

STUDY CONCERNING THE TRENDS IN ROMANIA'S HONEY MARKET

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Abstract

The paper aimed to analyze Romania's honey market in the period 1990-2009, based on the INSE data, using the index method. In 2009, Romania had 1,057 bee families, about 45,000 beekeepers, meaning 23 bee families per apiary. The number of bee families has increased by 9.76% compared to 1990 but the number of beekeepers decreased by 56% compared to 1980. Honey production reached 19.93 tones in 2009, being by 1.8 times higher than in 1990. Ecological honey represents about 16% of production. Producer honey price increased up to Lei 8-9/kg and Lei 15-20/kg in the free market, and the export price varies between Euro 2.5 -3.5/kg. Honey consumption increased up to 0.5 kg/capita in 2009, but it is still low compared to the EU average. The EU high demand and production deficit has encouraged Romania to export 70 % of its production, the main beneficiaries being Germany, United Kingdom, Italy, Austria and Belgium. Since 2005, Romania has imported small amounts of honey from Czech Republic, China, Germany, Hungary, Spain and Austria. Romania comes on the 19th position in the world for honey production and on the 11th one for the honey export value. As a conclusion, honey market is continuously increasing, Romania being a net exporting country of high quality honey.

Key words: production, honey, market, Romania, trends

INTRODUCTION

Honey demand is continuously increasing at world level, but mainly in the EU where offer is insufficient and consumption has to be covered from import [9].

Romania has a high meliferous potential, a high genetic resource, *Apis Melifica Carpatica*, a large variety of flora both wild and cultivated and a long tradition in beekeeping [3].

Romanian honey is of high quality, a reason to be required for export more and more [1].

In this context, the paper presents an analysis of honey market in Romania in order to identify the major trends that occurred after 1990 till present.

MATERIAL AND METHOD

The research was based on the use of the following specific indicators: number of bee families and their distribution in the territory,

number of beekeepers, average apiary size, honey production and its distribution in the territory, honey yield, consumption, market price, and Romania's honey foreign trade.

In this purpose the statistical data provided by National Institute for Statistics for the period 1990-2009 have been collected and processed using index, share and comparison methods, and finally the results were tabled and interpreted.

RESULTS AND DISCUSSIONS

The number of bee families followed a downward trend from 1,091 thousand families in 1990 to 649 thousand families in 2000. After this year, a revival of beekeeping has appeared and mainly after Romania's accession to the EU in 2007. Despite this, in 2009, the number of bee families accounted for 1,057 thousand families, representing 96.88% of the level registered in the first year of the analysis.

A similar evolution was recorded by the number of bee families in the private sector. If in 1990 there were 963 thousand bee families in private ownership, in 2000 it was

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registered the lowest number, 638 thousand families, but in 2009 it increased again accounting for 1,057 thousand bee families being by 9.76% higher than in the first year (Table 1).

The sinuous evolution of bee families was influenced by structural changes in

beekeeping after 1990, Romania's entry into the EU, financial support offered by the EU for setting up modern apiaries, purchase of biological material and inventory according to National Beekeeping Plan for the period 2008-2010 [12].

Table 1 Evolution of bee families in Romania, 1990-2009 (thousands)

	1990	1995	2000	2005	2009	2009/1990 %
Bee families, of which:	1,091	696	649	888	1,057	96.88
Private sector	963	662	638	887	1,057	109.76
Share of private sector (%)	88.26	95.11	98.30	99.88	100.00	-

Source:INSSE, 2010. Own calculations.

The distribution of bee families in the territory highlights a relatively equal number of bee families in the Northern-Western and Central Romania and, in the Northern-Eastern and Southern-Eastern part of the country, representing 26.79% and, respectively, 26.47% of the total number of bee families existing in 2009. The largest number of bee families is grown in the Southern-Western Romania, in Oltenia and Banat regions,

accounting for 29.64% of the total number of bee families. In the surroundings of the capital and Ilfov County it is a reduced number of bee families representing just 17.10% of their total number. This can be explained by the diversity of climate conditions that influences the floristic composition and possibilities of picking, as well as zonal tradition in beekeeping (Table 2).

