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Report on the Position of the Hungarian Milk and Dairy Sector

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Keywords

Hungary, dairy market, milk production, milk processing, competitive disadvantages

Introduction

In recent years the Hungarian milk sector has had serious problems. Since the EU accession, domestic milk production has continuously declined, the balance of the foreign trade of milk and dairy products has deteriorated year after year and the degree of self-sufficiency has fallen below 100%. This paper, drawing on the study of Popp and Potori [2009], analyses why the competitive position of the Hungarian milk and dairy sector has collapsed in recent years.

Our analysis does not start from agricultural production but from the side of the consumers, that is, from the demand, and approaches production from this viewpoint. Namely, the situation of production cannot be evaluated without knowledge of the food industry and trade phases, and, without the buyers/consumers' requirements, because agricultural production is the very sector where the need for adaptation is most compelling.

Prior to discussing the situation in the dairy sector it should be recalled that the most severe problems are not sector-specific, but derive partly from the macro-environment (e.g. tax and contribution burdens, bureaucracy, land issues, state involvement etc.). These problems are discussed in detail by Popp *et al.* [2008] and their presentation is not within the scope of this paper.

Methods

We visited several important participants in the supply chain (agricultural producers, food industrial processors, retail trade chains, input suppliers and trade advocacy organisations) and tried to summarise the problems and show functional interrelations in the course of professional discussions and interviews². The synthesis of the consultations was completed by information available from the Ministry of Agriculture and Rural Development and the Agricultural and Rural Development Agency, as well as by data from the database of the Central Statistical Office and the knowledge of the Research Institute of Agricultural Economics.

The dairy market in Hungary

The changes in world market prices influence the Hungarian market for milk and dairy products through Hungary's EU export opportunities. As a result of the European Community's (EC) deteriorating export competitiveness, the internal market's pressure is increasing and the competi-

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 $^{^2}$ For the sake of exposing the objective and subjective competitive disadvantages we have also visited producers, processors and organisations in Slovakia and in Poland. When selecting our interviewees, we did not strive for full representativeness as our competitive chances may be realistically evaluated from the viewpoint of the more important market players.

tion among member states is sharpening [European Commission, 2009]. It is determinative for the Hungarian milk and dairy market that Hungary's exports are principally to other EU member states and to other European countries. Typically, Hungary exports only special products (mainly cheese varieties) to greater distances (for example to the Arabian countries), where quality and reputation are more important than price.

At present, 10-15% of the raw milk and 20-25% of the processed milk (expressed in milk equivalent) is exported; even so the foreign trade balance of milk and dairy products is negative (Figure 1) because imports of high added value products have increased. Hungarian exports are not mainly constituted of high added value products (with the exception of supplies due to the intercountry division of labour of some multinational company groups) but mainly of raw and skimmed milk. According to the data of the Hungarian Central Statistical Office (HCSO), Hungarian milk exports have been continuously growing since the accession to the EU, amounting to 274,000 tonnes in 2007 and 313,000 tonnes in 2008. Italy is the largest market, but Romania and Slovenia also purchase increasing quantities of Hungarian milk. Transport of liquid milk exports is principally undertaken by the foreign customers and not by domestic companies. Deliveries to Romania are the only exception, as customers of that country usually have insufficient transport capacities.

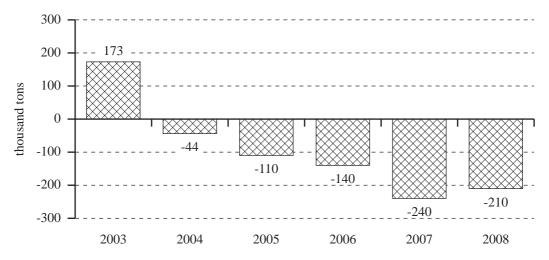


Figure 1: Net trade balance of milk and dairy products in milk equivalent Source: HCSO, AKI-PÁIR, and calculations by the Agricultural Policy Research Department of AKI

The trends of the raw milk exports have a determinative influence on the entire sector. Beyond the indirect impact of the prices in Germany, the purchase prices of the milk in Hungary are mainly determined by the prices available for Hungarian exports to Italy. The dynamic increase of the exports is also shown by the fact that by 2008 Hungary had become the third largest raw milk supplier to Italy – after Germany and Austria – even though in 2000 it was not a supplier to Italy. The exports of dairy products have declined following the EU accession, even though exports to third countries remained unchanged. The enterprises are usually able to export at prices that are lower than the domestic prices. Unprofitable exports are often maintained in order to dispose of the temporary surplus generated by the inequalities in the production and internal consumption.

