



EFFECTS OF THE CRISIS TO THE RURAL AREA IN HUNGARY

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Abstract: *The current global economic crisis may well become the longest in three generations. If trust in finance and economy does not return rapidly, economic reform, socio-economic growth and political stability will suffer. While some confidence in the financial system will return in due course, a new financial architecture is required to strengthen the global economy and increase economic and financial fairness. In this connection, it is critical that the needs for global food and environmental security are taken into account.*

Population growth creates a rapidly growing demand for crop products. Growing energy demand and climate change will also influence food production; agriculture will contribute to emissions into the environment and also suffer or benefit from changing climates, depending on climatic zones. Additional challenges are increasing market volatility resulting from yield and end stock fluctuations and consumer sensitivity to food quality, safety, and price. The challenges are aggravated by global irresponsibility related to food security, water and environmental sustainability-and energy security.

The difficulty for researchers lies in the fact that there are certain barriers to the utilisation of these resources, and it holds true especially for Hungary. One factor of the leap forward is in connection with financing since despite the fact that successive governments have been continuously proclaiming and stressing the opportunities, an adequate system of subsidization that is available for the majority of society has not been created. Witnessing the problems of the 12 newly acceded countries the European Union should take tangible steps rather than simply determining its expectations. The EU should name and assign resources that could form the basis of implementation.

I believe another vitally important task would be to tell how the lower quality agricultural areas could be utilised. The existing subsidy system encourages the utilisation of the better-than-average areas for such purposes while the less valuable areas remain unused. It is absolutely unacceptable since it affects some 600 thousand hectares in Hungary (200 thousand hectares if it is arable land below 17 Golden Crowns; and 400 thousand hectares if it is good quality pasture). As these areas require high volume of investment and are prone to unfavourable weather conditions, they are less suitable for agricultural use but are appropriate for growing energy plants perfectly. Taking all this into account it is expedient to consider the necessity of the structural modifications in agriculture so that it could adjust to new situations, offering possibilities to utilise less valuable areas, thus contributing to increased employment and to enhance the population retention ability of rural areas.

Keywords: *economic crisis, fossil minerals, unemployment, land utilisation*

INTRODUCTION

During production factors such as the capital, the labor, the natural factors and the entrepreneur that are needed for producing products are used in different measure. Their rates are dependent on the activity itself as there are activities which are labor and capital intensive. Anyway, we do not know such a productive activity that does not require any labor force or does not need some territory. When starting to deal with this topic more thoroughly that meant the basic point to us.

The economic crisis began in the second half of 2008 and became universal in 2009. Among its direct social effects that affected the undereducated en masse one of the most serious was the narrowing of employment and in line with this the sudden increase of the number of the unemployed. The recession that concerned the labor market hit the socially and economically different regions of the country with different intensity.

Going back to the last few decades in all periods Hungary was competitive only when employment and livelihood were ensured for those who live in the countryside. Agriculture and food industry had a leading role in these periods and the structure of agriculture guaranteed the employment of those who lived in the countryside. (R. Magda 2010)

RESULTS

Land utilization

After the 1990s there were significant changes in Hungary, which in many cases were in connection with the world economic events, however we can find numerous Hungarian specialties as well. When assessing our natural and economic resources we have to emphasize our lands, water supplies and labor force. In the last few years we have observed significant movements in land utilization.

Mrs. Takács (2010) investigated the change of land utilization in the European Union. She has found out that in spite of the fact that the economic and social changes were passing off in different ways in the countries of the middle-east of Europe, the rate of cereals is increasing. Besides the above mentioned, the current climatic changes in a particular area also influence land utilization, which – due to the change of annual precipitation distribution – means that the area mainly in the Carpathian Basin is getting arid. Besides the above mentioned factors the restructuring of the support system also influences the changes of land utilization and production structure.

