

HONEY MARKET DYNAMICS. THE CASE OF ROMANIA

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ABSTRACT: The aim of the present paper is to analyse the evolution of the Romanian honey market in the 2006-2016 period. The analysis, ran over a period of ten years, follows to depict honey’s market dynamics starting from 2006, one year before Romania’s accession to the EU. The used data consisted in empirical data provided by Food and Agriculture Organisation of the United Nations database, European Commission and National Institute of Statistics. Results indicated that Romania covers its honey consumption through production and that the country is a net honey exporter, recording a 30% growth rate in exports from 2006 to 2013. In the 2006-2016 period, Romania has managed to increase its beehives number by 58.81% and its honey production by 16.52%. Honey producer prices also went up by 42.99% in the analysed period.

KEY WORDS: Honey Market, Market Dynamics, Romania, European Union

1. INTRODUCTION

Beekeeping is one of the oldest practices in Romanian agriculture. While beekeeping supplies a variety of marketable value-added products such as pollen, royal jelly, venom or propolis, the best known primary bee products include honey and beeswax. Honey is the natural sweet substance produced by honeybees being the most important primary product of beekeeping both economically and quantitatively speaking (Krell, 2001). Apart from honey’s beneficial nutritional properties, honeybee colonies are fundamental for the environment, ensuring the pollination process and also participating to rural development.

Compared to other agricultural sectors, beekeeping is small both in Romania and European Union (European Commission, 2016) but has an essential contribution to agriculture’s pollination services. Beekeepers face constant challenges when it comes to maintaining their hives and yields which refer to intensified competition given by cheap imports from third countries, increasing costs, bees’ colonies losses or a deteriorating environment. European Union (EU) comes in support to mitigating such challenges through a series of tools provided by the Common Agriculture Policy (CAP) that also encourage member states to develop their apiculture sector.

While the EU is the second world producer of honey, it is not producing enough to cover Community’s demand and is a net importer of honey. Meanwhile, Romania is one of the Member States with the largest honey production and also a net exporter of honey.

2. PLACING ROMANIA IN THE EU HONEY MARKET

According to the European Commission (2016), as of 2015 there were roughly 16 million beehives in the EU, with Romania being among the top five Member States with the largest number of beehives along Spain, Greece, France and Italy.

The EU is world’s second honey producer after China with around 240,000 tonnes/year production in 2016. However, the Community recorded in 2015 a self-sufficiency rate of only 60% (European Commission, 2016) and imported approximately 200,000 tonnes of honey. Since 2000, due to the accession of honey producing countries to the Community such as Romania, Bulgaria, Poland and Hungary, the self-sufficiency rate went up. However, after the accessions, the rate has maintained relatively stable and with around 2,000 tonnes of exported honey in 2015, EU’s honey trade balance is largely negative.

Although the leader in 2015 in honey production among EU countries (European Commission, 2016), Romania has been outran in 2016 by Spain which produced 34,026 tonnes of honey (Figure 1). According to FAOSTAT, Romania has produced in 2016 21,202 tonnes of honey being the fourth largest honey producer after Spain, Hungary (26,360 tonnes production) and Germany (21,600 tonnes production). The EU-28 honey production recorded a total of 237,549 tonnes of honey in 2016, as for Belgium, Malta and the Netherlands data was not available.

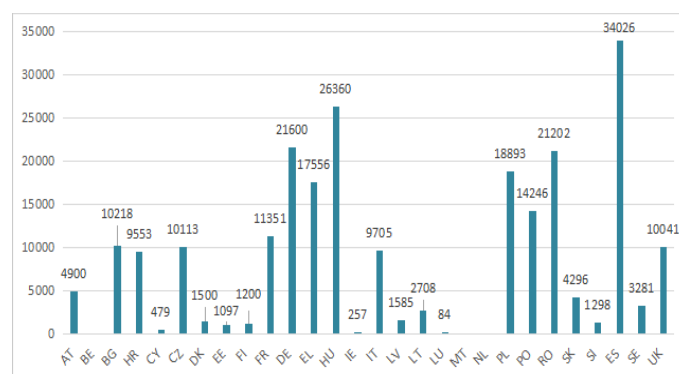


Figure 1. 2016 EU countries Honey Production (tonnes).