Several processing companies have almost entirely stopped production of previously important export products (milk powder, bulk butter) and their capacities are out of use or have been dismantled. Processing enterprises, especially companies with international relationships, also purchase small quantities of raw milk from time to time from abroad. The majority of the imports are however constituted of semi-finished products: cream, bulk butter and other additives required for the production of some products. In the aggregate, only small quantities arrive in the country, amounting to a small percentage of the imports. Importation is principally not motivated by the lower prices but by the fact that the fat content of Hungarian milk is low, therefore milk fat is insufficient.

Table 1

		2003	2004	2005	2006	2007	2008
Export, tonnes	Milk, cream	45,587	49,386	113,806	228,690	274,436	312,966
	Cheese	23,594	19,694	17,485	13,702	11,108	10,796
Import, tonnes	Milk, cream	4,003	29,427	72,657	72,816	123,059	99,254
	Sour cream, yoghurt	12,070	18,573	24,998	25,690	34,351	33,026
	Butter	1,663	4,356	3,766	5,243	5,428	4,478
	Cheese	12,719	18,315	22,893	32,668	39,155	34,718

Foreign trade structure of milk and dairy products (2003-2008)

Source: HCSO and calculations by the Agricultural Policy Research Department of AKI

Since Hungary's accession to the EU, the EU regulations have been applicable in the Hungarian milk and dairy products market. Milk producers received top-up payments linked to production from national funds, the so-called dairy premium. As of 2007, these supports have been decoupled from production, on a historical basis (the milk quota of 31 March 2007). Dairy producers in 2007 and 2008 were entitled to up to HUF 8.03 support by historical eligibility units, that is, by kilogramme, up to 1.99 million tons on the national level.

For Hungary, the national reference quantity (the national quota) amounted to 2,019,300 tonnes for the quota year 2007/2007, while the national reference fat content was 3.604 percent by mass. According to the data of the Agricultural and Rural Development Agency (paying agency), the producers had 1,856,014 tonnes of supply quota and 53,500 tonnes of direct selling quota at the end of the quota year 2007/2008. The utilisation of the supply quota amounted to 1,666,762 tonnes, that of the quota of direct sales by producers to 52,002 tonnes. The rate of utilisation of the national quota amounted to around 85% and, within it, that of the quota for processing was 89.8%, showing that *growth is not obstructed by the quotas at national level*. It should be noted, however, that most of the EU member states were unable to fulfil their processing quotas during the quota year 2008/2009 (Figure 2).

The gradual increase of milk quotas in the EU concerns Hungary directly, because as a consequence milk and dairy production is growing in certain member states (e.g. Germany, Italy and the Netherlands). The quota increase may influence Hungarian raw milk export, as member countries with more efficient production may have an advantage on the Italian market, narrowing Hungary's exporting opportunities and thus further depressing the purchase prices in Hungary. It is however certain that through continuing concentration of the EU's milk production the large specialised factories will gain further market share, resulting in a decrease in the production costs at EU level. In the long term – and subject to the trends in feed prices and to climate change – milk production may shift towards the member countries with abundant precipitation and excellent grass yields, thus allowing production of cheap mass fodder.

