STRUCTURAL PROBLEMS IN HUNGARIAN AGRICULTURE AFTER THE POLITICAL TURNOVER STRUKTURÁLIS PROBLÉMÁK A MAGYAR MEZŐGAZDASÁGBAN A RENDSZERVÁLTÁS UTÁN

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ÖSSZEFOGLALÁS

A szocialista rendszer Magyarországon az 1990. évi első szabad választásokkal összeomlott. Az új kormány azonnal nekikezdett a magyar mezőgazdaság átszervezésének, sajnos elsősorban ideológiai szempontokra támaszkodva.

A 70-es és 80-as években a mezőgazdaság a nemzetgazdaság sikerágazata volt, mivel szerkezetében egyaránt jelentős szerepet játszottak a korszak technológiai és piaci adottságaihoz sikeresen alkalmazkodó szövetkezeti nagyüzemek és kis háztáji gazdaságok. A rendszerváltás után az új kormány intézkedései felszámolták ezt a struktúrát. A szántóterületet felosztották, sok kisgazdaság jött létre. Az agribusiness hazánkban addig ismeretlen elemeként nemzetközi áruházláncok is megjelentek az élelmiszerpiacon, félelmeket és gondokat okozva számos termelőnek. A magyar mezőgazdaság jelenleg sem rendelkezik stabil struktúrával, mind a gazdaságok mérete, mind pedig tulajdonosi szerkezete állandóan változik, az alkalmazott termelési technológia pedig nem illeszkedik a kialakult új helyzethez, a jelen helyzetben nyereségesen termeszthető termékek köre nincs meghatározva. Mindezen problémák megoldása feltétlenül szükséges lenne a vidéken tapasztalható magas munkanélküliség csökkentéséhez. A jelen cikkben a fenti kérdéseket elemezzük, és javaslatokat teszünk lehetséges megoldásaikra.

KULCSSZAVAK: agrárszerkezet, gazdaságok mérete, Magyarország, Európai Unió, vidékfejlesztés

ABSTRACT

The so-called socialist regime collapsed in Hungary in May 1990 with the first free elections. The new government immediately started to reorganize the country's agriculture, but unfortunately on a mainly ideological basis.

The agriculture of Hungary had been a successful branch of the national economy in the 1970's and 1980's, because its structure, including the co-operation of large farms and smallholders, was very effectively adapted to the technological conditions and market opportunities of the time. The measures introduced in the early nineties by the new government destroyed this structure. The arable land was split up and became the property of many owners, and this way a lot of new farms of very small size emerged. International supermarket chains also appeared on the Hungarian market. They are a new factor of agri-business earlier unknown in Hungary, causing a lot of fears and several problems. Hungarian agriculture still lacks a stable structure, i.e. the sizes and owners of farms keep changing, the applied farming technology is not adapted to the new situation, the products possible to grow in a profitable way are not clearly identified, though it would be necessary in order to solve the problem of high unemployment experienced in rural areas. All these problems are analyzed in this paper and suggestions for the solution are made.

KEYWORDS: agricultural structure, farm size, Hungary, European Union, rural development

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DETAILED ABSTRACT

In this paper the structural changes of Hungarian agriculture caused by the political turnover of 1990 are surveyed.

The so-called socialist regime collapsed in Hungary in May 1990 with the first free elections. The new government immediately started to reorganize the country's agriculture, but unfortunately on a mainly ideological basis.

It is shown that the demolition of the former co-operatives caused the emergence of small farms which are now the main form of farms dominating Hungarian agriculture.

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The current structure has many malfunctions, including inefficient land size, lack of capital and up-to-date technology. In particular, it is difficult to find consumers for rural products of lower quality. International supermarket chains also appeared on the Hungarian market. They are a new factor of agri-business earlier unknown in Hungary, causing a lot of fears and several problems. On the other hand, rural areas are not well-served by shops. Small food processing firms can increase the value added of the products, and at the same time decrease unemployment in the rural areas. Hovewer, processed food products cannot enter the supply of big chains without fulfilling the unified quality and packing requirements, supervised by integrators.

INTRODUCTION

Hungary is a small country in Central Europe. Its territory is 93,000 km². Considering land use, approximately 8 million ha is used for agriculture and related activities, of which 6 million ha is arable and a further 2 million ha is for other agricultural activities including forestry. The total population is 10 million, of which 2 million people live in the capital called Budapest, which, of course, is the greatest food market within the country. The number of settlements is 3,300, of which 3000 are villages, located in mainly rural areas. 6% of the employees work in agriculture producing 4.5% of the total GDP of the country. The total share of agriculture (including the food and processing industry) in the national GDP is 15%([2]).

