

The Situation of the Sugar Beet Production in Hungary Before the EU Accession

Zsuzsanna SLEZÁK, Nikoletta FÁRÓ, György SZÉLES

SUMMARY

In Hungary, the sugar beet production suffers from many complex factors, which reflect on a crisis situation. Due to the narrowing markets and a decrease in the demands for sugar all together with the uncertainty and over-production of the processing industry, the sugar beet producers are very defenceless. The special technology of the sugar beet production gives an especial importance to this fact. There is not too much place for changes for the farmers within the structure of the production costs, which has consequences in terms of both quality and volume.

In the European Union, the sugar sector is highly regulated. The accession will lead us to a decades-old and solid state of the sugar production. For all member countries, unique and harmonised prices and export regulations exist.

With the accession, the EU countries have the opportunity to target the markets of the newly joining countries, such as Hungary, with their surplus in sugar production. Therefore, it is in their interest to give as low quota as possible to the Hungarian sugar beet production.

One key point of the regulations of the sugar production is the quota and its introduction in the production. For this reason and for the functioning CMO's of the sugar beet sector, it is important to create and maintain an accurate and up-to-date database and the relating institutional background. The statistical and information system should cover - besides the data of the domestic production and processing and the international trade - the monitoring of the foreign markets and the whole of the agribusiness.

The effectiveness of the production should improve even if a number of the farmers have to give up beet production. It is significant the government's responsibility to ensure these farmers' safety of existence. By the time of the accession, reaching an average yield of 45 to 55 tons per hectare, the Hungarian sugar beet production will be competitive with the EU farmers. The current technical and agronomical level of the whole sector does not satisfy the EU requirements, however a number of producers are falling into line with the EU level. Another task is to improve the effectiveness of the processing plants that could lead to the elimination of the factories with small capacity. In that case, additional attention should be paid on the sugar beet farmers and alternatives should be offered by the winding up concerns.

KEY WORDS

sugar beet, production, Hungary

University of Kaposvar, Institute of Economics and Management
Kaposvar, Hungary

Received: June 20, 2003

2. THE VOLUME OF THE SUGAR BEET PRODUCTION IN HUNGARY AND ITS CONCENTRATION

Despite of that the conditions are less favourable for the sugar beet production in Hungary, the yields cover the domestic consumption. According to the specific yields, the Hungarian figures belong to the last third of the European countries.

Yields above 60-70 tons per hectare are frequent in the European Union, due to the favourable soil conditions, the high potential breeds, the high level of machinery, pest control and fertilisation and the more favourable ecological conditions. In Hungary, the sugar beet production is 5,0 to 5,5 per cent and the sugar production is 1,5 to 3,0 per cent of those of the European Union..

In Hungary, some 3800 to 4000 companies are producing sugar beet, as an oppose, 350 large co-operatives of the '80-ies, which also integrated the production. More than one third of the producing land belongs to the small farms with less than 30 hectares; these farms produce 34 per cent of the total production. (Viatte, G. et al. 2001.)

The average yield is higher than 40 tons per hectare on hardly more than half of the producing land. The yield is especially low in the small farms of Middle Hungary and the Middle Transdanubian region.

TASKS BEFORE THE EU ACCESSION

One of the main challenges of the EU accession is the improvement of the conditions of agricultural production; in the aspect of not only the legal but the economical harmonisation. This means that the Hungarian level should reach that of the EU in terms

of producer prices, direct payments, profitability and even in consumer prices and wages till the accession.

After the troubles of the past years, the preparations for the EU accession raise the questions and tasks of modern management, complex development, quality production and competitiveness. According to the planned four to five years of lining up and technical modernisation, the double of the current annual payments and investments is needed. Along with the overall improvement of the economic conditions, the uncompetitive small farms, the shortage in income and source, which limits the quality and the volume of the production and the lack of the integration, which sets back the production, processing and trade can not be liveable any more. (Mészáros, S. et al. 2000.)