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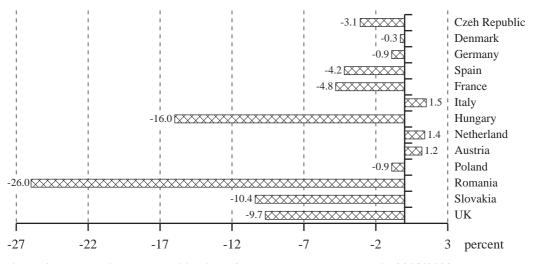


Figure 2: Processing quota utilisation of some EU member states in 2008/2009 Source: Calculations by the Agricultural Policy Research Department of AKI on the basis of DG AGRI data

Consumption

Unlike the global trends, consumption of milk and dairy products has only slightly increased in Hungary during recent years, remaining far below the level of the 1990s. According to the HCSO, the annual per capita consumption in milk equivalent amounted to about 180 kg in 2006 (while the average in the EU-15 countries exceeded 260 kg). The biggest lag compared to the more developed member states is in the field of butter and cheese consumption. In Hungary, consumption of liquid milk amounted to 81 kg per annum per capita, while the average consumption in the EU-25 countries approached 93 kg. Growth in liquid milk consumption is not expected in Hungary but demand may perhaps be encouraged through launching new, innovative dairy products onto the market [Hockmann and Vőneki, 2007].

In the last few years, the growth of cheese and butter consumption has accelerated. The per capita cheese consumption (quark included) in Hungary amounted to 10.6 kg per annum, exceeding by 18% the quantity of 2004. The average per capita cheese consumption of the EU-25 countries amounted to 18.4 kg in 2006. The global butter consumption was 1.3 kg per capita in 2006, while it amounted to approximately 4.1 kg in the EU-25 countries. In Hungary, the per capita butter consumption was just 1.2 kg in 2006, even after increasing by 33% in a single year. The negative judgements concerning animal fat consumption are decreasing and popularity of spreadable butter is increasing against margarine. The extended shelf-life convenience products are gaining popularity; also Hungarian consumers purchase breaded cheese, flavoured butter cream etc. in increasing quantities. ESL (*extended shelf-life*) milk that can be stored for 21 days is a novelty gaining popularity; short time pasteurisation occurs at 130 °C (for about half a second), thus the milk's flavour and original properties are better conserved.

The milk and dairy product consumption habits are still basically determined by income levels (cheese consumption is growing more quickly in the world's more developed countries, while in the poor countries, liquid milk consumption is principally increasing). In Hungary, too, further increase in the consumption of cheese and milk desserts may be expected. Due to the low level of

cheese culture (processed and semi-firm cheeses continue to be most in demand), there are still opportunities in the cheese market: special products could fill market gaps.

Loyalty to the Hungarian products is not typical; at most, consumers keep to some "approved" old domestic brands, but are open towards the (cheaper) imported products preferred by the retail trade chains. Of course there are some Hungarian products that continue to be popular to such extent that even discount stores mainly relying on imported products cannot neglect them. These are well-distinguished, highly processed and high added value products, principally yoghurts, bars and milk desserts. Only sales of these domestic products have presented real growth and no new, innovative Hungarian products have been launched on the market recently.

Trade

As a consequence of the direct commercial relationship, changes in the dairy product prices in other member states have strong effects on the Hungarian market of dairy products. By importing from other countries, the retail trade chains compel the Hungarian dairy industry to adapt. Merchants strive to cut prices to gain consumers and increase their attractive force with the help of cheap imported products. According to estimates, the milk processing companies sell 75 to 80% of their products within the country to the retail trade chains, the remaining quantity being exported. The pecentage of milk and dairy products originating from abroad may account for up to 30% of consumption (or even 40% in the case of cheeses).

Competition in the dairy products market is tough; the processing companies underbid each other and are often compelled to accept prices below costs. The market strategy of the retail trade chains is unilaterally consumer-oriented; they a follow price adjustment strategy and, as regional purchases are increasingly typical, they do not take into consideration the local possibilities and conditions of milk production and processing (e.g. high or increasing production costs).

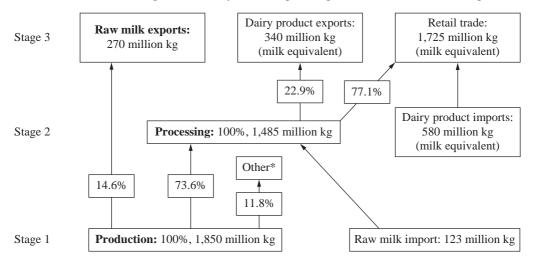
Own brand products of the commercial sector constitute a serious challenge to the processing companies. These are usually the cheapest products (partly from imports), sold in the largest volumes. There is strong competition for their production, but producers may improve the utilisation of their capacities through their production, while decreasing the production rate of their manufacturer brand products. Trends show that the price gap between commercial and manufacturer brands is narrowing and the own brands of the retail chains target increasingly higher quality categories, too.

