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# SUGAR BEET AND SUGAR MARKET IN EUROPEAN AND NATIONAL CONTEXT

RUXANDRA – EUGENIA POP<sup>1</sup>

**Abstract:** *This paper aims to present the sugar beet and sugar market from a marketing perspective, both at national and european level, taking into account the main elements of the custom marketing mix on the sugar beet and sugar market (product, price, promotion, distribution) as well as the characteristics of demand and supply on the market of interest, represented by the consumption registered respectively by the number of economic agents and beet production at national level. We also want to show where we situated in Europe, in terms of the value of beet production at producer price. Once these issues have been analyzed statistically and interpreting the data gathered, the paper aims to highlight the strengths and weaknesses identified at market level by conducting a SWOT analysis.*

**Key words:** *sugar beet market, swot analyze, demand, supply*

**JEL Classification:** *Q15, Q52, Q27*

## INTRODUCTION

The Root Market in Romania is one of the most productive markets of this kind in Europe, ranked fourth on the continent, after France, the Netherlands and Germany. Sugar beet is grown for roots, from which the sugar is produced as a main product, and molasses used as animal by-products for animal feed and for obtaining alcohol. Romania is a country with a tradition in the cultivation of sugar beet, especially if we refer to the period before the 1989 Revolution. As can be seen from the data analyzed in this paper, one can notice an involution of Romania's sugar beet areas and production, primarily due to factors such as market shares or liberalization of prices on the analyzed market. Liberalization refers to the production of white sugar obtained from the processing and processing of beet throughout Europe and its unrestricted marketing on the European and world market. The sugar beet culture is one of the main crops in our country, being the main source of raw material for sugar production, which is the main purpose of beet cultivation. Worldwide, sugar beet is the second source of sugar, after sugar cane, providing about 40% of world sugar production. Along with food, sugar also serves as a raw material for glycerol production, ethyl alcohol production, lactic and citric acid production, special fuels, lactoprene and dextran as a culture medium for penicillin production. In 2015, the area cultivated with beet was 26,596 hectares, according to the National Institute of Statistics, a smaller area than in 2014. In 2016, the area cultivated with beet reached 24,924 hectares, which shows a decrease compared to 2015. Analyzing the statistical data on the production of sugar beet recorded on the territory of our country, we affirm that the counties with high production are Covasna, Braşov, Satu Mare and Neamţ. Reduced sugar beet production was recorded in Bacau, Hunedoara, Galati and Vaslui. Thus, it is noticed that, in general, in the counties where large sunflower and maize production is registered, lower beet production is recorded because it is not cultivated after these crops. Sugar beet can be cultivated, however, after grain cereals, such as wheat and barley. We also notice that the production of sugar beet is higher on the territory of the counties where precipitation has been high, and vice versa.

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## MATERIALS AND METHODS

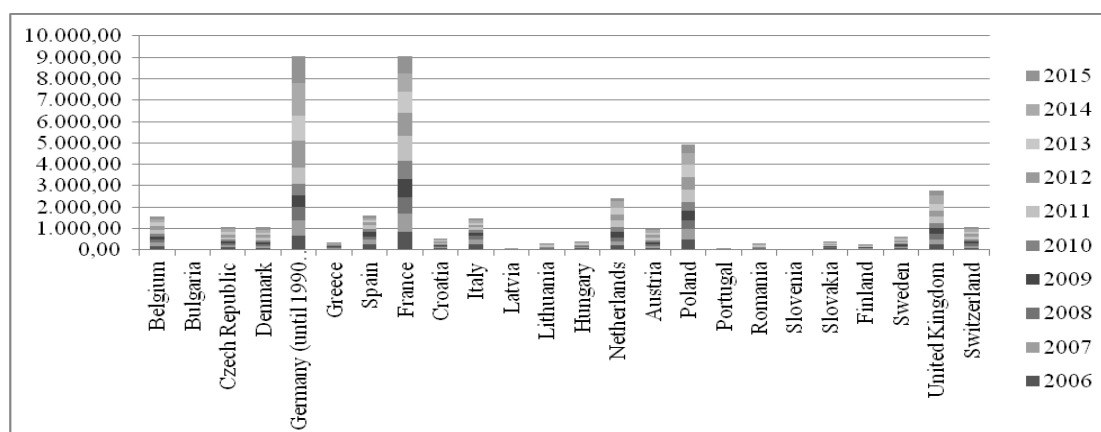
In order to accomplish the present work, the following will be used as main methods:

- Collection, interpretation and capitalization of existing statistical data in state databases, such as INSSE (national level) or EUROSTAT (European level), on the particularities of supply and demand on the sugar beet market as well as other components of analyzed market;
- Dissemination of information from national and / or international literature;
- Making a SWOT analysis at the sugar beet market at the level of an agricultural enterprise.

## RESULTS AND DISCUSSIONS

At european level, Romania ranks 18th in terms of the value of beet production at producer price, before countries such as Lithuania, Finland, Portugal and Latvia. Unfortunately, in the southeastern area of Central Europe, Romania has the lowest value on this market.

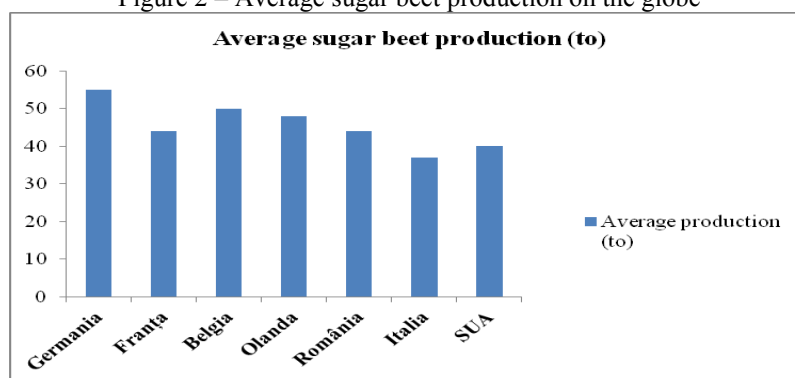
Figure 1: The value of sugar beet production at the producer price



Source: [www.eurostat.com](http://www.eurostat.com)

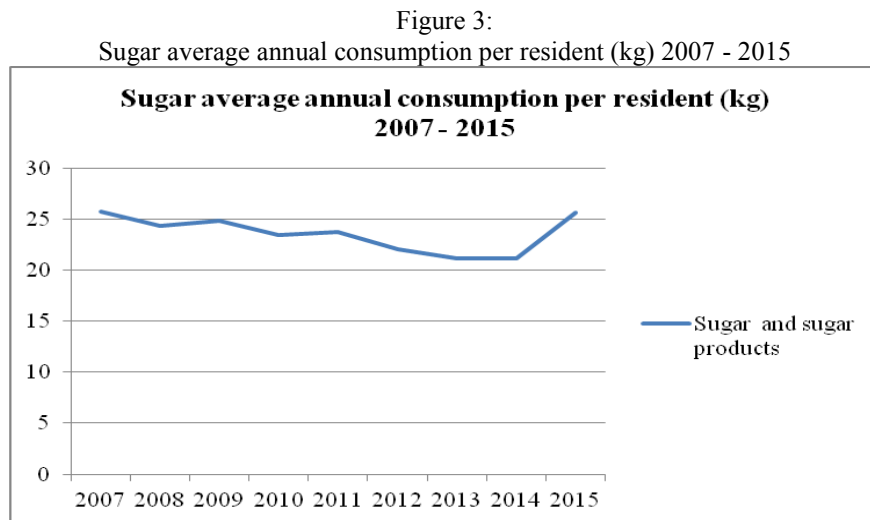
At the european level, sugar market and implicitly sugar market, leaders are represented by countries such as Germany, France, Poland and England. In relation to arable land, large beet-growing areas are found in countries such as the Netherlands, Denmark and Sweden. However, average yields per hectare are quite small, not exceeding 50 tonnes (Figure 2)