On its own, the smaller economic size is not disadvantageous; most of the EU farms are small family farms. The major limiting factors within the size are the agricultural technical level and the endowment of machinery.

Despite of the fact that the machinery endowment significantly improved in the sugar beet production during the last years, there are still lags in the equipment of soil-preparation. The low level of capital endowment makes the special and very expensive sugar beet equipment unavailable for widening layer of the small farmers. The average age of the existing machinery is high (more than ten years), therefore the maintenance costs are also high and the safety of the operation and work quality are getting worse. The sugar factories try to help their producers with different investment and credit constructions, such as loans for machinery, purchase loans or equipment lending.

Table 1. Sugar beet production by regions in Hungary in 2000 and 2001

Region	Year	Harvested land, hectare	Total yield, tons	Average yield, kg per ha
Middle Hungary	2000	2867	84471	29460
	2001	2982	124467	41740
Middle Transdanubian region	2000	4204	163561	38910
	2001	5818	259687	44640
West Transdanubian region	2000	11900	369798	31080
	2001	13376	407527	30470
South Transdanubian region	2000	4435	174093	39250
	2001	4988	272807	54690
Northern Hungary	2000	3000	82431	27480
	2001	3394	145374	42830
North Great Plane	2000	22056	801423	36230
	2001	23814	1148812	47120
South Great Plane	2000	9004	300415	33370
	2001	11322	544324	48080
Total	2000	57466	1976192	34350
	2001	65694	2902998	43780

Source: Hungarian Statistical Yearbooks

Table 2. The land contracted for sugar beet production

	2000	2001	2002	2002, in % of 2001
production land, ha	54573	67559	55703	82,45
yield, tons	2010469	3094878	2555097	82,55
average yield, t/ha	36,84	45,81	45,87	100,13

Source: Sugar Board

In the next years, an internationally competitive average yield of 45 to 55 tons per hectare should be reached in order to satisfy the domestic demand on decreasing land.

THE SITUATION OF THE SUGAR SECTOR AND MARKET IN HUNGARY

The sugar producer companies belong to three groups with foreign interest:

- Argana is Austrian (factories are in Petőháza, Ács, Ercsi, Sárvár és Kaposvár),
- Béghin Say is French (factories are in Hatvan, Szerencs, Selyp és Szolnok),
- Eastern Sugar, English-French (factory is in Kaba)

The sugar factories in Mezőhegyes and Sarkad had been owned by Argana and in 1997 these were bought by Eastern Sugar, which in the end closed them down.

A more and more important actor of the Hungarian sugar market is Hungrana Ltd, which produces sweetener, isoglucose from corn. The isoglucose is the biggest competitor product of the conventional sugar, its capacity is one fifth of the whole Hungarian sugar producing capacity. In the EU, there is a quota for the iso-sugar production in 2 to 5 percentage of the whole sugar production. The Hungrana is owned by foreign concerns, too; Agrana and Amylum own it in 50-50 per cent.

The French Béghin-Say group sold its factories in 2003. The factories in Szolnok, Szerencs and Hatvan were bought by Nordzucker AG, Braunschweig. The Nordzucker wants to extend its interest in Eastern Europe; it has already got factories in the Czech Republic and Slovakia. These three factories produce 130 thousand tons of sugar annually. (Erdész, F-né et al. 2001.)

Thus, at the moment, there are three actors on the Hungarian sugar market: the Nordzucker (German), Argana (French) and the Eastern Sugar (French-British). These three concerns basically, has divided the market geografically; they are not competitors of each other in the sugar beet purchase, because they are far away from each other. Likely, a great change can not be expected due to the appearance of a new actor, because the Hungarian sugar sector regulations

and the EU quotas limit the place for changes for the producers.