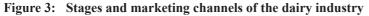
The processing companies often receive orders from the commercial chains on daily basis, thus sometimes they have to deliver within 24 hours. Due to the frequent sales transactions, the prices are often changed. Production is difficult to schedule; some milk processing companies accept orders in excess of their capacities and purchase the excess goods from other sources, thus avoiding their own production remaining unsold. There are companies that have relatively stable order quantities, but at other enterprises the quantities ordered may have even twenty fold differences from one week to another. Sales transactions are usually (but not always) discussed by the processing companies and the commercial chains one month in advance. It also happens that such transactions are established in contracts for a year in advance. Processing companies estimate that about 20% of the dairy industry's total production value is marketed at reduced "sale" prices.

Processing

In Hungary, milk production amounted to 12% of the food industry's production in 2007. According to the data of the Hungarian Tax and Financial Control Administration, 50 milk processing companies have been operating since 2004, their number remaining practically unchanged. Despite the large number of processing companies, the degree of concentration is relatively high: based on the 2007 year's data of AKI and the HCSO, the largest companies more than 80% share of milk purchases. With these data Hungary has the leading position among the Visegrad countries, but a much stronger concentration characterises milk processing in the EU-15 countries.

The processing companies purchased 74% of the domestic raw milk production in 2007. 15% of the total domestic production was exported. Imported raw milk amounted to 8% of the total processed quantity (Figure 3). The imports of milk and dairy products calculated in milk equivalent amounted to 703 million kg, considerably exceeding the exports of about 610 million kg.





* Direct sales and other non-traceable milk turnover.

Source: HCSO, and calculations by the Agricultural Policy Research Department of AKI

Even the smaller milk processors purchase milk from several dozens of producers, while the larger ones buy from up to 200 producers. The processing enterprises have a relatively strong bargaining position, having contacts with a large number of unorganised and relatively undefended producers. There is a general belief that smaller companies consider producers as their partners, having the aim of establishing long term co-operation. The purchase prices are defined by mutual agreement, in compliance with market prices.

The processing companies apply more or less uniform contractual basic prices, changing subject to the fat and protein content, and some enterprises may also differentiate (up to 5%) on the basis of quantity. When establishing the basic price, a majority of the processors start from the national average price data regularly collected and published by AKI, or from the price statistics of the product council. Thanks to its sector neutrality, in most cases the AKI price is accepted and purchases are implemented mainly on its basis. Several critical statements may however be made

in respect of pricing. Firstly, to a certain extent the processing companies are able to influence the data gathered; the prices reported are not identical with the amounts actually received by suppliers, because they are completed by premiums and other additions such as professional consulting fees, transport cost reimbursement etc. (Thus prices paid for a litre of milk may in fact exceed by HUF 3 to 5 the price actually published.) On the other hand, the published price is based on historical data, it does not reflect the differences arising from local conditions. Furthermore it has an automatic feedback effect on real prices. At the same time it is important to emphasise that, due to the increasing amount of excess milk, processors are purchasing an increasing percentage, 10 to 30% of the total milk supplies, on the *spot* market.

The weak quality parameters of milk and its low protein and fat content (Figure 4) spoil the competitiveness of processing and cause extra costs against Hungary's European competitors.