Source: Own adaptation based on FAOSTAT data (2016)

The average EU production cost per kilogram of honey produced is 3.04 €/kg (European Commission, 2016) with Malta (12 €/kg) and Belgium (8 €/kg) recording the higher¹³

costs. Romania is one of the EU countries with the lowest production cost, recording 2.10 €/kg, which leads to a low average price of honey at the site of production for the country of 4.35 €/kg compared to the EU average of 5.76 €/kg (European Commission, 2016). Still, the estimated average yield in kilograms per beehive and per year positions Romania only in the EU average of 21 kilograms.

The EU recognizes the role of beekeeping in contributing to a sustainable growth (European Commission, 2013) and supports the honey sector through national apiculture programmes that aim to improve the general conditions of producing apiary products.

The national apiculture programmes are established under common organisation of EU regulation and seek to provide financial aid on eight specific measures that include: technical assistance, combating beehive diseases, rationalisation of transhumance, analyses of apiary products, restocking of beehives, applied research, market monitoring and enhanced product quality. The measures were improved and adapted to sector's changing needs under the CAP reform in 2013. The funding is based on the number of beehives in each EU country and half of it is provided from the EU budget and the other half is provided by the Member States. The programmes are drawn up on three-year periods and for the 2017-2019 period €216 million is estimated to be allocated on national apiculture programmes at the Community level, with a 9% increase as compared to the 2014-2016 period. The funding for Romania during the 2014-2016 period consisted in about €6.6 million each year which accounted for roughly €20 million for the entire period (Ministry of Agriculture and Rural Development, 2017). Romania managed to absorb in 2015 10.10% of the allocation of the Union contribution to Member States, being the third after Spain (16.02%) and France (10.66%) (European Commission, 2016).

3. ROMANIAN HONEY MARKET ASPECTS IN DYNAMICS

Beekeeping in Romania is a very dynamic sector and has recorded a continuous ascending evolution in the last years. Since 2006, the number of beehives in Romania has followed an upward trend growing from 888,200 beehives in 2006 to 1,392,846 beehives in 2016, resulting in a 56.81% growth rate (Figure 2). According to the European Commission (2016), Romania has 22,930 beekeepers. Taken together with the number of beehives recorded in 2016, it results in an average apiary size of 60.74 beehives. Thus, the EU regards only apiaries above 150 beehives as professional (European Commission, 2017). Still, only 4% of EU beekeepers reported to have more than 150 beehives and some beekeeping associations consider a threshold of 40 beehives as more appropriate (European Commission, 2016).

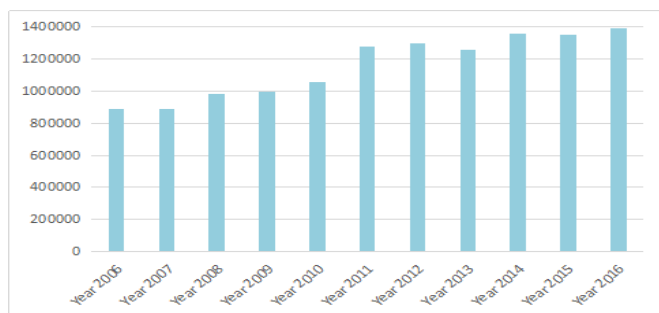


Figure 2. Number of beehives in Romania. Source: Own adaptation based on FAOSTAT data (2006-2016)

Overall, Romania's honey production has been increasing slowly, similar to EU's production, with annual variations due to climatic conditions. Although it is one of EU's largest honey producers, beekeepers face challenges in terms of bees' health or habitat loss as a consequence of agricultural intensification. To this adds a deteriorating natural environment, increasing production costs and increasing imports of cheap honey from third countries that leads to a strong competition.

Figure 3 highlights the largest production of honey from the 2006-2016 period, in 2015 with 27,893 tonnes for Romania, with a growth rate of 54.51% compared to the previous year, representing 10.83% of the total EU honey production in 2015. The year of 2007 marked Romania's accession to the EU and the ten-year horizon in the honey production evolution in Figure 3 indicates that 2016 had a growth rate of 16.52% compared to the pre-accession year of 2006.