Figure 2 – Average sugar beet production on the globe



Source: [www.faostat.com](http://www.faostat.com) ; [www.madr.ro](http://www.madr.ro)

At national level, demand on the sugar beet market materializes primarily through the recorded annual average consumption. Because we cannot quantify the consumption of sugar beet because the latter is cultivated for processing, we will analyze consumption on the sugar market. In Figure 3, we will present average annual per capita consumption over the period 2007-2015 for sugar and sugar products in sugar equivalent.



Source: [www.insse.ro](http://www.insse.ro)

Thus, from the data analyzed regarding the average annual consumption per capita (2007 - 2015), it is noticed that in Romania, from 2007, the average annual per capita consumption decreased from 25.7 kg to 21, 1 kg in 2014, then rising and reaching the 2007 level in 2015 (25.6 kg). This is directly proportional to beet production, in the sense that, in the years when small productions were recorded, consumption decreased and in the years when production increased, there were also changes in sugar consumption.

Also, looking at the data on sugar consumption, depending on the social categories in which consumers belong, but also by the environment, it is noted that the highest average monthly consumption in the sugar market is recorded in pensioners, this being normal, especially if we take into account the fact that older people are deficient in minerals such as chromium, magnesium and zinc. The lack of these minerals in the body triggers that "sweet lust". It is also noticed that a small amount is consumed in rural areas than in urban areas. This can be explained by the fact that in the countryside, sweet products made in their own household, such as jams or jams, are consumed.

Economic agents that have as their object sugar production are basically those who shape the national supply on the sugar market. By consulting the specialized sites on the number of entities according to the CAEN code, we can see that the segment of interest has to do with oligopolistic competition, with a high demand on the market, but with a low bid, activating in this field 23 companies, most of them based in Alba County. Other counties on the territory of which such enterprises are located are: Timiș, Bucharest, Bihor, Buzău, Ialomița, Mureș. In the beet and sugar market, the competition is dynamic and segmented, both from the point of view of their branches and from the point of view of the counties on the territory of which the economic agents operate.

Thus, briefly, the main components of the sugar beet and sugar market, we can make a SWOT analysis at its level (Table 1).

Table 1 –SWOT Analysis sugar beet market

<b>SWOT ANALYSIS ON THE SUGAR BEET MARKET AT AGRICULTURAL FACTORY</b>			
<b>Strengths</b>	<b>Weaknesses</b>	<b>Opportunities</b>	<b>Threats</b>
Climate change in Romania is favorable to the cultivation of beet, which requires, first of all, a large amount of water;	The location of the sugar beet culture is of paramount importance; it can not be cultivated in any way after the following crops: corn, sunflower, oats, rape, mustard, sorghum and after successive crops herbicidated with triazine substances; however it can be cultivated after the cereal grains, especially after the wheat and the barley and legumes;	At the level of political and governmental factors: the elimination of sugar quotas on the sugar market in the European Union;	Declining labor force in agriculture and its migration from rural to rural areas;
The sugar beet market is dynamic, demand in this market is rising;	The imperative necessity, especially in beet culture, the creation of irrigation conditions or land with groundwater intake;	Granting of grants (direct payment schemes and coupled support 733.6 lei / ha);	Climate change, extreme meteorological phenomena (drought, hail);
Innovative tools, treatments, and practices in the field of beet crop harvesting and efficiency (eg pest or other treatments, different types of fertilization)	Sugar beet is a crop that requires many soil nutrients (for example: for one tonne, a consumption of 4-5 kg of nitrogen, 1.5-2 kg of phosphorus, 5.5-6 kg of potassium, 2.5 kg of calcium and 1.5 kg of manganese)	Facilitating access to new technologies;	Decrease in the number of investors in the field;
Use of high quality seed	Need for elaborate maintenance work, even from the tenth day of sowing;	Technological improvements in the sugar beet market;	Changes occurring at the level of political and governmental factors that directly or indirectly affect the agricultural market, implicitly beet;
The beet market is one of the most integrated and regulated at European level	Lack of funding	The oligopolistic competition: high demand and low supply on the sugar market	Competition, mainly economic agents dealing with the production of sugar substitutes: reed
Taking important landmarks from us in the country, sugar	Reduced promotion of the agricultural enterprise on the beet or	Modernization of treatments against diseases and pests in the	At the level of the economic factors: the