Table 2 Distribution of bee families in the territory in 2009

Macro and microregion	Number of bee families	Share (%)
TOTAL ROMANIA	1,057,186	100.00
Macroregion M1	283,269	26.79
-North-West	129,207	12.22
-Center	154,062	14.57
Macroregion M2	279,864	26.47
-North-East	143,653	13.58
-South-East	132,211	12.89
Macroregion M3	180,814	17.10
-South Muntenia	164,742	15.58
-Bucharest-Ilfov	16,072	1.52
Macroregion M4	313,239	29.64
-South -West Oltenia	173,917	16.45
-West	139,322	13.19

Source:INSSE, 2010. Own calculations.

The apiary size varies from a beekeeper to another and from a region to another. In Romania, apiary size is relatively small compared to other countries. It varies from 20 bee families to 400 bee families, meaning about 23 in average, because most of the apiaries have a small number of bee families [9].

An increased number of bee families per apiary requires higher production costs and

has the advantage of lower cost/bee family and honey kilogram, a higher honey production, beekeeper's income and profit [8, 11].

Honey production registered a continuously increasing trend after 1990, reaching 19,937 tons in 2009, being by 1.8 times higher than in 1990.

In the private sector, honey production was by 99.54% higher than in the first year of

the study. Nowadays, honey is exclusively produced in the private sector (Table 3).

Production growth was due to the increasing number of bee families, the implementation of corresponding beekeeping technologies, the use of selected bee queens

able to develop strong families, to assure better pickings and to fill combs with honey, the making of treatments just in time, preparing bee families for winter better and assuring good picking opportunities both stationary and in pastoral [4, 6].

Table 3 Honey production in Romania, 1990-2009 (tons)

	1990	1995	2000	2005	2009	2009/1990 %
Honey production, of which:	10,579	10,435	11,746	17,704	19,937	188.45
Private sector	9,991	10,069	11,617	17,637	19,937	199.54
Share of private sector(%)	94.44	96.49	98.90	99.62	100.00	-

Source:INSSE, 2010. Own calculations.

Honey yield registered a continuous growth from 9.69 kg in 1990 to 18.86 kg in 2009, in the last year being by 94.63% higher than in the first one. This reflects beekeepers concern to create strong bee families and assure a corresponding feeding. The average production per bee family was higher in the

private sector compared to the national average in the period 1990-2000, with a small decline in 2005 due to the unfavorable climate conditions. This reflects that beekeeping has benefited of a more efficient activity and better keeping conditions in private ownership than in the state apiaries (Table 4).

Table 4 Honey production/bee family in Romania, 1990-2009 (kg/bee family/year)

	1990	1995	2000	2005	2009	2009/1990 %
Honey yield at national level	9.69	14.99	18.09	19.93	18.86	194.63
Honey yield in the private sector	10.37	17.20	19.20	19.88	18.86	181.87
Share of private sector (%)	107.01	114.74	106.13	99.74	100.00	-

Source: Own calculations

Distribution of honey production in the territory is closely related to the number of bee families and their production potential. The highest honey production is produced in the Southern-Western and Central Romania

accounting for 31.19% of the national honey production, then comes the Northern-Eastern and Central Romania with 28.22%, followed by the Northern-Eastern and South-Eastern parts of the country with 25.56%.

Table 5 Distribution of honey production in the territory in 2009

Macro and microregion	Honey production (tons)	Share of national production(%)
TOTAL ROMANIA	19,937	100,00
Macroregion M1	5,628	28.22
-North-West	2,421	12.14
-Center	3,207	16.08
Macroregion M2	5,097	25.56
-Northe-East	2,544	12.76
-South-East	2,553	12.80
Macroregion M3	2,997	15.03
-South Muntenia	2,693	13.50
-Bucharest Ilfov	304	1.52
Macroregion M4	6,215	31.19
-South-West Oltenia	3,464	17.37
-West	2,751	13.82

Source:INSSE, 2010. Own calculations.

In the Southern area, honey production was lower than in other regions, representing just 15.03 % of national production (Table 5).

