

EMPLOYMENT POTENTIAL OF AGRICULTURE IN HUNGARY

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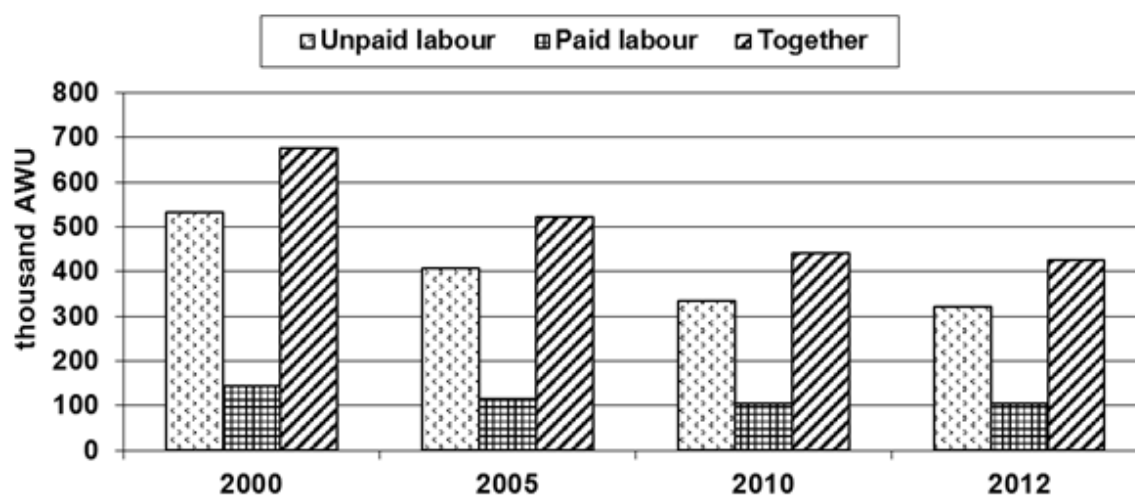
Abstract

In Hungarian agriculture, which plays an important role in rural employment, the signs of gradual restructuration can be seen. In the last decade the rural areas of Hungary – beside significant regional and sectorial divergences – could be characterized by high level and long term structural unemployment, low level of qualification, wages under the national averages, increasing number of people applying for social benefits and last but not least by ‘invisible incomes’ in connection with tax evasion. By analyzing the labor market potential of the agricultural sector as well as the opportunities it can easily be stated that employment extension in rural areas can hardly be based exclusively on basic agricultural activities. In agriculture primary the market-based employment can economically be more effective, but the increasement of economic and social activity of the population in disadvantageous position also needed for their integration.

Key words: agricultural employment, social economy, rural development

INTRODUCTION

The opportunities of increasing the labor demand under market conditions are significantly determined by the profitability of the sector as well as the supports and taxes to be paid. Employment extension is expected from the rural development subsidies; that is, from the measure to improve competitiveness through investments, the measure to maintain and/improve environmental conditions though surplus labor demand and from the subsidies to improve rural life through increasing consumption by services. However, the developments implemented up to now rather maintain the present employments and alleviate the symptoms than encourage new creative solutions and increase the employment through value added. For the continued market-based employment extension not only the development of the labor intensive sectors, the atypical employment types and the expansion of multifunctional agriculture are required but enlarging the group of qualified labor, its continued training and the vertical extension of the activities are also required. Similarly to the international tendencies, in Hungary general phenomenon are the decreasing role of agriculture in rural employment (Figure 1) and the increasing expansion of the service sector.



Source: Based on data of Hungarian Central Statistical Office, 2014

Figure 1 Labor in agriculture, 2000-2012

In the same time in Hungary employment is decreasing while in the other Member States of the EU it is increasing definitely. Domestic employment rate decrease during the last ten years was the most significant in the rural areas. The application of modern technologies leading to decreasing labor input, the simplification of the production structure, the specialization and concentration as well as the higher incomes attainable and the more favorable working conditions in other sectors of the national economy speeded up the labor outflow from agriculture.