A short historical background of the recent events and processes is as follows. Until 1945 large estates dominated the sector and beside them smallholders existed. In 1945 the arable area of the former big estates was split up and distributed among the people of the villages. Thus, until 1949 agricultural producers were only the smallholders in Hungary. When the communist party took over the power in 1949 the first wave of "co-operativization" took place. Later, as a result of the 1956 revolution cooperatives were demolished. Between 1959 and 1961 a second wave of co-operativization took place. Then, between 1961 and 1990 the sector was dominated by co-operatives. The re-establishment of the market economy started in 1990 in Hungary. The first freely elected government made several attempts to demolish the co-operatives. These efforts have resulted in a farming structure mainly consisting of very small family farms ([1]).

The success of the former Hungarian agriculture dominated by co-operatives was based on the following structural elements after 1961:

Every co-operative farmed a large arable area, approximately 600-2000 ha, or even more.

The technology was adjusted to the size of the farmed land. This technology was the same as the leading technology of the world, introduced in Hungary with some delay.

A new concept of "household farming" was also set up in the country. This meant, that the members of the co-operatives, besides working in the cooperative, also had a tiny arable land to farm on their own, and in this way they all became (very) smallholders. This concept had been unknown in any other socialist country.

Many ways of successful co-operation existed between the big farms, i.e. co-operatives, and the smallholders, i.e. household farming. The structure of corn/pig production may be mentioned as an example. The technology of the co-operatives was very appropriate for mass production, thus corn was produced by the co-operatives. At the same time, as animal husbandry requires more care, it was carried out by the household farms.

The manpower superfluous in agriculture was utilized by the industrial activities of the cooperatives, such as building and construction, or small clothes factories, etc., which were called "sideline" activities of the co-operative.

AFTER 1990

The coalition coming into power after the free elections in 1990 opposed the existence of the cooperatives on an ideological basis. Two legal ways were found to demolish them. The Parliament accepted a law, which allowed the members of the co-operatives to quit before a given deadline. As not enough members did so, the deadline was then extended several times. The same law required that the properties, including e.g. machinery, of the cooperatives must be "nominated", i.e. assigned to the members. If a member quitted the co-op, the property automatically became his/her private property. A very bad side-effect of this process was, that complete sets of machines and tools, which had had a special practical value exactly because of their completeness, were split up, and distributed among several owners of small new farms who were not obligated to help each other. Thus the machinery sets lost their effectiveness, as none of the small new farms owned a complete technology then. At that time any kind of self-organized co-operation was unimaginable, because of the hostile atmosphere, and this applied to the common use of the machines, which had been commonly owned and used formerly ([1]).

The second step to demolish the co-operatives was a so-called "Law of Recompensation". Many people had lost their properties during the communists regime. This law entitled them, or their inheritors to compensation for the loss. However, the formerly lost properties were not given back to the original owners. Instead, the state issued vouchers in a much smaller value than the value of the lost property, and the original owners were given these vouchers in proportion to the value of their lost property. The state offered stocks and land for these vouchers. All former big farms (co-operatives and state farms) were forced by the law to give up a certain portion of their land for this purpose. These lands were privatized in the subsequent winter seasons on special auctions. The compensation vouchers were used by way of payment in these auctions in their nominal value. A unit price was established for the land. Several optional values for the unit price were set in the law, and these options were used in the auctions in the following way. Each piece of land was offered by the representative of the state first for the highest optional value. If nobody wanted to pay this price for the land, then it was offered for the second highest value, etc. Most of the land was sold for the smallest possible value as the local people managed to make agreements among themselves. Higher prices were achieved only when nonresidents appeared on the auction. This was not prohibited by the law, so it was possible for someone, who had lost a factory, to buy some farmland using the vouchers issued for the factory.

As a result of these two laws, the co-operatives have lost a great part of their equipment and land.

It should be underlined that the total value of the property offered in the compensation process was much less than the value of the compensation vouchers, which are still present on the stock market. The farms created on the land bought for compensation vouchers are usually too small for efficient farming. Furthermore, in many cases the new properties were too small for any agricultural activity. Many owners are not residents in the village, in the neighbourhood of which the land is situated. These reasons explain the fact, that there are only 300,000 new farms, but there are 1,300,000 new landowners. We may conclude, that the structure of the farm property system has been drastically changed from a system dominated by big farms, to a set of small farms.

