Research and Information Institute for Agricultural Economics

STUDIES IN AGRICULTURAL ECONOMICS No. 98.

Selected publications Issued in 2002

Budapest
2002

Studies in Agricultural Economics No. 98.

Published by:

Research and Information Institute for Agricultural Economics
Hungary

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HU ISSN
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Agricultural incomes in Hungary in view of international comparison

by Sándor Mészáros and Márta Spitálszky

Abstract

The income of the Hungarian agriculture has been lagging behind the national averages for a long time (for example in 1998, the national average of the economy was 10,1 percent while that of agricultural enterprises was 5.4 percent in proportion to own equity.) In 1999 the agricultural income dropped drastically in the Hungary even if compared to that level. Therefore, on one hand, we investigated the factors of income development by making international comparisons and, on the other hand, by the help of index calculations. The present paper presents first of all the results of the comparison with the USA. First we stated that the income of the agriculture in the USA is high and well balanced compared to Hungary. In the nineties income was fluctuating between 20-28 percent projected to revenues. However, between 1997-1999 the income of the agriculture of the USA without governmental subsidies would also have dropped. The main reasons are the unfavourable world prices and the terms of trade. The values of the Hungarian terms of trade are almost equal to that of the USA during these three years.

Key words

agriculture, income, international comparison, terms of trade, governmental subsidies

The development of agricultural incomes has always been in the focus of agricultural economic research. We would like to underline this by presenting a brief overview by listing the literature on incomes. After World War II in the sixties (during the consolidation period of agricultural production co-operatives) three books were published emphasising the importance of the question. The book of **Béla Csendes** and **Ferenc Vági** (1964) presents that the data on (costs and) incomes were made use of by the state as early as in the fifties for planning the producer prices. The interesting feature of Chapter VII of the book entitled „Cost price in the socialist agriculture" edited by **Ferenc Erdei** and **Ferenc Fekete** (1965) is that it describes also the situation before the war. The most important characteristic of **László Csete's** (1967) book is that it presents the relationships of production intensity and the application of the various income indicators. The book of **Ferenc Fekete, László Szénay** and **József Tomka** (1984) provides an introduction to the vertical approach which is to be applied in the analyses of income situations. **Gábor Szabó, Margit Szabóné Guttyán** and **Katalin Szép** (1989) by analysing the macro- and microeconomic aspects of the topic emphasised the importance of the terms of trade. The study of AKII by several authors and edited by **Gábor Udovecz** (2000) attempts to identify the various reasons of low income. Finally a new study of AKII on agricultural income was published recently (**József Alvincz** et al., 2001.)

The further research carried out at the Research and Information Institute of Agricultural Economics (AKII) aimed at evaluatiing the income situation of agriculture at **national level**[1]. We will report on the results up to present in two parts: in the present paper we would like to assess the Hungarian agricultural income situation by making a comparison

[1] The first version of this paper was presented to and discussed by the Commission of Agricultural Economics of the Hungarian Academy of Sciences (MTA) on its meeting of 22 May 2001.

to the developed countries and then in another paper the components and the reasons of income development will be analysed.

1. The data sources of income and organizations/activities covered by the data collection

In the Research and Information Institute of Agricultural Economics there are **four databases** available for the calculation of the incomes generated in agriculture.:

- Tax reports of the Hungarian Tax Office (APEH),
- Calculations based on the Economic Account of Agriculture(EAA),
- Data of the Farm Accountancy Data Network (FADN),
- Database of the cost-income calculations by enterprises (by products)

The four systems differ from each other concerning the part of economy covered and also the methods of the calculations. Therefore, they can be applied for various purposes and up to now the results have mainly been published separately, independent of each other.

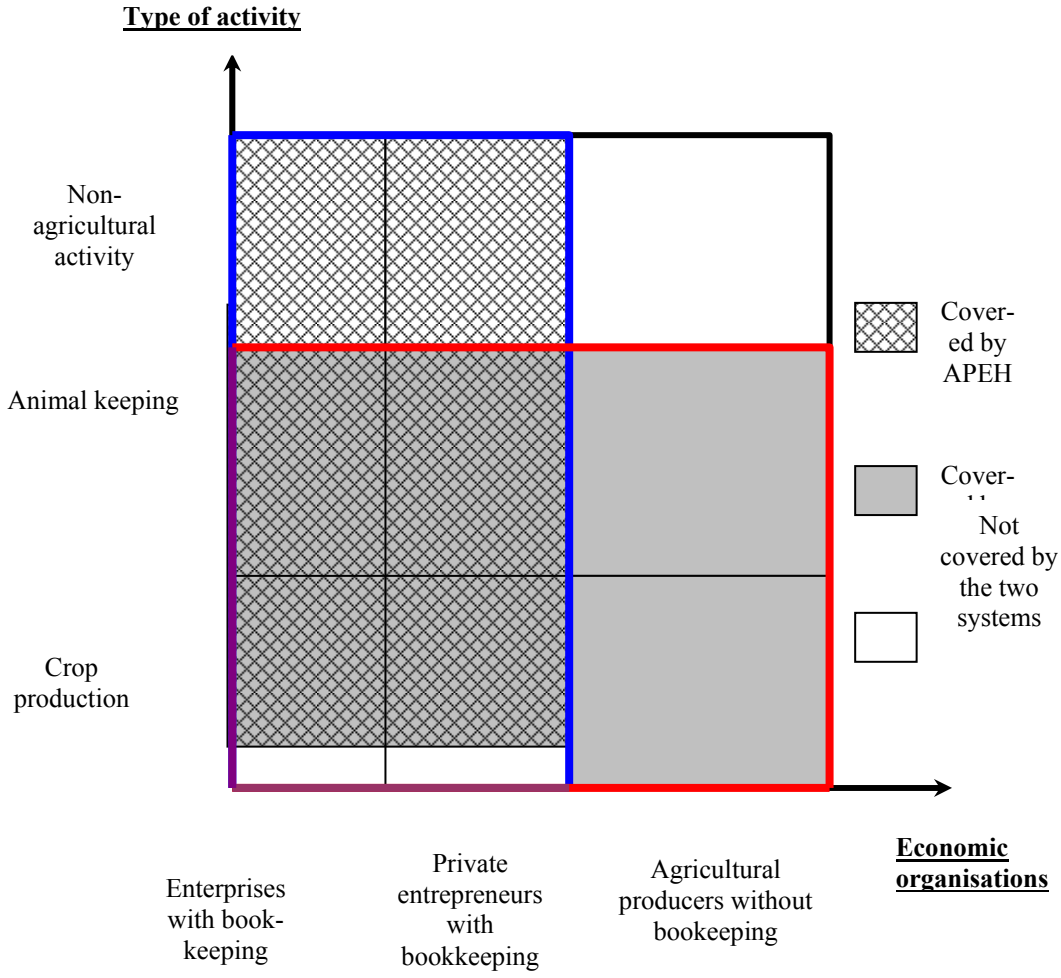
The main **characteristics** of the four sources of the data on income are as follows:

- In particular, the systems of APEH and EAA can be applied for approximate calculations of **income volume** (i.e., the **absolute** amount of the income) of agriculture being a sector of the national economy. The other two systems are based on **representative** statistical surveys and, therefore, can, on one hand, be applied for analysing the **relative** income indicators (indicators referring to the area of land, labour and capital).On the other hand, they can be applied for investigating the income **differences** by enterprises and by products.
- As for the **EU conformity** the EAA and the FADN are harmonised with the data collection and calculation methods applied in the European Union. The tax reports of APEH and the earlier cost-income calculations by products reflect rather the current principles of the Hungarian accountancy and statistics.
- Concerning the **income of agricultural enterprises** FADN and the traditional cost-income calculations provide guidelines. However, the previous one only indirectly, through classifying **by type of farming**, and the latter directly by calculating the incomes generated by the various products.

In order to illustrate the coverages of the various databases, which cover different parts of the economy the activities and organizations included in the systems of APEH and EAA are the following (Figure 1.).

Figure 1

The share of production covered by APEH and EAA



In the figure we can see that the tax reports of APEH containing also the non-agricultural activities include most of the activities. However, from among the agricultural producers these contain only the data of those enterprises and entrepreneurs who have bookkeeping. The data of EAA include the products of all agricultural producers – with the exception of the services – however, only those which belong to the basic agricultural activities (crop production and animal keeping). This way none of the above systems can cover all the activities and all producers. There is even one part of activities, which is not covered by either of these systems. (i.e., non-agricultural activities of primary producers). We have to note that in the EAA the limited partnerships (Bt.) are classified as enterprises while in the system of APEH they are considered as private entrepreneurs.

2. Agricultural income in Hungary between 1998 and 2000

The study of AKII edited by **Gábor Udovecz** (2000) presents first of all the lags of income (as a percentage of own equity) compared to the averages of national economy and processing industry. In 1998 the income of the processing industry was 19.7 percent, that of the national economy was 10.1 percent on average, while that of agriculture it was 5.4 percent (based on the data of APEH).

In this section we would like to provide a concise summary evaluating the Hungarian agricultural incomes during the above period. In connection with this we deal with its **magnitude and development as a function of time**.

As for the income-volume and the magnitude of agricultural income EAA can provide the most up-to-data since based on this systems forecasts for 2001 were also prepared[2]. EAA aims at calculating the **entrepreneurial income**, which - according to the EU terminology – is almost equal to the net agricultural income. In the last two years it was 179 billion HUF in current prices, that is, as a percentage of output value an income of 16.5 and 15 percent, respectively (covering all the producers but by considering only the basic activities).

Table 1

Income volume of the Hungarian agriculture (billion HUF)

	1998	1999	2000
EAA (entrepreneurial income, also private farms)	..	178,9	179,4
APEH (profit before tax, only enterprises)	23,9	-8,2	6,6

The actual situation of income and percentage income seems more unfavourable by analysing the data of APEH. In this system the indicator of income is in general calculated from the **profit before tax**. In 1999 when income was the lowest for income proportional to production values, a negative value, i.e., -0.9 percent was obtained.

Considering the income volume and percentage income there is a striking difference between the results obtained by the systems of EAA and APEH. The factors leading to these deviancies are as follows:

- The income of private farms are more favourable that that of the enterprises (and EAA includes also the former ones). This can be seen from the representative data of FADN: in 1999 the income of enterprises was–1.8 percent on average while that of private farms of +1.7 percent.

  In 2000 this difference was even larger: as for enterprises it was 0 percent and for private farms it was 5 percent exactly. We have to note here that the original value of 14 percent and/or 15 percent income of private farms had to be corrected in order to be able to compare them (by calculating with wages similar to those of the enterprises) see **Szilárd Keszthelyi and Gábor Kovács** 2000 és 2001)..

[2] See the paper of **Imre Bognár, Zsuzsanna Rontóné Nagy and Éva Petőné Varga** (2001).

- The deviation between the two systems results from the fact that EAA is a system of accounts at national level while the tax reports of enterprises of APEH are based on the data accounted by farms and by various types of costs. In addition to these, there are, of course, differences also between the calculation methods of costs and incomes.

3. Comparison of agricultural incomes in Hungary and the USA

We tried to compare the agricultural income in Hungary with that of other developed countries in order to decide whether last years' income fall is a special Hungarian phenomenon or if it is related to international tendencies (for example, to the developments of world market prices)

Firstly, we made comparisons with the USA, where USDA and the Economic Research Service provide extremely detailed data – among others also on income developments. The comparison with the EU is also important because Hungary's EU accession is approaching. The comparison with the USA has an advantage. Namely, the rates of agricultural subsidies are lower than those of the EU and due to this the impacts of world market tendencies on income are reflected more accurately (more clearly).

The first and probably the most important conclusion is that income of agriculture in the USA is **relatively high and well-balanced** on average: In the nineties the income as a percentage of receipts was fluctuating between 20 percent and 28 percent and during the period of 1997-1999 it was fluctuating about 22 percent. These data refer to the income corrected by governmental subsidies and the tax on assets (in the Hungarian terminology that is the 'profit after tax'), this of course, does not contain the fees to be paid for the resources (for land leasing, fees of the employees and interests). The data of 1997-1999 are shown in Table 2.

Table 2

Income utilisable and percentage income of the agriculture of the USA

Denomination	1997	1998	1999
Cash receipts, billion USD	207,6	196,8	188,6
Net farm income, billion USD	48,6	44,1	43,4
Income as a percentage of receipts' percent	23	22	23

Sources: USDA: Agricultural Statistics 2000;, USDA ERS: Agricultural Income and Finance. AIS-75, Sept. 2000.

Our second conclusion is that during the last two years the level of income could only be maintained in the USA by **increasing the governmental subsidies significantly**. Therefore, in 1999 the share of governmental subsidies in incomes utilisable reached its top level; it accounted for 47 percent of the income (see Table 3).

Table 3

Agricultural incomes and governmental subsidies in the USA

Denomination	1991	1992	1993	1994	1995	1996	1997	1998	1999
Net income	38,7	47,9	44,5	49,2	37,2	54,9	48,6	44,1	43,4
Governmental subsidies: billion USD	8,2	9,2	13,4	7,9	7,3	7,3	7,5	12,2	20,6
In proportion to net income, percent	21	19	30	16	20	13	15	28	47

The third conclusion results from the previous two: by calculating without the increased governmental subsidies the **income generated („produced") in agriculture dropped even there considerably**. What are the factors, which have led to the drop of income since 1996?

The study published by the Economic Research Service in December presents that the reasons. The main reason was that in four consecutive years the yields were good in the most important agricultural countries and the great supply on the world market (in addition to the low demand of food) pressed down the agricultural producer prices in the USA. Let us examine whether the statistical data justify this statement.

Table 4

Price indices in the agriculture of the USA

Denomination	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000
Prices received 90-92=100	100	98	101	100	102	112	107	101	96	97[p]
Prices paid 90-92=100	100	101	104	106	109	115	118	115	115	119
Terms of trade	99	97	97	94	93	98	91	88	83	81[p]

Remark: p= preliminary
Source: Agricultural Statistics 2001, USDA, Washington, 2001.

In fact the price level of agricultural production was dropped in the three years after 1996. However, we have to mention that the year 1996 was in this respect an especially good year (price index of 112 percent). In the Table we can see that the decreased price level did not solely cause the income problem. The significant increase of the input price level contributed to this too: T**he gradually increasing terms of trade** – with the exception of the especially good year of 1996 – **the same phenomenon could be seen in the USA since the beginning of the nineties**! The input price level increase after 1995 was due to the increasing prices of the energy, seed, fees and transportation. **The USA was forced to increase the proportion of subsidies in incomes in those two years** (in 1998 and 1999) **when the terms of trade dropped under 90 percent - which is considered as critical by us** (the data of incomes of 2000 are still missing).

Let us compare the American and the Hungarian terms of trade. The reciprocal values of the terms of trade of the Hungarian Central Statistical Office (KSH) have to be applied and in order to get comparable data comparisons have to be made with reference to the averages of 1990-1992. Then the data obtained are as follows:

Table 5

Terms of trade in the USA and Hungary (1990-1992=100)

Country	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000
USA	99	97	97	94	93	98	90	88	83	81
Hungary	90	90	89	94	97	89	88	87	84	91

Slight deviations can be found: In the USA at the beginning of the nineties there was a more unfavourable terms of trade than in Hungary and the outstanding year was 1995 instead of 1996. The fundamental characteristic is, however, that the terms of trade of the **last three years** before 2000 (the period between 1997 and 1999**) are almost equal !** At the same time this means that **after 1995** (when the terms of trade turned to be less then 90 percent) **the increased need for subsidies of the Hungarian agriculture was also justified!** However, in the course of 2000 the Hungarian terms of trade was decreasing (in contrast to that of the USA) but the extent of this decrease made it only possible to reach again the level of the beginning of the decade.

For the comparison with the European Union there are only preliminary data available (EC-Eurostat 2001). The incomes as a percentage of output values (based on the net entrepreneurial incomes) of the 15 EU Member States reached 26.5 percent on average in 1999 exceeding the data of the USA.[3] This is, of course, due to the fact that subsidies account for almost half (49.4 percent) of the entrepreneurial incomes (in 1999 also in the USA it was 47 percent!)

However, the average income (26.8 percent) varies considerably by Member States. In the European Union there are some countries where agricultural incomes are extremely low, such as Denmark (with a income indicator of 8.8 percent) or Germany (9.7 percent). While there are countries where income is outstanding, such as Greece (59.8 percent) or Spain (47.2 percent); probably this is due in particular to the large amounts of subsidies. For the time being it is not clear yet whether these differences of the Member States are incidental (in the case of only one year) or indicate a permanent tendency.

What are the **conclusions** drawn based on the international comparison:

- By comparing the agricultural income of Hungarian to the developed agriculture of the USA or the EU it can be seen that it is significantly lower - based on national averages.
- The large amount of income utilisable freely in the USA and the EU are obviously due to the increased rate of subsidies which are larger than in Hungary and are

[3] This is even more justified if we take into account that the production value as a reference value is a wider category than the revenue.

probably also due to the better (complex) efficiency of production (see the paper of **S. Mészáros, 1991** on the comparison)

- It is reasonable to investigate and analyse the components and factors of the development of the Hungarian agricultural income (in our next paper we will attempt to do this).
- Finally, in the future it would be reasonable to describe in detail the agricultural incomes of the European Union (by Member States, dynamics and components) in order to form an opinion as clear as possible on Hungary's chances in the competition on the enlarged Common Market.

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Hungarian milk production joining to the EU – What to expect?

by Gyula Varga

Abstract

The presentation sums up the expected impacts of the country's EU accession on the Hungarian milk processing industry. It analyses the characteristics of the new agricultural policy of the EU (which is in for reforms) in the time of Hungary's accession and comes to the following important conclusions:

- The quota system and intervention purchases will be maintained for a longer period, that is, even after 2007.
- In parallel with price guarantees, the quality level of prices is continuously decreasing. Half of this is supplemented by direct payments.
- As a result of the competition becoming fiercer year after year, the milk yield per cow increased by more than 22 percent in the Member States of the EU between 1990 and 1998.
- The concentration of livestock increases under the aegis of dealing economically with wage costs, which primarily results in the liquidation of small dairy farms.
- The regulations of animal health and those regarding the "well-being of animals" are becoming stricter, extra milk quality becomes an absolute condition of sales even for the newly admitted Member States.

Key words

milk, competitiveness, EU accession, production quota, income, productivity

Introduction

The accession to the EU – despite of the opinion that has become widespread even in the professional public opinion – is not to take place sometime in the opaque, distant future but **at a very close date**. Scientific analyses have unanimously come to the conclusion that, even despite the serious gaps in these countries' preparation, any time spent outside the EU **causes losses** calculable in numbers to the agriculture and the people living on it. Moreover, it is also clear on the basis of data gathered during the last years that – with the exception of the legal and some other important systems of institution – Hungary is not closing to, but rather getting further from the quality level required by the European Union, which would provide favourable competition conditions for the country. So there is no real basis of the opinion that it would perhaps be better to prepare for the accession and to join only after it. **There is no solution without the EU, the Hungarian agricultural economy has no chance of breakthrough**, although it is also clear that the country's agricultural sector will have to face many further difficulties after the accession.

In this brief presentation I will try to give an overview of the consequences and chances to count on from the aspect of the entire milk processing industry and agriculture. In addition I will also try to discuss the characteristic features of the new agricultural policy of the EU – which is so often mentioned these days – in the time of Hungary's accession.Producer price trends between 1990-1998

The decisive majority of prices for agricultural products in the European Union declined to a greater or lesser extent between the years 1990 and 1998. The slump in prices was most pronounced in the case of **cereals**; over the nine years the price of cereals declined at a relatively even rate, by 25-30 per cent. Looking to the **animal husbandry sector**, there was a total 6 per cent drop in prices registered in nine years, but behind this average one can observe falls and increases in prices. The producer price of some meat types fluctuated enormously, most particularly with cattle and sheep. Pork prices fell to their lowest level in 1998, 25 per cent down on the 1990 level. The price of milk increased at a moderate pace from 1994, reaching a point where in 1998 it was 7 per cent higher than the 1990 figure.

Turning to the EU **horticultural sector**, prices have been on the rise since 1994 (albeit accompanied by major swings), and in 1998 they were on average nearly 30 per cent higher than in 1990.

Hungarian producer prices measured in Euros showed extraordinarily large fluctuations between the years in question. There is virtually not one single Hungarian agricultural product, which displays a relatively even change in price. It is also possible to establish that Hungarian and EU prices show a more or less divergent trend. While the majority of EU prices fell, Hungarian producer prices measured in Euros actually stagnated or increased marginally. It is important to emphasize, however, that price fluctuations in Hungary were particularly strong, strikingly so in the case of **cereals**. There was a period when the price of wheat doubled from one year to the next (between 1995-1996), and then dropped by 30 per cent, and then 50 per cent. The other cereals also showed similar, albeit slightly less dramatic, movements.

Compared to cereal prices, the price movement of **oil seeds** was relatively even. Up until 1998 Hungary registered a rather strong rise in prices, followed by a significant fall in prices in 1999. The price fluctuations in the majority of the examined **horticultural products** nearly balanced each other out, resulting in a minimal price rise in total.

The prices of Hungarian **cattle, pigs and broiler chickens** showed a slight increase, again attended by fluctuations, in the period between 1990 and 1997, but all three prices plummeted to lows in the following two years. The producer price of milk climbed relatively evenly and, in comparison to prices for slaughter animals, at a quicker rate between 1990-1999.

Regulation of milk production in the EU

The milk production of the EU is regulated by tight methods of planned economy explicitly foreign to the market, by quotes and prices announced in advance. The community was forced to adopt this method in 1984 because the prices that were kept high generated a production far above the real demand, and they could sell the surplus products only at high costs. The system itself is slightly different in the individual countries (the quotas are somewhere given to milk producers, and in some other places to processing companies), but this is not typical of the system – its main point is **quantities customised to each country**.