If the National Aim is to reach the employment level of the developed Western European countries (where the activity rate is more than 70 percent), employment of 1.1 million people in the age group between 15-64 would be required in Hungary. For this aim besides eliminating the unemployment at least one fourth of the inactive population should be brought back to the labor market. What should be the share that agricultural sector could bear till 2020?

METHODOLOGY

The combined application of the various analytical methods made it possible to gather information and to evaluate the Hungarian and international characteristics of agricultural employment. The evaluation is primarily based on the available Hungarian and international literature and statistical databases. By studying the topic consistently by a comprehensive approach and by systematic collection and logical processing of the information new relationships could also be found. In order to express the potentials of employment in numbers estimations were used; and then the results were conferred and the eventual aggregations and discrepancies were filtered.

Market-based employment generation estimated on creation of new employments based on market outlook, diversification of agricultural activities, and more balanced use of the present labor. Social employment generation (provisional measure to manage the lacking market-based employment) potential was calculated on employment results of present public social employment, complex labor market programs, the social land program and the social cooperative program. Production for own consumption (314.4 thousand small farms and 1.1 million rural households) was also taken into consideration. The conditions of the population in the most disadvantageous labor market situation can be improved by introducing the social employment. The indirect multiplication effects of the increase of agricultural employment on the labor markets of rural areas through direct economic benefits in the fields of basic infrastructure and services. Based on the literature at the market-based employment increase we used the multiplication values of 1.2-1.3. In the calculation of the social employment increase we used multiplication values of 1.04-1.08.

Main sources of agricultural labor enhancement

The agricultural labor market in the Hungarian rural areas – beside regional and sectorial deviations – can be characterized by simultaneous presence of decreasing structural unemployment, wages under the statistical national averages, low level of qualified workforce as well as illegal employment. Most of the agricultural labor is based on family labor. This labor input is seasonal and the additional works carried out outside the agriculture are often required for subsistence. By assessing the role of farms in employment we can see that the family-farms are founded primarily on self-employment, that is, on the best possible utilization of own labor while large farms are based on full time employment of non-family labor and wage-work. The output per labor unit of farms employing non-family labor seems to be more favourable than of farms based on part-time employment and family labor. However, in order to increase the agricultural employment by improving the utilization of labor and increasing the efficiency developing the farms based on family labor is of outstanding importance.

The market-based employment opportunities for expansion are often missing or have failed. Changes in the labor market in developed countries warned of the danger of the level high level of persistent and long-term unemployment parallel with the reduction in the volume of work decades ago. Experience on the reversal of those steadily outside the labor market also increased. While the first stage of labor crisis in the seventies mainly passive incentives, while the second half of the eighties active measures aimed at developing skills for the job were in the center of attention in Western Europe. In the beginning of the nineties, it became clear that active measures alone are not capable of eliminating socio-economic problems behind unemployment. Upon the experiences of the implemented crisis management programs in the European Union most developed Member States it is generally accepted that the integration of large groups of potential workers - in the absence of adequate knowledge and skills – at most the so-called second labor market, the social economy can provide (Csoba *et al.*, 2007)

Given that a significant proportion of the affected population with the labor market disadvantages is concentrated in the less favored agricultural rural areas, expansion of the social economy - across Europe - often linked to agriculture. Support for becoming an entrepreneur because of the saturation of markets, and with the lack of enough capital entrepreneurship is only for a narrow group of job-seekers a way out. Most of the beneficiaries start new business in the commercial sector. The self-employment assistance is typically able to solve only the set up in most cases, and majority of the supported companies remains only one-man on the market (Frey, 2007). The initial operation of agricultural enterprises is characterized by mainly the lack of financial and marketing knowledge, thus linking the facility to carry out business training can increase the chance of survival.