There are two important negative consequences of this change. First, the credit worthiness of the small, badly equipped farms is practically zero. Therefore investments in agriculture drastically decreased, as it is shown in Table 1. Thus the technology of farming has not been renewed in the appropriate time. This implies, that the future competitiveness of Hungarian agriculture can be seriously damaged.

Year	Investment	Consumer Cumulativ		Relative	
	billion	price index	e price	investment, as	
	HUF		index	a percentage	
				of 1986	
1986	27.1	-	-	100.00	
1987	35.2	1.059	1.059	122.65	
1988	26.8	1.065	1.128	87.68	
1989	25.7	1.037	1.170	81.08	
1990	33.7	1.146	1.340	92.78	
1991	21.1	1.205	1.615	48.21	
1992	16.2	1.267	2.067	29.21	
1993	19.7	1.163	2.380	30.55	
1994	24.5	1.151	2.739	33.00	
1995	29.6	1.206	3.304	33.06	
1996	46.1	1.254	4.143	41.06	
1997	62.6	1.215	5.033	45.89	
1998	76.8	1.168	5.879	48.21	

Table 1: Agricultural investments in Hungary, 1986-1998.

The second consequence is more temporary. A lot of people considered the purchase of land as a capital

investment. These people do not cultivate the land, although there is an obligation for cultivation. They

simply report to the local agricultural office the cultivation as a fact, but do nothing. Therefore it is very difficult to get reliable data on the true size of the uncultivated area. It is surely not an overestimation to say that 500 thousand out of 6 million ha of arable land is left fallow.

All these facts mean that the utilisation of input materials, such as chemicals, has also decreased. Thus, the deterioration of the efficiency is much less obvious from the economic than from the technical point of view. From the environmental point of view the decreased level of chemical usage is advantageous. For example, recently the quality of the water of the shallow lake Balaton has significantly improved due to the decreased chemical usage in the farmlands around the lake.

To illustrate the economic consequences of the change in the farming system the example of Polish agriculture is given here, which chose a different path of development.

A COMPARISON OF HUNGARIAN AND POLISH AGRICULTURE

In Poland agriculture has never been subject to the "socialist" development path, i.e. no co-operatives had been established. Thus, in Poland the farming structure remained the same after the political turnover.

Both Hungary and Poland belonged to the group of COMECOM countries. Both of them lost large markets after the demolition of this organization and the breakup of the Soviet Union. In the early 1990's the former COMECOM countries could hardly trade with one another. Their internal export/import was accounted for in (Soviet) rubels. After the political turnover and the demolition of COMECOM, the IMF suggested for these countries that they should use US dollar instead of the rubel in accounting. By accepting the advice they immediately lost the advantage they had had on each other's markets. The new system showed clearly, that the dollarequivalent of their former rubel-priced products are no cheaper than the prices of the commodities coming from the West or the Far-East, and the payment was to be made in US dollars as well. Furthermore they were short of US dollars, and this made trade among themselves extremely difficult. From the agricultural point of view the Eastern markets collapsed as the successors of the Soviet Union were unable to import as much food as earlier. Although the political turnover affected Polish agriculture, too, as we have seen, the effect was much less grave than in Hungary. This is clearly seen in the different extents at which the yields of some important cereals decreased in the years 1989-1996.

 Table 2: Percentage of the decrease of the yields of some important cereals in Hungary and Poland in the years 1989-1996.

Cereal	Hungary	Poland
	Decrease	e (percentage)
Barley	6.9	2.9
Maize	3.5	1.6
Rye	4.8	2.4
Wheat	5.5	2.8

Source: [5].

At the late 1950's the agricultures of the two countries had had basically the same structure, but this was followed later by the collectivization process in Hungary. The higher effectiveness of the big farms is demonstrated by the wheat yields in Table 2, which is based on the data from the Agricultural Statistical Database of FAO [5].

THE NEW FARMING STRUCTURE IN HUNGARY

The main characteristic feature of the new structure in Hungary is the dominance of the "verysmallholders", farmers with tiny plots of a few hectares. The present Hungarian farm structure is significantly different from the farm structure of the European Union, as is shown in Table 3.