As for the support system connected to production farmers prefer producing those plants of which production technology is well-known, the necessary resources are available on the whole, their expense level is not extremely high, the storage and sale of these produces have relatively small risks and together with supports provide appropriate income level. Hence they produce cash crops in those areas as well where it cannot be economically effective without supports. (I. Takács, 2008)

As for the utilization of agricultural areas there is a big decline – we will deal further on with this topic in detail – and in line with this our energy dependence has exceeded 70% in these days. In the case of crude oil and natural gas it is more than 85%. This fact was worsened by the outburst of the economic crisis, which started in the United States of America and spread all over the world.

Taking the year of 1986 as a basis from the period before the regime change and analyzing the last 20 years we can find unfavorable tendencies in two fields. The horticulture and viticulture sectors have significantly decreased where the number of employees on 1 hectare together with the processing industry connected to them could be 10 or even more. The labor force released from these sectors have mainly the necessary hard-working and the know-how that goes from father to son, and in these activities it is sufficient to be competitive. As far as the other cultivation sectors are concerned their uniformity is acceptable and the size (rate) of the agricultural land area still shows that Hungary belongs to those countries in the world where this resource provides excellent opportunities – if it is used properly – for food production. Besides, apart from food, it might also provide the production of new values that are important for our national economy and the employment of those who are undereducated. (R. Magda - S. Marselek 2010)

Table 1
Land areas in Hungary by land use categories
(1986-2010)

Year	Arable land	Garden	Orchard	Vineyard	Grassland	Agricultural land area
1986	4,704.8	338.6	99.0	147.4	1,233.7	6,523.6
2000	4,499.8	101.6	95.4	105.9	1,051.2	5,853.9
2010	4,501.6	96.1	93.7	82.8	762.6	5,536.8
1986 / 2010	95.7%	28.4%	94.6%	56.2%	61.8%	84.9%

Source: own compilation based on http://portal.ksh.hu/pls/ksh/docs/eng/agraar/html/tab1_3_1.html

Summing up the data shown in Table 1 in these days the size of the agricultural land areas that are used for plant production or animal husbandry is 1 million hectares less than it was before. It means such free capacities for us that we must utilize.

The change is minimal as far as the main crop productions are concerned (Table 2). If we compare them to the happenings in the world, we have to assert that from the '70s to the end of '80s the absolute yield and the production in 1 hectare of the maize, wheat and other agricultural produces tripled in Hungary, however, since the regime change the period can be characterized with the following words: hang, being liable to weather and a stagnant but in no way an increasing yield and produce quantity. The reasons cannot be detailed in such a study like this, but we emphasize the following: in these days and in many cases the provision of chemicals (fertilizers, pesticides) used in 1 hectare and the provision of some quality seeds depends on the necessary financial sources available of the entrepreneur or the enterprises to purchase these resources. It is observable that after the regime change these resources or expenditures in the western countries have been growing by the supports (EU + national), contrarily they have ceased in Hungary, moreover in the rate of national supports they have decreased. That could be the answer to the frequently asked questions: why do not we have produce growth and why does production fluctuate?

Table 2
Yields of the main crops

Year	Maize (ton)	%	Wheat (ton)	%
1986	7 028 845		5 739 868	
2000	4 984 332	70,90%	3 692 470	64,30%
2009	7 528 380	107,10%	4 419 163	77,00%

Source: HCSO

The data in Table 3 confirm the above written because the animal stock has decreased in such a degree that is considered dangerous regarding that further on the production of these sectors – considering the investment costs of one animal space – can be enhanced only by expensive investments. By now these developments have been occurred with the help of EU support in those areas where there was willingness and opportunities, therefore further positive changes are not expected as far as the main animal breed stocks are concerned, moreover, knowing the financial situation of the Hungarian farmers and due to the lack of foreign investors' interest stagnation can be predicted. That is why the inner market of the plant production sector – as a forage production

sector – is decreasing further. As for animal husbandry the dramatic setback also means that those people who had been employed in this sector (as they have special professional knowledge) lost their jobs at least this rate, moreover due to their knowledge limits similarly to those who had been working in the horticulture and viticulture sectors they would persistently appear as unemployed on the Hungarian labor market.

