The supply chain for small farmers in Hungary, with particular attention to fruit and vegetable growers.

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Abstract

At the time of the 1990s transition in Hungary from a socialist to a capitalist economy a process of land reform took place. The land of large state and collective farms was privatized. The average size of these newly privatized land parcels was not more than about 4 ha; even now, after some concentration, it is 4.6 ha for individuals. It is obvious that farms of such a size are not viable in a modern economy. However, it is fortunate that, on average, land tenure is much more concentrated than land ownership. Thus there are larger individual farms and commercial farms which rent land from those – mainly absent – landowners who own the small plots of agricultural land. Nevertheless, there are still many small farmers. Many of them use their land to grow vegetables and fruits. Most of the individual small farmers operate on a subsistence or semi-subsistence level. But there are some, about 20%, who produce exclusively for the market, and about 20% sell a part of their products. There are small farmers who are well-specialized for open-air or covered vegetable production, mainly on the Great Hungarian Plain. Yet it is not easy for them to sell their produce. Markets are increasingly dominated by hyper-markets, super-markets and discount chains. The chains need steady supplies and standard varieties of fruits and vegetables in large quantities throughout the whole year. Obviously, these requirements can only be fulfilled by those traders who dispose of large quantities of products. That is why these suppliers are mainly large domestic farms, big cooperatives and importers. If small farmers want to fit successfully into the supply chain, considerable cooperation will be needed.

Keywords: Hungary, small farmers, horticultural production, supply chain

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INTRODUCTION

Hungary's ecological and climatic conditions are favorable for both open-air and under-cover horticultural production. The country does not rank among the largest producers of Europe (especially with respect to Mediterranean producers), but its production is significant in the temperate zone. The country has plentiful supplies of geothermal energy for heating the plastic tunnels and greenhouses which are mainly on the Great Hungarian Plain.

This paper was based on a research, which focused on the development of small farming.

METHOD

The research was based on inquiries, statistical data and literature dealing with the topic. The representative survey was carried out among smallholders using questionnaires and interviews (Burger-Szép, 2008). The farms included in the survey were situated in 3 counties in the Southern Great Plain of Hungary and in 3 counties of the western part of the country (Transdanubia). We received replies to the questionnaires which could be usefully used in the survey from 613 family farms. In this paper we use the results of the survey concerning the trade of the farms.

SMALL FARMERS IN AGRICULTURAL EMPLOYMENT

Employment in agriculture has significantly decreased in Hungary, in line with developments in other countries. (The figure was 51% in 1950 while in 2010 it was about 4.5

%.) However, unlike in many other countries, in Hungary this process has been neither smooth nor gradual. In connection with the decrease two big waves have to be pointed out. One happened at the time of collectivization, the other took place when the collective farmland was redistributed. Almost complete collectivization of the land occurred in the years 1959-1961. The outflow of labor from agriculture consisted of about 700 000 people; this represented a fall of 43% of the total national employment to 27% in the years 1958 to 1965. After the collapse of socialism and during the transition, laws were passed in 1991-92 which dealt with the redistribution of the land of the former producer cooperatives. From 1990 to 1995 the number of people employed in agriculture diminished by more than 500 000 and the agricultural share of national employment decreased from 17.5% to 8.5%. Such enormous reductions in employment were not without severe consequences. Furthermore, the consequences in the post-collectivization phase were not the same as those after the land redistribution. In the first case the labor leaving agriculture was absorbed by different economic sectors. In the second case many people remained unemployed. Many of the rural population who found themselves unemployed after the land redistribution have tried to escape into small farming. This has at least ensured a minimum standard of living for them. At present about 1 million people are involved in agricultural production - i. e. about 10% of the population is engaged in some way in this type of production. However, those people whose main occupation is agriculture represent only 4.5% (171 800 people in 2010) of the total employment (Statistical Yearbooks of Hungary; Agricultural Statistical Pocketbook, 2010; Farm Structure Survey in 2010).