Table 3: The present Hungarian farm structure compared to the European Union						
	Number of estates		Area of estates			
	HUN '96	EUR15, '95	HUN '96	EUR15, '95		
10ha >	97.5%	69.4%	52.1%	10.9%		
10-50ha	2.0%	22.1%	29.4%	29.5%		
50ha <	0.3%	8.5 %	18.5%	56.6%		

Table 3. The	present Hungarian	farm structure con	nnared to the Euro	nean Union
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Source: [2]

The Hungarian government of the years 1998-2002 put a special emphasis on the support of smallholders, but only in traditional activities. Wheat producers, for example, who farmed land not more than 20.8 ha obtained special financial support. On the other hand, these farms are too small to own, and efficiently utilise the machines (tractors, combine harvesters) necessary to produce cereals. Thus, their income must be shared with the owner of the technology. The final result is, that for a farm having 20 ha of land and producing only wheat, the net income equals the income of 50 workdays. Then either the main income of the farmer must come from outside of agriculture or the farmer must live in poverty. Even in the case of the first option it is very unlikely that the farmer has enough capital from

other sources for the farm to follow the development of the technology.

For the sake of completeness it should be mentioned, that no new technology appropriate for the small farms appeared, of course. Furthermore the government of the years 1990-1994, who had forced the structural changes, offered no special support for adaptation to the new farm sizes, either.

The trend in the European Union is just the opposite. The concentration of production is progressing continuously. As an example of this phenomenon Table 4 summarizes the changes in the sizes of pig farms. Similar phenomena is reported by MacDonald et al. ([6]) in the United States.

Percentage of farms in categories by number of pigs kept								
Country	Year	1-19	20-49	50-99	100-199	200-399	400-999	> 1000
Germany	1985	14.0	10.9	12.1	18.0	24.6	17.6	3.0
	1992	4.1	5.6	8.5	13.9	22.4	37.7	7.8
France	1985	7.3	2.1	4.6	16.9	34.4	26.8	7.8
	1992	2.7	1.1	1.8	4.9	10.8	37.9	40.8
Holland	1985	0.8	2.7	7.2	16.3	28.9	33.1	11.0
	1992	0.1	0.4	1.7	5.5	12.3	34.6	45.4
Denmark	1985	4.3	9.8	14.7	23.7	27.4	17.4	2.7
	1995	0.4	1.4	2.9	6.2	13.2	32.4	43.5

Source: [4, 5].

We do not claim that this process has only positive effects. It also causes dangers, e.g. a farm with a large number of animals face a much higher risk in an epidemic, both in the animal hygienic and financial respect.

HYPERMARKETS

A new phenomenon without having any antecedent is the recent appearance of the international supermarket chains (Metro, Auchan, Spar, Cora, Tesco, etc.) in the internal food market of Hungary. They are considered as the leading channel of selling agricultural products and other household items (including even TV-sets and refrigerators). The Hungarian producers are extensively squeezed out from this channel. E.g. both German-made and Hungarian-made Swiss cheeses are sold for the same price, although the price of the German milk is 150% of the Hungarian one, and a still higher transportation cost is also included in the cost of the German cheese. This is why a considerable proportion of the Hungarian society shows signs of disapproval of them. On the other hand, it is not admitted that Hungarian producers cannot deliver amounts of supply sufficient for an international chain. Furthermore, no attempt was made to call professional advice to establish the basis on which any kind (financial, organizational, etc.) of support could be given to the Hungarian producers to find their customers. Of course, there is no need for such a support in a normal market economy. But here a transient period is discussed, where the transition was forced by the government. As a consequence, the producers faced a quite new situation due to a sudden change, without time allowed for adaptation, and the same government that had initiated the change, did not help to overcome the adverse effects. The international chains run mainly hypermarkets in Hungary. A shop is a hypermarket if (1) its floorspace is greater than $2500m^2$, (2) it has more than 10.000 product items, (3) more than 30% of the items is non-food and (4) the shop has more than 10 cashiers. Currently there are only 44 hypermarkets in Hungary.

The hypermarkets have a 15-16% share in the market of the daily consumed commodities. This is less than it is usually estimated but still remarkable, especially considering that the Hungarian market is of 10 million people. The main customers targeted by the hypermarkets are the motorized families. This policy, which is reflected in the choice of the location of the hypermarkets, restricts the share hypermarkets can own on the Hungarian market. More than 40 per cent of the population is unable to do any shopping in hypermarkets, because they do not posses a car ([9]). (Only 1-2 Tesco hypermarkets are reachable by free buses, but most of them are not approachable by public transport.)

On the other hand there is no chain of shops in the villages. Furthermore, sometimes it is difficult to buy very simple kinds of food in rural areas, e.g. vegetables, fruits. This is a part of the market where other types of shops and chains may get a market share. The residential areas of towns also belong to this part of the market.

In Germany the REWE Corporation has two chains of stores, namely Penny Market, and Billa. The floor area of their shops is 700-800m². The shops are less luxurious, and operate in a more economical way than hypermarkets. REWE Co. is present on the Hungarian market with the Penny Market shops. The shops run by the REWE Co. make profits everywhere, in Germany, Austria, Hungary and other Eastern-European countries, too ([7]).