After Hungary's EU accession the future of agriculture – and the cattle industry within it – highly depends on the **bases, value and payment methods** through which the subsidies defined by the size of livestock **are realised**. This has been given to the EU

producers for years, and the point of view that this system should be expanded to the new members is becoming more accepted. Its primary reason is that not only the sale prices of agricultural products will rise significantly but also their expenses, including production costs. As a common consequence of the price changes and modifications taking place in the economic environment, profitability is clearly falling beside the current parameters of efficiency if the producers can only get their market incomes and cannot enjoy the direct payments, which are given to their competitors.

What subsidies to expect?

The size of livestock – forming the basis of subsidies for animal raising – is debated itself. The data in Table 1 provide information about this.

Table. 1

Number of cattle stock calculated by various methods, 1000 cows

Name[4]	A	B	C	D
Specified dairy farms producing milk	319	267	267	297
Small and medium-size farms selling to parties purchasing the products	65	72	21	44
Exclusive-use beef cattle	44	19	19	34
Cattle used for the producers' own consumption and sale	256	51	102	155
Total number of cattle	684	409	409	530

It is clear that we were rather brave when giving the data to start the negotiations with, except for the number of specified milking cows. It is also remarkable that – according to the EU norms – the number of small and medium-size milk producing farms of appropriate quality is lower than one-third of those defined, and the stock of cattle used solely for the owners' consumption and sale is too high. In reality, these data has to be interpreted in a way that the **future of milk production clearly depends on big farms**. For this reason, this unambiguous fact has to be realised in the agricultural policy making, too.

It is not an easy task to tell the future of about one thousand cattle that cannot be counted on when talking about the suppliers of the milk processing industry. About 14-15 percent of the entire milk quantity comes from the production of these, **which is not possible to sell directly or consume within the producers' household**. The ratio of direct sale[5] is the highest in Austria among the EU Member States – the country is geographically predestined to this. However, the EU decreased the quota of direct sale exceeding 13 percent in 1997 – leaving the total quantity of milk unchanged – by 2000, and it now hardly exceeds

[4] On the basis of their number: A – the official Hungarian position: number of cattle between 1985-1989. B – Number of cattle between 1995-1999. C – Number of cattle between 1995-1999, classified according to the EU rules. D – on the basis of livestock expected for 2003.

[5] The country quotas contain two data, one referring to the quantity purchased, the other to direct sale. Thus the former quota, which is continuously decreased, cannot be of any size.

6 percent. It is around 2-4 percent in the other countries and shows a falling tendency. **There is a possible solution here: the stock has to be changed to beef cattle**. It would have a dual use: increasing beef-cattle production and maintaining the living of the families involved (in the case of having more than three cows kept for beef)[6]. However, the current agricultural policy does not show enough motivation to realise this change, although these are really the last minutes to act.

Production subsidies that can be gained on the basis of the milk quota and the amount of payments can be approached from two directions. Either on the basis of the data of the Hungarian standpoint represented during the negotiations of accession, which says 2.8 billion litres, or on the basis of the average milk production in the period between 1995-1999, which is 2 billion litres. In my opinion it is not primarily the quantity of former production but the **demand of returning the level of consumption** reached that time (which cannot by all means called excellent) that we have to (should) use as a basis for arguments.

Even if keeping the strict EU quotas (the breaking of which are sanctioned by fines), there can occur some surplus supply. This is solved through **intervention buying**, within the framework of which butter and skimmed milk powder is sold for 3282 and 2055.2 Euro per metric ton accordingly. **It is a new element of this regulation that this price is to be reduced** by 15 percent as from the economic year 2005/2006. For compensating the producers, the **system of direct payments will also be introduced** here. This will be represented by a gradually increasing amount: the milk producers' supplementary income will be Euro 5.75 per tone milk in 2005, then it will be increased to 11.49 and will reach Euro 17.24 per tone by 2007. There will be further donations from community and national resources added to this in regions with disadvantageous characteristic features. However, the sum of these cannot exceed the limit of Euro 13.9 per tone in 2006 and 27.8 in 2007.

If we calculate **the possible sum of subsidies the Hungarian milk production can obtain** according to the above, the result will be 24/17, 48/35 and 72/52 million Euros for 2005, 2006 and 2007 accordingly. The impact of intervention prices – on the other side of the scales – cannot be calculated for the time being.

The production price (guiding price) of milk itself was Euro 309.8 per metric ton, that is about HUF 80 per litre in the economic year 2000/2001. Provided that this price remained unchanged, total incomes could rise to HUF 83-87 per litre beside the different direct payments and subsidies. What is still important to know about the quota system is that **quota has already become a market, what's more a stock exchange article** and its price is higher than that of milk. Our "system of quotas" has an entirely different basis of operation, and its presence is rather disadvantageous from the aspect of negotiations.

There is another area of EU regulation that is rarely or not at all mentioned in the specialised Hungarian literature. This is the question of **stock density**, that is the connection with the cropland area of fodder. The extensification efforts of the EU has their roots in the past and the rule of obtaining milk quotas only together with a cropland area was in force until 2000. The intention in its background was **to limit the use of farmyard manure produced**. This is not directly implemented today, but its relation to other forms of cattle raising remained and is worth of attention.

[6] This is the minimal level of being entitled to apply for subsidies.

Thus we have a dual task. On the one hand, we have to get prepared for the long-lasting **connection** of livestock farmyards currently creating an independent legal unit **with the real cropland area of fodder**, and its administrative process of getting it accepted with the EU. The other tasks require some management at the level of enterprises. Different subsidies referring to beef cattle, sheep and goats can only be applied for if the livestock unit per one hectare remains below two (this figure has to be given to four decimals), moreover, there is a further subsidy available if this value is reduced. So enterprises with a cattle-raising farm have to calculate according to the following formula: the cropland area of fodder[7] minus the area per "unit cow"[8], and only the remaining can be used for the keeping of other animals.

Expected changes of costs and revenues

We used the data of several studies prepared by AKII as a basis for our estimation[9]. The analysis is solely based on the data of specialised dairy farms and presumes a gradual improvement of productivity of 100 kilograms per year. It has to be indicated at this point that **this does not seem to be sufficient to counterbalance the expected growth of production costs**. After the accession, in accordance with the EU requirements, we can only calculate with the sale of extra quality milk. Adapting to stricter quality requirements will need significant surplus investments. This will on the one hand, appear as additional costs, closing amortisation and maintenance costs to the level usual in the developed countries, while, on the other hand, it will require additional incomes, without which it is hopeless to find resources for investments.

After the accession **wages will also probably get closer**, or at least it is expected that disparity – the phenomenon that agricultural wages are more than 30-percent below the national average, which was practically unknown in the decade of the 1980s – would gradually disappear within the country. The gradual termination of inner disparity of the agricultural wages during three years will appear as a significant item of expense if the closing up remains slow in the field of technology. Finally, the expected impact of the rising rental fees of land also has to be mentioned on the side of expenses. We cannot of course believe that there will be a revolutionary change at this point, but it is almost certain that the landowner will want to have a share of the profit coming from the significant increase of area subsidies. It is of high possibility that this factor – and not the market price of land – will have a more significant effect on the tenure of land.

[7] It is also important that the area of the branch given area subsidies cannot be taken into consideration here, so area can only be supported on one ground. In Hungary enterprises having a huge area of grass will have an almost unlimited scope for action.

[8] A „unit cow" makes 5800 kg milk a year.

[9] Mészáros, S. – Udovecz, G.- Varga, Gy.: Expected effects of the EU accession on the agricultural economy – on the basis of model studies. Experts' studies on agricultural economy. AKII, Budapest 1998. This study was followed by several model calculations, with a much wider circle of co-operative partners than above, until 2001. The majority of the results currently discussed originate from the study – led by the author and widely published – within the framework of which calculations regarding milk production were prepared by Zoltán Ráki and Mária Gubai.

The **cost and revenue ratios** of milk production can basically change after the country's EU accession. The branch will only be able to keep its current, basically balanced situation of revenues in the future if the annual production of 6000 litres of milk per cow taken into consideration in the calculation further increases at least by an annual quantity of 150-200 litres, and there will be a slow cost-adjustment going on at least for three-four years realised in the field of production costs.

One of the reasons of the critical situation of incomes lies in **the low level of labour productivity**. It is obvious that beside the favourable change of the level of wages the high level of labour use typical of dairy faming today will be impossible to maintain. The other factor-reducing incomes are the rising costs of fodders and farm feeds. This can only be counterbalanced by **improving the effectiveness of feeding,** but – according to the data – this is not at all an unrealisable task.

Let me present Table. 2 at this point to confirm the above-mentioned figures, containing the calculation data – using factual data – prepared for German dairy farms. From this it is clear that even family farms with 60 cows suffer from a significant economic disadvantage compared to the situation of a huge farm of 500 cattle, and that this disadvantage, if a new farm is established, will be almost entirely kept even despite of the maximal state subsidy of DEM 2.5 million that can be offered to one farm[10].

Table. 2

Pre-tax income of milk production
in Germany, beside different yield levels and investment costs
(in case of own heifer replacement)[11]

Unit of measure: DEM/cow

Denomination	At a renovated farm		At a newly established farm		At a renovated farm
Livestock	60	500	60	500	
Milk yield 5500 kg/year	-628	-456	-855	-689	
Milk yield 6000 kg/year	-408	-236	-635	-469	
Milk yield 6500 kg/year	-196	-25	-423	-257	
Milk yield 7000 kg/year	25	196	-202	-36	
Milk yield 7500 kg/year	171	343	-56	110	
Milk yield 8000 kg/year	387	559	161	327	

Can we really apply for the subsidies established in the EU?

The Hungarian public opinion is usually characterised by the – simplified and exaggerated – point of view that by the time Hungary becomes a member there will have not only many years elapsed but also the EU will have reformed its agricultural policy in a way

[10] The entire building-investment and equipment/furnishing costs of one place in a farm of 60 cattle are DEM 14500 (HUF 1.9 million), while in a farm of 500 cattle it is DEM 13000 (HUF 1.7 million).

[11] Ökonomische Richtwerte für Zweige der Pflanzen- und Tierproduktion. Sächsische Landesanstalt für Landwirtschaft, Dresden, Februar 2000.

that **only a fragment** of the so attractive current agricultural subsidies will be available for us. This opinion must be faced because on the one hand it reflects an erroneous standpoint, and on the other hand it spreads that attacking "Euro-scepticism" suggesting the approach of "Pató Pál[12]" instead of getting prepared for the real situation. Each fact and real estimation **define tasks for us**, and in the majority of the cases these tasks are useful and reasonable to fulfil even if we are never admitted to the European Union. And it is probable that we will be admitted in such a short time – provided that we do not commit an irrecoverable political mistake – that we will not even have time to arrange ourselves, seeing the hosts of urgent tasks to be solved. For this reason, I will try to draft the changes of the agricultural policy due to the Agenda 2000 reforms affecting the field of milk production, as well as their political and economic background through a general approach.

The Common Agricultural Policy of the EU has been characterised by all the typical positive and negative features of **compromises** from the very start. Thus we have to regard the currently planned and new **steps of reform ahead us as natural and not as one-time or unexpected, new phenomena**. It was already signalled by the agreements of Agenda 2000 – that were unwillingly established and are unprincipled from many standpoints – that the Berlin decision is only an interim phase, during which there was no breakthrough. Agricultural policy was not really changed by the Agenda 2000, since the EU decided to partially fulfil only the tasks that were long recognised and urgent.

Keeping these facts in mind is also remarkably important when considering the changes expected to take place in the future. **There is no reason for revolutionary changes taking place in the common agricultural policy of the EU, furthermore, these are not made possible by the system negotiated**, despite the fact that several manifestations have been emphasising its necessity for decades. There is not a new concept in it, except for this **new element** to be taken really very seriously that **the efforts made to produce healthier food products** is given more emphasis when making decisions and reform measures, and this – temporarily – outshines even the increasingly acknowledged necessity of improving competitiveness.

It is typical of the CAP reforms realised in the past and expected to take place in the future that they have been and are **directed to change a status quo negotiated through hard work**, and their motivating power is almost always some **external pressure, force**. This also means that there are almost always **following and not preventive decisions made**, and in the majority of cases they are delayed because of the system, thus missing the optimal date. This results in the fact that by the time a reform is born there is another thing to be done.

Regarding the given decisions and the elements of reforms, it is typical that **equalising the interests of the leading countries** and preserving the formerly negotiated financial "balance" by almost all means are often of higher importance than the consequent following of principles[13].

[12] Well-known personality of Hungarian literature representing procrastination.

[13] This is well illustrated by the decision by which maize for silage was taken to the circle of product plants, thus including its cropland area in the circle of products entitled to get direct payment. But if the grower makes a higher profit this way, they can add this branch to the cropland area of fodder in order to keep the requirements of livestock density – losing, of course, the right to have direct payments.

I am certain that the most important power of the reform process and its factor with the strongest impact are represented by the hardly-negotiated ratios of payment and resource application, as well as the efforts to maintain the methods prepared for them. **This means that the intention to preserve is above all regarding its influence**, and thus no significant breakthrough of conceptual importance can be imagined to take place in the near future in the field of the EU's agricultural policy.

From among the countries with a significant vote it is France that fights for the maintenance of the already achieved subsidies by all means and Germany wants to relieve its position as a net payer, which determines the maintaining of the status quo resulting in a more or less unchanged financial balance, allowing for only some formal, legal status changes in the system. In other words, no reform measure can really be imagined that would result in a significant decrease of subsidies available for France, and so German payments cannot either be radically reduced. It is also a fact, however, that the vast majority of German farmers are not for reforms, or only in a way – on condition that their own subsidies remains unchanged – that they would be glad to know if the net payment of Germany decreased. Of course, this – because of the budget – is again an impossible wish; moreover, a big part of the entire payment goes back to the German growers themselves.

From the aspect of our theme the agricultural policy efforts of Germany and France (which at the same time show the direction of the reforms), the two leading economies, agricultures and milk producing countries of the EU are of high importance. It became clear in the 1980s that price subsidies applied with no limitations on quantity **led to undesirable and expensive overproduction**, and an alternative solution was also worded: price reduction or (as a solution causing less trouble) quantity limits. **The French were interested in price reduction** – due to the country's natural qualities and its competitive farming structure already developed – **while the German became interested in limiting quantities beside high prices**, which is also comprehensible. Compromises developed on the basis of the original interests are typical of the then CAP reform measures: in 1984, primarily under German pressure, milk quotas were introduced, which were also kept in accordance with the German interests at the time of the new reform steps made in 1992, but – as a result of the French influence – the price subsidies were decreased.

However, there have been new trends in the field of German agricultural policy since 1990. **The country was forced to decide** whether to continue an agricultural policy of social purposes, giving up the advantages offered by big farms, or to modify the model to follow and say farewell to the ideal of "farmers' economy". Of course, this required **that decision makers of the agricultural policy make an ideological change**, who – led by the then Christian democrat minister of agricultural affairs, Kiechle – did so: **the ideal picture of a farmers' agriculture was replaced by a competitive agriculture**.

In France it was the socialist government **to perform a spectacular turn**: from 1997 social elements – preserving jobs, the acknowledgment of preserving landscapes and the issue of regional development – were strengthened in their agriculture focusing on production and effectiveness.

These movements of opposite directions are, however, easy to understand: Germany, **realising the danger of a final collapse, focused on improving effectiveness**, while France,

enjoying the results of their policy of that focus followed to that time, played emphasis – certainly only temporarily – on **its popular exploitation**.

The "reform atmosphere" of the EU Member States is typically trying to keep their own **financial situation negotiated to date** by all means, and they are not willing to give up the smallest subsidies obtained. For this reason, in our opinion, **no reform measures can be expected that would result in a significant or higher decrease of the final amount of subsidies**. Reforms can only bring changes in the field of distribution forms or legal titles, but these cannot basically restructure the ratios of the Member States' shares.

Some conclusions

Using the status quo typical of dairy farming, the recently made decisions and the debates during the review of Agenda 2000 as our starting point, we have to get prepared for the following more important changes, which will have a direct impact on Hungary as well:

- The quota system will be maintained for a longer period, that is, even after 2007, the detailed figures of which have been exactly recorded in the case of each country. In this question there is hardly any movement due to the given system, so Hungary has to fight for its appropriate production quotas during the negotiations currently going on.
- Thus intervention purchases with reference to butter and skimmed milk powder will also be kept.
- Although price guarantees will be kept, the quality level of prices will be gradually reduced from 2005/2006 for three years, by an annual ratio of 5, altogether by 15 percent. The price of butter will be decreased from Euro 3282 to 2790, while that of skimmed milk powder from Euro 2055 to 1747.
- The price falls will result in a lower guiding price of milk. About half of the loss of income resulting from price reduction is intended to be supplemented by direct payments, the sum of which will be Euro 5.75 per metric ton in 2005, 11.49 in the next year and will finally reach Euro 17.24 per metric ton.
- Beyond this loss resulting from the decline of income, producers also have to count on the fact that – as opposed to the Hungarian news, and even if at a slow pace – production costs gradually increase in almost all EU countries, which means that the price gap between agricultural and industrial products widens. If we take the year 1990 as a basis, the Member States' agricultural issue rose by 1.1 percent altogether until 1998; during the same time their costs rose by 11.9 percent, which means that during a period of eight years the terms of trade increased by 10.7 percent.
- From the above it is clear that the competition is becoming fiercer year after year, and the tightening of efficiency requirements generate fast reactions especially in two directions:
- Milk yield per cow in the EU Member States rose from 4582 kg per cow by more than 22 percent, to 5557 per cow between 1990 and 1998. In the meanwhile, our results stopped at the level achieved a decade and a half earlier.
- Primarily with the intentions of handling wage costs economically and rationalising labour, the concentration of livestock is increasing very fast, the realisation of which is primarily achieved through the liquidation of small cattle raising farms. The ratio

of cattle in livestock having more than 50 animals rose from 29.4 percent to 45.6 between 1987 and 1997.[14]

- The requirements regarding land use are further tightened, reducing the livestock per 1 hectare. This question has to be dealt with even for administrative reasons because of the artificially divided Hungarian farming structure, but the biggest farms also have to prepare for the fact that the stock of cows will also have to be taken into consideration when providing subsidies for beef-cattle.
- The regulations of animal health and those regarding the "well-being of animals" are also becoming stricter; the system of control becomes more comprehensive.
- Faultless milk quality becomes an absolute condition of sales even for the newly admitted Member States
- The so-called ecological milk production is gradually spreading, without, however, obtaining a determining role on the market. In 1998 two percent of the overall agricultural area of the European Union was involved in ecological production[15].

[14] The former state secretary of the German ministry of agricultural affairs announced a prognosis stating that the number of agricultural farms performing dairy tasks either as their main or part-time activity (taking the lower limit of 2 hectares as a basis) in Germany will fall from 421 thousand by 2020 to 186 thousand, which means that 56 percent of them will be terminated. Dr. H. Scholz: Prognose Landwirtschaft 2020 auf dem Prüfstand. Agra Europe 14/01, 2. April 2001.

[15] Agra-Europe 16/01, 17. April 2001.

Perspectives of the world market of major crops

by Norbert Potori

Abstract

We provide an overview on the market outlook of wheat, corn, soya, rape, sunflower and sugar on the basis of the prognoses prepared by several well-known and acknowledged national and international organisations, institutions and institutes. Thus our primary aim is to draft the world market trends that would probably define the next decade on the basis of information currently available, and not to regard the difference of figures as very important factors – except for some extraordinary examples. In general, it can be stated that the economic development of the developing countries in Asia, South-America, Middle East and North America will lead to increasing demand of animal products and this will stimulate the world markets of cerelas, grits and vegetable oils, the markets of which has been sagging since 1996/97. The stocks will decrease gradually during the next decade, however, due to the slow incease of market prices the inceasing demand of the main crops will be covered first of all by the higher yields. The development of the agricultural policy of China is a very important factor of the uncertainty, however, China's WTO admission will by all means have a favourable effect on the world trade of cereals and oil-seeds. On the world market of wheat the market position of the European Union, on the world market of corn the position of the USA will be strengthened, while on the world market of oil-seeds in particular the strengthened positions of Brazil and Argentina can be expected.

Key words

wheat, corn, soya, rape, sunflower, sugar, world market, trade, forecast

Introduction

The perspectives of the world market of major crops will be examined on the basis of prognoses prepared by several well-known and acknowledged national and international organisations, institutions and institutes (FAO, OECD, FAPRI, USDA and the European Commission). Our mission gets more difficult by the fact that the methods of different prognoses also vary, they are not obviously built on the same hypotheses[16], and do not refer to the same period. Even their data referring to recent things often differ, and sometimes not even the definitions of collective terms agree. Thus our primary aim is to draft the world market trends that would probably define the next decade on the basis of information currently available, and not to regard the difference of figures as very important factors – except for some extraordinary examples.

Cereals – Summary

The continuous falling of the world market prices of cereals[17] after the season year record of 1996/1997 ends, and a slow increase is expected from the historic nadir of the season year 1999/2000. This rise, however, will only be noticeable in the case of nominal

[16] However, they typically do not count on any significant change of the current agricultural policies.

[17] We don not intend to discuss the expectations of the world prices of rice at this point.

prices, the real prices of cereals corrected with the inflation rate will not significantly change in the next few years – what's more, they can even decrease on the long run. The demand of developing countries for cereals will further increase; the stocks transferred through them are continuously decreasing. Due to the low world market prices, the reduction of cropland areas will go on during the next few years. At the same time, due to hypothetic yield growth, production further increases, and the issue according to the prognoses of OECD will reach a 12 percent rise by the season year of 2006/2007 compared to the average of the period between 1995/1996 and 1999/2000. However, this expectation may be too optimistic, since – among others – the stricter and stricter environmental regulations of the developed countries or the increasing global water shortage can act as a strong constraint against the growth of product yields.

According to the estimations of OECD, the use of cereals will be 13 percent higher in the season year of 2006/2007 than the average of the period between 1995/1996 and 1999/2000. Primarily the demand for fodder cereals, remarkably for corn fodder will rise on the world market. The demand for fodder will significantly increase in Asia, Latin America and in the countries of the Near East. The net cereal export of the OECD Member States, reaching about 122 million tones, will be nearly 29 percent higher in the season year of 2006/2007 than the average of the period between 1995/1996 and 1999/2000; the international trade of processed and packed cereals will also increase beside that of bulk goods.