Beekeeping has become an attractive practice in the rural areas of Romania also because of the country's favourable climatic and exploiting conditions, which add to the financial aid of the National Beekeeping Program. According to the National Institute of Statistics, in 2016, out of the country's seven regions, the South-West Region of Romania has produced that largest quantity of honey (3809 tonnes). Also in 2016, among the counties with the largest honey production that obtained over 1000 tonnes were Valcea (1301 tonnes) and Mures (1063 tonnes).

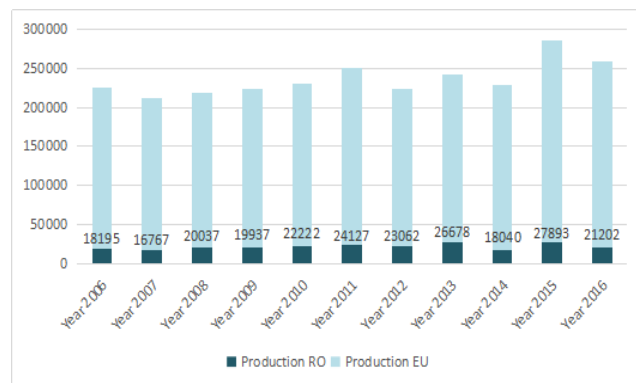


Figure 3. Honey production evolution (tonnes) in Romania and EU. Source: Own adaptation based on FAOSTAT data (2006-2016)

National Institute of Statistics data shows that the monthly consumption of honey per capita in Romania has increased to 0.078 kg in 2016 from 0.042 in 2006, recording a growth rate of 85.71%. Still, it remains one of the lowest in the EU-28. Since the country is entirely self-sufficient on honey, it is also a contributor to worldwide and European exports.

Table 1. Monthly honey consumption/inhabitant (kilograms). Source: National Institute of Statistics (2006-2016)

Year	Consumption
2006	0.042
2007	0.045
2008	0.049
2009	0.055
2010	0.057
2011	0.058
2012	0.061
2013	0.061
2014	0.061
2015	0.072
2016	0.078

Although over the last years honey imports to Romania rose from 0 in 2006 to 3,000 tonnes in 2013 (Figure 4), exports also

honey imports to Romania mainly originate from Poland (994 tonnes), China (507 tonnes), Moldova (183 tonnes) and Ukraine (122 tonnes). Due to its high quality, Romanian honey is in high demand especially on the EU market and about half of the production is exported. The main countries that import honey from Romania are Germany (4,751 tonnes), Italy (1,839 tonnes), France (807 tonnes) and Spain (605 tonnes) (INS and ANV, 2016). Also, according to FAOSTAT, natural honey exports from Romania increased from 10,000 tonnes in 2006 to 13,000 tonnes in 2013, indicating a positive trade balance and positioning Romania as a net honey exporter.

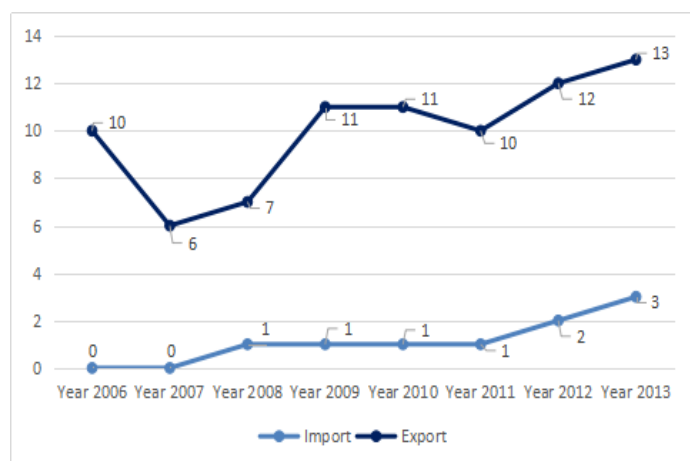


Figure 4. Honey trade balance (1000 tonnes) of Romania evolution during 2006-2013. Source: Own adaptation based on FAOSTAT data (2006-2013)

As shown below in Table 2, the Romanian honey market has recorded a trade surplus during the 2006-2013 period and has maintained a relatively stable trade balance that peaked at 10,000 tonnes in 2006, 2009, 2010, 2012 and 2013. The lowest values in the trade balance reached 6,000 tonnes and were recorded in 2007 and 2008. Export quantities reached a peak in 2013 with 13,000 tonnes of honey exported, which accounted for 48.73% of production in that year, representing a 8.3% growth rate as compared to the exported honey in the previous year. In the 2006-2013 period Romania has exported an average of 46.82% of its honey production, recording a peak in 2009 with 55.17% of exported honey relative to the production in that year. Overall, from 2006 to 2013, Romanian honey exports grew by 30%.