production costs are much lower than in other crops (around 0.160 lei / kg.)	sugar market;	tuberculosis market;	increase in the interest on agricultural loans and the fees charged by the bank;
National experience in beet cultivation, dating back to the communist period;	Equipment wear;	Drop in interest on agricultural loans;	Rising input prices without which the farmer can not effectively carry out his work;
Application to funding sources to support the business.	Labor instability in the agricultural market, or lack of necessary skills.	Major financial allocations at national level by the PAC	Implement poor management to improve productivity and efficiency.

Source: Pop R., Piața culturilor de cereale, oleaginoase, tuberculifere și rădăcinoase, Ed. ASE, 2017

Determinants that influence beet production can be assessed through the SWOT analysis so that farmers can form an overview of their crop conditions, harness their strengths, improve the weaknesses and know the threats with which they can face their work. The most important aspect is that they are aware of the opportunities existing on the market and make use of them in the work they carry out.

## CONCLUSIONS

The sugar beet market is an important sector for the agricultural system in Romania due to the ratio between the demand and the over-supply offered on this market. This paper attempted a funnel-based approach, from general to specific, starting from an overall analysis of the sugar beet market at European level and continuing with a national analysis.

At European level, we have established Romania's position in terms of value for production at producer price, but also from the point of view of the average international sugar beet yields. Analyzing the ranking of countries with the highest value of beet production at producer price, we highlighted countries such as France, Germany, Poland and England. As for the lowest values registered in Europe, we mention countries such as Bulgaria, Slovenia, Latvia, Portugal and Finland. Romania ranks 18th in the ranking.

At national level, we have briefly traced data on the counties with the largest recorded beet production (Covasna, Brasov, Satu Mare and Neamt). The counties on the territory of which small productions were registered are Bacau, Hunedoara, Vaslui and Galati. Generally, in the counties where large sunflower and maize crops are recorded, lower beet yields are recorded because they are not cultivated after these crops. Sugar beet can be cultivated, however, after grain cereals, such as wheat and barley. We also notice that the production of sugar beet is higher on the territory of the counties where precipitation has been high, and vice versa. Concerning sugar consumption on the sugar beet market, we can analyze it from the perspective of the processing industry to the consumption of sugar. It remained relatively constant during 2007 - 2015, reaching the peak at the end of the range. We note that pensioners are the social category consuming a higher amount of sugar, which is to be expected, given that they need a higher amount of sugar than young people. Analyzing the competition in the sugar production sector, I noticed that it is oligopolistic, with a small number of bidders, but a high demand. The paper ends with a SWOT analysis conducted at the level of an agricultural enterprise operating on the sugar beet market, presenting the strengths, weaknesses, opportunities and threats that could characterize the internal and external environment of such an enterprise.

## BIBLIOGRAPHY

1. Balaure V. (coord.), Marketing, Editura Uranus, București, 2000;
2. Chiran A. (coord.), Marketing agroalimentar. Teorie și practică, Editura Orizonturi, București, 2002;
3. Culache, D., Platon, V., Tehnologia zahărului, Ed. Tehnică, București, 1984;
4. Pop R., Piața culturilor de cereale, oleaginoase, tuberculifere și rădăcinose, Editura ASE, 2017;
5. [www.madr.ro](http://www.madr.ro);
6. [www.insse.ro](http://www.insse.ro);
7. <http://ec.europa.eu/eurostat>;
8. [www.faostat.com](http://www.faostat.com) .