China plays a significant role on the world market of cereals, the country's joining to WTO and its agricultural policy steps greatly influence the future development of its demand and supply conditions. China has almost disappeared from the world market of wheat for the last three years and has been present on the world market of corn as an exporter; it is expected, however, that the country becomes a major importer of both cereal products in the second half of the decade. The country's foreign trade organisation of food products reports the following: the cereal production of China has risen by an annual 3 percent on the average recently, while its cropland area has been continuously shrinking because of the urbanisation process, and it is about 83 million hectares today. The degree of self-supply regarding cereals is about 95 percent. The government intends to increase the cropland area to 128 million hectares by the middle of the decade.

According to the expectations of the European Commission, the competitiveness of cereals grown in the European Union – due to the reforms of Agenda 2000 – will improve both on the inner and foreign markets. However, the balance of the cereal market primarily depends on the rise of international cereal trade and the development of the USD/Euro exchange rate. The only exception is rye, whose expected production growth causes a continuous increase of total intervention stocks (it is not an accident that more Member States urge the taking out of rye from the system of intervention purchases). Voluntary creation of fallow lands increasing due to the declining profitability of cereal production and the inner demand for fodder limit the growth of production and export until the middle the decade. In the second half of the decade the rise of crop yields will not be able to keep up with the increasing domestic and foreign market demands, the prices of wheat and barley will move downwards. The total transit supplies of corn will reach a relatively low level, 5 million tones on the average. The cropland area of cereals will rise to 37.4 million hectares by the season year of 2003/2004, and it will fall back to 36.8 million hectares by the season year of 2008/2009. The total crop yield of cereals will rise by 1.3 percent per year, while that of corn by an annual 1.4 percent. The total cereal production will exceed 226 million tones in

the season year of 2008/2009 (according to the most recent COCERAL report, slightly more than 198 million tones of cereal was harvested in the season year of 2001/2002), while its use will increase by 18 million tones. Export directed to third countries will exceed 30 million tones.

The cereal production of candidate EU Member States in Central-Eastern Europe will continuously rise until the season year of 2008/2009, according to the prognosis of the European Commission[18], and it will reach 88 million tones (38 million tones of which is represented by wheat), the total crop yield will rise by 8 percent, and the cropland area of cereals will be about 25 million hectares by the end of the period examined. The use of cereals will fall behind production by about 13 million tones (in the case of wheat by nearly 10 million tones), thus the region becomes a net exporter from a net importer. It is to be noted that the independent experts' studies expect a decrease of demand for fodder cereals on the long run in the candidate EU Member States in Central-Eastern Europe, since as a result of harmonising the *acquis* regulations in connection with livestock farming (regarding quality, the well-being of animals, food safety, etc.) a high number of growers will probably fall out of competition, the issue of lower quality goods sold on the Eastern market will decline or terminate, while an increasing quantity of livestock farming goods of the European Union will flow in the markets of these countries. The way of changes – as well as their impact on production – within the fields of market regulation of cereals, intervention buying and the system of direct payments in the candidate countries are further questions to be asked.

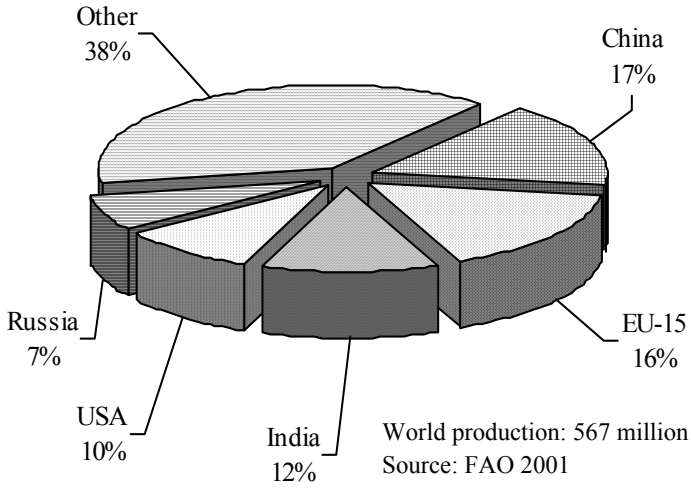
Wheat

According to the most recent data provided by FAO, the world's wheat production reached about 567 million tones in 2001, 17 million tones less than a year earlier. The biggest wheat-growing countries are China, the European Union, India, the United States and Russia, altogether providing for 62 percent of the world production (Figure 1). According to the forecasts prepared by the OECD and the USA, production will grow by an annual 1.2-1.4 percent on the average until 2008 – it will be altogether increased by 80-90 million tones. According to the FAPRI prognosis, the European Union will produce 25 percent of the surplus quantity. The issue of Australia will experience the highest degree of growth – nearly 27 percent by the end of the decade.

[18] The forecast of the European Commission does not calculate with the possible joining of any of the candidate countries.

Figure 1

Distribution of the world's most important wheat growers in 2001



The world price of wheat according to the FAPRI forecast is in for a continuous rise from 2001 and will exceed USD 150/metric ton in 2008 (FOB Gulf). The prognosis of OECD expects a rise of USD 10/metric ton within two years as a result of China's admission to WTO.

The international wheat market is sagging for the time being, but according to the forecast of FAPRI the demand of the developing countries will grow after the season year 2002/2003, and trade will increase by 21 percent, about 19 million tones by the end of the decade. The USDA prognosis is slightly more optimistic, expecting an annual growth of turnover of 2 million tones.

The upswing of trade will be primarily profitable for the European Union: despite of the gradual weakening of the Euro, the inner market price of wheat remains below its world market price, thus the product will be competitive on the foreign markets even without export subsidies. According to the prognosis of FAPRI, the net export will rise by 12 million tones by the end of the decade, which is more than 50 percent of the expected growth of the world trade turnover. Until the season year 2007/2008 Canada still remains the second biggest exporter after the United States. However, but it will be forced to the third place by the European Union by the end of the decade. The export of the Central-Eastern European countries and the successor states of the former Soviet Union will rise due to the weakening of national currencies, as it is prognosticated by the USDA.

The demand for wheat is in for the sharpest increase in the Asian countries. According to the FAPRI prognosis, China's current net import of about 1 million tones will exceed 5.6 million tones by the end of the decade, although it cannot reach the historic record. OECD expects a more rapid development, China's purchases will reach the preferential duty quota of 8 million tones as early as within two years after its WTO

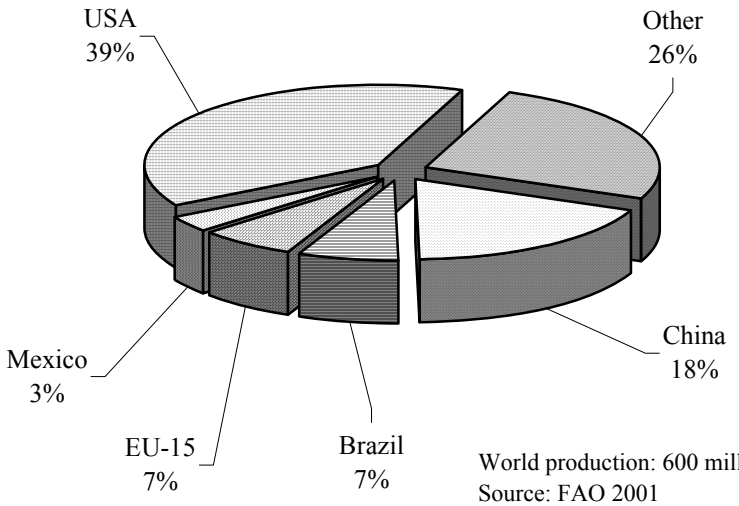
accession. The more developed Eastern Asian countries heavily depend on import, according to the forecast of FAPRI their net import will rise to 6 million tones by the end of the decade from the 5 million tones recorded in the season year 2000/2001. The fast increase of the inner market demand and the further liberalisation of trade will result in Mexico's net purchases rising by more than 30 percent until the season year 2010/2011, almost reaching 2.5 million tones. Iran's net import will continuously rise after the season year 2001/2002 and will reach about 6 million tones by the end of the decade. According to the USDA forecast, the import of North Africa, primarily that of Egypt, as well as the import of the entire Near East and Indonesia will increase.

Corn

The world's corn production reached about 600 million tones in 2001, according to the most recent data of FAO, exceeding the quantity harvested in the previous year by more than 7 million tones. The biggest corn growers are the United States and China, altogether covering 57 percent of the world production (Figure 2).

Figure 2

Distribution of the world's most significant corn growers in 2001



World production: 600 million tones
Source: FAO 2001

The world's use of corn, according to the USDA prognosis, will rise by an annual average of 1.8 percent until the end of the decade, which significantly exceeds the averages of the 1980s and 1990s but is below that of the 1970s. The slowing down of the pace of use increase experienced during the last decade is on the one hand due to the economic crisis in Asia and on the other hand to the declining livestock of the successor states of the former Soviet Union and the Central-Eastern European countries. The rise of meat consumption per head results in the increasing demand for corn in the more developed Asian countries, as well as in Latin America, North Africa and in the developing countries of the Near East.

After the 48-percent fall of the world market price of corn in the period between the season years 1995/1996 and 1999/2000, it will get close to USD 110/metric ton (FOB Gulf) by the season year 2008/2009, as FAPRI forecasts. The OECD prognosis expects a price rise of USD 10/metric ton within four years as a result of China's WTO accession.

The international trade of corn, according to the forecast of FAPRI, will increase by more than 30 percent, nearly 21 million tones by the end of the decade. About 90 percent of the expansion will be directed to the developed countries, while the remaining will target the markets of more developed Asian countries. The USDA prognosis is slightly more optimistic and counts on a greater ratio of turnover growth: it expects that the record of 80 million tones recorded in the late 1980s will be hit in the middle of the decade, and 95 million tones of corn will be sold by the end of the decade all over the world.

The number one winner of the increase of trade is the United States, which – according to the prognosis of FAPRI – will satisfy 90 percent of the surplus demand and will increase its market share to 82 percent from 79. The USDA forecast expects an export of 68 million tones by the end of the decade. The upswing of the world market demand is also favourable for the Central-Eastern European countries. The net export of Hungary is slowly increases, getting close to 1.5 million tones by the end of the decade19.

Japan, the country purchasing 24 percent of the corn exported in the season year 2000/2001, will continue to be Asia's biggest importer according to the FAPRI forecast, although its demand for fodder will decline because of the decrease of livestock and the liberalisation of trade, and its net import exceeding 16 million tones will suffer some fall. The net purchases of South Korea will rise to nearly 10 million tones by the end of the decade from the current level of 8 million tones, while Taiwan's net import of 5 million tones will also rise to 6 million tones. Mexico's net import will increase by an annual average of 2 percent, altogether by more than 1.5 million tones by the end of the decade from the 6.3 million tones recorded in the season year 2000/2001. The purchases of the European Union conducted on foreign markets will reach 2.7 million tones by the season year 2010/2011. While China's net sales were about 7 million tones in 2001, its purchases will reach the preferential duty quota of 6 million tones by 2010.

Oil-seeds – Summary

The world market prices of oil seeds[20] has recently fallen back from the record of the season year 1996/1997 by about 40 percent, and a significant price rise – even despite of the increasing demand of the developing countries – can only be expected after the season year 2004/2005, due to the slow dwindling of the transit supplies. The erosion of the world market prices has led to a smaller decrease of the cropland areas of rape and sunflower, but, as a result of the indicated price hike, the total cropland area of oil-seeds will increase from the middle of the decade, and will reach 140 million hectares according to the prognosis of

[19] The forecast of FAPRI is to be cautiously handled, since Hungary is currently struggling with a surplus exceeding 2 million tones.

[20] We are discussing the world market expectations of soya, rape and sunflower and will not deal with the world market perspectives of palm oil at this point.

FAPRI. The major part of the increase exceeding 10 percent is expected to take place in the soya sector of South America.

The use of grits products of a high protein content gained through the processing of oil-seeds will rise by 30 million tones by the season year 2010/2011, and that of plant oils by 15 million tones. The international trade of oil-seeds will grow by 41 percent until the end of the decade, while that of grits products of a high protein content by 10 percent and that of plant oils by 13 percent. Primarily the demand for soya bean and its processed products will increase, which will be followed by rape and sunflower.

On the world market of oil-seeds and their processed products the future development of the demand and supply conditions will be highly influenced by the agricultural policy measures of the United States, as well as by the world price of crude oil and China's purchases.

According to the forecast of the European Commission[21], the cropland area of oil-seeds in the European Union will decrease as a result of the Agenda 2000 reforms (by 13 percent in the case of rape and 15 percent in the case of sunflower), then it will increase after the season year 2002/2003 in parallel with the improvement of productivity and profitability, and it will reach 4.6 million hectares by the season year 2008/2009 – however, it will remain below the Blair House limit of 4.93 million hectares. The total production of oil-seeds will fall to 11 million tones until the season year 2002/2003, but – due to the growth of cropland areas and crop yields – it will reach about 12.8 million tones in the season year 2008/2009. Changes greatly depend on the happenings of the world market of cereals, as well as on the export opportunities. Furthermore, the efforts of the European Commission to achieve that at least 2 percent of the fuel used be covered by materials of agricultural origin by 2005, 5.75 percent of them by 2010 and 20 percent of them by 2020 are not to be disregarded, although the proposal is taken with significant scepticism, since the production of bio-fuels is very expensive for the time being.

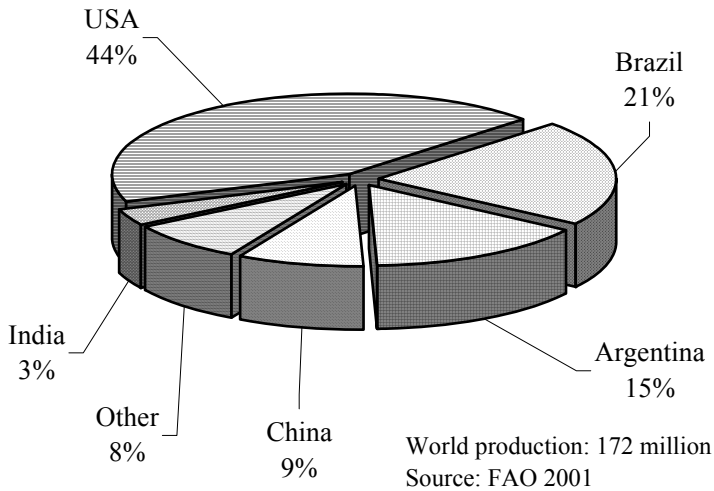
Soya

The world's production of soya, according to the most recent data of FAO, reached about 172 million tones in 2001, exceeding the quantity harvested in the previous year by nearly 11 million tones. The most significant growers are the United States, Brazil and Argentina, altogether covering 80 percent of the world production (Figure 3).

[21] The prognosis of the European Commission does not count with the possible accession of any candidate countries.

Figure 3

Distribution of the world's most significant soya bean growers in 2001



World production: 172 million tones
Source: FAO 2001

According to the FAPRI forecast, the world market price of soya bean will rise by an annual average of 2.3 percent after 2001, reaching USD 244/metric ton (CIF Rotterdam) by 2008. The OECD prognosis expects a sharper rise until 2006, when the world market price of soya bean will exceed USD 250/metric ton. The world market price of soya grits, according to the FAPRI prognosis, will suffer a significant decline after the 10-percent rise in 2000, but it will increase again after 2003 and will get much higher than USD 205/metric ton (CIF Rotterdam) until 2008, which price level, however, is still much below the remarkable record in the middle of the last decade. The OECD prognosis is less optimistic, it expects a more significant fall, and it prognosticates that the world price of soya grits will not exceed USD 200/metric ton in 2006. Both according to the forecasts of FAPRI and OECD, the world market price of soya oil – ending its several years of decline – will rise again. However, the OECD prognosis expects a sharper price hike; there is a significant difference (USD 170/metric ton) between the calculations of the two workshops regarding the year 2006. FAPRI expects that the world market price of soya oil will be about USD 375/metric ton (FOB Rotterdam) in 2008.

The international trade of soya bean and its processed products, according to the USDA prognosis, will experience a growth until the end of the decade faster than the process experienced in the 1980s but slower than in the first half of the 1990s. The export of soya bean and soya grits (counted in soya bean par value) will rise above 116 million tones from 95 million tones; soya bean export will grow by an annual average of 1.3 percent.

According to the forecast of FAPRI, the world market turnover of soya bean will experience a significant, nearly 48-percent rise until the end of the decade. It will be Brazil that primarily makes profit from the increase of turnover – covering 51 percent of the surplus

demand –, while the United States and Argentina will equally share the remaining half. The world market share of Brazil will exceed 30 percent by the end of the decade, while that of the United States will shrink to 50 percent by that time from its 63-percent share in 2000/2001. The forecast of USDA is more optimistic, it expects that the world market share of the United States will reach about 55 percent in the season year 2010/2011. According to the prognosis of FAPRI, the net import of the biggest importer – the European Union – will rise to 17.5 million tones by the end of the decade from 16 million tones recorded in the season year 2000/2001, while the net purchases of China – expected to prefer the domestic processing of soya bean in the future – will sharply rise from 7.6 million tones in the season year 2000/2001 to 16.3 million tones by the season year 2010/2011, thus taking the second place on the list of importers.

The international trade of soya grits will, according to the USDA forecast, expand by an annual average of 2.3 percent. The growth of processing capacities in Mexico, Brazil, Argentina, India, Taiwan and China increases the competition between the countries exporting grits products and slows down the increase of soya oil turnover on the world market, and furthermore increases the world market price of soya bean as compared to soya grits.

According to the forecast of FAPRI, the net soya grits import of the European Union will rise to 16.5 million tones by the end of the decade from 15 million tones recorded in 2000/2001 (the USDA prognosis expects the opposite of the above: purchases will fall due to the significant cereal stocks and the low inner market prices of cereals.) As a result of the ban on using protein of animal origin as animal fodder, soya grits import will increase by one million tones in the European Union in the season years 2000/2001 and 2001/2002. The incentives to grow plants of high protein content would incur higher costs on the long run than the increase of soya bean and soya grits import, moreover, soya grits is more appropriate as a fodder-supplement than the grits products of oil-seeds grown at home. Further important, expanding export markets of soya grits are the Central-Eastern European countries, the total net purchases of which will grow by 13 percent by the end of the decade, as well as South Korea and Canada. Due to the increase of domestic processing capacities, China and Taiwan will become net soya grits importers by the end of the decade, while the export of India will practically remain unchanged. The share of the United States will reach 20 percent by the end of the decade on the world market dominated by Latin America. The USDA forecast is, however, pessimistic: it states that the 18-percent share of the United States in the season year 2003/2004 will shrink to 16 percent by the end of the decade.

Argentina has a share of more than 50 percent on the world market of soya oil. The international trade of soya oil, according to the prognosis of USDA, is increasing by an annual average of 2.5 percent, and the surplus demand is primarily covered by the export of Argentina and Brazil. Due to the increasing demand for soya oil, the varieties of higher oil content are preferred in production.

As the FAPRI forecast states, the net import of China, the biggest soya importer will be doubled by the end of the decade despite of the increase of processing capacities, and will reach 1.2 million tones. The purchases of the second biggest importer, India will reach 1.1 million tones as a consequence of the growth of the population and the rise of income per head. The net import of the Central-Eastern European countries and the successor states of the former Soviet Union will only slightly increase during the decade. The net export of the

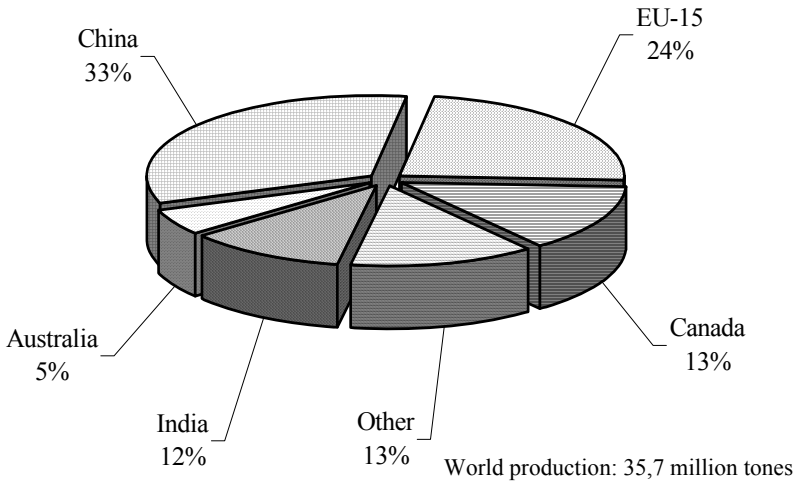
European Union will suffer a slight fall, while the United States will have a 14-percent share on the world market of soya oil by the end of the decade.

Rape

According to the most recent data of FAO, the world's rape production was about 35,7 million tones by 2001, while 39,7 million tones of it was harvested in 2000. The biggest rape growers are China, the European Union, Canada and India, altogether covering 84 percent of the world production (Figure 4). Rape production will be nearly to 38 million tones by the end of the decade, and rape processing will exceed 37 million tones.

Figure 4

Distribution of the world's most significant rape growers in 2001



World production: 35,7 million tones
Source: FAO 2001

According to the forecast of FAPRI, the world price of rapeseed will fall by 5 percent in the season year 2001/2002 due to the growth of production and the decreasing world price of soya bean, but – in parallel with the rise of soya bean's the world price again – it will experience an increase of 2 percent by the end of the decade.

The cropland area of rape in the European Union will decrease from 3.6 million hectares of the season year 1999/2000 by 12 percent until the season year 2001/2002 as a result of the Agenda 2000 reforms, as the FAPRI prognosis says, then, as a result of the increasing demand for rape grits due to the ban on animal fodder containing protein, it will rise by 2 percent in the season year 2001/2002. Rape production will continuously rise after the season year 2006/2007. Because of the subsidies of equal area basis provided for cereals and oil-seeds, the cropland area of rape will be probably about 3 million hectares by the end of the decade, while its issue will reach the level of nearly 9,5 million tones in the season year 2001/2002.