Based on the General Agricultural Census 2010, 60.2 percent of the individual farms (341.4 thousand farms), was producing mainly for own consumption (Table 2). Their number sharply decrease (by 40 percent) compared to the previous decade. There is also a structural change in the production share of farms producing for the market increased two and a half times (from 8 percent to almost 20 percent). In addition to individual farms further 1.1 million households - especially around the house and enclosed garden areas – involved in agricultural activity, which is 265 thousand household more than ten years before. Extension of agricultural labor with five working days in the subsistence farms and rural households in a year (which mean only a couple more in pig fattening, or 0.1 acres of potato, apple, peach production) for 10 to 15 thousand-subistence farms, together with the households nearly 25 to 35 thousand Annual Work Unit (AWU extra time allocation arise).

Main activity	Production type						Together	
	Crop farm		Animal farm		Mixed farm			
	thousand	per cent	thousand	per cent	thousand	per cent	thousand	per cent
2000								
Own consumption	233.5	60.5	172.5	81.7	172.5	47.7	578.5	60.4
Excess sale	109.2	28.3	34.1	16.1	158.2	43.8	301.5	31.5
Producing for the market	43.2	11.2	4.6	2.2	30.6	8.5	78.5	8.2
Together	385.9	100.0	211.2	100.0	361.3	100.0	958.5	100.0
2010								
Own consumption	152.6	55.1	109.2	87.6	79.6	47.9	341.4	60.2
Excess sale	54.5	19.7	10.8	8.7	49.8	30.0	115.1	20.3
Producing for the market	69.6	25.2	4.6	3.7	36.7	22.1	110.9	19.5
Together	276.7	100.0	124.6	100.0	166.1	100.0	567.4	100.0

Table 2 Individual farms by production type and main activity

Source: HCSO, 2010.

The public employment programs (between 2003 and 2010) provided support to 250 to 300 thousand people for temporary employment opportunities. In the broad sense agriculture connected about half of the participants. The community service employment is primarily for local governments and non-profit organizations. Experience has shown that from 60 to 70 thousand job only a relatively small proportion (1-2%) established employment relations after the end of the public service. Public work programs are complex, project-based tasks could also apply, to achieve sectoral programs. For farming silviculture, ragweed eradication and control of flooding and

inundation works apply, which involved about 8 to 10 thousand persons per year. For those who involved in public employment income for legal work itself is important, and in many cases the only instrument. The public employment with control measures has a significant role in reducing illegal employment.

The social land programs in the context of cultivation amounts to about 4.5 to 5 thousand hectares. The last years of the previous decade, nearly 24 thousand people, about seven thousand families participated in the programs, which may be made of only one-fifth of the populations affected. The average daily one-hour programs are part-time employment, which represents 3 thousand people in full-time equivalent employment (FTE). The number of employed in social co-operatives according to estimates 1-1.5 thousand people. According to Tarjányi and Simko (2011), the main obstacles to the spread of social cooperatives that stimulating the social economy as a whole – which was successfully applied in international practice with forms of support (tax and social contribution exemptions, discount loans, interest subsidies) – do not apply. Social co-operatives and the wider social economy – depending on the consumers' needs – could reach up to 5-10 thousand full-time job in the expansion of agricultural employment.

RESULTS

Without real and continued employment extension rural subsistence and the low level of agricultural production cannot significantly be raised and the unfavourable tendencies might become steady. The agricultural subsidies could provide more assistance to increase rural employment. In order to make a better use of employment potentials the challenge is to increase parallel both the value added and extend the employment as well as to encourage enterprising and developing the economy to provide a base for innovations and new ideas and for cooperation. The National Rural Development Strategy (Ministry for Rural Development, 2012) is based on this concept; their main goals are to reconstruct the vitality and maintain the subsistence of rural areas. The Plan draws attention to the increasing values of natural resources, the protection of the natural environment and also to the close relationship between agriculture and rural areas.