Table 3

Animal husbandry

Year	Stock (thousand)			
	Cattle	Pig	Sheep	Poultry
1986	1 725	8 687	2 337	37 176
2000	805	4 834	1 129	19 422
2009	700	3 247	1 223	18 907
1986 vs. 2009	40,6%	37,4%	52,3%	50,8%

Source: Agricultural Statistical Yearbook, 1986 and Hungarian Statistical Yearbook, 2009

Examining the reasons for the decline in the first place we have to mention the internationalization of the sales market where due to the low number of rural logistic bases and the aggravation of animal hygiene restrictions rural areas have almost completely lost their corner markets.

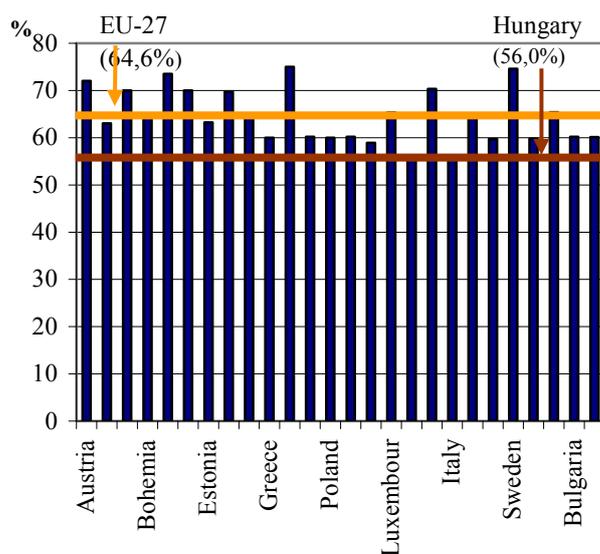
Employment

The labor market effects of the crisis entered in the highest degree first those regions which were economically more developed, of which labor market situation was more advantageous and their employment rate was higher. In these regions within the employed the employment rate was the highest in the industrial sector, especially in the export-oriented processing industry. These sectors perceived the crisis first, but in these days the effects of the Western European key sectors (automobile industry, electronics industry etc.) are typical.

The intensity of the negative labor market effects of the recession were slighter in those areas of the country which were economically less developed, but the signs of recovery were also perceived more slowly. Thus the economic crisis caused considerable changes on the labor market in some particular regions of the western part of the country. Meanwhile in the northern part of the country, where the situation was more disadvantageous anyway there were not such considerable changes. The regional indicators have significantly changed according to the previous years' however the order of the regions correlated with each other have not changed and the strong regional differences have still remained.

As far as employment is concerned we have known so far that our situation is not too favorable. In the past few years the situation has even worsened. Examining the data of 2009 – which meant the worst situation and did not depict a very positive picture for the future – we can say that this negative tendency did not continue in the year of 2010. According to the date of 2010 3 million 781 thousand people were considered as employed based on labor force surveys. Comparing to the previous year there was a restructuring observable as the rate of women improved a bit. If we investigate the employment rate of the population between the age of 15 and 64 – corresponding with the previous year – it was 55.4 % in 2010. According to the data available for comparison to the European Union the third quarter of 2010 data show that their drawback from the community average was 8.6%, which is roughly 65%. In comparison with the indicators of the EU-15 member countries their drawback is nearly 10%.

Fig.1
Employment rate (aged 15-64), 3rd quarter, 2010



Source: Statistical Reflections, 13 April, 2011. 5/2011, HCSO

We can find some countries, for instance Austria, Denmark, the Netherlands, Germany and Sweden where the indicator is above 70%. The aim of the EU is to reach the 70% employment rate, which seems to be extremely difficult for numerous countries. In our opinion this is the biggest problem in Hungary today, which must be solved in the near future if we do not want to lag behind irrevocably. (Figure 1)

When analyzing the age group distribution of the 2010 employment rate we can observe two important changes basically. The employment rate of younger men aged 25-34 worsened compared to the previous year, meanwhile – mainly due to the changes in the pension rules – the unemployment rate of women aged 55-59 has increased by almost 6 % from 41.1% to 46.9%.

Unemployment

The employment rate in 2010 did not change compared to the previous year. The increase of the unemployment rate, even if more slowly, was going on. The peak of the annual average unemployment indicator was in 1993 when it was 11.2%. In 2010 it was only 0.9% less, i.e. 11.2%.

