-70% of GDP is already produced by services in the modern economy and not in the narrower sense of material production. One of the main reasons for the low GDP per capita is that the Hungarian wages are from one-fourth to one-fifth of the Western European workers with the same performance.

According to institutional labor statistics, the average gross monthly earnings of full-time employees in agricultural organizations employing at least 5 persons between 2000 and 2010 corresponded to 75-76% of the national average (BIRÓ ET AL., 2012).

Before the research I had the following hypotheses:

1. Less than 70 percent of farmers surveyed have between 1 and 5 permanent employees
2. Over the last 5 years, most farmers surveyed have experienced a drop in labor between 11% and 25%

MATERIAL AND METHOD

Between 4 million and 503 thousand employees, the proportion of men was somewhat higher, but economic growth and job growth seemed to be somewhat favoured the gender imbalance in the labor market.

The level of education among the employees improved further between 2011 and 2016: the proportion of those with no higher education, typically skilled workers, decreased slightly to 26%, and the proportion of high school graduates was still 35%, with a low level of education, for those with tertiary education, 27% increased. In addition to improving the education of the population, the proportion of those with primary education has not decreased over the last five years, due to the increase in employment of low-educated people with the expansion of public employment (KSH, 2016).

The decline in the role of agriculture in rural employment is not an individual case, and even a decade-long trend and a general phenomenon in Hungary. The use and spreading of modern technologies, simplification of the production structure, specialization, and higher incomes in other sectors of the economy and more favourable working conditions have led to the quasi-phasing out of agricultural labor in recent decades.

One of the main characteristics of agriculture is the exposure to weather, natural factors, and the geographical location and accessibility of a given farmer influences the supply and demand situation of the workforce. Due to the high degree of mechanization in arable crop production, large areas of agricultural land are cultivated from sowing to harvesting with low number of employees. There are few extra tasks that are seasonal and require manual labor. In contrast, animal husbandry has fixed tasks (feeding, milking) 365 days a year, no holidays and several shifts works schedules. Supervising the birth / farrowing is a priority. The fruit and vegetable sector have the greatest need for manual labor. The cultivation of propelled, foil or greenhouse vegetables provides employment throughout the year. A critical point in the sector is to cover the high demand for seasonal labor during the harvesting period of certain plant species. All in all, animal husbandry, vegetable and fruit production, and ornamentals are highly demanding among the agricultural sectors. In addition, seasonal work can often mean working hours longer than 8 hours.

Opportunities to increase workforce efficiency or the proliferation of mechanization / robotics are not new. Many economies in Hungary have begun to modernize and have reduced their need for live labor through various precision technologies or other developments.

During my research, I visited 100 farmers to get information on the number and development of their employees. I used the questionnaire method, the results of which will be presented in the next section.

RESULTS

Agricultural employment has clearly shown an upward trend in recent years. According to the data of the HCSO survey on the labor force of the HCSO, the number of people employed in agriculture, forestry and fishing increased by 217 thousand in 2016, by 6.8% in one year and by more than a quarter in the last 6-8 years. Examining a longer time span, 16 years since the millennium, the sector was characterized by a continuous outflow of labor until 2008. However, after the small fluctuations, a substantial increase in the number of people employed in agriculture can be observed on *Table 1*.

Table 1. Number of employed between 1990 and 2017

Year	Number of Employees (Thousands)		
	Total national economy	From this	
		Agriculture, forestry, fishing	Food industry
1990	4 880	693	234
1995	3 679	295	157
2000	3 856	256	154
2005	3 902	194	140
2010	3 732	173	122
2015	4 210	203	140
2016	4 352	217	144
2017	4 421	220	146

Source: KSH, 2019

Examining the composition of the agricultural labor force, according to the data of the Economic Structure Survey 2016, the economic organizations consisted of 94 thousand permanent employees and 55 thousand temporary employees, while the individual farms employed 19 thousand permanent and 71 thousand temporary employees to supplement the work of the family (*Figure 1*).