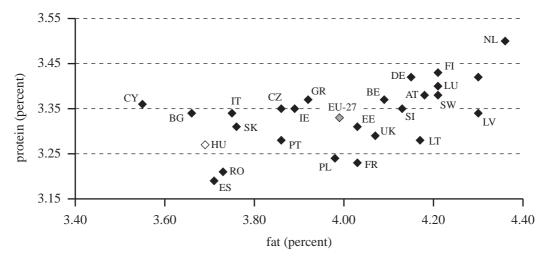


Figure 4: Nutritional content of raw milk in the EU member states (2008) Source: Eurostat

The rate of utilisation of the dairy industry's capacities has slightly improved during the last few years at sector level, but still remains very low – estimated to be about 50%. The loss-making butter and powdered milk factories were closed, but in the meantime several investments allowing compliance with the Community's requirements and more efficient operation have been implemented. There are great differences among enterprises and even among factories. While the most competitive processors in Western Europe and the surrounding countries strive for maximally utilising the capacities, for two- or three-shift operation, single shift operation (perhaps extended) is characterising Hungary. Moreover, in some places, the number of the weekly working days also had to be decreased, constituting a competitive disadvantage. Milk processing factories with around the clock capacity utilisation are rare exceptions in Hungary. The multinational companies are characterised by strict co-operation with their other subsidiaries; the importance of the international division of labour is increasing. Co-operation among domestic processors still remains low in the field of the reasonable division of labour; the utilisation of capacities could be increased through assigning production of certain products under contract work.

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Almost all processing companies wish to increase their revenues, not through takeovers or mergers but through better utilisation of their capacities. While in the past, larger market share constituted the main strategic objective, by today, improvement of profits has become the principal goal, for example through profile cleaning or better capacity utilisation. Cost cutting is a general aspiration, while the production shifts towards the products with a higher degree of processing. At the same time, however, benchmark analyses are not performed. Where such analysis was done, it transpired that specific water consumption was considerably higher and machine exploitation and energy efficiency remarkably worse in Hungary than with competitors. Correct adjustment of the dry matter content in the case of cheese production is a very important requirement. Recycling of the by-products and of waste water also allow important economies.

Product development, introduction of new packing sizes and of more modern packaging are included among the objectives of enterprises. Based on market research studies performed by the processing companies, development in the category of desserts and cheeses is most rewarding. Even so, *Hungarian companies are behind their competitors in the field of product innovation.* This is for several reasons. On the one hand, enterprises really strong in capital and equipped with modern technologies are mainly owned by foreign investors and operate as subsidiaries of multinational companies. The innovative products are often developed and manufactured by the parent company, while subsidiaries, in the best case, take up the process against payment of a fee, or more frequently, the ready product is directly imported by the trade. The product range is often too large and the quantities produced too low, thus remarkably increasing the costs of developments. In addition, Hungarian consumers are extremely price sensitive, not readily accepting expensive novelties.

The Hungarian dairy industry is unable to compete with the large European processing companies in the field of mass products (e.g. semi-hard cheeses). For example, the market position of the traditional *Trappista* cheese, most popular in Hungary, may be defined as dramatic: the brand is not protected, anybody may produce it at present, while *Edam* and *Gouda* type cheeses manufactured in the Netherlands and in Germany exercise a huge pressure to the Hungarian market of the semi-firm cheeses.

While dairy processing in Western Europe is characterised by high technology level and narrow product range, the situation is just the opposite in Hungary. Thus the market share of the domestic processors will continue to decrease due to growing imports, rendering unavoidable the selection of the companies and further expansion of the foreign dairy products in the sales.

The situation of the smaller milk processing companies (especially of those manufacturing mass products) is becoming increasingly difficult and they are gradually losing ground in the market. These processors principally supply wholesalers and retail trade chains under Hungarian ownership. Due to the small volumes, it is difficult for them to access the shelves of the multinational chains. Therefore, for them manufacturing of special (e.g. lactose-free or organic) products and the expected future propagation of the speciality stores may offer the possibility of survival or through collaboration they could achieve higher volumes or convince the commercial companies to grant separate shelves for their special products.

The market participants are of the opinion that the requirements created by the authorities are over-precise and lacking practical relevance, thus the non-uniform operational mentality of the authorities sometimes causes significant extra costs in milk processing.

The black economy amounts to about 10% of the dairy industry (except for direct sales of raw milk), according to estimates of the sector's participants. Even though the tax evading market players are not price-setters, they quickly fill the market gaps thanks to their lower sales prices.