It might make difficult the activity of the Nordzucker in Hungary, that the future of the three different public companies, which are partly owned by the state is still not arranged by the ÁPV Rt and Béghin-Say. According to the current negotiations, the shares of the sugar industry will be apported into the Forrás Plc, and the stocks will be offered for owners of compensation note in Spring.

In 2002, the regulation based on production quotas was introduced and applied on the Hungarian sugar factories and sugar beet producers. The effect of the new system has already being seen at the seeding, as the sugar factories have their partners produced only that amount of sugar beet, which is enough to fill the quota given. It is considered as EU-conform process.

In 2002, 530 thousand tons of quotas were allocated by the agricultural minister. The white (beet) sugar was given 400 thousand tons and 130 thousand tons for the isoglucose. The total quota for sugar beet production was divided among the three producers of beet sugar based on their production in last year. Thus, the Hungarian Sugar Plc (Magyar Cukor Rt) was given a maximum of 146,520 tons for inland sale that is 36.63 per cent of the total production, the Nordzucker (Béghin-Say) 36.46 per cent (145,840 tons) and the Eastern Sugar (Cukoripari Rt) 26.91 per cent (107,640 tons).

As the exclusive producer in Hungary, the whole quota for isoglucose was given to the Hungrana Ltd, Szabadegyháza.

The factories has made their contracts with their farmers and producers according to these quotas. In 2002, the Hungarian Sugar Plc contracted 376 farmers on the production of a total of 980 thousand tons of sugar beet, which is enough for the production of 130 thousand tons of white sugar. The net price for the sugar beet with 16 per cent of sugar content is contracted at 8,131 HUF per ton; and with optional surcharge the average purchase price can reach 9,000 HUF per ton.

The regulation of the sugar production, which was implemented in 2002 made the co-operation more calculatable between the producers and the factories. Despite of that, some fields of the regulation need further refinements and complementation. Such fields

are, e.g. that whether the producers who were given quotas can or can not forward it, or what the quotas of ceasing or transitioning farms will happen.

The Eastern Sugar Plc, Kaba has contracted on the production of 650 thousand tons of sugar beet with some 120 farmers and producers via integrators. This amount will be produced on 12,500 hectares. Not all the producers are in direct contact to the factory, only the integrators (almost 30) are, who produce on greater land and organise the smaller farms. Also the subsidies are paid for the farmers by the integrators.

REGULATION OF THE SUGAR PRODUCTION IN THE EU

The common market of the sugar sector started to be organised by six countries establishing the European Union, in 1967. The different areas of the Community had so great differences in their effectiveness and production, that a quota system had to be introduced in the sugar sector in the beginnings. The role of the production quotas was intended for a transitional period, only till the equalisation of the differences. Though, after the structural changes the quotas could have been eliminated, they became an important element of the system and remained. Likely, due to the combination of the quotas, the self-financing system and thus the detachedness of the sugar sector, the reforms of the CAP did almost not affect the sugar industry. (Mihalovits, A. 2003.)

The price of the sugar was stabilised with intervention guarantees, and the domestic sugar was defended with import duties and export subsidies. The intervention covered the sugar, while the price of the sugar beet was guaranteed by the regulators included in the contract between the farmers and the factories.

By 1981, the sugar regulation became self-financing due to the different duties on sugar and raw materials.

The common market organizations of the sugar sector were introduced in 1968 in the European Union. Basically, it has not changed since and is organised on the basic theory of the beginnings.

The first regulation covered only the sugar, and in 1980, the isoglucose and in 1994, the inulin beet

syrup were included. The current sugar regulation covers the production of beet and cane sugar, sugar beet, sugar cane, inulin syrup, isoglucose, molasses and other sugars.

The several-decade-old sugar regulation covering almost all small details is built on five main factors that determine its strategy:

- production quotas
- prices and guaranteed prices
- self-financing
- import duties and export subsidies
- intervention

The quotas for sugar production is being reviewed and modified along with the EU enlargement.