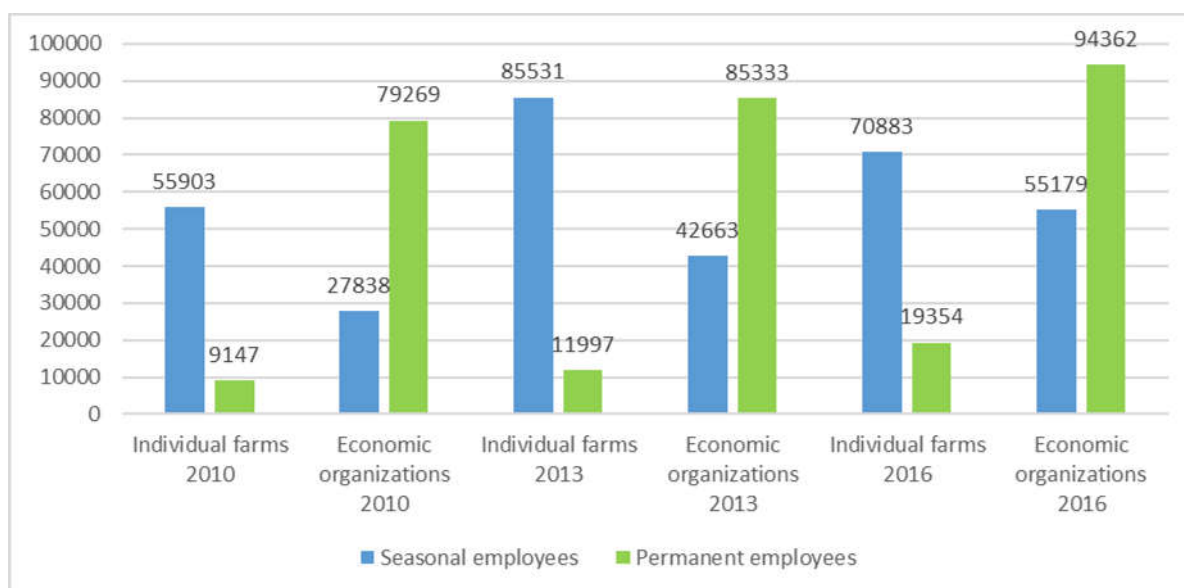


Figure 1.: Permanent and temporary employees by management form

Source: KSH, 2019

Compared to 2010, the number of both temporary and permanent employees has increased in both groups of economy, but growth is particularly noticeable among occasional employees of economic organizations, where their number has doubled in six years and increased by about 27,000. The increase in the number of seasonal workers is due to the change in the legal and tax background of casual employment. LXXV on Simplified Employment 2010 Laws introduced significant simplifications and reductions in seasonal employment, including agricultural seasonal work. These are diminishing public charges and decreasing administration (KSH, 2016).

Unpaid labor utilization accounted for 68 percent of total labor input in 2017, while the rate has gradually declined in recent years, from 75 % in 2010. In parallel, the number of paid workers in agriculture has increased significantly, which may be due to the replacement of declining family labor by paid workers. During my research, I visited 100 farmers to gain more insight into the topic. I am interested in the number of people working in their economy and its development over the last 5 years. I was curious about their views on labor shortages. The *Figure 2.* below shows the number of employees employed by the farmers surveyed.

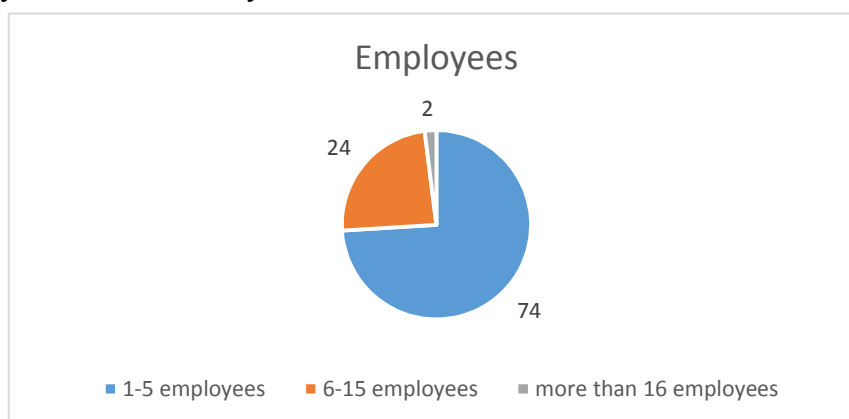


Figure 2.: Number of employees per farm based on questionnaire survey, 2019

The surveyed farmers show that the number of permanent employees is mostly between 1 and 5 persons. These farmers are generally engaged in arable crop production and this is the number of their tractors. 24 farmers reported that the number of employees is between 6 and 15. They are said to be engaged in animal husbandry, vegetable and fruit production, which requires more live work. Two farmers indicated that they employ more than 16 people, have large vineyards and produce large quantities of wine. So, they already need more people due to processing. In the next section, I examined the percentage reduction in the number of employees in *Figure 3*.