The increasing unemployment that escorts the stagnant employment can have more reasons:

- The gradual increase of the retirement age has affected the supply side of the labor force, meanwhile on the demand side there was not a real vividness.
- The restructuring of the unemployment benefit system demands a more active labor force presence from those as well who were considered inactive previously.
- Less and less people who have lost their jobs are admitted by the social and social security systems, and this way they remain jobseekers persistently.

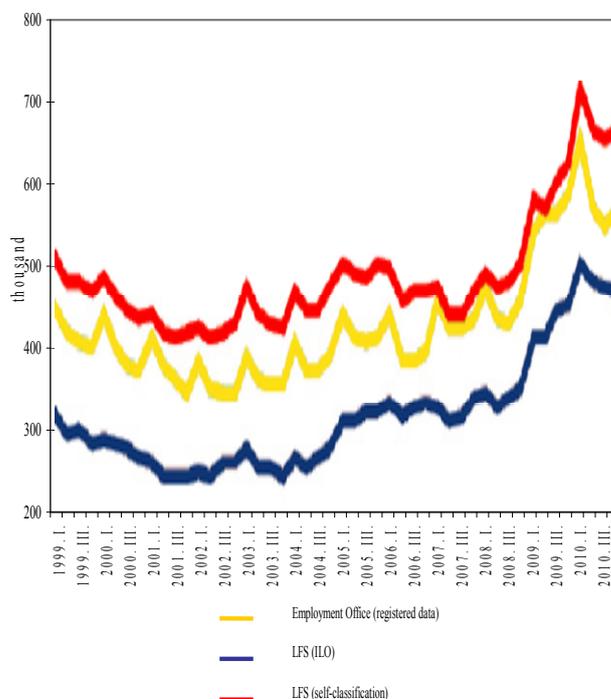
According to the data of the first half of the year 2010 the number of the unemployed and the unemployment rate exceeded the level of the corresponding period of the previous year in the whole of the European Union, so the Hungarian trend cannot be considered unique from this point of view.

Examining the average unemployment rate of the European Union we can experience that we do not have such a big lag as we have in the above mentioned employment rate. According to the data of the second quarter of 2011 the unemployment rate in Hungary was 10.9%, meanwhile the European Union average was 9.3%. So, in this respect there are countries of which situation is worse than that of Hungary; however as for the previous case Hungary can be considered the last with Malta and Italy.

We have investigated the differences between the registered job seekers and the unemployed from 1999 to 2010. (Figure 2) During the above mentioned period according to the Labor Force Survey

(LFS) the number of the unemployed was the lowest, while the number of those who considered themselves unemployed was the highest. The lately mentioned make the analysis much more realistic, which means that nearly 700 thousand people have to find a solution to this problem in the near future, if we do not want a bigger problem than we have already have nowadays.

Fig. 2
Number of job seekers according to the Employment Office, LFS (ILO) and LFS (self-classification), 1999-2010 (quarterly averages)



Source: Statistical Reflections, 13 April, 2011. 5/2011, HCSO

The third examined field is the inactive segment of the population. In 2010 it meant 37.1% of the population in the case of people aged 15-64 in Hungary. The average value of the indicator is about 10% more favorable than it is in the average of the EU. The number and rate of the inactive in line with the accession of the unemployed decreased compared to that of the previous year.

Redundancy was centered upon two categories: 1) pensioners (-32 thousand persons) 2) not studying, not receiving any person-related care, the so called other inactives (-18 thousand persons). Within the appropriate age inactives the largest group is the pensioners with their 39% ratio. The second largest group is the regular students with their 32%. There is still a significant group with approximately 360 thousand members whose living resources and their detailed activity status is still unknown.