The world market of rape is in for an average annual growth of 1 percent according to the FAPRI forecast, and its turnover will reach 5.2 million tones by the end of the decade. The net rapeseed export of the biggest exporter, Canada will be decreased by 1 million tones in the season year 2001/2002 from 4.2 million tones in the season year 2000/2001 as a result of the significant fall of China's import, then it will gradually exceed 3,8 million tones by the end of the decade.

The net rapeseed export of the Central-Eastern European countries remains stable during the next decade. The foreign-market purchases of the biggest exporter, China will gradually rise again after the decline in the season year 2001/2002 and will nearly reach the level of 2.5 million tones in 2000/2001 by the end of the decade.

The net import of the second biggest importer, Japan will rise to 2.4 million tones by the end of the decade from 2.1 million tones recorded in the season year 2000/2001. Because of the temporary decline of production and the increase of domestic trade, the European Union will become a net importer of rapeseed from the season year 2001/2002 and will keep this role until the end of the decade.

According to the FAPRI prognosis, Canada's net rape grits export will rise from 1.2 million tones in the season year 2000/2001 to 1.6 million tones by the end of the decade. India's net rape grits export will gradually get back to the level of the season year 2000/2001 after the sharp rise in the season year 2001/2002.

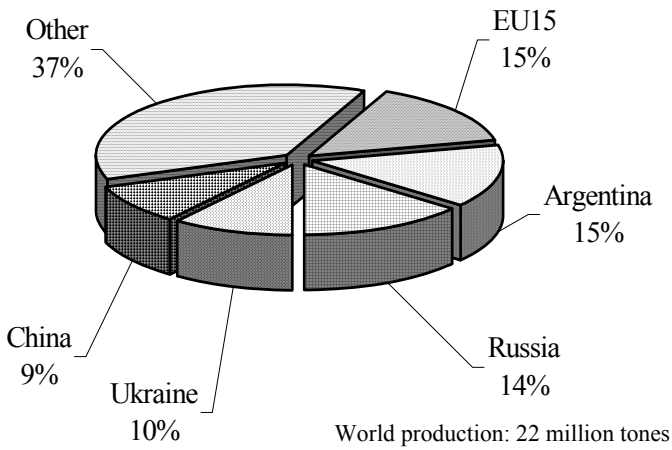
According to the FAPRI prognosis, the rape oil export of Canada will rise from 800 thousand tones in the season year 2000/2001 to 1 million tones by the end of the decade. The net rape oil export of the European Union will be decreased by about 50-60 thousand tones because of the growth of domestic demand. The net import of India, the biggest importer will be more than doubled by the end of the decade if compared to the country's net foreign-market purchases in the season year 2000/2001, reaching more than 800 thousand tones. The Chinese rape oil import that suffered a fall earlier due to the limiting measures made to support the domestic processing industry would also reach 800 thousand tones by the end of the decade.

Sunflower

The world's sunflower production was nearly 22 million tones in 2001 according to the most recent data of FAO, about 4 million tones less than a year earlier. The biggest sunflower growers are Argentina, the successor states of the former Soviet Union and the European Union, altogether providing for 56 percent of the world's production (Figure 5).

Figure 5

Distribution of the world's most significant sunflower growers in 2001



World production: 22 million tones
Source: FAO 2001

It is important to emphasise that due to extensive production and a significant shortage of rain only 3.2 million tones of sunflower was harvested in Argentina in 2001 compared to the 6 million tones in 2000 and 7.2 million tones in 1999. According to the forecast of FAPRI, Argentina and the successor states of the former Soviet Union will cover 65 percent of the world's sunflower production by the end of the decade.

The world market price of sunflower has been decreased by 43 percent since the season year 1997/1998. According to the FAPRI prognosis, a further 2 percent of decline will take place in the season year 2001/2002, and then, as a consequence of the decrease of cropland areas in Argentina, a significant improvement is expected from the season year 2002/2003. The world price of sunflower grits is in for an average annual rise of three percent until the end of the decade. The world price of sunflower oil has fallen by 50 percent since the season year 1997/1998. However, from the season year 2000/2001 it will increase with an annual average of 5 percent until the end of the decade.

Sunflower production in the European Union will decrease by 450 thousand tones to 3.2 million tones by the season year 2002/2003 due to the Agenda 2000 reforms, then it will experience a very modest rise until the end of the decade.

On the international market of sunflower seed the most important exporters are the successor states of the former Soviet Union, their total net export – according to the FAPRI prognosis – will increase from 1.6 million tones in the season year 2001/2002 to 2.2 million tones by the end of the decade. Due to the decline of production, the sales of Argentina fell by 80 percent below 110 thousand tones in the season year 2000/2001, but it would exceed 340 thousand tones by the end of the decade. The export of the Central-Eastern European countries fluctuates between 330-350 thousand tones in the period between the 2001/2002

and the 2010/2011 season years. The import of the European Union will nearly reach 3 million tones by the end of the decade.

The most significant sunflower grits and sunflower oil exporter is Argentina, processing 90 percent of its sunflower production and sells 90 percent of its sunflower grits and 65 percent of its sunflower oil on the world market. 80 percent of the international trade of sunflower grits is conducted between Argentina and the European Union. After the decline suffered in the season year 2001/2002, the net grits export of the Latin American country will rise above 1.6 million tones according to the prognosis of FAPRI. The net import of the European Union will grow until the middle of the decade, and then it will slightly fall and reach about 1.8 million tones in the season year 2010/2011. The world market of sunflower grits is in for an average annual expansion of 1 percent after the 30 percent decrease in the season year 2000/2001.

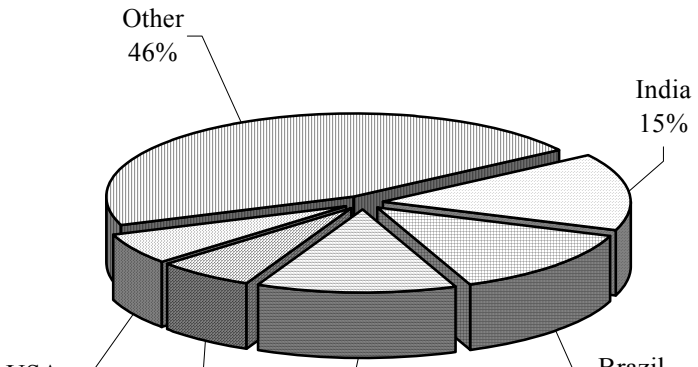
On the world market of sunflower oil Argentina has a 66, the successor states of the former Soviet Union have a 26-percent share. As a result of the increasing domestic use the net export of the successor states of the former Soviet Union will decrease by 30 percent until the end of the decade according to the FAPRI forecast, thus their world market share will shrink to 18 percent. Besides Argentina, it is the European Union that profits from the increasing demand for sunflower oil, since the net export of the latter will be doubled by the end of the decade and will get close to the level of 250 thousand tones of net foreign market sales reached by the successor states of the former Soviet Union. The region of Central-Eastern Europe will be a net importer of sunflower oil from the season year 2001/2002, its import will rise to 47 thousand tones by the end of the decade.

Sugar

The world's sugar production, according to the most recent data of FAO, reached about 128 million tones in 2001, nearly 8 million tones less than a year earlier. About two-thirds of sugar is cane sugar, the remaining is beet-sugar. The biggest sugar producers are India, Brazil and the European Union, altogether providing 41 percent of the world's production (Figure 6).

Figure 6

Distribution of the world's most significant sugar producers in 2001



World production: 128 million tones
Source: FAO 2001

The cropland area of sugar beat, according to the most recent data of FAO, was about 6.2 million hectares in 2001, while that of sugar cane reached about 19.2 million hectares. According to the FAPRI prognosis, the total cropland area – after the decline in the season year 2000/2001 – will continuously rise because of the increasing world price of sugar, while the ratio of the two cultures will remain practically stable. The cropland area of the second biggest sugar producer, Brazil will steadily grow in the next decade, the Latin-American country remains the most significant exporter due to low land prices and production costs. The issue of the biggest grower, India will fall back to the level of domestic production by the season year 2002/2003, as EIU, the economic research institution in London prognosticates.

It was in 2001 that the world's sugar consumption first exceeded the production since the season year 1993/1994. According to the FAPRI forecast, sugar production will reach 150 million tones by the end of the decade, which means a nearly 20-percent growth but still remains below the consumption of 150 million tones.

The highly volatile world market prices of sugar, according to the FAPRI prognosis, will increase by 28 percent from the level of the season year 1999/2000 as a result of the early decline of sugar production and the continuous increase of demand, and will reach USD 236/metric ton by the end of the decade.

According to the forecast of FAPRI, the net export of Brazil will reach 8 million tones by the end of the decade; the efforts made in the Latin-American country to limit production are not successful. The European Union, leaving Thailand behind it, will become the third

biggest exporter by the season year 2010/2011: although its net export will slightly decrease after the season year 2001/2002, it will experience a steady growth from the middle of the decade and its net foreign market sales of 4.6 million tones prognosticated for the end of the decade will only be slightly below Australia's export of 4.8 million tones. The increase of export is almost exclusively covered by "C" sugar (however, it is of course an open question when and to what degree the sugar industry regulation of the European Union can be reformed). The net export of Thailand will experience a modest rise in the period examined, the transit supplies of sugar accumulated are growing because of corn syrup gaining grounds. The cropland area of Cuba was the lowest in the season year 2000/2001 if the last two decades are considered; its sugar industry is struggling with serious problems, which has a negative impact on its productivity as well. However, by the end of the decade a slight increase of yields is expected, due to which net export will grow by 600 thousand tones.

The most important buyers on the world market of sugar are the successor states of the former Soviet Union, whose production will increase by 400 thousand tones by the end of the decade, according to the FAPRI forecast, but it will still remain 55-56 percent below the level of issue before the fall. The role of sugar played in the culture of nutrition is continuously decreasing in the region, thus the net export falls back to 5.2 million tones by the end of the decade from the 6 million tones recorded in the season year 2000/2001. The foreign market purchases of both the United States and Indonesia will increase, while the import of Japan will slightly decline. According to the prognosis prepared by the International Sugar Association, the import of China will experience a sharp rise in the near future as a result of the termination of surplus, low-performance, low-efficiency processing capacities, the decrease of saccharin consumption, and furthermore because of its accession to the WTO.

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Competitiveness of the meat sector and market prospects after the EU accession

by Mária Nagy

Abstract

In addition to the numerous competitive advantages of the Hungarian meat sector it is also struggling from a great number of competitive disadvantages, therefore, the sector has to solve several tasks in order to be able to develop. The Hungarian purchase prices of pork have already reached the market prices of the main pork producing countries of the EU. The markets of the sector – regarding both the domestic and the export markets – are relatively limited. Following the EU accession Hungary will have only slight chances for increasing its export. The most important task is to launch the efficiency improving investments and solve the numerous problems of the agricultural phase (e.g., indicators of fattening, prices, and livestock concentration).

Key words

competitiveness, prices, consumption, export

1. Competitiveness of the meat sector

The analysis of competitiveness was performed based on the Porter model applied in the international practice, which analyses one by one the factors influencing most the competitiveness.

Factors of production

Concerning the productivity indicators of the dominating sector of the meat sector, that is, in pig fattening severe competitive disadvantages can be found. This can be explained by the fact that the stock is very much fragmented and there are only a few pig-fattening farms of with large stock numbers. However, even the indicators of large pig keeping farms do not reach West European level. The four main productivity indices of fattening are lagging behind the Danish and the German indices by 15-30 percentages. Concerning the weight gain and feed conversion the differences are even larger (see Table 1)

The competitiveness of the meat industry is weakened by the low level of the **capacities used** since this leads to the increase of specific production costs. The use of the slaughtering capacities is in particular low; the capacities used of pig slaughtering are 58 percent and that of cattle is 40 percent.

It can be expected that at the date of Hungary's accession those small processing plant of small capacities, which cannot meet the hygiene and environmental regulations deriving from Hungary's EU membership will have to close down the production. This might then increase the use of the capacities of the other operating plants.

Table 1

Efficiency indicators of pig production in Hungary and in Europe

Denomination	Denmark	Germany	Hungary*	Hungary/ Denmark	Hungary/ Germany
Weaner, sow/year	22,0	18,6	15,8	72	85
Gain in weight, G/day	730	641	520	71	81
Feed conversion, kg/kg	2,9	3,0	3,7	128	123
Boneless meat, %	59,9	56,0	50,1	84	89

*Large-scale processing plants

Source: Published by Rabobank based on Baltay's data, 1999.

The **technical state** of the meat industry is heterogeneous. The large-scale processing plants meet the requirements of both the EU and USDA, these requirements have already been observed at their establishments.

Price competitiveness

We compared the producer's prices of the Hungarian meat sector to those of the European Union. By analysing the differences between the producer's prices of the slaughter cattle in Hungary and the Union it can be seen that - based on the averages of 1997-98 – the price of the Hungarian slaughter cattle is 70% of the price in the Union. Therefore, there is a 30 percent of gap between the Hungarian and the Union prices. It has to be noted that at the beginning of the nineties this difference was even larger. Since 1996 the prices have been getting closer to each other due to the decreasing prices in the Union (BSE disease) and to the just since then increasing Hungarian prices.

In the case of **slaughter pig** the values obtained are different if the Hungarian prices are compared to the average prices of the Union or to the prices of the largest, market determinant producers of the EU. Our opinion is that the latter can be considered more realistic as the prices of slaughter pig in the Union are very much scattered. Between the lowest price in Denmark and the highest price in Greece the difference is double, that is, 100 percent. By calculating the slaughter pig prices based on the data of October 2000 it can be stated that the price of slaughter pig in Hungary was 88-97 percent of the prices in the countries analysed.

Table 2

Price competitiveness of the Hungarian slaughter pig in relation to the EU

October 2000

Denomination	Germany	France	Netherlands	Denmark	Austria	Hungary
Price in national currency	2.98	9.50	3.05	10.24	20.85	353.50
Price in HUF	400.95	380.70	363.52	389.70	390.84	353.50
Hung. Price/EU price, %	88	93	97	91	89	100

Source: Calculations were based on the data published by Agrár Európa, 2000. in No. 12.

In the above table we can see that the Hungarian and EU prices are close to each other the price advantage of the Hungarian products compared to EU prices is minimal and this phenomenon could be seen since 1994.

Factors of the demand

The **domestic demand** of meat products dropped significantly in the nineties due to the declining standard of living, decreasing real incomes and unfavourable consumer preferences of red meat. The level of consumption – in particular in the case of beef and lamb – is much below the averages of the EU. In the EU the average consumption of pork is 43 kg/person/year and of beef is 20 kg while in Hungary this is 27 kg of pork and 4 kg of beef.

In the **export revenue** of the meat sector the products of the pig sector are dominating. The share of the Union in the export of the meat sector exceeds 50 percent and of beef and lamb this is extremely high, that is, about 88-97 percent. Even if Hungary is the largest pork supplier of the Union the quantity exported is not more than 40 thousand tones since the import from third countries is very small. It can be considered favourable that in the last two year Hungary succeeded to penetrate into new markets in Asia (in Korea and Japan), although where price competition with the USA is really fierce. The same refers to the Russian market, where the Hungarian prices have to compete with the low prices of the US products supported by export credit and of the EU supported by export subsidies. The fierce competition on the export markets results in a development in the direction of increased competitiveness.

Related and supporting sectors

The **integration relationships** between the preparatory phases of meat processing, that is, between fattening and feed production, are weak. The unpredictable purchasing relationships, the fluctuating quality and unregulated supply of raw material all increase inputs of the processors and this way weakens the competitiveness. Even at large-scale processor it is not a general practice to integrate the producers by transferring piglets to and supplying feed for them as it is the case in the poultry sector. Even the fluctuating purchasing prices deepen this unfavourable situation. Although there are some positive examples, such as Pick Szeged Rt., which is in, close integration relationships with the producers, who produce the majority of its raw material and provides guarantee for the loans of the small-scale producers.

In the USA in the second half of the nineties the practice of contracts of several years between fattening farmers and purchasers were spreading rapidly. In 1993 only 11 percent of the total number transactions were based on contracts while in 1999 it was already 59 percent (Martinez, 1999). The last chain-link in the vertical chain built on each other is the **trade**, where the production of the enterprises is realised. The concentration process of food trade in Hungary in the last few years was extremely rapid. The result of this was that the trade became price determinant and parallel to this process the meat processing **companies were forced to a position of price-accepting**. The food retail chain force such sales conditions to the meat processing plants, which strongly restrict their income productivity. It often happens that the apply deadlines of 60 or 120 days for the payments and thus stocks are often financed by the suppliers. The strength of the concentration varies. This can be illustrated by the fact that by considering the average of food industry the total domestic market share of the 10 largest companies is 22 percent while that of the 10 largest food chain stores is 53 percent (calculations of M. Szabó).

Similar to the other sectors of food industry also the meat industry had to adopt itself to the requirements of the food retail chain and had to include the costs of maintaining the relationships with the chains (shelf price, listing) in their budget. In additional to these supplementary costs the packaging, schedule of transportation and the development of the whole logistic system became also the tasks of the sector. During the last years the development of these could be experienced. The development was in particular significant in the fields of slicing and packaging.

Organisational structure of the enterprises, competition

The organisational structures of meat processing are bipolar. On one pole there are the large-scale companies, the revenues of which exceed the HUF 10 billion, while on the other there are the small-scale plants with revenues less than HUF 100 million. From among these the above-mentioned Pick Szeged Rt. is outstanding with its revenue of HUF 30 billion in 1999. From among the 300 meat processors 163 are small-scale plants, that is more than half of the processors can be classified as small-scale companies.

Market concentration of the meat industry can be considered as medium; the market share of the four largest enterprises is 55 percent. This does not endanger the competition; it even encourages it. Therefore, the market structure of meat industry can be considered good.

By approaching the date of Hungary's EU accession and by accessing the export markets it would be required to establish large-scale enterprises, which can be competitive both with the potential importers and chain stores.

By observing the large-scale enterprises it can be seen that the companies diversificate their products. The number of products generating higher incomes, and the output of processed products increased as well as new were improved. These tendencies indicate the intensification of the competitiveness, which will be much required after Hungary's EU accession.

Based on the above overview let us sum up the **competitive advantages and disadvantages** of the meat sector, which have to be taken into account and which disadvantages have to be eliminated in order to be competitive also after Hungary's EU accession.

Competitive advantages:

- central location in Europe
- the processed products brands are well-known on the West European markets
- penetration of the market segments of the Spanish meat market (serano bacon)
- the meat product supply is widening and modernising
- improving product quality and appearance
- fierce competition on the domestic market between the processing companies
- improving organisational structures
- large agricultural areas available
- domestic feed base
- well-operating animal-health system
- free of BSE disease
- the individual identification system were introduced in cattle breeding
- the large processing plants meet the requirements of the EU and USDA
- ISO and HACCP were introduced in the processing sector
- the conditions of the EUROP classification system are ensured

From among the competitive disadvantages let us emphasise the following:

- no harbour, long transportation distances from the Asian markets developing dynamically.
- depressed world prices, strong competition pressing down the prices generated by the USA
- stagnating red meat consumption in West Europe
- consumer preference to white meat
- price accepting position in export
- restrictions of export subsidies of the WTO agreement
- price pressing behaviour of the food retail chain
- animal stocks dropped below the critical level
- scattered stocks in all the three sectors
- dominating species of the livestock for milk production
- efficiency of the fattening phase is weak
- low level of vertical integration in pig keeping
- Hungary's pork price advantage in contrast to the EU disappeared
- high level of unused capacities in the meat processing
- a great number of enterprises are in weak financial situation
- capital supply is low
- environmental and hygiene investments are lacking at small-scale enterprises

By comparing the competitive advantages and disadvantages we can see that by considering only the numbers the problems are larger than the tasks performed. Furthermore, it is also obvious that the disadvantages are severe, the sector has to carry out a lot of tasks for ensuring the survival and the opportunities for the development. The opportunities of the sector concerning the demand are relatively limited both on the domestic market and the world market. The meat sector has to make large efforts due to the present market behaviour and for this aim efficiency improving investment programmes - in particular in the breeding phase but also at some processing plants - are required. The numerous problems of the agricultural phase are not to be delayed further.

2. Demand and supply tendencies following Hungary's EU membership

2.1. Change in the domestic demand after the EU accession

Hungary by becoming a member State of the EU will also be part of its Common Market. This position will bring about changes in numerous food industrial sectors. The question is what changes are to be expected in meat industry, consumption and external trade of meat products.

We tried to answer the questions on the survey on the consumption to be expected by analysing the consumer prices, the incomes, the total consumption and the consumer preferences.

In the previous paragraph we could see that the Hungarian producer prices of slaughter cattle are by 30 percent less than that of the large cattle breeding countries of the EU while for pork prices Hungary' competitive advantage shrunk to minimal.

By analysing the consumer prices of the two meat sectors a picture different from the above can be seen. As for both the beef and pork the differences are significantly larger between the consumer prices of the determinant EU countries and of Hungary than the differences between the producers prices of the two meat sectors. It can also be stated that the increase of the consumer prices between 1990-98 in France and Germany was minimal.

By analysing the consumer prices of Hungary and the EU we can state that the consumer price of beef striploin in Hungary is only one fourth of the most frequent retail price in the West European countries surveyed. In the case of pork this difference is not as large but is still significant. The price of the Hungarian carcass meat (leg and pork loin) is only half of the price paid by the consumers in France, Germany or Austria. As for the sliced ham the difference is 62 percent.