Production

The bovine population in Hungary has almost continuously decreased during in recent years: according to the HCSO's data, the 703,000 beef cattle counted on 1 June 2009 is 3.4% lower than the number of cattle one year earlier. The number of cows has fallen by 6.4% from 2004 to 2009, amounting to 320,000 on 1 June 2009. Within this, the number of dairy cows was 219,000 (-13.1%), of meat cows 61,000 (+56.4%) and of the mixed utilisation cows to 40,000 (-21.6%). About 80% of the dairy cows are kept by economic corporations and the remaining 20% on individual farms; this rate has not changed in recent years.

Hungary's milk production has been continuously decreasing since EU accession, amounting to just 1.85 million tonnes in 2007. The milk purchase decreased further in 2008, and though raw milk exports have been increasing, a further fall in the output has also been detected in 2009. The trend of Hungarian milk production in the medium term will be remarkably influenced by the effects of the gradual increase and than of the termination of the quotas on raw milk exports.

According to the farm structure survey of 2007, there were 20,000 farms raising cattle in Hungary in that year. Nearly 8,000 of them kept dairy cows. In all, 4,000 farms produced milk for processing. In the production stage of the sector a single important producer organisation has recently been established: the *Alföldi Tej Értékesítő és Beszerző Kft*. With its quota of about 400 million litres, the enterprise had a 31% share of total milk purchases and 20% (expressed in milk equivalent) share of milk processing in 2007. Recently the low prices and the increasing quality requirements have expelled several producers from the market; the smaller ones elected farm gate sales or abandoned production, while the larger ones opted typically for joining producer organisations (e.g. *Alföldi Tej Kft*.).

By examining the farm structure it can be established that the dairy cattle concentration in Hungarian farms is high compared to other EU member states. While enterprises with cattle number between 30 and 99 are in the majority for example in Germany and Denmark, the overwhelming majority of the dairy cow population is held by cattle farms with 100 or more headcount in Hungary. Further strengthening of the concentration is expected in the future. Large processing companies would prefer to have contacts with only 20 or 30 milk producers instead of the current 100 to 150 suppliers.

The domestic milk farms can be divided into two main categories, differing basically in respect of the degree of concentration, the technologies applied and in part also in the production objectives. Farms raising more than 20 cows produce for direct dairy processing, while the rate of own consumption and direct sales is remarkable in the case of farms with less than 20 cows [Fertő *et al.*, 2005]. (To be noted: those selling at the farm gate are higher in number than those having direct sale quotas).

The international comparison of milk production costs demonstrates well that, related to the protein and fat content, milk production is relatively expensive in Hungary. Feed costs constitute a determinative element of the cost structure. Although there are remarkable differences among factories in this cost element, the majority of the producers are at a disadvantage against competitors in respect of feed utilisation and of the green fodder use. A further problem is constituted by the fact that the supply of the relatively cheap sugar beet processing and canning industry by-products is continuously decreasing, thus increasing the costs of feeding. The relatively high level of labour costs denotes a competitive disadvantage of the Hungarian milk producers in the field of organisation and labour productivity.

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Losses arising from the problems concerning the health state of the stock cannot be neglected either. According Ózsvári [2007] the annual losses per cow due to reproduction disorders may amount to HUF 40-80 thousand (EUR 145-290) in Hungary; this may represent as much as 9-11% of a cattle farm's total revenues. Due to the long period between birthings the output is lower and the reproduction slower. Frequent mastitis due to intensive deep litter keeping is another serious animal health problem causing significant losses.

Sufficient land (in ownership) may give a significant advantage; here a cattle farm is able to produce the necessary mass fodder and can dispose of the manure generated. With the lack of land property, the economic corporations are undefended against land owners in Hungary; however stability of land use is a very important aspect when making long term investment decisions. The problem is further aggravated by the inordinate land ownership relations, the fragmented property structure and by the large proportion of the undivided common property lands. In some regions of the country the majority of the suppliers are foreigners (the participation of the Dutch, Austrian, Italian and Belgian milk producers raising 400-600 cows may amount to up to 40%), with quite uncertain future, due to the unclear and secret so-called "pocket contracts".

Producers' co-operatives play an important role in cost cutting in western countries. Hungarian farmers, however, still make hardly efforts to decrease input costs, even though purchasing associations would be indispensable in Hungary, too, because input suppliers are much more concentrated than milk producers.