During the last negotiations with the candidate countries, the Committee took the production of five years before the application into account. Leaving out the years with the highest and lowest production, the rest three years and consumption and trade data were the basis for determining the quotas „A” and „B” for the new member countries. The data can be seen in Table 3.

There are quotas „A” and „B” and production „C” for sugar, isoglucose and inulin allocated. The quota for inulin is given individually for each company. Though, both the quota system and the production duties are applied on the production of isoglucose and inulin, institutional prices are not valid for these product.

Quota „A” is provided for satisfying the domestic consumption, quota „B” is a safety amount to balance the variation of the yields and the quota for export subsidies. Generally, the share of sugar quota „B” is around 20 to 25 per cent, but in case of the lately joined countries it was about 10 per cent. In general, quota „B” can not be less than 10 per cent of quota „A”, in case of isoglucose and inulin this level is at least 23.55 per cent.

The member countries are not allowed to give quotas to each other, though 10 per cent of the quotas can be allocated within the countries among the factories; and to this extent, also the authorities can limit the quotas of the companies.

Production „C” means the (sugar and beet) production above the quotas „A” and „B”. The

Table 3. The sugar quotas given to Hungary after the negotiations in kopenhágai

Quota	EU official standpoint (CONF-H 21/02)	Allocated quota
basis crop producing land, (ha)	3 553 148	3 487 792*
Isoglucose quota „A”, (t)	111 241	127 627**
Isoglucose quota „B”, (t)	0	10 000**
Sugar quota „A” (t)	400 454	400 454***
Sugar quota „B” (t)	1 230	1 230****

Source: Népszabadság 2003; *average of the figures 1999-2001; **based on the offer of the Danish package; ***domestic consumption of 1995-1999; ****export licensed by WTO (31 per cent of quota „A”)

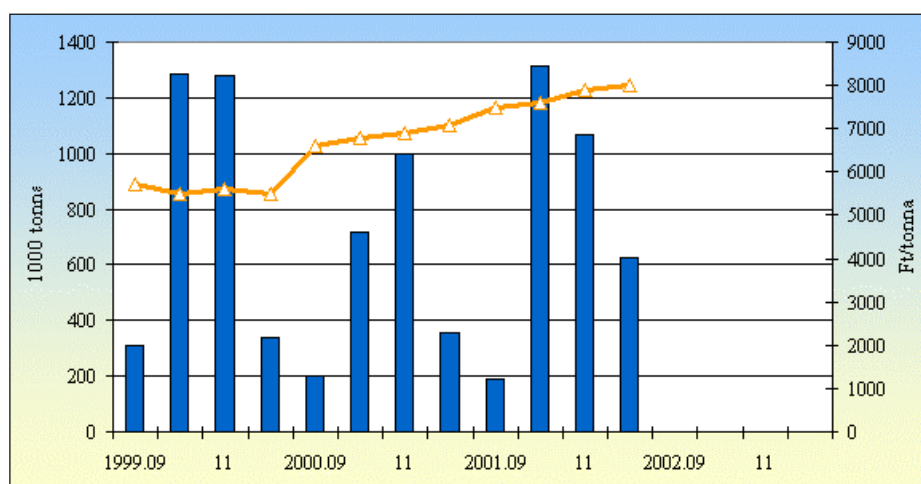


Figure 1.
The yields and the purchase price of sugar beet;
Source: National Statistical Office, KSH

common regulations do not cover this amount of the production other than it is not allowed to sell inland and export subsidy is not available. If the company can not sell all its „C” production, it is possible to allocate a part of it to the next year and sell as quota product – if the relating strict conditions are met. The allocated amount of sugar have to be stored for at least one year, it can not be more the 20 per cent of quota „A” and the sugar beet producers have to agree previously. (Kürty, Gy. – Szűcs, I. 1999.)

According to the GATT Agreement, the EU took commitment on reducing the volume of the subsidised export and the level of the budget of the subsidies.