Table 3

Ratios of customer prices of the main meat products in Hungary and the EU

(Hungary/France, Germany, Austria, percent)

Meat product	France		Germany		Austria		Average of the 3 countries
	1968-88 average	1998	1996-98 average	1998	1996-98 average	1998	1996-98 average
Beef, striploin	21	21	28	29	31	32	27
Pork, leg without loin	-	-	54	55	48	48	51
Pork loin, with bones	52	53		47	49	48	49
Sliced ham	43	44	34	36	-	-	38

Source: Preise im Ausland, AMC, Köln, Statistiches Jahrbuch Österreiches, own calculations based on the data of the Hungarian Statistical Pocket Book of Food Industry

It can be seen that the differences between the consumer prices is much larger between the countries surveyed and Hungary than between their producer prices. It can also be stated that the proportions have hardly changed during the last years.

What are the causes, which can explain this development?

- Limited demand; that is, the difference between the GDPs per capita and the incomes is about four-fivefold.
- Some of the basic food industrial sectors made losses between 1995-98.
- It is probable that the whole sale and retail price margin in Hungary is still lower than in the West European countries.
- Chain stores are pressing down the prices.

What kind of changes in the consumer prices of pork can be expected in from the date of the EU accession and in the next few years?

Considering the producer prices of pork Hungary has already reached the prices of the largest producers of the EU; presumably no rapid price increase of producer prices can be expected. Rapid increase cannot be assumed in the field of consumer prices either due to the above causes, which will influence the price development also during the time of Hungary's EU membership. Price and income sensitivity of pork consumption is high. This was shown by both the representative surveys of the consumption and the mathematical- statistical calculations. If the prices are rising rapidly a part of the consumers will abandon buying pork. By considering the price increase of pork, which has happened also recently, up to the EU accession in real values a 10-15 percent price increase can be expected and our opinion is

that accession will not induce a sudden price increase either. Even after 5-6 year following the accession Hungary will not reach the German or the Austrian consumer prices.

In the forthcoming years a real income rise of 3.5-4 percent can be expected in Hungary, the consumption increase will, however, be lagging behind. Based on the prognosis of Pénzügykutató Rt. in 2002 the final consumption increase of 3.5 percent, in 2003 of 3 percent and in 2004 of 3.4 percent can be expected. These tendencies are advantageous for the consumption of the income sensitive food products, such as pork and cattle.

The resultant force of the contradictory effects will determine the levels of pork and beef consumption to be expected at the time of the accession and after that. It is assumed that in spite of the extremely low level of beef consumption it will shrink further due to the BSE disease and then will increase to some slight extent. Only a slight increase of pork consumption can be expected induced by the future real income increase and the demand transferred form beef to pork and poultry. In 2003 pork consumption in Hungary is expected to be 28-29 kg/head, while beef consumption by 2005 will presumably be 3.5-4 kg/ head. In the first year of Hungary's EU membership pork consumption might reach 30-31 kg/head; that of beef consumption 4-5 kg/head. These volumes will still be below the EU averages of red meat consumption. It has to be noted, however, that the poultry meat consumption of Hungary is much above the EU average and it will increase further in the future.

2.2. Tendencies to be expected after the EU accession

We will sum up the external trade of the world and of the EU of meat products to be expected by 2005 based on the mid-term forecasts of the various prognoses preparing institutes (USDA, FAPRI, OECD, EU DG VI). Our opinion is that it would be difficult to judge what kind of tendencies can be expected in the external trade of Hungary after its EU accession.

The prognoses prepared for **beef** production and trade – with the exception of one – were prepared before the BSE disease. Therefore, cannot be accepted without reservation. Anyhow it is interesting that consumption decease was predicted for the developed countries (also for the EU) even without the BSE disease; demand increase was only expected in Asia and South America. The Asian and Russian import will be determinant. The import of Japan will be an enormous quantity. By 2005 it will exceed 1.1 billion tones. The import of Korea and Russia is expected to be about 300 thousand tones each (data of USDA).

Since most part of the Hungarian beef export is transported to the Union. It is favourable sign for Hungary that the import of the Union is expected to be high, that is 380 thousand tones per year. The question is whether this demand will be imported from the East-European region or from Latin America where the mouth and foot disease could successfully be eradicated. Unfortunately, concerning the BSE Hungary was classified by the EU as a country of medium endangered (in spite of the fact that in Hungary the disease was not identified). This is not really a positive outlook for the Hungarian beef export. In order to certify the origin monitoring and labelling will become more important because of the BSE disease.

Contrary to the hectic market development of the last few years institutes preparing prognoses expect on mid-term more balanced and favourable pork markets. In spite of this

pork price will only slightly increase due to the fierce competition with the poultry meat, to the increasing supply and the continuously increasing productivity.

Concerning the pork production of the world a increase smaller than that of the nineties is expected. China will produce 70 percent of the production increase, the production of the other regions will rise only to a slight extent. Pork consumption of the developed countries will hardly rise due to the strong competitiveness of poultry meat and to the modest income rise. This slight increase will be compensated by the rapid consumption of South America. In the world in total **between 2000-2007 400-500 thousand tones of pork export surplus can be expected**. This corresponds to a 17-23 percent increase. Similar to poultry, the regions having a dynamic effect on the development of trade will be Asia and Russia.
Prognoses call the attention to the **competition of productivity** started in the **USA** a few years ago. Behind the pork export boom of the US there are the developments both underway and implemented already. These enormous plants (with livestock of 100 thousand) by industrial production processes and with high efficiency produce the pigs. The laws of animal and environmental protection make this possible. South America will soon catch up with the USA. The main characteristics of the South American pork sector are the following: significant restructuration, strengthening concentration and vertical integration as well as the cheap feed.

In the future a slight increase of the pork production of the **European Union** can be expected which will become in contrast to the previous years a demand-oriented sector. The pork import of the Union is the smallest among the other types of meat. In 1999 it was only 55 thousand tones. This volume will increase by 2005 up to 75 thousand tones at the least according to the prognoses. The 20 thousand tones of import increase will not offer great opportunities for market expansions.

It might be important for us to know what can be expected in the pork production of **Central and Eastern Europe**. According to the Agricultural Directorate General of the European Union by 2003 the total production of the 10 countries will exceed the consumption by 300 thousand tones, in contrast to the 170 thousand surpluses of 1997. Two third of the export surplus will be produced by Poland, while the net export of Hungary is forecasted to reach 110 thousand tones. **Slovenia together with all the three Baltic countries and Romania will remain in the position of importing,** however, with smaller quantities.

The future export of the Hungarian pig sector might be influenced after the EU accession by the following factors:

Factors facilitating the export after the EU accession

- participation in the export subsidies of the EU
- import of the EU will a bit increase
- no tariffs in the Union (the present tariff free quota is 40 thousand tones)
- the Russian market will still require the import
- meat product purchase of Ukraine can be expected
- Romanian and Southern Slav markets will need the import
- Asian market will need increasing imports
- In contrast to several EU Member States the environment in Hungary can still be loaded

- livestock is free of the main diseases
- domestic feed base

Factors limiting the export:

- large subsidies are required in contrast to the WTO quotas
- the consumption increase of the Union will only be minimal, mainly in the southern states
- the finished products (produces) market of the Union is saturated.
- on the market of the Union also the Polish exporters might appear
- on the markets of Russia and Asia the price competition of the USA and Canada is very strong
- probably new competitive exporters from South America
- stabilising prices - even if lower than the world market prices
- the present competitive disadvantages of the sector in the production and processing

We think that by weighing the pros and cons of the above factors then the impacts will compensate each other. **We cannot expect increasing exports. By summarising, we can rather take into consideration a shrinking meat and meat product export in the first years of Hungary's EU membership** unless concerning efficiency and productivity. There would be a significant progress.

Hungary as a Member State of the Union will be entitled to the export subsidies of the EU, however, we have to take into account that the export subsidies of the EU accounts for only one third of its total export, that is 402 thousand tones. Thus export subsidy is only provided to each third tones of pork. If no significant efficiency improvement is implemented in the sector and without subsidies the Hungarian meat sector could be endangered.

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Rural development program in the European Union

by Krisztina Miskó

Abstract

The goal of this brief overview is to show what are the opportunities offered by the LEADER Community Initiative Programme of the European Union and what kind of opportunities are provided by the programme for Hungary. Furthermore, by presenting a calculation it shows the estimations of the resources expected to be available for Hungary. However, it has to be noted that the calculation can be performed in several ways. Therefore, by making the amount known Hungary we would like only to show the magnitude of the subsidies to be expected for Hungary in the frame of the LEADER programme.

Key words

European Union, regional development, rural development, Community initiatives, Leader programme

Introduction

Hungary is not yet a Member State of the European Union but the date of the accession is getting more and more concrete. At the same time this means that by becoming a Member State Hungary would like to acquire as much of the resources available as possible. This refers also to the resources of rural development; however, the condition is, to collect detailed information on the rural development policy and subsidy schemes of the Union. Therefore, Hungary has to prepare now for the reception of the resources to be expected and the institutional and technical background required has to be established. The problems with the management of the SAPARD programme are lessons to be learned – the financial conditions of co-financing has to be established and last but not least the rural population has to be prepared for making use of the resources available in theory.

The characteristics of the present regional development policy of the European Union

The regional and rural development policy of the European Union is under permanent transformation, and the period between 2000-2006 is a new phase of it. The primary objective of the regional policy – to reduce the development differences between regions, provide opportunities for the development of the undeveloped regions – remains the same but the system of objectives and means has changed. Structural Funds – its role is to finance the reduction of regional differences – have a budget of 194 billion Euro in the present programming period that can be distributed among regions to which the development objectives refer to based on the regulations.

Concerning the operation of the Funds it is a significant change that the number of the Community Initiatives (local initiatives, from below) has decreased from the former thirteen to four. *From the point of view of rural development the most important programme from among them is the LEADER+*[22] *programme* with a budget of 2.02 billion Euro. Concerning the share of the LEADER assistance it is not a great amount since it accounts only for 1% of the Structural Funds. The three other programmes are the following. The *INTERREG* reaching across the borders, providing financing for programmes between nations and regions (with a budget of 4875 million Euro); the *EQUAL* that fights against the existing discrimination on the labour market (with a budget of 2847 million Euro) and *URBAN* that supports the local initiatives of urban regions in crisis (with resources of 700 million Euro).

[22] This abbreviation comes from the French title of the programme: Liasion Entre Action pour le Develeopment de l'Economie Rurale. The English form: Link between actions for the development of the rural economy. The current LEADER, which can be considered as the continuation of the previous programmes, is called LEADER III or LEADER +.

LEADER programme as rural development possibility

The new LEADER programme, like the others before, supports rural development and it is worth considering because after becoming an EU Member State Hungary will also get this assistance. The success of the programme is proved by the fact that this programme has been approved as a Community Initiative for three programming periods. The programme was launched in 1991 under the name of LEADER I, its resource was only 400 million ECU then. In the next programming period LEADER II had already increased resources of 1.7 billion ECUs while the current programme has a budget of 2.02 billion Euro.

Significance of the programme

The basis of the LEADER is the promotion of *local initiatives*. It is based on the fact that the resources, possibilities and disadvantages of a certain area (settlement, group of settlements, sub-region) are best known by the residents themselves living there. If local communities recognise their social, economic and environmental problems and propose ideas that mean the first step – the preparation of the project - for the solution of the difficulties then also the continuation is promising. Thus LEADER supports initiatives and projects for the solution of concrete local problems the idea of which comes from people, groups, collectives and enterprises of that given area. Of course, they have to fit, on one hand, into the local development plans and, on the other hand, into the objectives set out in the national rural development plan.

General objectives of the LEADER programme:

- to diversify local economy by innovative projects,
- to strengthen the local and regional interactions and relations, and
- to intensify the relation and co-operation between local participants (residents, enterprises and other organisations).

Decentralisation of great degree is characteristic for the operation of the LEADER. The management is primarily the task of the responsible Ministries of the Member States Thus probably the Ministry of Agriculture and Rural Development would be responsible for the programme in Hungary. The primarily task is the co-ordination of programmes since programmes function in an autonomous way. It has to be noted as a lesson to be learnt that not each country could prepare a national LEADER programme by the end of the first year of the programming period. Therefore, not everyone could grasp the opportunity of this assistance in the first year. It is important for Hungary since it is not yet a Member State and, therefore, apart from the resources relating to Pre-Accession Funds it has no experience in the preparation of programmes for EU resources. Moreover, the institutional background required could not be established yet either.

Characteristics of the LEADER+ programme

LEADER+ programme differs in some points from the former ones. The first such difference is that financing used to be provided by three funds (EAGGF, ERDF and ESF) up to now while the new programme is financed only by the Orientation part of EAGGF. The second significant difference is that it can be applied not only for regions under objective 1 and 5b. (as LEADER I and II) but to every rural region where the number of population is between 10,000 and 100,000 capita and the density of population is less than 120 capita/km^2. The group of final beneficiaries has been modified too because also collective implementers could obtain assistance in the framework of LEADER II but in the new programme local action-groups can again be supported. Member States had to prepare their LEADER+ programme within 6 months starting from the date of publication of the decree regulating the programme, broken down to the period of seven-years. If Hungary becomes a Member State it will also have to prepare a similar programme that will probably require long time due to lacking practice unless some preparations will be made in the meantime.

Measures assisted in LEADER+ programme:

Measure 1: Integrated rural development strategies of pilot nature based on horizontal associations built upwards from below

Those rural areas can expect assistance that plan and can implement an **integrated**, **economically sustainable and innovative development plan.** This plan has to be jointly elaborated by an association well representing the local society focussing on the solution of a well-articulated local problem.

The priorities at European level are as follows:

- application of **new methods and new technologies** for developing products and services in order to become **more competitive**;
- **improving the quality life** in rural areas;
- **increasing the value added of local products** supporting in particular the products of small producing units in the market access;
- making use of **natural and cultural resources** with special regard to increasing the value of areas selected in the framework of NATURA 2000 programme of the Commission.

The Member States can extend the list of selected priorities and the target-groups by taking into consideration their specific situation.

The Commission would like to provide special assistance to those development projects aiming at **creating new jobs** or ensuring alternative activities **for women and young people**.

Measure 2: Assistance for inter-regional and international co-operation

LEADER+ supports co-operation **within the Member State** (inter-regional co-operation) and co-operation between **different Member States** (international co-operation) and (and/or) third country as well.

The aim of co-operation can be not only the **passing of experience** but also the joint implementation of joint projects as well. If it is possible the implementation of **programmes in one joint organisation** has to be aimed at.

The followings have to be taken into consideration during the co-operations:

In the case of inter-regional co-operation:
Commission co-financing is available only for the selected operational target areas of LEADER+.

In the case of international co-operation:
In the international co-operation at least two Local Action-Groups can take part. They have to be located in two different countries of the Union. Organisations of the European rural regions can also take part, which were established in compliance with the LEADER principles.

Measure 3: Establishing networking of all rural areas in the whole area of the European Union

LEADER groups are part of a domestic and international network and it provides that everyone can get information on the projects supported by LEADER, with the results and those who are interested can get ideas from them.

Based on the projects studied it can be stated that assistance can be obtained for almost every kind of topic, idea that contributes to increasing the economic activity – such as tourism, handicraft, services, processing industry or agricultural production – and for the implementation or development of many other production-servicing activities. The rate of assistance depends on the activity. Approximately 50% of assistance were spent on diversifying the economy and the development of rural-tourism. In the case of these activities the rate of community assistance varied between 30% and 60%. Assistance of 100% was granted very rarely, in most cases only for technical assistance or for the production of publications disseminating the results and distributing them without any business purpose, or for programmes organised with similar purposes. It is a general experience that LEADER stimulates the mobilisation of

local resources since each unit of EU assistance can mobilise at least one and a half or rather two units of the local resources for the implementation of the planned programmes.

Types of projects studied:

Projects relating to training:

Establishment of training centre; organisation of training for the maintenance of diving equipment; establishment of information technology and enterprise simulation centre; computer training for the entrepreneurs of the village; establishment of food industry training centre; training for bio-sugar beet producers; training centre for unskilled young people.

Community developing projects

Programmes for promoting the personal developing and community integration of women; general community developing training and practising; awareness forming of people living in villages; launching of local newspaper, radio; establishment of sport and leisure time centre; establishment of community house; organisation of programmes, events and competitions.

Projects supporting producing, farming

Osier production and basket-work; product innovation; production of bio-paste and bio-noodles; growing of narcissus tuber; promotion of market access of (local) products; home-made cheese production; establishment of „eco-farm"; production of dried fruit; production of gifts typical to the region.

Projects supporting rural-tourism

Creation of internet web-site for selling and popularising folk-music; establishment of art and cultural centre; utilisation of small lakes for tourism; creation of signed walk and bicycle routes; creation of information-points; renovation of country-houses characteristic to the region; guide training; archaeological excavation; construction of lodgings.

Other, value-protecting projects

Environment protection, forestation, „re-utilisation" investments, utilisation of waste water, establishment of a network operated by solar energy and providing hot water, biological sewage treatment, treatment of pig semi-liquid manure, landscape rehabilitation programme.

As the above listed projects show the range of assisted projects is colourful and based on the experience it can be stated that those projects that are properly elaborated and fit into the development plan prepared by the local action-group can apply for assistance with good chance.

The contribution of the funds to the resources varies also at the level of the Member States. The structure of the resources of assistance of a certain programme depends on the type of the programme, in other words what will be implemented in the framework of the programme. Hungary can obtain assistance from the Union not only for projects but also for the establishment of the LEADER network - which is mandatory - mainly for establishing the technical background.

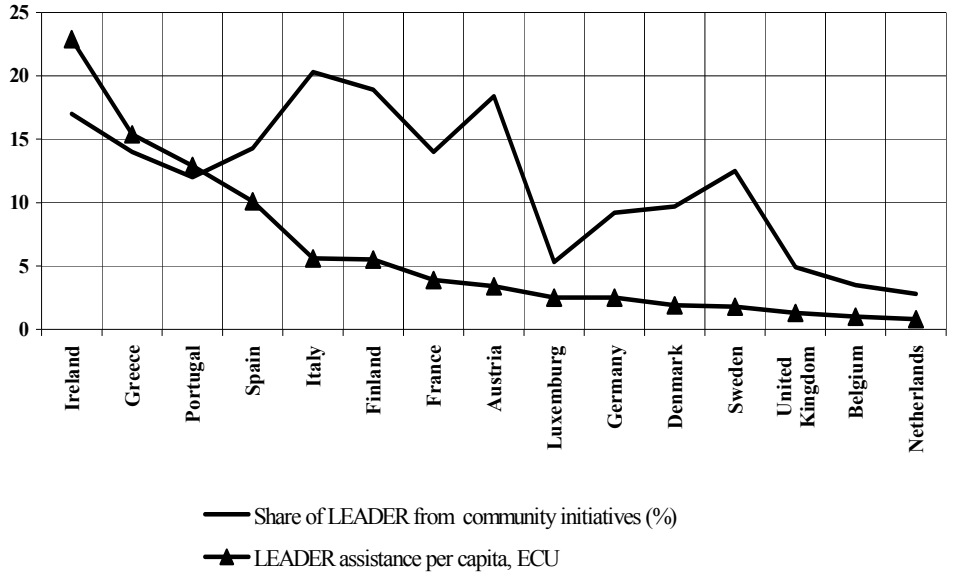
Expected amount of LEADER resources

Table 1 shows the specific amount of the LEADER assistance, it clearly shows that those three countries (Ireland, Greece and Portugal), that belong to the target area category 1 and Spain are on the top based on the assistance per capita.

Figure 1

Specific assistance under LEADER II

(1994 - 1999)



If the total resources of LEADER are divided by the number of rural population then 18.3 ECU (app. 760 HUF) is the share of each rural resident of one programming period. Table 1 and 2 indicate the summary of the characteristics of the LEADER resources in order to draw the conclusions - that can only be considered as estimates - for Hungary.

Table 1

LEADER assistance in the programming period between 1994 and 1999

Total	Amount of LEADER assistance
	in Euro
Amount of assistance:	1700 million
Per capita	4.6
Per capita and per year	0.8
Per rural resident	18.3
Per rural resident and per year	3.1
	in HUF
Per capita	1144
Per capita and per year	191
Per rural resident	4575
Per rural resident and per year	763

Table 1 shows the value of LEADER assistance per capita based on the total population and the number of rural population respectively.

Table 2

Assistance calculated for Hungary

	million Euro
On the basis of assistance per capita	8.1
Based on the assistance per rural resident	12.8
	million HUF
Based on the assistance per capita	1.9
Based on the assistance per rural resident	3.1

What kind of LEADER assistance might Hungary expect as a Member State?

Table 2 shows a calculated sum that indicates the amount of LEADER II assistance that Hungary would obtain if it were a Member State under the following conditions:

- all our regions would belong to objective 1,
- the population of Hungary is 10,135.4 thousand people,
- the rural population of Hungary (number of people living in settlements under 10 thousand people) is 4,127,699 people.

According to the calculations Hungary could expect 8.1-12.8 million euro LEADER assistance annually that is app. 1.9-3.1 billion HUF (calculating with the rate of exchange of 250 HUF/EUR) and it could be increased taking into consideration the conditions of LEADER+. It is, of course, only a calculation that can be made based on another method as well but it can be seen that it is a significant amount that is worth considering. However, it has to be clear that the solution of the rural development problems cannot be expected from solely this assistance.

Way of distribution of the assistance

It has to be noted that probably not every area of the country will have the same share of the assistance of the LEADER programme. Since the so-called Local Action Groups (LAG) will receive the assistance that cover the population of a certain area (max. 100,000 people) being uniform from a certain point of view. The development project submitted by them has to be prepared in compliance with the characteristics of the area covered. Therefore, also in Hungary attention will have to be paid to that during the preparation of the projects those problems will have to be targeted that are the most important from the point of view of the given area.

But this does not mean that the amount of the assistance will have any kind of project. It is required that the people living in the given area propose project ideas, developments. At the beginning of the programme it was a serious problem in many countries. The assistance could not be used for a long time because the final beneficiaries did not submitted tenders or those that were submitted were not in compliance with the philosophical principles of the LEADER programme. From among them two principles – partnership and innovation - are worth considering since problems can rise relating to their satisfaction or utilisation in Hungary that primarily originate from the lacking practice in Hungary.