Analyzing the distribution of the unemployed according to gender and age we were surprised to observe that people aged 25-44 form the largest group. It is by all means worth further considering in future respects as on the one hand, it could be a bad situation, because this age-group should undertake most of the burdens, on the other hand, they might mean a potential in the long run for the different economic sectors. (Table 4)

Table 4
Distribution of the unemployed according
to gender and age from 2006 to 2010
(thousand)

Year	15-24		25-44		44-64		Total
	Woman	Man	Woman	Man	Woman	Man	
2006	28,8	35,3	81,4	89,0	41,9	40,1	316,5
2007	25,1	32,5	83,6	87,1	39,0	44,4	311,7
2008	27,1	33,9	81,1	94,7	46,4	45,6	328,8
2009	31,3	47,9	99,4	126,2	56,1	59,4	420,3
2010	32,5	46,7	112,5	146,5	65,1	71,2	474,6

Source: own compilation based on www.ksh.hu

Right after this we present the differences according to gender and qualification. Normally the unemployment rate is much higher among the less qualified than among the qualified labor force. This situation was proved in the past and it has not changed recently either. Some months after the beginning of the crisis the increase of the number of the unemployed was perceivable. The increase in the developed industrial sectors – the most qualified labor force – was higher than in the agricultural sector where this had appeared previously. More than 300 thousand people belong to the first two categories – primary school or less, vocational school – while the unemployment rate is the lowest among those who have BSc or MSc degrees.

How to find the solution?

It is a very simple question; however the answer is extremely complex. Thinking about the problems of land utilization, energy dependence and employment where to find the solution: in the industrial, agricultural or service sector? Examining Table 5 we can see that both in the case of the industrial and the agricultural sectors the setback was extremely huge in the examined period and it was only the tertiary sector that could get some growth.

Table 5
Number and rate of the employed in different economic sectors (aged 15-64)

Sector	Persons (thousand)		Rate (%)	
	1990	2009	1990	2009
Agriculture	697.2	173.5	15.4	4.6
Industry	1,711.0	1,174.4	37.9	31.3
Services	2,107.9	2,403.4	46.7	64.1
Total	4,516.1	3,751.3	100.0	100.0

Source: own compilation based on HCSO

In the 1990s the number of the employed was higher – by 700 thousand persons – than in 2009, however as for the population we could not observe such a decrease in the examined period. So, we can tell which sectors have free capacities that could be rather must be used in the future. After all what could be the solution?

Green rural area

After the changes passed off in the two sectors, which basically employ labor force in the country, the tendencies shown in Table 7 were predictable. However to answer the question of what to do with the Hungarian agriculture and what the ability to retain labor force should be in the country new research should be carried out. The requirement of the present and the most important task of the future is to provide employment for those 4-500 thousand low-skilled workers who at present are living on benefits (and by no means can be employed in ‘high-tech’). The solution for both

Hungary and the people living in this country could be to find a way to utilize the basic energy resources and agricultural areas effectively. It is also important to connect this whole thing to the new and complex system of rural development. According to our surveys on that arable land which is not suitable for competitive plant production (these are mainly territories below 17 GC) and on those meadows and grass lands that previously provided the grazing and forage production land for nearly 2 million cattle and 2.5 million sheep weeds are 'produced', not national values. They do not contribute to the decrease of the negative aspects of climate change, do not help fix rapid rainfalls, do not have any positive effects on untamable winds and storms either.

At the beginning of the second decade of the 21st century the fossil energy resources are getting more and more restricted and this way such energy resources come to the foreground that might be suitable to moderate our energy needs. In these days this way is nothing else but the production and utilization of alternative energy resources, and the cultivation and utilization of lands towards this way.

Our country is extremely lucky considering that we have sufficient soils and water supplies. These factors are indispensable to produce the necessary raw materials for food production. (A Galgóczy-Németh 2009) The third factor to be examined is the labor force; within this mainly those who are currently between jobs and most of them – as we have already mentioned – are low-skilled workers.

However creating new work places also means that new knowledge and skills are required that is why an attitude change is necessary in the education as well, mainly in agricultural training. Only those work places can provide a living for those who are low-skilled and live in rural areas which are based on up-to-date knowledge. (A. Herneczky)

Hence our task for the future is to find those ways of resource utilization with which there is a chance to decrease our energy dependence and to increase employment. In the past 10 years Károly Róbert College have been seeking for the answers to the above asked questions and owing to its basic and applied research the college is able to harmonize the low-value resources (LAND, LABOR FORCE).