SMALL FARMING

According to the 2010 farm structure survey there were 8600 corporate farms (companies and cooperatives) with an average area of 323 ha per farm, and 567 000 individual farms with an average area of 4.6 ha. The number of farms is diminishing. At the time of the 2007 farm structure survey there were 619 000 individual farms (23 896 of these were producing vegetables as their major profile). Beside the 567 000 individual farms 1.1 million households deal with some form of agricultural activity. In 2010, 2/3 of the individual farms were operating on 1 ha or less than 1 ha. This was 4% of the individual agricultural area. Small farms produce more labor intensive products – among them fruits and vegetables – than large farms.

Additionally, there are many people who cultivate small household plots, gardens, hobby plots, etc. If the latter are taken into account, altogether there are more than one million people among the ten million inhabitants of the country involved in farming in Hungary. Hence the real extent of employment in agriculture is much more than the official 4.5% of the total.

According to the 2010 survey, 60.2% of individual farms are mainly subsistence, 20.3% are semi- subsistence and only 19.5% produce mostly for the market. Nevertheless, also the smallest farms sell some part of their produce either for the local markets or for the national trade (see table 1). However, their involvement into the supply chain is not without problems.

Table 1. Aims of production of small farms in %

Hectare	0<-1	1<-5	5<-10
Farms producing for own consumption	74	30	12
Farm selling the excess of own consumption (up to 50 % of produce)	17	35	36
Farms producing mainly for trading (more than 50% of produce)	9	35	52

Source: Farm Structure Survey in Hungary, 2010, Hungarian Central Statistical Office, Budapest, KSH.

THE SUPPLY CHAIN

There are a growing number of papers, which deal with the problems of the supply chain of small producers (Csaki and Forgacs, 2007; Swinnen and Vanderplas, 2007; Vorley at all., 2007).

Trade

The major actors in domestic horticultural trade are local markets, small retail shops, retail trade chains, wholesale markets, producer organizations (POs) and producers.

1. Local Markets and Small Shops.

On local markets, generally small producers are the sellers. Supplies are characterized by big variations of products in small quantities. The buyers are mainly local consumers. Altogether 7% of the total agricultural produces are sold on local markets in Hungary.

Small shops are supplied by wholesalers or sometimes directly by producers. There are some Hungarian chains in which the individual shops do their own purchasing. Furthermore, they often buy from individual producers as well (Seres and Szabó, 2010).

The role of small shops is decreasing as big retail trade chains gradually gain an ever-greater share of the market.

2. Retail Trade Chains.

Between 1999 and 2009 the number of hyper and supermarkets dealing with food marketing has grown from 683 to 1223 in Hungary. This was for a country of 10 million inhabitants. In contrast, the number of small shops diminished by more than one third between 1999 and 2009 (Management Forum 2010 6 April). Multinational companies own most retail chains. Only 28% of them are in Hungarian ownership at present; however some Hungarian chains are growing quickly.

The chains strive to provide a steady supply of standard varieties of fruits and vegetables for consumers throughout the whole year. At the same time, their requirements are that the delivered goods should be quality controlled (by some international system); comply with food safety requirements; be transported in cooled facilities; treated with post-harvest processes (washed, sorted, labeled, etc.); and supplied regularly in standard quantities and qualities. Obviously, these requirements can only be fulfilled by those suppliers who dispose of large quantities of products. These could be importers, wholesalers, or some large individual farms. Small farmers could comply with these requirements if they created cooperatives.

3. Wholesalers and Wholesale Markets.

Wholesalers buy mostly in wholesale markets from small producers, but also directly from some large farms and POs. Some have joint ventures with large farms and POs, while some work with foreign capital. Furthermore, some of them also export and import. There are others who deal exclusively with fruits and vegetables, and yet others who are concerned with different agricultural and food products (or even products outside the sphere of agriculture). There are 1681 wholesalers in the country who deal with fruits and vegetables. They sell to small shopkeepers in the wholesale markets, but they also supply retail chains. The largest wholesalers have big logistic - i.e. transporting, storing, cooling, packing - bases. They supply the retail chains regularly with sorted, equalized, cleaned, and labeled goods.