Beyond profits realised by the farms, the rural development supports will be the most important sources of investment and development in Hungary during the years to come. However interest for development supports is negligible in Hungary, especially by animal raisers, because the acute lack on capital, the expensive loans, the market conditions and the economic prospects together with production obligations imposed as a precondition for the supports dissuade large numbers of the participants from making improvements.

For some farmers diversification from milk production and additional activities (for example direct sales or operating milk shops, domestic cheese production, landscape management, organisation of corporate or school excursions etc.) may represent a solution. But the success of these activities is highly influenced – beyond availability of supports –by the geographical location and by the personal qualities of the entrepreneurs.

Summary

The Hungarian milk sector has faced serious problems of competitiveness in recent years. The production has continuously decreased, the foreign trade balance of milk and dairy products has deteriorated from year to year and the rate of self-sufficiency fallen below 100%. The rate of utilisation of the national quota (2,019 thousand tonnes) hardly reaches 85%, and within it the utilisation of the processing quota remains below 90%.

Recently not only have the imports of milk and dairy products increased, but also the milk exports: today, 10-15% of the produced raw milk and 20-25% of the milk for processing is sold abroad, mainly in Italy and also in Romania and Slovenia. The export volume of the dairy products has at the same time drastically declined. The purchase price of the raw milk is mainly determined in Hungary by the price of the raw milk realisable in the exports to Italy.

The consumption of milk and of dairy products has grown only very slightly in recent years. There is the largest lag in comparison to the more developed member states in butter and cheese consumption. In the future, principally an increase in the demand for cheeses and milk desserts may be expected, supposing however that the purchasing power of the Hungarian consumers would increase.

The domestic market is still dominated by brands of the period before the change of regime but loyalty of the Hungarian consumers to domestic products is not typical; they are open to (cheaper) imported products. The share of the imported milk and dairy products in the consumption attains 30% (and even 40% in the case of cheeses).

The commercial brand products represent a serious challenge for the processing companies. The competition for their production is very strong, thus the rate of manufacturer brands in the sales is gradually decreasing, but at least the utilisation rates of the milk processing capacities may be maintained. Due to the strong competition, the milk processing companies are often compelled to supply their products at prices below costs. The retail trade chains do not take into consideration the local conditions and interrelations of milk production and processing. The purchase prices are often changed due to the frequent sales transactions. In the estimate of the processing companies, about one fifth of the dairy industry's aggregate production value is sold at "sales prices".

While milk processing in Western Europe is characterised by high level technologies and a narrow product range, the situation is reversed in Hungary. This explains in part the very low degree of utilisation of the capacities – attaining hardly 50% in some estimates. Due to the growing imports, the market share of the milk processors is further decreasing, rendering selection indispensable and headway of the foreign capital very likely.

The market participants are of the opinion that the requirements created by the authorities, though circumstantial but lacking practical relevance, furthermore the non-uniform operational mentality of the authorities in Hungary cause sometimes significant extra costs in milk processing.

Recently the low prices and the increasing quality requirements have expelled several producers from the market; the smaller ones elected farm gate sales or abandoned production, while the larger ones opted typically for joining producer organisations.

Milk is produced in Hungary at relatively high costs related to the protein and fat content. The majority of the farmers are at a disadvantage against competitors in respect of feed utilisation and green fodder use. The relatively high labour costs denotes a competitive disadvantage of the Hungarian milk producers in the field of organisation and labour productivity. Important losses deriving from the stock's health condition problems constitute a determining element of the milk production costs.

In Hungary, the economic corporations are undefended against land owners due to the lack of their own landed property. Interest in development supports is negligible because the acute lack on capital, the expensive loans, the market conditions and the economic prospects, together with the production obligation imposed as a precondition for the supports dissuade a large number of the participants from making improvements.

The gradual increase of the milk quotas concern Hungary in an indirect manner: more efficient milk producing countries may be at an advantage on the Italian market, thus narrowing Hungary's exporting possibilities and as a consequence further depressing domestic producer prices. If the Hungarian producers are unable to keep pace with the growth of cost efficiency, the competitiveness of raw milk production will further deteriorate as the milk quotas are "inflating away".

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