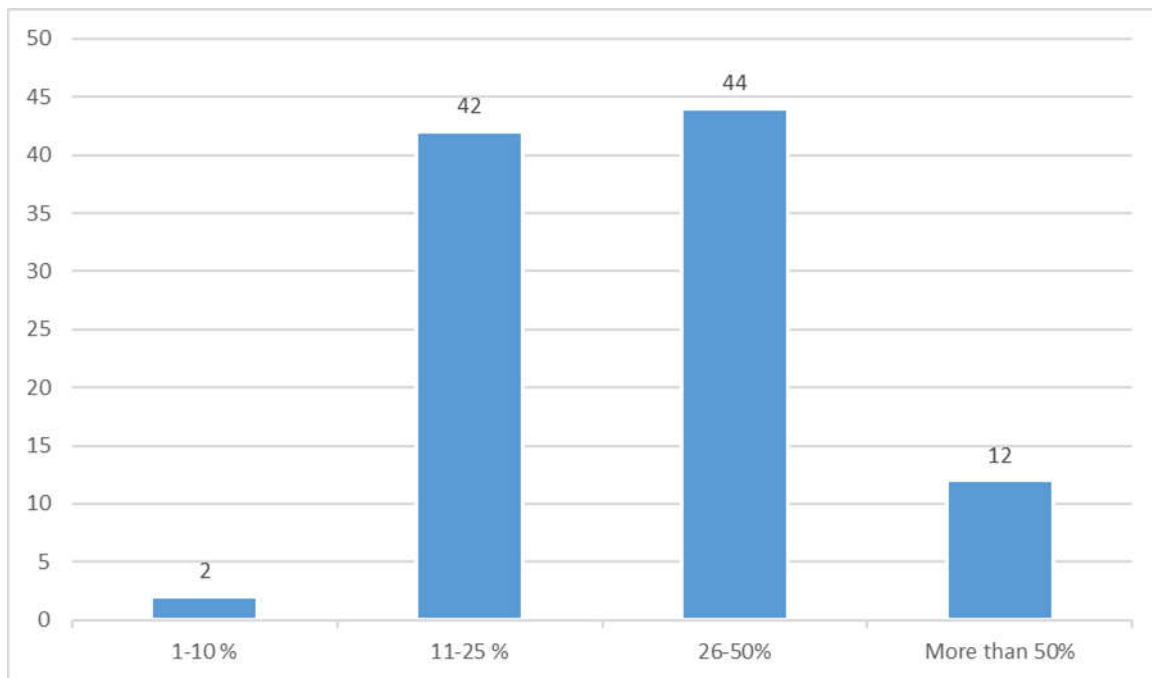


Figure 3.: Decrease in the number of employed in the last 5 years as a percent

Source: Based on questionnaire survey, 2019

The figure shows that for the farmers I interviewed, the workforce decreased the most in the last 5 years by 11-25 and 26-50 percent. Unfortunately, twelve farmers responded that the workforce had fallen by more than 50 %.

During my investigation, I was also interested in what the farmers say may be the reason for the termination. According to them, the problem was not the amount of pay, but rather the long hours at work peaks. The unpredictable working hours and the long working days taken away from family time have led to more family choice and more predictable working time, such as factory work. Mention was also made of moving to a cleaner environment and requiring less physical force. Unfortunately, deaths have also been marked because agriculture is an aging society. According to information from farmers, they say they are trying to pass on their farm to their children and grandchildren, but the lack of labor will be a big problem for them, because agriculture is inconceivable without a living job.

CONCLUSIONS

By the end of my research, none of my hypotheses have been confirmed. 74% of the farmers surveyed have between 1 and 5 employees and 24% have between 6 and 15

employees. In my other hypothesis, which concerned the decrease in the number of employees, the largest number of respondents indicated a decrease between 26 and 50%.

Shaper of job creation, employment is the market on one hand, and state intervention influencing it on the other. Its job is to increase the demand for labor in the long run to achieve the highest possible level of employment, which requires the development of a suitably qualified supply.

In the short term, the goal is to balance the labor market. Neither can the labor market lack social care and solidarity nor help the livelihood of the unemployed without their own fault.

Improvements in efficiency also lead to a fall in employment. Competitiveness is a prerequisite for efficiency and efficiency requires skilled labor, while rural unemployed people are generally low skilled.

In Hungary, the level of education of agricultural workers is significantly lower than that of other branches of the economy and the EU average. Agriculture cannot solve the employment problems of the rural population and may make a modest contribution to the creation of new jobs.

Technological innovations are already present in all branches of agriculture, which require skilled labor. People with higher educational qualifications are less likely to remain permanently in agriculture. Unfortunately, the young and skilled workforce has moved to a city and another sector and there is no indication that they will return to the countryside and find employment in agriculture. The problems that farmers say they have with their employees are: unpredictable and long hours, a cleaner environment. Unfortunately, these problems cannot be solved because the weather generally determines working hours and the environment cannot be changed.

The social moral recognition of agricultural activity will only improve if the agricultural income of qualified young people reaches or is above the national average, but in my opinion, this would require state support.

Improvement of efficiency can be achieved by saving labor input, i.e. by technological development, depreciation is part of GDP. Increasing efficiency and competitiveness can be achieved by improving labor productivity, with profit rising as part of GDP.

Improving efficiency can also be achieved by saving on labor input, i.e. technology development. Increasing efficiency and competitiveness can be achieved by improving labor productivity, with profit rising as well. The output of agriculture could be increased with the help of capital, innovation and expertise, which would increase depreciation, wages and profit.

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