There are four institutional prices for the sugar sector: target price, intervention price, basic price and minimum price for sugar beet; and several other prices, such as subsidised price, deduced intervention price, preferential price, representative import prices, CIF prices and trigger prices.

From the aspect of the harmonisation of the EU and Hungarian sugar regulation, the most important prices are the institutional prices.

Target price is given for white sugar and the intervention prices are calculated from this. The white sugar and the raw sugar are given intervention prices. For Hungary the intervention price for white sugar is important, which incorporates the basic price of the sugar beet, the costs of the transportation, the processing mark up that is reduced with the returns out of molasses. The intervention price is annually allocated by the Council of Ministries. The intervention price for white sugar was 631,9 Euro per ton (158,000 HUF) in the economic year of 1998-99.

The changes in purchase price of the sugar beet between 1999 and 2002 are shown in Figure 1.

The basic price of the sugar beet is calculated from the intervention price of white sugar so that the varying yields and the differences in the incomes

coming from the varying processing costs and the sale of the by-products. This price is equivalent with the price given to the farmers before production taxes. The basic price of the sugar beet for both the types „A” and „B” is allocated on annual negotiations by the Council of Ministers in the EU. The basis of the calculations is the basic price of the sugar beet, that is 47.67 Euro (11,900 HUF) per ton in the economic year of 1998/99. However, the producer is given not this price.

For the producers, the minimum price of the sugar beet is a guaranteed price, which in any conditions has to be paid by the factories for the sugar beet produced within quota. As production duty is paid by the farmers, too; the basic price of the sugar beet reduced by the production duty gives the minimum price. Different minimum prices are calculated for the beet types „A” and „B”, that is 46.72 Euro (11,168 HUF) per ton and 28.84 Euro (7,200 HUF) per ton for „A” and „B”, respectively.

If sugar „C” is exported at the world market price, that is 200 Euro per ton, the price of „C” sugar beet will be 15 Euro (3,750 HUF) per ton. The income of the farmer will be 46,432 Euro (11.6 million HUF), that is 42.2 Euro (10,550 HUF) per ton.

In 2001, the target price of the sugar beet is 8,100 HUF per ton, and 133,000 HUF for crystal sugar. At first sale for the sugar beet that meets the standards of 16 per cent sugar content the lower intervention price is 7,300 HUF per ton, the upper is 9,700 HUF per ton. The lower intervention price is 120,000 HUF per ton, the upper is 160,000 HUF per ton at first sale for the sugar calculated on factory gate parity.

REFERENCES

- F.-né Erdész - A. Laczkó - J. Popp - N. Potori - T. Kocsis (2001): Agrárszabályozási rendszer értékelése és továbbfejlesztése 2002-re. (The Review and development of the agricultural regulation for 2002) Agrárgazdasági tanulmányok, 2001/5. szám. Budapest: Agrárgazdasági Kutató és Informatikai Intézet.

- Gy. Kürty - I. Szűcs (1999): Az Európai Unióhoz való csatlakozás ágazati felkészülésének fejlesztési forrásigénye. (The financial demands of the preparations in enterprise level for the EU accession) Agrárgazdasági tanulmányok, 1999/2. szám. Budapest: Agrárgazdasági Kutató és Informatikai Intézet.
- S. Mészáros - M. Spitálszky - G. Udovecz (2000): Az EU integráció várható hatásai. (Expectable effects of the EU accession) Agrárgazdasági szakértői tanulmányok, 2000. Budapest: Agrárgazdasági Kutató és Informatikai Intézet.
- A. Mihálovits (2003): Három magyar cukorgyárat vett a Nordzucker. (Nordzucker bought three Hungarian sugar factories) Népszabadság 2003.
- G. Viatte - J. Kiss- J. Popp - N. Potori (2001): Nemzetközi agrárpiaci kilátások. (Outlooks in international agricultural markets) FVM- AKII 2001.

acs68_50