In wholesale markets it is mainly small producers and some POs who sell, and small shopkeepers and traders of local markets who buy - sometimes directly, but often through the mediation of wholesalers.

Although there are no auctions in Hungary, wholesale markets are still good for getting information about quantities, qualities and prices.

PROCESSING

One possibility for increasing the income on farms is food processing or dealing with non-agricultural activities. However, there are very few Hungarian farmers who deal with non-agricultural activities (see Table 2).

Table 2. Percentage share of individual farms dealing with non agricultural activities.

Food processing	3.9
Vegetable-fruit-wine processing	2.3
Service and other activities	0.9

Source: 2007 Farm Structure Survey

The processing and deep-freezing industries process one-third of the vegetable production of the country and half of the fruit production (among the latter, 60-80% of apples).

Earlier, the range of processed products was much more diversified than at present. At present the major processed fruit and vegetable products are sweet corn, green peas, pickles, sour cherry and apple concentrate. Hungary produces the second largest quantity of sweet corn in Europe after France. The narrowing choice of industrial products and the growing import share in trade affects horticultural production, as well. The cultivation of many traditional Hungarian plants (for example, onions, root vegetables, red and green pepper, cucumber and different fruits) has diminished, however, the decline was offset somewhat by the increase in yields.

The possibilities for small farmers to supply processing industries in the required quantities by them would require the widening of joint production and trade.

COOPERATION

POs are promoted and supported by the EU. According to the EU regulation of 1996, which is observed by Hungary, POs organize production, store, grade, process and market products and are set up by producers of a certain product or (sub) region. POs are active mainly in the fruit and vegetable sector.

According to the statistical data, there were 67 fruit and vegetable POs in Hungary in 2010, – most of them in the form of cooperatives – supplying twenty percent of the total fruit and vegetable market value. They had 20 000 members. In 2008 they had a total area of 35 000 ha. The average PO had 317 members and an area of 556 ha (see figures 1 and 2).

In 2011 altogether 20 % of fruit and vegetable growers sold through POs and other cooperatives. This share is about 90% in the Netherlands and Belgium, and 45-55% in Spain

and France; however, the equivalent figure is only 3% in Poland and these percentages are similarly low in the other new ECE (East Central Europe) member states of the EU (Székely and Pálinkás, 2007).

Some big POs operate well. Some of these were created from the old specialized producer cooperatives. Some wholesalers organized also POs from their suppliers. However, many POs which were organized as cooperatives were struggling with financial difficulties and low or negative incomes. Companies are in better financial situation in the horticultural supply chain, therefore some cooperative POs change their forms into some forms of companies.

Governments try to strengthen cooperation by supporting POs, particularly those which merge and create larger organizations. Larger POs could become financially more successful. They would be able to buy the equipment which is needed for processing and homogenizing the products. They would thus a better chance to become steady suppliers of the retail trade and the processing industry; furthermore, due to their stronger bargaining position they would also be able to become partners of the large commercial chains.

Cooperation could be much more productive than the individual selling and purchasing of products if its organization, financial rules, and regulations were better. Lower taxation and better financing systems are needed, less administrative obligations along with better extension services and the promotion of the building of larger organizations.

CONCLUSIONS

Hungary has a good climate, good soils and sufficient geothermal energy for horticultural production. However, small producers have few possibilities for involvement in the horticultural supply chain of the country, since they produce in relatively small quantities and their trading practices are disorganized. The cooperation of producers has to be strengthened in order to synchronize and support production and trade. Inside cooperatives, or in other forms of integration the building of vertical chains – with respect to purchasing inputs, production, processing, and selling - has to be promoted. Stronger cooperatives or other forms of integration would also have a better bargaining position when dealing with retail trade chains. The government should support cooperation by creating better financial rules, taxation systems, reducing administrative obligations, lowering labor costs added to wages, and providing more extension services for the cooperative organizations.