In the near future and later on as well we can only be successful if we are able to harmonize the formerly mentioned factors. We are trying to do so with the help of the following pictures:

Energy forest



Source: own compilation

Intensive horticulture



Source: own compilation

Renewable energy utilization



Source: own compilation

In the first picture we can see the harvest of energy forests, while in the second one an intensive horticulture, and on the third one such a power station can be seen that is able to utilize the renewable energy resources. How are these connected to each other and to the factors examined?

The pictures help understand this. If a country – Hungary as well – has free – currently not cultivated – lands, a significant part of them must be utilized by afforesting energy forests. On the one hand, those people who do not have high education but otherwise are employable are exceedingly suitable for this work. Of course, this demand for labor force will remain in the long run as well as we can count on them not only in connection with the forestation but with the post-treatment as well. On the other hand, this kind of land utilization provides opportunities for the country, a region or a settlement to decrease energy dependence repelling the use of fossil fuels. This kind of utilization method create opportunities towards another land utilization way, which is nothing else but the intensive horticultural activity where both the low-skilled workers can be employed and that energy can also be utilized which are gained from renewable energy resources.

SUMMARY

In these days everybody in the world is seeking for possibilities to get out of the crisis – let it be an economically strong capitalist country or an economically less strong developing country. The crises has reached our country as well just like it has reached almost all of the countries in the world without being able to get ready for it, so we do not have any other chances but to find the solutions through bioenergetics, education, environmental industry and research. However it is typical that we can find only forecasts and estimations instead of definite strategies (we have been speaking about agricultural strategy for about 20 years). Without specific goals and definite strategies we will be hopeless, futureless and losers.

Our research shows that green economics and the employment connected to it would mean the outstanding possibility of Hungary's competitiveness. The practical connection of this could contribute to some of the main targets set by the European Union namely to the gipsy recovery program and to the increase of the rate of alternative (green) energy.

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ПОСЛЕДИЦИТЕ ОТ КРИЗАТА ВЪРХУ СЕЛСКАТА ТЕРИТОРИЯ В УНГАРИЯ

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Ключови думи: *икономическа криза, изкопаеми минерали, безработица, използване на земята*

Резюме: *Сегашната глобална икономическа криза може да се превърне в най-дългата за три поколения. Ако доверието в областта на финансите и икономиката не се върне бързо, икономическата реформа, социално-икономическият растеж и политическата стабилност ще пострадат. Необходима е нова финансова архитектура за укрепване на глобалната икономика и увеличаване на икономическата и финансова справедливост. В тази връзка от критично значение е да се вземат предвид нуждите на световната продоволствена и екологична сигурност.*

Растежът на населението води до бързо повишаване в търсенето на растителни продукти. Увеличените потребности от енергия и изменението на климата също оказват влияние върху производството на храни; земеделието има принос към емисиите в околната среда и страда или се възползва от промяната на климата в зависимост от климатичните зони. Допълнително предизвикателство е увеличаването на волатилността на пазара в резултат от колебанията на доходността и чувствителността на потребителите към качеството на храните, безопасността им и цената. Предизвикателствата са усложнени и от глобалната безотговорност, свързани със сигурността на храната, водата и устойчивостта на околната среда и енергийната сигурност.

Друга жизнено важна задача е да бъдат използвани земеделските земи с по-ниско качество. Съществуващата система за субсидиране насърчава използването на територии, които са по-добри от средното ниво, а по-малко ценни земи остават неизползвани. Това е абсолютно неприемливо, тъй като засяга около 600 хиляди хектара в Унгария. Тъй като тези области изискват голям обем инвестициите и са подложени на неблагоприятни метеорологични условия, те са по-малко подходящи за използване в селското стопанство, но са подходящи за енергийни култури. Имайки всичко това предвид, е целесъобразно да се разгледа необходимостта от структурни промени в селското стопанство, така че да се адаптира към нови ситуации, предлагащи възможност да се използват по-малко ценни райони. Това ще се допринесе за увеличаване на заетостта и за подобряване на способността за задържане на населението в селските райони.