Table 2. Romanian honey trade balance (tonnes). Source: Own adaptation based on FAOSTAT data (2006-2013)

Year	Import	Export	Trade Balance
2006	0	10,000	10,000
2007	0	6,000	6,000
2008	1,000	7,000	6,000
2009	1,000	11,000	10,000
2010	1,000	11,000	10,000
2011	1,000	10,000	9,000
2012	2,000	12,000	10,000
2013	3,000	13,000	10,000

Honey prices vary according to the point of sale and quality. The Romanian honey market is a seller's market with low inventories and high sales. The average honey price in Romania has varied from one year to another also as honey supply varied. In 2013, the country produced 26,678 tonnes of honey and the average producer price (price collected at the

grew at a exponential rate. According to the National Institute of Statistics (INS) and the National Customs Authority (ANV)

initial point of sale) per kilogram was \$6.16 (Figure 5). In the following year, production went down to 18,040 tonnes and the price peaked to \$6.59 per kilogram, recording a 6.98% increase compared to previous year's price. In 2015, honey production increased by 54.61% compared to 2014 which has also reflected in the price decrease that reached \$5.96 per kilogram which further led to a decrease in price of 9.55% as compared to 2014. 2006 marked the year with the lowest price of honey from the analysed period, of \$4.14 per kilogram, continuing afterwards an ascending trend. Romania's accession to the EU enlarged the market, which increased the demand and impacted the price increase. Overall, during the 2006-2016 period, the producer price of honey increased by 42.99%.

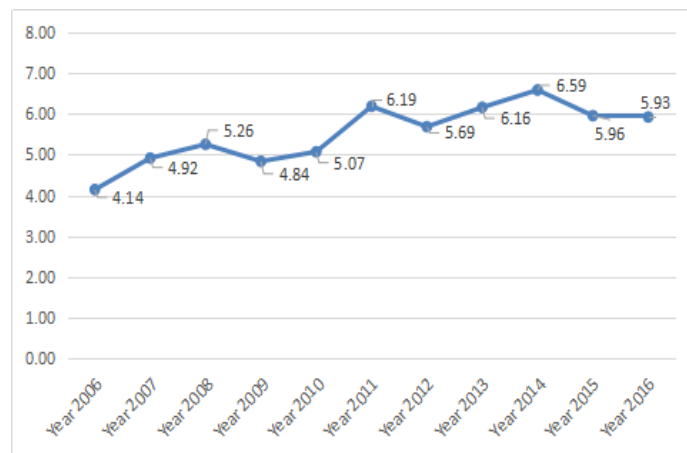


Figure 5. Honey producer price (US\$) in Romania per kilogram in the 2006-2016 period. Source: Own adaptation based on FAOSTAT data (2006-2016)

Figure 6 expresses the total value of honey in Romania during 2006-2014 and brings together in one data set the total annual honey production and its afferent price.

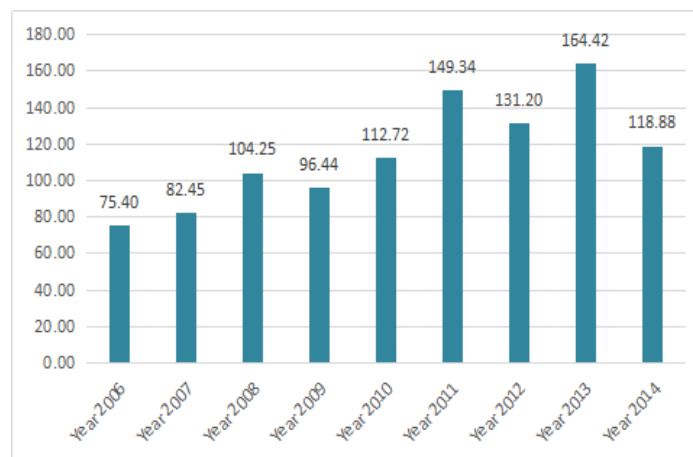


Figure 6. Honey Gross Production Value (million US\$) in Romania in the 2006-2014 period. Source: Own adaptation based on FAOSTAT data (2006-2014)

The highest gross production value from the analysed period is recorded in 2013 at \$164.43 million. The value is owed to the large quantity of honey produced in that year (26,678 tonnes) and also to the high price of \$6.16.