WHOLESALE MARKETS

Traditionally there is a huge wholesale market for fruits and vegetables in Budapest, which has an important role in supplying the capital of the country. There are also a few wholesale markets for flowers in Budapest with lively trading activities. Other markets are practically not working or are closed.

A good example for that is the story of the fruit and vegetable wholesale market in Kaposvár. Kaposvár is a city approx. 200 km south-west from Budapest. When its wholesale market opened, the following psychological process took place. The producers thought that demand would not be high enough for them to sell their products there, so they continued the old practice of taking their products to sell on the wholesale market of Budapest. Similarly, the shopkeepers also thought, that supply would not be sufficient on the market of Kaposvár, so they continued to purchase the needed products on the market of Budapest. Due to this self-fulfilling expectation, tomato, a product of Kaposvár, was sold in Budapest, and was transported back to the same town. Tomatoes traveled an unnecessary distance of 400 km causing an unnecessary cost both to seller and buyer. Later the fruit/vegetable wholesale market of Kaposvár was closed because of some technical reasons. There is no understanding in Hungary regarding the possible economic role of the wholesale markets. Up to now no such research has been going on either. There is no law on agricultural wholesale markets.

The Hungarian producer is traditionally inclined to hide his/her income from the authorities. On the other hand subsidies are paid in the European Union if production is well documented. Furthermore, some of these subsidies are paid to organizations of producers, and not directly to the producers themselves. A wholesale market run by an organization of producers might be a successful way of satisfying all of these conditions.

DEVELOPMENT OF RURAL AREAS

The development of rural areas is a front-running political issue in Hungary. There are approx. 200,000 unemployed people there, which is mainly a consequence of the fact, that together with cooperatives their industrial sideline activities were also demolished. In spite of the great political interest there are very few constructive elements in the discussions about improving rural incomes and job opportunities.

One idea is to increase rural tourism. However, a very easy calculation shows, that it is very far from being a complete solution in itself. Assuming, that 5 guestnights will justify the utilisation of one day of labour, and there are 250 workdays in a year, and 1 tourist spends 13 nights on average in the village, this means that altogether 19,000,000 tourists per year are needed to give enough work for the 200 thousand unemployed people, which is very far from the reality. A complete solution for the problem of rural unemployment must be built up of many elements, of which rural tourism can be just one.

Another important element may be to change the structure of rural production, i.e. increasing the proportion of products requiring higher amounts of labour. Practically it means that more horticultural products and less cereals should be grown. Hungary is traditionally a wheat and maize producer country. The quality of Hungarian wheat is very good. On the other hand 90% of the word trade of wheat and maize is transported by sea. Only the Mid-Asian countries, former members of the Soviet Union are able to export wheat by railway in high quantities ([8]). The reason of this fact is the transportation by sea being at least 7-8 times cheaper than by train. The internal transportation costs in Hungary are even more expensive. Hungary has no seaport. The Black Sea could be reached via the river Danube and via river Tisza, a side river of Danube, but the country does not have enough appropriate ports at the rivers,

either. Thus Hungarian cereal export is restricted to the surrounding countries and Poland. This situation underlines the necessity of the suggested change.

The products of horticulture request post-harvest operations and/or further processing. The value added can be increased this way, too. To achieve these changes local firms and integrators should be established. A certain part of the agricultural subsidies should be used for this purpose.

The importance of establishing a local firm is not only the fact that it offers jobs to some employees. A cheese factory, for example, stabilizes the position of the cow owners in the village, too. Goods produced in smaller quantities have little chance to find a longterm customer in the new big food markets. This is why an integrator is needed, who cares about the unified quality and packing of the local product.

CONCLUSION

In this paper the structural changes of Hungarian agriculture caused by the political turnover of 1990 are surveyed. It is shown that the demolition of the former co-operatives caused the emergence of small farms which are now the main form of farms dominating Hungarian agriculture. The current structure has many malfunctions, including inefficient land size, lack of capital and up-to-date technology. In particular, it is difficult to find consumers for rural products of lower quality. The hypermarkets belonging to international chains have an ever increasing importance in the Hungarian market. On the other hand, rural areas are not wellserved by shops. Small food processing firms can increase the value added of the products, and at the same time decrease unemployment in the rural areas. Hovewer, processed food products cannot enter the supply of big chains without fulfilling the unified quality and packing requirements, supervised by integrators.

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