The fact that the different assistance in Hungary are centralised, directed “from above” is relating to the above-mentioned fact. Therefore, the Hungarian population has to be familiar with and prepared to the characteristics of the programme. It means the wide clarification of partnership – that is the union of separate sectors, entrepreneur, civil and municipality sectors - that is so successfully applied in the European Union. Furthermore, it is very important that not only one person would profit at the given area from the implementation of the project but also it should widely familiarise the project and its innovative elements. The final beneficiaries will not be able to meet the requirements of the programme without the successful application of these elements.

It can be stated that the success of utilisation of the assistance for the development of a given area depends on the aptness of tenderers (who can be private persons, farmers, enterprises, communities, etc.) that is the population of the given area. It is clear that this will only be successful if the concerned people can look beyond their own interests and can recognise and combine the managing and development of themselves with the development of their own settlement. For this purpose it is needed that the people concerned in the future can already now get familiar with the programme itself and its characteristics.

Becoming familiar with the practice of several countries it can be stated that the structure of the LEADER groups varies by countries and even within the same country permitted by the regulation of LEADER. Since it only determines the framework of the programme and every country can be flexible in planning within the framework based on its own characteristics. The structure of and the issues that would be expedient for the LEADER groups expected to function in Hungary will primarily depend on the different development organisations, region-development associations, enterprise-development funds, etc operating in Hungary. It can be stated that in general there is a managing board in every group that takes decisions, different professional committees assist this and there are development offices in operation that carry out the actual daily work. The issue that which group will be expedient and effective in Hungary depends on the area and the different development organisations existing there already. Independently from them the organisational structure of the LEADER group can be established. However, it has to be taken into consideration that the group has to meet the strict requirements and accountancy related to the application for EU assistance. Therefore, it is worth considering already now what kind of possibilities will be offered for Hungary to implement such programmes successfully and effectively.

Our tasks in the preparations for the reception of sources

The resources will become available also for Hungary from the moment of accession and Hungary can get assistance from LEADER. It is already sure that not every area, community will receive assistance of the same degree. The more apt communities, farmers, organisations, the more resolute programme-makers can obtain higher amounts. But these differences can be reduced by the appropriate information and preparation of the people concerned and then the assistance will effectively contribute to decreasing regional differences.

However, it has to be emphasised that rural development sources are not sufficient even if additional national assistance is provided for reducing the rural under-development significantly. This can only be imagined if developments (investment, supporting small and medium size enterprises, development of infrastructure, health, education, etc.) concerning small-settlements have priority in the regional and national programmes.

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Annex 1

DEVELOPMENT OF THE LEADER PROGRAMME

DENOMINA-TION	LEADER I	LEADER I
PERIOD	**1991-1993**	**1994-1999**
RESOURCES	**400 million ECU**	**1.7 billion ECU**
FUND	**EAGGF - ERDF - ESA**	**EAGGF - ERDF - ESA**
BENEFICI-ARIES	**GOVERNMENTAL, PRIVATE AND MIXED ORGANIZATIONS (LOCAL ACTION-GROUPS)**	**GOVERNMENTAL, PRIVA ORGANIZATIONS** (LOCAL ACTION-GRO GOVERNMENTAL OR ORGANIZATIONS **(COLLECTIVE EXECUTO**
AREAS	**AREAS UNDER OBJECTIVE 1 AND 5b POPULATION: 5,000-100,000 PEOPLE**	**AREAS OF OBJECTIVE 1 POPULATION LESS THAN PEOPLE**

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The State of Agricultural Land Ownership based on the Research of Harta and Szakmár Villages

Abstract

This study is the summary of the results of the research carried out in Harta and Szakmár villages in the first half-year of 2000 by the researchers of the Research and Information Institute for Agricultural Economics commissioned by the Budapest Office of the FAO.

The compensation process affected the landed property and farm structure intended to 'remedy' previous aggressive interventions and deprivations of rights led to an ownership transformation, which, despite its more or less consistently formulated aim, became an obstacle rather than an initiator of private farming.

In several settlements the people concerned have decided to maintain common land usage and the co-operative framework for the cultivation of land. These are the co-operatives which are mostly able to provide suitable production (related to farming) as well as marketing and warehousing services for individual farmers.

Replacing the co-operatives, which had ceased to exist or were liquidated in later years, usually few viable-sized and a large number of small economic units based on small property were established. The lack of enterprises providing suitable services is a real blow for the mostly elderly individual farmers. They, in accordance with modern requirements, are not able to cultivate their lands privately although, in most cases, strongly dependent on private land usage.

The process of the concentration of landed property and the joining of the large number of mainly small plots cannot be expected to accelerate until the market of landed property has its realistic buyer's prices, and until the smallholders depend on the additional income comes from the agriculture.

The two settlements selected to be the field of detailed analyses have run significantly different paths concerning economic development particularly the structural transformation of agriculture in the past 10 years. This different development gave the possibility for very interesting comparison during the research.

Key words

compensation, landed property, land ownership, land usage, farm structure, rural population, multifunctionality

Introduction

This study is summary of the results of our research carried out in the first half-year of 2000.We are grateful for the generous assistance, warm and friendly reception we were given for the preparation of our study during our visits, discussions and time-consuming data-surveys.

Initial conditions

In Hungary at the beginning of the 1990s an **ownership transformation strongly neglecting economic interests and considerations took place in agriculture,** based essentially on political considerations. In the course of the transformation partly a compensation procedure supposed to remedy ownership grievances, partly the transformation of large farms in accordance with ownership and legal forms were accomplished. The lengthy transformation process unfolded in its integrity in 1992, in a period heavily burdened by economic crisis, following several justified compromises as well as ones driven by particular interests. The relative overproduction due to the loss of markets has opened wide the gap between prices of agricultural and industrial products, which still results in permanent income withdrawal.

Basic structural changes partially permitted by law earlier took place in the course of the compulsory ownership and organisational transformation only, due to the disinterest and indifference of those concerned – which is understandable considering the lack of clear vision concerning the future. These basic structural changes can be briefly summarized as follows:

1. Ownership grievances, especially those concerning land ownership were supposed to be remedied by **compensation,** in the course of which all those who were entitled to ownership compensation or owned compensation vouchers (state-issued securities) were able to obtain land ownership in degressive value, each owner within a maximum value and in an indirect way (by issuing compensation vouchers), in the framework of an auctioning system. This group of people obtained lands at auctions the size of which was determined by that of their previous land, local interest (demand), and the land fund available for compensation. These lands were very different depending on the region and time of the auction and even smaller than previously due to inheritance.

2. Still **in the framework of the compensation** the members of co-operatives owning less than 30 golden Crowns[23] were permitted to supplement their lands up to 30 golden Crowns and the employees of large agricultural farms up to 20 golden Crowns. It was mainly this compensation method and principle that resulted in the establishment of the large number of small plots.

3. Owners and their heirs were permitted to **take possession of** lands, which had always been in their possession formally (for which large farms using the land paid rent to the owner the amount of which was close to today's prices). The size of these lands depended on the size of the former ownership.

4. A special form of land acquisition was the **distribution of land funds** available at those large co-operatives where the above mentioned first two legal titles even together had not utilised the available land fund. (The first ones obtaining land from the total land area were those who had always remained owners according to registers as well.)

The major source of compensational land funds was the **common and impartible landed property of the co-operatives.** And from 1967 this originated from lands given by the state into co-operative ownership without recompense or for a mere symbolic amount or

[23] The golden Crown is a number, which values the quality of land. In Hungary the golden Crown system serves as a basis for the unified land registration of different quality and size.

from making land ownership dependent on agricultural activities or from the forced sale of those unable to meet this requirement.

From the total land area managed by co-operatives about **36% returned directly to their owners,** 61% was common and 3% in state ownership. It was especially the land in common ownership (and state-owned lands only in smaller proportions) that was distributed in the compensation process based on legislative decision. From this common property of the members 53% was obtained by those 'originally compensated' (in point 1), 24% was given to smallholders supplemented to 30 and 20 golden Crowns, while the remaining 22% was distributed among all of the co-operative members and this distribution took place in accordance with the principles of distribution (different in the case of different co-operatives) of the total property besides land. The 'leftover land' also resulted in very strongly differentiated sizes, but characteristically slight ownership ratios.

As a final result, the compensation process intended to 'remedy' previous aggressive interventions and deprivations of rights led to an ownership transformation, which, despite its more or less consistently formulated aim, **became an obstacle rather than an initiator of private farming.** Two aspects deserve special attention:

In several settlements and agricultural co-operatives the people concerned have decided to maintain common land usage and the co-operative framework for the cultivation of land strongly differential in size. These are the co-operatives which are able to provide suitable production (related to farming) as well as marketing and warehousing services for individual farmers and those farming at their own risk (besides a very small number of private entrepreneurs).

Replacing the co-operatives, which had ceased to exist or were liquidated in later years, usually few viable-sized and a large number of small economic units based on small property were established. The latter can in no way meet the requirements of profitability, on the other hand provide their owners with vital income supplement and not negligible social and moral holdfast. For them the lack of enterprises providing suitable services is a real blow, and their situation, due to their decreasing physical strength as well as their obsolete and incomplete machinery, is worsening rather than improving.

A significant proportion of the land was obtained by not local heirs and mainly local owners, the majority of whom are pensioners. They, in accordance with modern requirements, **are not able** to cultivate their lands privately **although, in most cases, strongly dependent** on private land usage. The process of the concentration of landed property and the joining of the large number of mainly small plots **cannot be expected to accelerate until** the market of landed property has its realistic **buyer's prices** higher than today, which can only be reached by reducing restrictions, and until the **dependence of smallholders decreases** due to the possibility to subsist on incomes from the main occupation as well as to the improvement of the social provision of pensioners. An impending danger is, however, that the bigger parts of private producers do not acquire pensionability due to forced and unreasonable thriftiness, and in this way the necessity of supplementary incomes and subsistence farming will not decrease in the future either.

The economic and social situation of the studied settlements

The two settlements selected to be the field of detailed analyses are situated close to each other, there are significant similarities in their natural potentials, but in the past 10 years they have run significantly different paths concerning economic development particularly the structural transformation of agriculture. Determinant factors in their selection for study were that we found unconditional willingness to cooperate in the side of local authorities in both settlements and, on the other hand, past and near future promised to be analysable in real rural surroundings with strong agrarian orientation.

Harta

The population of **Harta** is approximately 3.8 thousand people, its total area is 13.0 thousand hectares. The settlement has a well-developed infrastructure (water conduit, sewage system, gas pipes, telephone network, cable television etc.). The population is slightly decreasing. The number of homes is stagnating or slowly increasing (26 new homes were built in 1970, 41 in 1980, 13 in 1990 and 2 in 1998.) The network of shops has rapidly widened in the past decade: after 1990 the number of shops grew from 21 to 68, and reduced to 57 by 1998. In the village there are 15 catering units, several places of accommodation and camp-sites. On the bank of the Danube, on the island rehabilitated and receiving nature protection in the past years tourism is beginning to develop.

In the economic life of the village the Erdei Ferenc Co-operative providing 500 workplaces and the Agro Harta Joint Stock Company providing 85 workplaces play an important role. Besides these there are several smaller and bigger industrial and commercial enterprises (altogether 245 in 1998, of which 1 joint stock company, 2 co-operatives, 42 limited companies, 44 deposit partnerships and 152 private enterprises). Many people have workplaces in the neighbouring settlements, but a large number come to work here from elsewhere. 42 people, 1.1% of the population received income supplementary benefit given to the unemployed in 1998.

The number of private farmers is insignificant in agriculture. Characteristically they cultivate larger lands in the intensive sectors (vegetable and fruit production). The overwhelming majority of land owners either leases out or, in the frame of a special, locally developed contract system, has his land cultivated by the two large co-operatives. The cultivation of small-sized, subsistence gardens as well as vine and fruit growing are traditionally characteristic.

In the fact that in Harta neither transformation losses became unbearable, nor the conversion of the structure of the farm and corporate system resulted in irrecoverable damage similar to the ones at national level or in the case of the other studied settlement, the ownership reform started in due course played a determinant role. Few settlements grasped the opportunity, which was permitted by law since 1987 already, that is, members were permitted to take direct possession of half of the formerly impartible co-operative property and to be free to dispose of land ownership, formerly subject to compulsory delivery into common usage. Moreover, the fact that common and impartible land was allowed to be transferred into private ownership, was only realized by co-operative members and management in a mere 1-2 settlements. Here in both co-operatives the majority of common arable land was bought by the members (its size depending on the years spent in the co-operative) in 1998, which gave them enormous advantages:

- anomalies inherent in compensation such as the subdivision of plots, land purchases by strangers, taking advantage by those in key positions etc. did not take place;
- land was mainly acquired by those living on agriculture or having retired from agriculture.

After the transformation the two co-operatives have run different courses. The Erdei Ferenc Co-operative can be characterised by:

- traditional co-operative way of thinking, involving efforts towards social welfare, in some cases even neglecting economic considerations,
- stronger corporate spirit and inclination to preserve employment opportunities, due to which almost half of the former workplaces were maintained,
- the survival of the diverse production structure, reliance on several activities, including the operation of a shoe factory employing 150 people, providing the local female workforce with income opportunities,
- the cultivation of the members' and outsiders' lands in the framework of leasing contracts mainly.

Characteristic features of Agro Harta Joint Stock Company:

- economic rationality involving all aspects,
- strictly simplified production structure concentrating purely on arable lands, which had already been established before the change of regime practically,
- land owners have their lands cultivated in the framework of a cultivation contract system (this amounts to nearly 80% of the area and only the rest is fixed lease),
- the predominance of profit-oriented entrepreneurial spirit.

The joint stock company was established in 1999 out of the co-operative, with the participation of 92% of the members, primarily to prevent strengthening political pressure.

The population of **Harta** is generally well-informed and has a direct and thorough international outlook, owing to the fact that the majority of the population are ancestors of one-time German-speaking settlers and have permanently been in touch with the relatives living in Germany, as well as to the fact that the initially involuntary, later conscious acceptance of the minority role has led to more thoughtful decisions than average. This is characteristic of the selection of leaders as well as of the former (integrated small-scale production) and present (the system of cultivation contracts) forms of organization and cooperation characteristic in agriculture. The village is keeping its traditions alive, its museum of local history is well-known, they are planning to develop it significantly.

In our opinion a reasonable agricultural farm structure has developed in the village. Conditions of permeability between large-scale and private farming are given, owners' decisions are mainly induced by rationality (or, sometimes, by emotional motives) instead of force. All local conditions of professional land cultivation to the benefit of land owners exist, therefore, the future mainly depends on general agricultural policy. In connection with this, the local population expresses a great deal of scepticism, but tries to make complete use of all legal opportunities involved in the present system (e.g. preferences granted to small enterprises). The local authority – due, primarily, to its own and former initiative as well – is able to plan further developments on strong basis. However, its basic problem is that it has few means to keep home younger and ambitious experts, the local youth.

Szakmár

Szakmár is smaller than the former, with an area of 7.5 thousand hectares and a population of 1.5 thousand people. It is characterised by a specific form of settlement called 'szállás', closed outskirt settlements earlier involving the majority of the population. Their number has decreased from the former 25 to 5-6 at present. They are shrinking permanently leaving several deserted and empty houses behind. The village is old (700 years old) with a Hungarian population. Its agricultural co-operative which had functioned well formerly, underwent strong economic deterioration by the beginning of the 1990s. It was broken up into several parts and later the common agricultural plant was wound up. Natural potentials for agriculture are weak and average, the ratio of low and watery lands is high.

The number of the population had been decreasing permanently and significantly until 1999, the natural increase is negative. The number of homes is stagnating or, mainly in the outskirt settlements, decreasing (6 homes were built in 1970, 13 in 1980, 3 in 1990 and 0 in 1998). The village is well supplied with infrastructure. Even the outskirt settlements have electricity and long-distance bus service, the village is supplied with telephone network, water conduit and gas pipes. The building of the sewage system started in June 2000 with the cooperation of several villages. The number of shops grew from 11 to 20 after 1990, later it decreased to 16. There are 3 catering units.

The former large agricultural farm made several, but only partly successful attempts to employ the large number of local workforce, partly in livestock farming, partly by setting up different industrial activities. Large-scale livestock farming was completely liquidated (excluding the fish pond functioning as a limited company and providing 9 workplaces), from among industrial enterprises an iron-foundry (in co-operative form), a galvanizing plant and a commercial-logistic enterprise (as a limited company.) are still functioning. In the field of agriculture a plant established to harvest, clean, dry, warehouse and market cereals and oil-seeds has proved to be a viable enterprise functioning as a limited company. Two private farms properly cultivating larger fields and about 8-10 smaller, full-time private farmers work in the area of the village. The majority of the area is cultivated on small-scale by part-time farmers (among them a large proportion of pensioners) with obsolete means of production, usually at low standard or, lacking other employment opportunities, in full-time by involuntary former co-operative members. In 1998 there were 90 functioning enterprises **in Szakmár,** out of which two were co-operatives, 14 limited companies, 6 deposit partnerships and 68 private enterprises. Many people from the village work in Kalocsa, a town 8 km from Szakmár. In 1998 50 unemployed people received income supplementary benefit (3.4% of the population).

The situation and the future of agriculture are unsettled. Besides the few viable enterprises the majority of the land is cultivated by an aging and gradually impoverishing layer. We have not been able to find promising signs concerning neither the improvement of their personal fate, nor the establishment of the bases of their subsistence. The decisions of those cultivating the land are driven by emotional considerations and, due to strong dependence, by the necessity to subsist. People have used up most of their previous reserves, a general worsening of economic, social and even physical (health) conditions can be observed. Emotional attitudes can be characterised by waiting out, passivity and abstaining from any form of common economic enterprise. The lack of orientation applies to local circumstances as well as to general economic and, within this, agrarian policy. It is worrying that the number of those marginalized in society is growing rapidly and most of them completely lose their ability to work in a very short period. A positive exception is the active

cultivation of the traditions of local folk art and culture (the activity of folk dance groups), and the cultivation of spiritual traditions can offer a kind of starting point for the development of the cooperation inevitable in the future. The strength of the local government is completely absorbed by the operation of the infrastructure and public institutions of the villages and by the maintenance of its ability to do so. The lack and eventuality of local incomes – the cut and new distribution system of central resources – have resulted in a defenceless local government, in whose social politics the aiding of the most indigent (the elderly and school age children) takes the first place.

The main results of the detailed surveys carried out in Harta and Szakmár[24]

The primary aim of this study was to get closer to the colourful world of 'generally known' problems by exploring real and concrete cases. We hope that the answers of the relatively large number of quite thoroughly interviewed families – a total of 197 families, 131 in Harta, 66 in Szakmár – can not only justify or question the well-foundedness of the questioning of those charging us with this study, but, in case of a positive answer, we can find a basis for the method and direction of breaking out from the present situation towards new opportunities.

The analysis of the answers enables several interesting and useful conclusions, first of all that we are to beware of schematic and simplifying conclusions. Even the two almost neighbouring villages suggest the image of two different worlds despite the fact that land ownership changes having taken place together with the change of regime have been finished relatively smoothly, the majority of lands has been distributed and disputed ownership questions do not burden the residents.

In Szakmár only one third of land owners, in Harta half of them are in active age,

In Szakmár owners lease out 10%, in Harta 21% of their land, and they have another 61% cultivated by service enterprises in the framework of cultivation contract,

In Szakmár the people questioned increase their land by lease by 93%, in Harta by only 15%,

In Szakmár one family questioned cultivates an average of 14 hectares of land on its own, in Harta only 2.3 hectares,

At the same time,14% of the people in Harta would be pleased to buy land, but only 6% in Szakmár are considering it (presumably because of the lack of resources rather than indifference).

[24] In the course of basic data collection we were not able to observe the strict rules of statistical sampling, but followed the practice of questioning every tenth family. If they did not want to answer we asked the next neighbour.

On the other hand, especially in the light of the above, surprising similarities can also be found. Among them some interesting ones are:

The area of land belonging to one family is 7.7 hectares in Szakmár, 7.0 hectares in Harta. The ratio concerning land size is also similar. Half of those questioned have less than 5 hectares, but 40% of the land area belong to those owning more than 20 hectares.

The majority of the local population is involved in some kind of agricultural activity, 87% of those questioned in Harta, 95% in Szakmár. Characterizing the vagueness of the term 'őstermelő' (primary producer) 83-83% of the families questioned has this certificate in both villages entitling them to tax allowances and representing one condition of receiving subsidies but, at the same time, excluding them from social benefits.

In both settlements the owners' arable lands are in 2-2.2 plots. Their average size is 2.9 hectares in Harta, 3.7 hectares in Szakmár (according to our knowledge much bigger than the country's average). Still, only 29 and 32% of the owners would concentrate their lands into larger units. In fact however, even fewer people mean this seriously, since only 23% of the people in Harta and a mere 20% in Szakmár would be willing to carry through land exchanges, a practical realization of land concentration. Altogether only 10% have tried to exchange lands.

20% of those questioned in Szakmár think the winding-up of the co-operative was good, 70% think it was bad and for 10% it is indifferent. In Harta half of the people questioned think the survival of the co-operative is good. However, further answers can be evaluated with difficulty because of the inaccurately formulated question, because the co-operative became a joint stock company in the meantime. Perhaps the answer according to which 79% of those questioned in Harta maintain relations with the former co-operative and joint stock company is more important. As far as the chances for future cooperation are concerned, in Szakmár besides 22 positive answers 44 people do not wish to participate in any form of it, while in Harta we were given 90 positive and only 24 negative answers.

It is most likely that the **population of Harta** – considering the potentials and opportunities of the general economic environment – **is basically satisfied with the evolved situation of land ownership and land usage.** In this, of course, a significant subjective factor and cause is represented by the transformation process which can be called favourable and exceptional from a certain point of view and which started before the change of regime and came to a rest without significant conflicts. In our opinion owners **consider and handle** arable land **as an asset,** and their expectations concerning the future are formed accordingly ('its value can only grow').