The number and proportion of the farmers in the total employment is getting more and more determined by the income opportunities outside agriculture (Popp, 2014). The increase in the educational level also increases the prospects of non-agricultural employment (Dries and Swinnen, 2003). Agricultural wages below the national average and poor working conditions diverts the more skilled younger workers to other sectors (Mészáros and Szabó, 2014).

High taxation with low incomes counteracts to employment extension; employers might be encouraged to replace permanent employment by shortened time employed or temporary workers or to tax evasion. Self-employment and seasonal work together with low incomes raise the economic problem of subsistence; while on long term the extremely low level of social benefits will set a social problem. The eventual increase of minimum wages would increase unemployment and/or illegal employment. By labor legalization the labor market can be 'whitened' and transparency can be ensured but the additional labor costs (the contributions and taxes) borne by the employer will become higher so part of the illegal workers will stay without income and subsistence. By the application of the new legislation on temporary employment the administrative burden and thus the staff cut back can be decreased.

The advantages of social employment are creating seasonal employment incomes for subsistence are ensured provisionally. It assists to maintain the capability to work of the participants. It eases the financial burden of the local governments, decreases illegal labor market. Social employment also provides opportunities for gaining knowledge, experience and relationships required for working and farming even providing public goods (e.g. afforestation, water management, reintroduction of abandoned land). The main disadvantages of social employment are that the jobs require low qualifications, reemployment is significant (in public employment the employees are 'stuck' in the programmes). Poor reintegrating effect, without subsidies it is difficult to maintain. The risk that participants are not become able/not willing farming individually.

Market oriented employment development

Based on outlook, until 2020 a 5-10% surplus of output is projected varying by sectors. Employment potential is mainly in the labor intensive sectors, fruit as well as vegetable, grape and wine sectors. In the rural employment extension the 8-26 thousand AWU potential connected to agriculture can be based on the additional labor demand generated by the development of the various agricultural sectors (Table 1). By considering the market prospects up to 2020 and by making use of the opportunities in total 5-10% additional output varied by sectors can be projected. The output increase might require considerable additional labor mainly in the labor intensive

fruit, vegetable and wine sectors; while in livestock farming, in the pig, poultry and beef cattle sectors, there is only a modest potential in employment extension even if the output increases. For the developments based on market projections innovative technologies have to be applied which expanding demand of qualified labor.

Denomination	Number of employment	
	thousand AWU	share (%)
Outlook of the sector	8 – 26	1.8 – 51.0
Diversification of activities	15 – 25	49.0 – 65.2
<i>in which: on farm food processing</i>	8 – 12	23.5 – 34.8
<i>direct sale</i>	4 – 8	15.7 – 17.4
<i>green economy</i>	3 – 5	9.8 – 13.0
Direct employment generation in total*	23 – 51	100.0

Table 1 Market-based employment generation potential in Hungarian agriculture up to 2020

Source: (Biro et al., 2012)

Diversification outside of agricultural production not only generates significant additional incomes but increases also the labor utilization of the farms (by 15-25 thousand AWU). Food processing in farms has an outstanding role (8-12 thousand AWU) in the employment extension of farms, since by raising the level of processing both the value added and number of employments increase. Direct sales also offers further opportunities for the increase (cca. 4-8 thousand AWU) and the increase of renewable energy production can also lead to employment extension of a few thousand (3-5 thousand AWU) in the sector under market conditions. The qualified labor demand and the simplification of the legislation related to temporary employment facilitates significantly the expansion of atypical employment types adjusted to agricultural seasonal labor requirement which also leads to decreasing illegal employment.