The figure also followed high values recorded in its two previous years: \$149.34 million in 2011 and \$131.20 million in 2012. From 2012 to 2013, the gross production value increased by 25.32%. 2014 was not a favourable year for pickings and yield reached a low of 18,040 tonnes of honey which also

reflected in a lower gross production value as compared to the previous year. Still, because of the price of \$6.58 per kilogram, the value is not the lowest from the analysed period and it only decreased by 24.11% from 2013. Overall, from 2006 to 2014, the honey gross production value in Romania increased by 150.50%.

4. ROMANIAN HONEY MARKET OUTLOOK

Bees play a key role in our ecosystems as they are responsible for the pollination of various species. Their importance has been more and more acknowledged by international organisations (United Nations) and not only that head their attention towards sustainability, in general and towards sustainable beekeeping, in particular and work to find solutions for sustainable beekeeping methods.

Still, a high proportion of beekeepers in the EU are older than 65 years (European Commission, 2016) and the decline in the number of beekeepers also threatens the Romanian sector. Germany is one of the few Member States to take action and succeed in stopping this decline through a recruitment strategy of beekeepers and by offering beginners' courses (European Commission, 2016).

In recent years, stakeholders have signalled that there are quality issues with imported honey that can be mixed with sugar or syrup and still not be detected by existing analysis methods. This could provide an opportunity for Romanian beekeepers to produce good quality honey for higher prices and also help develop the organic honey sector.

Positive perspectives for the sector arise also from the National Apiculture Programme that is half funded by the EU and half funded by the Ministry of Agriculture and Rural Development. The 2017-2019 period objectives include, but are not limited to maintaining bees' health, encouraging transhumance rationalisation or acquiring new beehives and involve total budgets of €463,500 for 2018 and €465,000 for 2019 (Ministry of Agriculture and Rural Development, 2017).

5. CONCLUSIONS

With a long beekeeping tradition, Romania's honey market has been developing continuously, reflecting an increasing general trend. Its dynamic has been favoured by the adequate climatic conditions, geographical position and accession to the EU, which provided the free movement of products on the EU market.

Due to the fact that Romania is self-sufficient on honey and honey consumption per capita still remains one of the lowest in the EU (0.078 kg/month), opportunities arise for the country to further explore the EU market, especially since it produces good quality honey at lower prices as compared to other Member States.

Apiary practices have been attractive for Romanian farmers and in ten years, beginning from 2006, the country managed to increase its beehives number by 56.81%. As of 2016, Romania had 23,930 beekeepers, but the number is in decline due to the high proportion of beekeepers over 65 years old, which might

pose further threats to the sector unless a strategy to attract younger farmers into beekeeping is developed.

Honey production in Romania has had an ascending trend, recording a 16.52% growth from 2006 to 2016, which is also owned to the National Apiculture Programme, which has funded the sector. Still, compared to the 58.81% increase in the number in beehives, it results that honey production has more potential to be exploited.

After the accession to the EU, starting with 2008, there have been recorded inflows of honey to the country, however small compared to exports which has led to a stable positive trade balance, that increased by 30% during 2006-2013. The accession also favoured honey price evolution, which determined a 42.99% increase in the producer price from 2006 to 2016. Still, the honey price remains low compared to EU's average.

Also, honey prices and production have been reflected in the gross production value, which generated over the 2006-2014 period an increase of 150.50%.

Under these circumstances, it is clear that the Romanian honey market has had an ascending dynamics and that Romania is an important honey producer. Although the sector faces challenges, these can be outrun by proper measures and in mitigating the threats, the National Apiculture Programme has had and will still have a positive contribution in the following years. Also, given the market opportunities, Romania should explore them more, through a more intense promotion or increased organic honey production, and raise beekeepers' income and rural communities' living standard.

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