In Szakmár the ownership and farming conditions of agriculture are temporary. Reasons are manifold and complicated, often unexplainable by rational arguments. The overwhelming majority of those venturing – partly voluntarily and in great hopes, partly as 'forced' entrepreneurs – upon private farming possessed neither enough land, nor enough assets, nor adequate experience concerning production techniques and marketing when the local agricultural plant was wound up. All this would have undermined most of them after a few years even if there had been no significant deterioration in the market relations of production. But since 1991 drastic income losses and, after that, stagnation at this level is characteristic. **Material sources, reserves** not plentiful at the beginning either **became completely depleted by today.** The strategy of the farmers can definitely be described by **survival, waiting out** without clear vision. The process is characterised by general – economic and personal – depletion together with continuously increasing differentiation.

Land in Szakmár is, primarily, means of production, the last resort of subsistence proving permanently insufficient. Emotional motivations of the attachment to landed property are very strong. It seems however, that being dependent is the main force but, somewhat surprisingly, abstract affection for the land, strong emotional links also play an important role.

The material and emotional background of the attachment to land ownership

Hungarian motivations related to land ownership – on the basis of our general knowledge and the surveys carried out – can be divided as follows:

1. Subjective elements

- 'emotional attachment to the inherited property,'
- 'affection for the land,'
- sense of security given by landed property,
- sense of dependence,
- confusion and lack of information concerning the future etc.

2. Objective elements

- handling the **land as capital**, preservation of the property and intentions to enlarge the property, including:
  - landed property as a stable way to preserve means,
  - expectations connected to the increase of land prices, especially in the period before EU accession,
  - property speculations (arable lands can become building , industrial, resort areas etc.),
  - leasing out.
- practical usage of the **land as means of production,** the current profit from the land:
  - cultivation of the land,
  - having the land cultivated.

All these motivations can be grouped further depending on how large this landed property is.

In the case of **very small land sizes** (under 5 hectares) a usual characteristic feature is that besides dependence, nostalgic attachment also plays a role especially in the case of the elderly. This property is the least mobile in nearly every aspect, while being the most subdivided and in the worst need of land consolidation.

In the case of **large sizes** (above 50 or 100 hectares) the capitalist's view is realized concerning either the property manager's or the user's attitude. In Hungary low land prices are still attractive for speculators, also present provisions of law are favourable to land purchases by non-agricultural investors, the so-called 'townspeople'. Therefore, the trade of large-sized lands should urgently be made dependent upon the conditions of agricultural occupation, such professional training and local residence, which, at the same time, would eliminate the more or less justified reasons for the fears of foreigners' land acquisitions.

The group of the owners of **medium-sized lands** (5-50 hectares) is very diverse in every respect. In the transformation at the beginning of the 1990s legal regulations focused more on the elimination of the past rather than the establishment of the future. Therefore, besides and largely at the expense of those intending to cultivate their lands a large number of owners emerged who only accepted land for lack of something better or who were unable to cultivate it due to old age. This is the group where all possible motivations can be found, and who belong to the circle of those who intend (or, sometimes, are forced) to sell their lands sooner or later.

Owing to the many small-sized lands unable to provide independent subsistence and the large number of those unable to cultivate their lands the form and especially the standard of land usage depend on whether there is a private entrepreneur or enterprise in the given settlement, who is able to and suitable for

- the lease of land,
- the most important phases of cultivation,
- or carrying out complete services (extending to complete cultivation, even marketing).

In our experience few entrepreneurs are suitable for the undoubtedly more favourable contracts of having lands cultivated (mainly large farms having proved viable only), but usually land owners themselves are not in the position to finance the whole production process. (According to our findings, on the basis of contracts of having lands cultivated the owner has to advance current assets in the value of HUF 80-90 thousand for the production of one hectare of cereals or oil-seeds, which returns upon the actual selling of the product.) There is a need for increased goodwill from both parties (as well as legal clarification concerning the registration of land usage and the utilization of area-based subsidies) in order to make this otherwise very promising solution more wide-spread.

Chances that the overwhelming majority of land owners could cultivate their lands themselves are diminishing day by day. Its reason – besides aging – can be found in the lack of assets, the complete obsolescence of the ones available, the lack of capital funds due to poor profitability and, last but not least, the permanent increase of the limit of profitable size. Concerning the latter, information is provided by calculations made by Gábor Kovács in the Research and Information Institute for Agricultural Economics (Table 11). According to the calculations in order to obtain gross coverages of HUF 1 million – EME[25] 4 in accordance with EU measures – (covering, besides the cost of wages, all indirect costs e.g. the amortization of fixed assets), the necessary minimum for the subsistence of one family, at least 40 hectares of cereals, 7.5 hectares of apples or 15 milking cows are necessary.

According to our experience we can also say that the majority of the many small-size land owners do not wish to sell their lands – at least not under the present system of economic conditions. Its most important reasons, besides the ones mentioned above, are:

economic dependence, the necessity of self-sufficiency especially among those with decreased capacity of work,

low land prices, due to which the purchase of a modest town flat would require the sale of 8-10 hectares of land,

relative satisfaction with the present utilization, since even the low fixed price of leasing amounts to 7-10% of the selling price of the land, and under the undoubtedly much

[25] EME – European Unit of Measurement

riskier system of cultivation contracts (not even available in all settlements) the price of leasing can be two, two and a half times higher than the former.

Table 11.

Calculated values of Hungarian sectoral sizes corresponding to EU farm categories

Sector	Unit	Small less than EME 4-8	Small-medium EME 8-16	Medium-large EME 16-40	Large EME 40-100	Very large EME 100-
		sized farms				
Winter wheat	hectares	41,6	83,2	166,4	416,0	1040,0
Corn	hectares	42,7	85,4	170,8	427,0	1027,5
Apple	hectares	7,5	15,0	30,0	75,0	187,5
Wine-grape	hectares	15,5	31,0	62,0	155,0	387,5
Milk production	pc cows	15,1	30,2	60,4	151,0	377,5
Pig fattening	pc porkers	179,0	358,0	716,0	1790,0	4475,0

Source: Dorgai - Kovács - Stauder - Tóth - Varga: The Farm System in Hungary's Agriculture Considering EU Experience. AKII, Budapest, Agro-economic Studies, 1999. No 8.

Conclusions, proposals

It is obvious that a small analytical project like ours worked out during the research of Harta and Szakmár is not a suitable base for national economic generalization. However, we think it would be useful to consider our findings on a national scale as well.

It is also necessary to point out the very important fact that agriculture in itself is not able to solve the sustenance of rural population, the employment of those in active years. We have always observed this unchangeable fact in our proposals.

Out of the two researched settlements the conditions of reasonable and effective cost-saving agriculture, viable farm sizes are given in Harta but missing in Szakmár. This concerns the question of land ownership: in Harta chances of the establishment of the land market are more realistic, in Szakmár they are insufficient. In order to establish the latter and to start a reasonable land consolidation – beyond clarifying the principles related to minimum and viable sizes – first of all

- local non-agricultural **employment opportunities** are to be improved,
- early retirement and **social problems of the elderly** are to be solved (by granting life-annuity supplementing land sales, that is by granting subsidies encouraging sales),
- preferences are to be given to **land buyers** who, on the basis of objective criteria, are able to meet the requirements of profitability (size, qualifications, farming plan, creditability, local residence, etc.),

- those **having leased out their lands for at least 10 years –** if they are elderly – are to be helped in handing over their lands by incentives similar to preferential pensions, but it is also reasonable to favour enterprises leasing such lands.

Based on the research in both settlements and the review of the country's situation an evident claim can be formulated: **the country needs clear and conspicuous agrarian policy**, and in strong connection with this, a rural development conception founded on realistic economic basis. Lacking the above local efforts cannot be successful and lasting and, particularly, they cannot represent examples for other areas. All these, in brief, raise the following claims:

- A clear distinction and handling of the competitive and social spheres, on the basis of the limitation of agricultural development subsidies to the competitive sphere and the opening of social funds for the really indigent, aiming at subsistence, self-sufficient small producers.
- Working out conception for the structural development of the critical, unprofitable small-farm structure (from associations to the encouragement of ownership concentration by strengthening the durability of leasing relations).
- The establishment of viable field sizes and minimum sectoral (farm) sizes and the direction of properties and, to some extent, the further changes of land lease within these limits.

The practice of cultivation contracts having developed by the present time deserves special attention. It enables reasonable usage of small fields, which could be cultivated with large cost increase separately, which is the most important condition of the primary aim: profitability. Those having their lands cultivated – undertaking the risks and financing the current assets of production – obtain increased income compared to the fixed amount of leasing taxed in a fixed proportion especially today, when primary producers are given tax preferences and smaller land owners (real or on paper) are given preferences in allowances based on land size.

The Hungarian countryside is not in the position to initiate local organizations, unions or any kind of cooperations which would be inevitable for the development of agriculture due to its hard economic situation and the lack of the population's activity. Therefore, only outside forces, the state and the EU can be expected to make compelling and supporting steps in order to initiate local cooperations. One important element in the modernization conceptions of the EU concerning agrarian policy is strengthening the **multifunctionality of agricultural enterprises.** This provides us with very important chances to 'break out' towards new opportunities. However, it is to be clarified whether systems creating workplaces and improving local employment like the one functioning in Harta's Erdei Ferenc Co-operative (the performance of shoe industrial part-tasks) can fit in the notion of multifunctionality. If so, new opportunities can be explored in this direction with further analyses.

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Endre TANKA
The history of changes in land ownership structure prior to the change of regime

Abstract

Following the Magyar Conquest in the late 9th century, the establishment of Hungarian agriculture required first the winning over of the land from nature and then three centuries of gruelling work to form a system of cultivation. Farming was structured on small farm villeinage production for close on a thousand years. Serfs enjoying actual holding rights were cultivating their plots for their own interests and motivated by financial gain. Until 1848, the acquisitional position of the producers – without achieving complete personal independence – brought them ever closer to civil private land ownership.

For unique historical and economic reasons the emancipation of the serfs in 1848 still did not create free ownership of land for Hungarian farmers. Since state socialism abolished private ownership, the conditions for the free ownership of land by natural persons had to wait until the 21st century.

Key words

land ownership, land usage, producers' private acquisition, holding structure

l. Feudal land relations

The Magyars were not the first and not the only people to settle in the Carpathian Basin. Overpopulation since the dawn of the Iron Age (more than a thousand years before the birth of Christ) generated huge waves of migration driving peoples from East to West. These human waves had swept numerous peoples (Dorians, Celts, Scythians, Sarmatians, Gepidsk, etc.) into the Carpathian Basin, where they had then been wiped out one after another. The fact that the conquering Magyars managed to avoid extermination, and indeed were able to create a nation in this part of Europe, can be attributed to two factors. **Politically**, to the formation of the state: the recognition that it was only possible to face new waves of migration from the East bringing in turn the threat of destruction and annihilation when they could do so together with the West, that is, between the two threats it was necessary to ally with the West tied as it was to cultivating the land. Secondly, **economically**, to the realisation that land occupied by force of arms had to be conquered by the Magyars not only from the enemy but from **nature** too. The peoples who arrived in the Carpathian Basin before us were never conquerors because they lacked these two preconditions. For example, the Avars were crushed after being placed in a vice-like grip between East and West. The Romans, who arrived in the Carpathian Basin with their road and town building skills, were also unable to win domination even with their iron ploughshares: inhabited and cultivated areas shrunk to the shorelines of the major rivers and alongside the major commercial routes.[26]

Cultivation, therefore, was the **true conquest**. The land was forced into the service of humans through backbreaking work over generations. Using different means to clear and

[26] The natural conditions found by the Magyars in the Carpathian Basin only favoured nomadic stock breeding, and not farming. Around one-eighth of the country comprised a network of catchment plains, bogs and marshland occasionally or constantly flooded, while the other parts of the territory were covered with impenetrable forests.

cultivate land, the system of land cultivation was brought into existence following 300 years of unremitting toil.

Our **medieval system of cultivation** was conducted at a developed agricultural technical level, on a par with Western models. Over the centuries cultivation techniques developed and matured which flexibly accommodated themselves to the geographical, production and regional conditions, and at the same time farmers institutionalised tenure to serve their own interests. (For example, permanent single field usage and the two- or three-course rotation ploughing system.)

Linked to this was the **village land community**, a self-organised social micro-system organically integrated into the economic and settlement structure. Qualitatively, it surpassed the Asian cultivation rent-levying structure, for example, the Russian *obshchina*. Its members, in comparison to the rental producers, neutralised, mostly eliminated the superior feudal ownership at the distribution of the land fund and the validation of the communal regulations on land usage. Thus from the inside it became an institution to balance the interests of its members, while from the outside it functioned as a producer interest community in the face of ownership and power of the overlord. It is important to note that the Hungarian land community was never a producer commune; rather it was a **tenure structure**, whose members cultivated their own land **by themselves** and for their own benefit. In this way farmers were able to build their own **private land usage rights** on their own holdings (for example, on single field ploughland), and at the same time they enjoyed the benefits that came with the land community **common holding** (for example, grazing rights, forest usufruct).

The five to six century lag which farmers in historical Hungary later stabilised in relation to West Europe at the same time provided a typological difference among the **development of producers into serfs**. For example, emancipation of *servus* (slaves) working on Italian latifundia happened before they were able to achieve a legal title allowing them to remain on the land (for example, as a *colonus*). However, in Hungary the overlords did not use slaves to till the fields, but instead they mostly settled on communities of free Hungarians dealing with animal husbandry and land cultivation. Producers, formerly free, who undertook to become serfs grew close to the land they cultivated, thus giving them a measure of their own lives even under feudal subjugation.

The fact that right from the start the social recognition of **individual work performance** in agriculture was established and became fixed is due to the low density of population in Hungary and the specific utilisable value of both human and animal labour compared to land value, almost up to the 18th century. Since cultivating the land for food production required the hard labour and toil of several generations, the feudal legal system recognised the peasant small farm as the serf's permanent and inheritable holding. Individual peasant ownership of cleared ploughland, fields and vineyards supplemented by common land (pastureland, forests) forming part of the plot led to the formation of **villeinage.**

The individual work of the producer organised and carried out independently became, very early on, the basis of **socage relations** between the overlords and the serfs. In the course of cultivation the serfs ran **small farms**, which were separated from the overlord's own holding (*allodium*) and relatively independent as land usage work organisations. Production conducted by the serf at his own risk also meant that the impact of expenditures and returns fell firstly on the producer. The amount and quality of **individual work performance**

regulated, on the one hand, **production results**, and on the other hand the **producer's share** of the total production.

One of the key elements of the socage relationship between the overlord and the serf was the question of the **actual tenure of the land,** and this was settled, to the advantage of the latter, in what proved to be a historically lasting compromise. The forced concession on the part of the overlord derived from the fact that the increase in production – that is an increase in own rent resources – demanded renouncing the physical ownership of the land, and passing over the right to cultivate the land to the serfs. In social terms serf production – together with the **driving force of share proportion creating producer interests** – became so profitable that the seigniorial domestic economy had not displaced it right up until the first third of the 19th century. Thus it was in the overlord's long-term interests to maintain the economic independence of the villeinage small farm, and indeed to protect these plots from other feudal lords. The overlord's income was in part tied to the labour of ever more serfs, and in part to increasing seigniorial monopoly rights. However, the **holding rights of serfs** were in their own interest when – under the cover of feudal land ownership – they developed into **actual power**, also serving the producer's own social and economic aims (as such a genuine escape from subjection, and private acquisition leading to a civil value model).

However, all this only partly explains the fact that the Hungarian system of land usage from the foundation of the state right up until the early 19th century was built on peasant small farm production, which with the actual holding power consolidated in villeinage realised the **producers' farming for their own interests and utility**. This development pattern was the result of a further factor. The individual interest-constraints of the production work in socage relations broke away from the allocation function of the duty of socage – owing to the development of agricultural techniques and the widening of financing – and gave birth to a **totally new social paradigm: producer, entrepreneur, peasant-civil private acquisition system of values**. The examples of adaptation and the individual interest validation mechanisms – utilising the producer's independent farming advantages and productivity which could be increased through the farmer's own efforts – counterbalanced **with rational economic activities** the chronically backward social conditions of the peasantry and their tragic historical twists of fate.[27] The acquisitional value model which developed out of medieval agrarian relations became ethnic, and was **transmitted as a durable mark of modernisation** to the civil land relations of the new age.

2. Civil private land ownership and a historical dead end

The 1848 War of Independence and emancipation of the serfs in Hungary – as a first in the Habsburg Empire, not counting the Lombards – created civil private land ownership. This historical turning point can also, according to today's modernisation standards, be considered a **civil democratic land reform**. According to historical experiences, the latter can also be differentiated from the division of land on two counts. On the one hand it followed a **civil value model**. This eliminated the thousand-year-old separation between work organisation and ownership through the creation of the **subjective measure** of land

[27] This trend is proved by numerous research projects. For example, survival and adaptation strategies, peasant household models, tenure customs of surplus land (cleared land, vineyards), the inventiveness of producer loopholes to dodge taxation pressures, the role of peasant-civil entrepreneurial credit, the consistent competitiveness of the serf farms in the face of seigniorial domestic economy, and so on. All this became general in the several-century-long, crushingly difficult **age of crisis** when independent Hungarian statehood ended, and the serfs were "eternally tied to the soil" in 1514.

usage and land ownership. The land – as a means of production – was given to the producer as a **property** operating economically: in a viable acreage together with the production factors and the necessary capital resources for its utilisation. Through this it established the ownership of the natural person land users both legally (as a constitutional declaration) and economically. On the other hand, with the implementation of the majority interests of the producers, **democracy** follows long-term **agricultural and land policies**, which guarantee that the new landowners, as small farmer agricultural producers, enjoy an appropriate standard of living from agricultural production carried out as a vocation. With the emancipation of the serfs, and besides state compensation for landlord property, 55.3 per cent of the entire land fund was passed into the ownership of the peasants.[28]

Thus in 1848 free private land ownership was established for the decisive majority of the land fund and for the benefit of a significant proportion of producers. The fact that despite the quality of this land reform which gave the base for civil modernisation, **right up until the 20th century it failed to lead to the creation in Hungarian agriculture of farmer land ownership and the establishment of a Western-style family farm model** can be put down to several complex factors. Some determining historical factors:

- From the middle of the 18th century the relative abundance of land characteristic of the domestic land supply ended and gradually a position of **relative land shortage** developed. From the turn of the century – mainly as a consequence of the partition of the country after the First World War – this process consolidated, and then with the solidification of the minor holdings and the large estates it intensified.[29]
- Maria Theresa's system of socage (the 1767 Urbárium) halted the landlord's acquisition of villeinage plots, although further land acquisition was also forbidden to producers in that the then uncultivated land (which was quite extensive) was transferred to the (allodial) ownership of the landlords. This was the result of the altered production and land holding structure. The own cultivated holdings of the landlord, the seigniorial domestic economy, developed into large holdings, and then **large holding farms** as an impact of the increased demand for grain which was sparked by the Napoleonic wars, partly with land concentration, partly by acquiring the necessary labour force. **The peasant small farms lost their independence to organise work and their goods production function**. They were subordinated to and became merely a branch of the large farms.
- After 1848 the large holdings, lacking capital and an affordable workforce, were only able to meet the increasing market demand through the **extensive expansion of farming**. This, at the technical level of the age, required increasing land acreage for the development of both plant yields and stockbreeding. Due to this the large holdings restricted the small farms[30] to ever smaller areas, limiting them to self-sufficiency alone. In the meanwhile the population grew unevenly, the area of land available to the holdings declined, and there was no way to halt the slicing up of holdings despite the fact that several generations of large families lived on one piece

[28] This proportion of the land formerly used by the peasants reached 74.5 per cent.

[29] The Trianon Peace Treaty reduced Hungary's cultivable land from 31 million hectares to 8.5 million hectares. The unqualified success story that in the seven years between 1920 and 1926, following the complete collapse of agriculture and a 400 per cent drops in production, Hungarian agricultural production was able once again to reach the levels recorded before the war is truly worthy of separate analysis.

[30] For example, in 1913 holdings over around 1000 acres occupied 39.8 per cent of the land fund. The average size of each large holding was 4630 acres, while the dwarf holdings were an average of 1.6 acres.

of land. Long-term agricultural overpopulation appeared; conflicts were permanent between the two world wars. (Birth restrictions, urban migration, emigration.) The extremes of the **large holdings** incapable of developing and the unviable **dwarf holdings** rigidified within the holding structure.

- Under the **land reforms of 1945-47** 60 per cent of the land of the large holdings was shared out (average plots of 5 hectares) to the poor peasantry, while the state land fund was endowed with the remaining area unfit for small farm cultivation. Land distribution made the 5-20 acre small farms based on a family workforce dominant, regardless of the fact that this would have been followed by agrarian reform. The resulting dwarf holdings, besides lacking the most elementary technology, capital and tools, were also unable to contract family labour and even less capable of guaranteeing their livelihood. Since the smallholdings could at best be run as a means of gaining supplementary income and for self-sufficiency, agricultural production dropped like a stone. This apparent reform was in truth the dictate of state socialism, preparing the way for the forcible collectivisation of agriculture, the annihilation of the private ownership of land by the peasantry, and the installation of a Soviet-type kolhoz model.[31]

3. Land holding structure of state socialism

Since state socialism was built on the denial of private property, forcing the peasants into co-operatives reproduced the dispossession of the producer from land ownership, furthermore replicated land usage at works level and the polarisation of the large farms and the small farms.[32]

Both the state and co-operative forms of large farm land ownership ruled out the possibility of producer acquisition, since **social ownership** was "everyone's and thus no one's", although in reality the party state etatism ruled with absolute power. The small farm mini parcel household and wage land came into the producer's ownership solely under the title **for usage**. The historical continuity of large and small farms was also apparent **economically** speaking. The production value between the two modes of operation continued to be shared equally, while later it changed to a 60:40 ratio in favour of the large farms.