Social employment enhancement

No employment can be found neither in the market-based agriculture nor in other sectors if qualifications and skills are lacking. The population of the most disadvantageous situation can be found in rural areas of suitable for agricultural production but where the basic requirements of self-employment (land, capital) are lacking the most. Their situation might be improved by socially-based employment extension; by this even 50-75 thousand AWU utilization can be reached (Table 2). For their social integration and for decreasing the share of illegal employment useful measures seem to be the employment extension on social basis, the further development of the social land programmes (10-15 thousand AWU) and of the social cooperatives (5-10 thousand AWU), as well as increasing the agricultural public employment (10-15 thousand AWU). The social programmes improve the social status of the participants and through their work they can be able to catch up and adopt.

The implementation of social measures might provide basis or might develop the production activities of using own household resources (25-35 thousand AWU), which by absorbing significant labor might play a role in decreasing the households' expenditures on food products. By considering the economic effects the increasing share of people living on wages will increase the demand for fundamental infrastructures and services which might generate further employments connected partly to agribusiness and to other sectors. As an indirect (multiplication) effect up to 2020 by market-based agricultural employment 5-15 thousand additional jobs, by social agricultural employment an additional of 2-6 thousand jobs could be created in the non-agricultural sectors in rural areas.

Denomination	Number of employment	
	(thousand) AWU	Share (%)
Public employment, complex programmes	10 – 15	20,0
Social land programme	10 – 15	20,0
Social cooperatives	5 – 10	10,0 – 13,3
Increasing production for own consumption	25 – 35	46,7 – 50,0
<i>in which individual farms</i>	<i>10 – 15</i>	<i>20,0</i>
<i>households</i>	<i>15 – 20</i>	<i>26,7 – 30,0</i>
Direct social employment generation, in total	50 – 75	100,0

Table 2 Social employment generation potential in Hungarian agriculture, up to 2020

Source: (Biro et al., 2012)

Employment extension in addition to the impacts on the labor market has also broad economic and social consequence in the rural areas. The employment extension on social basis has numerous economic and social advantages. The marginalized people will not only be prepared for agricultural production and subsistence but by improving their standards of living might also catch up and their economic and social activities might also be increased. In this way the younger generation living in persistent deep poverty might have a chance for braking out. In addition to the replacement effect between market based and social employment extension the minimal demand 'increase' for consumption, investment, products and services originating from social employment might also lead to market-based employment extension.

DISCUSSION

In Hungary in addition to the 200 thousand unemployed in rural areas accounting for the majority in the total oversupply of labor there is a group of economically inactive people of about 2.5 million who are potential workers on the labor market. From them – upon the estimation (Biro et al., 2012) – up to 2020 the full time employment of additional 80-150 thousand people could be reached connected directly or indirectly to agriculture. One third of employment extension can be implemented under market conditions. The increase can be generated by creating new jobs, utilizing better the present labor and whitening the black labor. Half to two third of the employment extension can be ensured by socially-based employment and the rest (9-15%) as a result of the multiplication effect can be generated indirectly in the other sectors of the economy in rural areas.

The market-based extension of agricultural employment can primarily be generated by the state by creating stable, prospective, entrepreneur-friendly environment and by ensuring the required legal background as well as by encouraging employment generating agricultural investments. The re-establishing of the vocational training system, restructuring of the other agricultural training institutions are required to ensure the supply adjusted better to the requirements of the labor demand of the enterprises. The cooperation operated by mutual interests and vertical integration can also lead to employment extension. Further research is needed especially in the fields of the market potentials of food processing, food retailing, innovation and knowledge-transfer related to rural developments as well as in the fields of business and community networks.

The social economy, which is based on solidarity and cohesion, might also serve the growth. For dissemination the experience, that is, the 'good practices' gained by implementing pilot programmes can be used. Supporting

the cooperation of small producers is a good starting point for disseminating the entrepreneurial attitude and diversification of activities. By encouraging the subsistence farming, organizing training courses unemployment can be prevented and in this way the amounts of governmental subsidies financed in the form of social benefits can be decreased. The strengthening of the population retention capacity of rural areas can be reached by overcoming the difficulties in subsistence: with reducing poverty, and increasing their inhabitants' social activity and catch up.

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