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Figure 1. Producer Organizations in Hungary

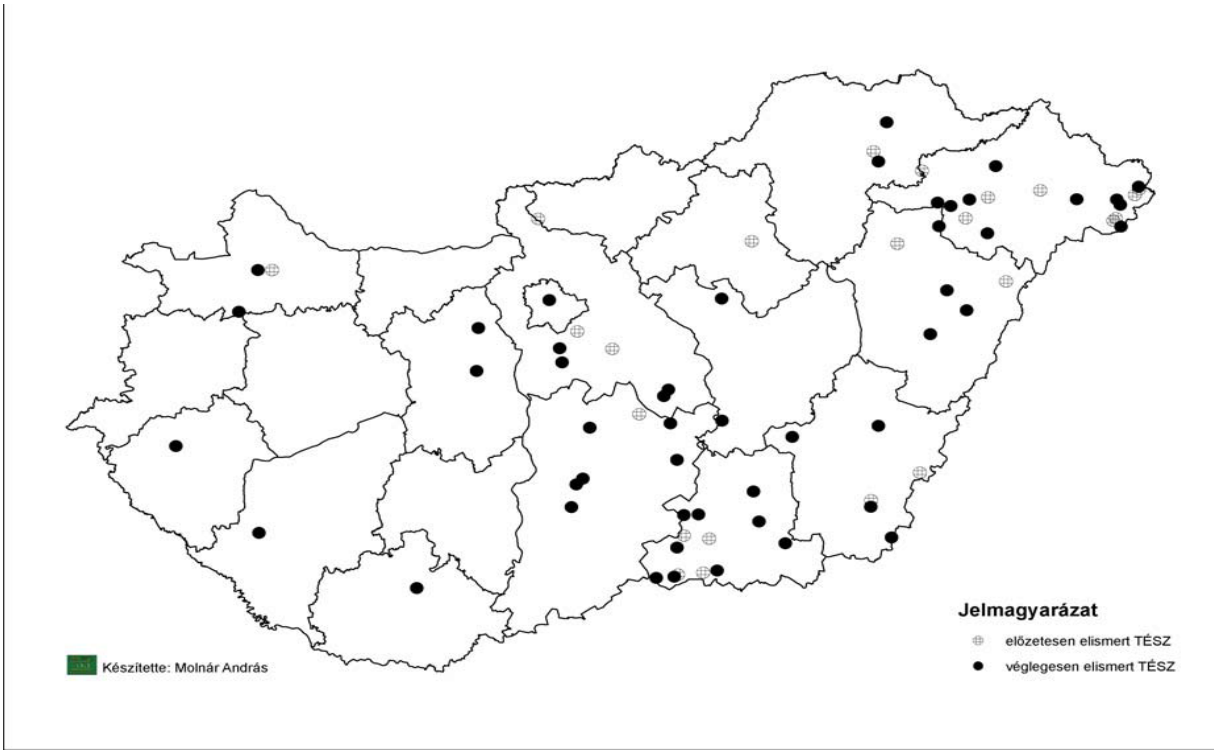
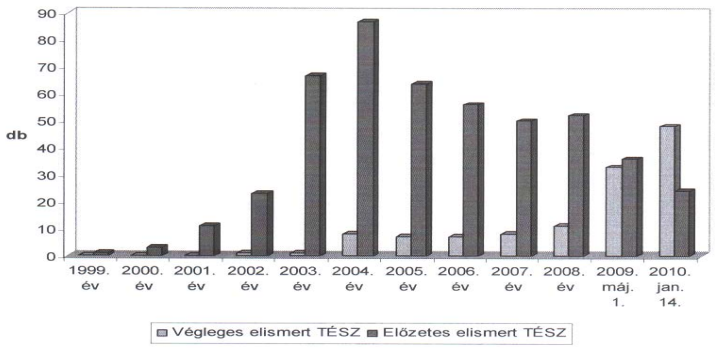


Figure 2. The Change of Number of Producer Organizations

2. ábra

A TÉSZ-ek számának változása Magyarországon



Forrás: Agrárgazdasági Kutató Intézet.

The gray columns are the finally officially acknowledged POs, the black columns are the temporarily acknowledged ones.