In 1989 14.9 per cent of agricultural land was used by state farms, 70.9 per cent by the co-operatives, and 14.2 per cent by private farms. Around 1500 large farms cultivated 85 per cent of the land fund. The average size of the state farms was 7600 hectares, while that of

[31] According to historical documents, when Soviet troops entered Hungary, Stalin personally briefed the head and secretary-general of the Hungarian Communist Party Mátyás Rákosi on the tactics the Party would follow over the land question. (Implementation of these orders was to be overseen by Marshal Voroshilov, commander of the invading army.) According to these instructions, the party, in order to first gain power, had to promise every working peasant land ownership, although it was not permitted to reveal exactly what area of land. The fact that the peasantry would receive dwarf holdings on which it would be impossible to live was to be kept a closely guarded secret. According to the strategy, with the vegetating small peasant farms unable to break out of the crisis the Communist Party, having given them one or two years "grace", would, in the name of economic rationalization and the workers-peasant class, start a centrally devised party-led move to compulsorily and totally introduce large farm communal land usage.

[32] The socialist restoration of small farm production – with the renewal of the tradition of small parcels of land which tied landless agricultural labourers to the large holdings – came about because the co-operative large farm work organisations were unable to keep the producers forced off their lands and deprived of their means of production, and thus they had to take care of their own self-provision. This was not possible without receiving a minimum (4300-5700 square metre) plot for individual use. This resulted in the institutions of household and wage land usage (the former for co-operative members, the latter for co-operative members and state farm employees).

the co-operatives was 3800 hectares. The 1.4 million private farms had an average acreage of just 0.62 hectares.

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Judit GÁBOR, Anikó JUHÁSZ, Mária ORBÁNNÉ NAGY, Márta STAUDER
The marketing strategy of the poultry sector

Abstract

Hungary no longer enjoys a price advantage over the major producers in the EU with respect to the purchase price of broilers. At the same time, the consumer price of whole chickens in Hungary is 40-50 per cent lower than consumer prices in the Netherlands, Germany or France.

Export revenues from the poultry sector amount to USD 400 million; 70 per cent of our exports go to the EU. The primary strategic thrust of the poultry sector is focused on a glutted market marketing strategy since the sector is forced to operate in a saturated market situation both as regards supply and capacity. Of the marketing strategy's four main elements (4 P), product strategy (which is backed up by the promotion strategy) is of key importance.

Key words

poultry industry, competitiveness, marketing strategy, export strategy

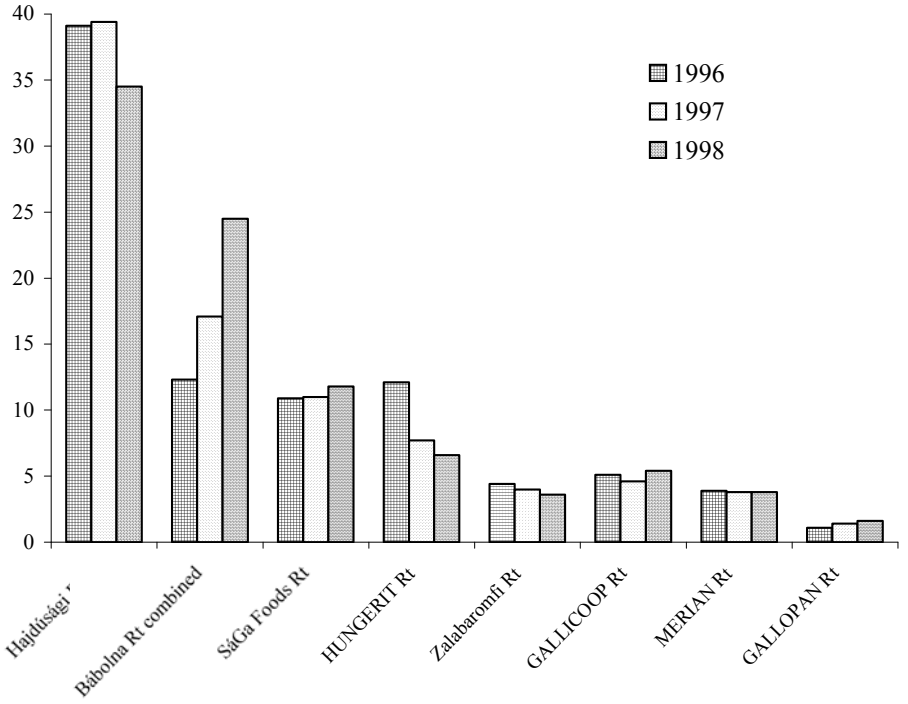
1. Competitiveness in the globalizing world market

The last 10-15 years have seen a **considerable concentration process** carried out among the poultry processing enterprises of the leading poultry producing countries. Company groupings and conglomerates have come into existence following mergers, buy-outs and the establishment of subsidiaries. The 10 largest companies of the **European Union** hold 33 per cent of the vast Community market by ensuring that they have stakes in companies in several countries. The giants of the industry are present not only within Community countries, but in Eastern Europe, China and most recently in Brazil too. The top five **US** companies each process individually more poultry than the entire production of the Hungarian poultry industry.

The Hungarian poultry processing sector comprises small, medium and large companies but, on an international scale, no mega-corporations. The two leading groups – Hajdúsági Rt. and Bábolna Rt. – have a 60 per cent market share (Figure 2.). This strong market concentration could lead to dominance on the domestic market, at the same time it does not differ greatly from international practice and from the aspect of access to export markets it also holds advantages. Rather the problem is that the concentration of factories in the poultry industry has still not been concluded, although from the viewpoint of competitiveness it would be most important to see the formation of factory units of optimal size operating at full capacity.

Figure 2.

Market share of the poultry industry companies on the basis of revenue



[1/] Hajdúsági and CONAVIS combined

Source: On the basis of balance sheet data calculated by the authors

Hungary enjoys no price advantage in respect of the purchase price of broilers over the major producers in the EU. Indeed, Dutch and Danish prices are consistently lower than the producer prices in Hungary. In certain years prices in Germany and Belgium were lower than in Hungary. At the same time, the **differences in the consumer prices are considerably greater**. The French price closest to the consumer price for Hungarian roasting (bratfertig) chicken is still 40 per cent higher, while the consumer prices in Germany or Austria are no less than 70-85 per cent higher than the Hungarian retail price.

It can be stated that from the point of view of competitiveness the Hungarian poultry industry is not in an easy position. Producers charge high prices for chickens, and the cost advantage is further reduced by processing. Compared to the EU countries, the domestic consumer price is low which from the viewpoint of maintaining demand is positive, but with regard to the generation of development resources and innovation funds is highly unfavourable, particularly when the world poultry market is characterised by rapid development and globalisation. The financial situation of the sector is weak, and the amount of interest paid on short-term credits (HUF 7 billion in 1998) in the poultry sector is the highest of all the food industry sectors. Despite this, however, poultry industry investments have risen ever since 1994, representing a continually growing proportion of total investments in the food industry. **The majority of companies also trading on the international market work to a high technological standard on lines that enjoy economies of scale, although the same thing does not hold true for small enterprises**.

Total slaughter capacity of the sector is greater than solvent market demand, which alongside interest repayments represents the second largest cost growth factor.

2. The market situation for poultry products

The per capita poultry consumption in Hungary in 1998 reached 25 kg, high by European standards. **Over the course of the 1990s, poultry was the only meat type to record an increase in consumption**, and today it represents 40 per cent of total meat consumption. Among poultry types, turkey has shown a consistently upward trend: in the 1990s domestic demand for turkey doubled. The higher the income the higher the demand for poultry: there is a two-fold difference in consumption between households on the lowest incomes and households on the highest. **The growth in demand for further processed products is strongest**, the two dominant categories being pre-breaded semi-ready products and red meat.

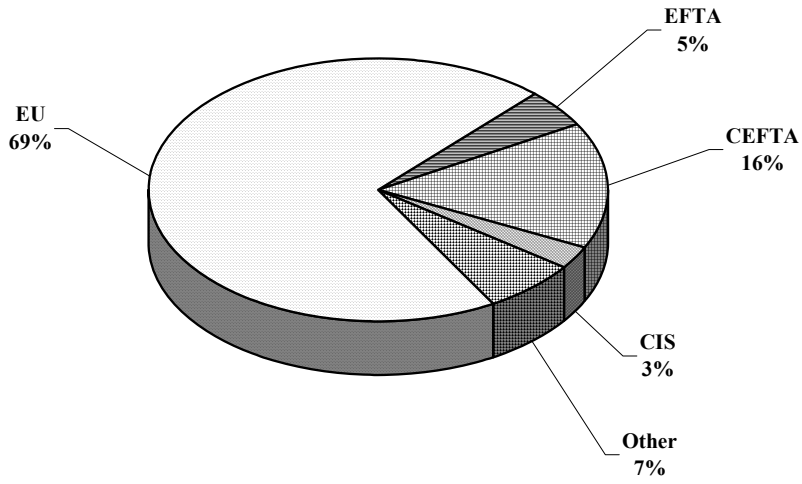
It is likely that in the future there will be continued polarisation as regards demand for poultry products. On the one hand the proportion of cheap meat types and cold cuts in total consumption will remain high, while on the other hand demand for high value-added, ready-made products will continue to grow (in addition to breaded products demand will also grow for other ready-to-eat types. In this segment of the market quality will be the deciding factor.).

Export revenue in the poultry sector stabilised over the last four years at over USD 400 million. Hungary ranks as one of the world's top 10 exporters. Chicken accounts for half of the total volume of poultry exports, although in value terms only one-third. The greatest revenue is generated by the goose sector (together with feathers and livers).

Our most important **buyer** is the European Union (69 per cent), followed by the countries of CEFTA, EFTA and the CIS (Figure 3.). One warning sign, however: ever since 1995 the Union proportion in total Hungarian poultry sector exports has declined slightly, although continually. The share, particularly of cheaper products, taken up by neighbouring countries has increased. **Although Union poultry imports have expanded, the proportion of Hungarian poultry products shows a declining trend.** While in 1995 Hungarian suppliers provided a half of the volume of poultry imported into the countries of the European Union, this had fallen to just one-third in 1997. Because of the proximity advantage we hold, we are the EU's largest supplier in the fresh products area, while Brazilian, Chinese and Thai suppliers have an advantage over us in the frozen meats area. We share the goose market with Poland.

Figure 3.

Hungarian poultry exports by target country groups in 1998 (USD 340.8 million)



Source: The authors' calculations based on the data of ARH-FOOD

An examination of the total poultry imports of our most important receiver markets shows that our market share is greatest in the case of Austria (Hungary's exports account for 19 per cent of Austria's total imports), followed by Switzerland (14 per cent), and then, contrary to popular belief, Hungary has only a 7 per cent share in Germany's imports, and a similar figure with France.

3. Domestic marketing strategy

When considering the marketing strategy to be employed in the poultry sector, we have to start from the fact that we are facing a domestic market in which production factories with under-utilised capacity are fighting each other for the consumer's "favour" in an ever more aggressive war of competition. Since we cannot reckon on considerable growth in the purchasing power of the population in the near future, and standing on the threshold of EU accession we have to reckon on the entry of new and stronger competitors into the domestic market, **the primary strategic thrust of the poultry sector is focused on a glutted market marketing strategy**, the main elements of which can be defined as follows:

- a strategy of staying on the market, maintaining the market share of domestic enterprises,
- exploitation of competitive advantages through domestic product development and placing primary emphasis on quality,
- employment of differentiated marketing strategies for some product groups

In order to realise the objectives of the sector's marketing strategy, the sector has to be underpinned by the four main pillars (4 P – Price, Product, Place, Promotion) of the marketing strategy. Of these, **product strategy is of greatest importance**, and this is backed up by the **promotion strategy**. The price and place strategies are of somewhat lesser importance.

3.1. When considering the product strategy, it is critical to determine the product portfolio, which is done with the following steps:

- Survey of the sector's current product portfolio (lifecycle analysis, profit analysis of the various product groups),
- Examination of the market environment and demands of consumers and retailers,
- Having carried out these tasks, identification of the strategic products,
- Determination of product development focus and product innovation,
- Identification of the products to be withdrawn from the market.

Product innovation has moved beyond mass products to special products meeting particular consumer demands. The next definable main aim is to **move beyond primary-type products and towards further processed products**: ready-to-eat meals instead of the primary materials for meals. Among highly processed products fresh products and easily prepared products can be considered strategic products. Product innovation has to target consumer groups, and by meeting their demands market positions can be improved.

Product development can be characterised as a progression towards **healthy, safe nutrition**: low cholesterol, low fat, protein- and vitamin rich products combined with vegetables, products designed for diets, and marinated products. Organic products, which at the moment can really only count on buyers on the domestic market, can also be listed here.

Secondly, product development has resulted in a move towards products **reflecting traditions**, yet unique, requiring mainly **manual work** which would be difficult to mechanise, for instance, frozen product types (individually packaged for small families), fresh ready-to-eat meals warmed in the microwave, and high standard processed natural products (pre-cooked, pre-baked).

Product development does not always lead to the creation of new products; improved, perfected old products can be just as valuable as a completely new product, and indeed the risk is less with the former. (Consumers prefer tried and trusted flavours.)

It would be advisable to shift from ad hoc-type unplanned product development to a complex product development carried out by **product innovation teams**, formed with the participation of the representatives of all fields concerned (trade, production, packaging technology, marketing controlling), that would perform the entire process from product concepts to testing. Where companies do not have sufficient professional and specialist capacities for complex product development, outside companies specialised in these areas should be brought in to complete the task.

Countries with developed market economies are giving an ever-greater voice (frequently exaggeratedly and without reason) to **animal welfare concerns** in product development and consumer programmes. At present the Hungarian consumer is not really sensitive to this issue, but EU experts have already drawn attention to the fact that this is an increasingly important factor in trading acquisition policy in the EU member states, as is the need for origin markings not only in the case of poultry but eggs too.

Quality stands at the forefront of the product strategy, and the other marketing elements are built around this. Today the significance of the quality assurance and hazard analysis systems (ISO, HACCP) in production plants in the poultry sector is evident. Without

them, companies are at a serious competitive disadvantage. Commercial companies consider product quality the most important choice-formation criterion.

Brands built on quality, however, have particular significance in the product strategy. Consumer and retailer brand consciousness is clearly visible in market analyses. Consumers are often hesitant about purchasing non-brand name or unknown brand products. They have greater confidence in recognised and established food items. It would be useful for companies to work towards winning awards and quality marks (Foodapest, Excellent Hungarian Food Product, etc.) as these reinforce a brand image. Strong brands can represent a competitive advantage and improve negotiating positions and conditions with trading partners. Product brands are ever more frequently being joined by branded product families. In future it would be appropriate to increase the proportion of registered brand names.

A differentiated strategy for poultry products is necessary for different product groups. Price plays the leading role with primary products, while quality, brand building and innovation are the main strategic elements for further processed products.

Product differentiation is a critical element of the strategy. It is necessary to map out the driving products and those, which should be cut, after which **product range positioning** can be outlined. It is vitally important in product positioning to avoid the so-called "fatal average" in which one finds medium-priced, weakly branded goods of average quality, where the competition is greatest and where it is easiest to fall in the battle to maintain market position.

The formation of so-called "me too" products can play a major role in product development. These are products similar to those already available on the market and which are developed on the basis of experiences gathered from markets, fairs and from abroad. There is less risk with these products, since product acceptance and market lifecycle is largely known.

3.2. Today, the **price strategy** in the poultry sector is, in practice, a "conflict strategy", with the companies facing each other in a huge price war, the end result of which is that they ruin each other in the face of a continuous battle on undercutting the competitor's prices and without any common agreement. In order to establish a price strategy it is necessary to have a complete understanding of the market, competition and cost price, and it is better to base decisions on price strategy on profit analysis. It is equally important to determine the price/quality relation.

Today the benchmark is not price but **price + conditions system**, since producer companies – as we have seen earlier – are, in general, in an exposed position with regard to their relations with the commercial chains, and the retailers largely dictate the prices and conditions. Producers have to be careful that there are not significant differences in the prices offered to individual members of the distribution chain.

3.3. A significant proportion of poultry industry companies are also restricted in their **choice of distribution channel**. International and domestic food retail chains have ever greater significance in the various sales channels. It would be useful to employ the "co-operation strategy" or the "adaptation strategy" in the system of relations with the chains. It is important to get to know the chains, the special characteristics of and the differences between the chains, and by using this information choose the right product for the right chain. When selecting a channel it is also important to examine the competition as this can also play a role in either targeting or avoiding a particular chain.

Key account managers and sales agents have a particularly important task in improving the efficiency of sales channels and ensuring comprehensive feedback. Shelf maintenance should also be made general.

3.4. One area of sales promotion is addressed to the consumers. They have to be reached using differentiated marketing tools. **The other part of sales promotion is aimed at the retailer,** since in the final analysis it is up to him as to whether the products are ordered or not. It would be appropriate to reinforce sales promotional activities aimed at the retail trade and expand the means by which this can be done (press briefings, discounts, product tasting, despatch of samples, sales folders, brochures etc.).

4. Export strategy

4.1. Market prospects

Prognoses for poultry consumption and retail prospects are optimistic, and indeed new prognoses were drawn up after the crises. Poultry will continue to gain ground against the other meat types.

Prices will remain depressed over the long-term as well because productivity will continually improve. Experts believe that a noticeable increase in world market prices can only be counted on after 2003.

The expansion in the consumption of poultry in the **European Union** will slacken to an annual 2-2.5 per cent. Yet this sluggish growth in demand will still be faster than any of the other meat types. Consumer trends that can be expected over the coming decade, for example increasing health awareness, the further gaining ground of fast foods and catering industry services, and changes in age composition, all favour the consumption of poultry over the red meats.

4.2. Export strategy

Consultations with companies in the poultry industry revealed that **companies are unable to trace exported products to the final user**, since the client is exclusively an importer or wholesaler. The reason for this is that the commercial chains and other retailers or users (major consumers) directly serving consumers do not take on the administration, which comes with the quota system. Packaging material is generally supplied by the importer, or they repackage the products, so companies do not export under the company logo. Hungarian poultry industry companies are primarily considered as primary material suppliers in the European Union, and as such their own profile and packaging do not appear on the consumer market. Of course, part of this has to do with the fact that the image of Hungary and of Hungarian products is not so positive with highly demanding “Euro consumers”, particularly when the different community marketing strategies constantly hammer home the message that domestic products are best and only they can be relied upon. It is another question as to the proportion of non-domestic products sold as being domestic in origin. Due to the above factors, market pressure and brand management do not even come into the reckoning.

Under the circumstances outlined above, then, it is not possible to speak of an export strategy in the traditional sense of the word until EU accession. Despite this, there are some matters that, if resolved, would assist our exports.

One of the tasks of **agrarian diplomacy** will be, during the course of the renegotiation of the European Agreement, to achieve the greatest possible acceptance of the proposals worked out by the Poultry Product Council, the main elements of which are:

- further increase customs tariff preferences. At the current stage of negotiations this proposal looks seems realistic, since the so-called double zero list is being introduced from 2000, that is, customs are being abolished but subsidies may not be applied either.
- an annual increase in quotas. According to our information, negotiations are underway on an annual 5-10 per cent quota increase.
- an increase in the size of the current quotas (on whole ducks, boned chicken breasts, turkey breasts, jointed ducks).
- quota penetrability. The proposal recommends that there be no further breakdowns within the HS 0207 product group.
- all-round acceptance of quota management.
- if a Hungary-centred quota management cannot be arranged, then a "first come, first served" system must be introduced on an annual basis for fresh poultry products, and on a quarterly basis for frozen products. This would curb quota trading.

Several of our foreign competitors arrange exports through joint export sales organisations, but there are examples in the European Union where two competing companies establish a joint export organisation. The practice in Hungary today has gone in a completely different direction, with every poultry processing enterprise building its own export sales organisation. This is why a proposal to establish a common export company would be hopeless. However, it would, and should be realised that companies should never undercut competitors' prices on the external market. There could be **export price conciliation** within the Poultry Product Council every, say, quarter, at which the concerned companies would agree on the prices of their main products.

In the case of inter-company agreement, it would be possible to start external market **brand building** with those products, which are placed onto the retail market in unchanged format. Such products would include chilled and frozen "bratfertig" ducks and geese. It would be important to design a common packaging symbolising Hungary as well on which the logo of the producer company would appear alongside a common brand name.

The Union market for **further processed products** is growing, and Hungarian enterprises have to get into this market before accession. If the opportunity for a common foreign appearance in this market segment arises, a market entry could be promoted with Union marketing tools. Joint presentations could be held in our largest market, Germany, to inform importers of our products.

It would be worth continuing (within the AMC) **market research** on target markets and potential buyers. We are thinking here of our former market, the Middle East, and other potential alternative markets such as the countries of Southeast Asia, Korea and China, or the nations of North Africa. It would also be worth conducting market research into consumer customs and expectations in **neighbouring countries** with regard to further processed products.

We recommend the publication of a comprehensive, unified **product catalogue** encompassing every poultry industry company for distribution at fairs and exhibitions abroad, and which would also be available on CD and the Internet.

In advertising campaigns abroad it would be possible to link high-value products such as canned **goose liver** with typical Hungarian features and well-known Hungarian regions in order to stimulate consumption of goose liver. For example, it would be possible to create a common image by tying in Lake Balaton, wine and goose liver.

It is clear from the above that the **commercial representation networks** are of enormous assistance in providing market research and information regarding the given country. Each week they update the list of purchase offers to which everyone has access. Although this problem falls into the court of trade diplomacy, every forum should be used to push for the strengthening of these organisations by the Hungarian state.

It is likely that the **Russian market** will continue in the future to fall outside the circle of our major buyers. Smaller deals can be placed on this market through non-state barter trade deals and various trading credit schemes, but it is not possible to reckon on a large upswing here. **Kazakhstan** could represent new market potential, where according to earlier market research there is solvent demand for poultry products.

The situation in **neighbouring, smaller countries** is more favourable. Here a slow improvement in solvent demand is expected, and these are markets, which America and European Union exporters have not yet conquered. They offer positive opportunities for the placement of both primary products and further processed products, and some Hungarian companies have already availed themselves of the opportunities. Target countries include the south Slav states, Romania, and more recently Bulgaria. Market research and participation in fairs in these countries could help exports. In the interest of ensuring closer contacts, the **formation of commercial representative offices** in these countries is urged.

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