Honey production per inhabitant was positively influenced by the continuous growth of honey production and the demographic decline in Romania. Thus, in the analyzed period, honey production per capita increased 2 times from 0.45 kg in 1990 la 0.93 kg in 2009, because honey production

increased 1.8 times while population declined by 7.49% (Table 6).

Romania has a large variety of honey types in close connection with its large variety of cultivated plants and wild flora with a deep impact on pickings: acacia, linden, sunflower, meadow, polyfloral etc. In addition, in the recent years, some beekeepers have turned to organic honey which gives it a special quality [5]

Table 6 Honey production per inhabitant (kg/capita)

	1990	1995	2000	2005	2009	2009/1990 %
Honey production per inhabitant	0.45	0.46	0.52	0.82	0.93	206,66

Source: Own calculations.

In 2009, 1,018 apiculturists carried out about 32 tons organic honey coming from 84,705 bee families organically certified. Grace to its special quality, organic honey is safe for export sales. [1]

Romania' entry into the EU imposed new quality standards, which determined beekeepers to improve keeping technologies and respect treatment requirements.

Average honey purchase price registered a variable dynamics from a year to another in the period 2001-2009. If in 2001,

a beekeeper got Lei 2.90 per kg at delivery, in the coming years it received a higher price which accounted for Lei 7.48/kg in 2003. After that, honey price has fallen by 2006, when it reached Lei 4.30/kg. But, starting from 2007, honey price has increased reaching Lei 7.72/kg in 2009, being 2.66 times higher than in 2001 (Table 7).

In 2012, honey purchasing price offered by Beekeepers Association increased to Lei 8.5-9 per kilogram.

Table 7 Average honey purchase price (Lei/kg)

	2001	2002	2003	2004	2005	2006	2007	2008	2009	2009/2001 %
Honey price	2.90	5.25	7.48	6.71	4.10	4.30	4.55	6.15	7.72	266.20

Source: INSSE, 2010. Own calculations

Taking into account that beekeepers have to sell at least 10 kg honey to an authorized processor in order to receive Lei 20 subsidy per bee family according to the provisions of National Beekeeping Plan, in general purchase price is imposed by processor. The difference between the amount of honey produced could be directly marketed at a higher price which in 2012 accounted for Lei 15-20/kg, with a positive effect on beekeepers income.

Honey export price is Euro 2.5-3.5 /kg depending on honey type (polifloral, acacia etc), and encourage beekeepers to look for export partners.

Average honey consumption per inhabitant in Romania is very small in

comparison with other countries from Western Europe. In 1990, honey consumption was 50 grammes per inhabitant but today it reached 0.90 kg.

Taking into account that honey is a natural product, rich in nutrients, biostimulators and antioxidants, it has important prophylactic and therapeutical properties, being recommended to be consumed by all ages in different amounts.

It is obvious that if Romanians would consume honey at the level recommended by nutritionists, domestic honey production would be insufficient.

Because, in general, Romanians are not accustomed to consume too much honey,

about 60% of domestic production is exported mainly in the EU countries where demand is very high [7].

The countries with a high honey consumption per inhabitant are Denmark, Austria, Italy, France, United Kingdom, the Netherlands and Belgium. In Denmark an inhabitant consumes 5 kg honey per year, in Germany 1.5-2 kg, in Netherlands and Belgium 1.5 kg, in Hungary 0.6 kg [1].

Romania's honey foreign trade was stimulated by the evolution of honey international market. World production has continuously increased reaching 1.2 million tons and for the year 2015 the forecast is 1.9 million tons. About 30% of global honey is marketed.

The largest honey producers in the world are China, Turkey, Argentina, Ukraine and USA, Romania coming on the 19th position.

In 2009, the value of world honey export stood at Euro 890.5 Billion and import value accounted for Euro 906.7 Billion.

The main honey exporting countries are Argentina, China, Germany, Mexico, Brazil, Spain, New Zealand, Hungary, Canada, Romania being on the 11th position with a market share of 2.7% in global export.

The destination of exported honey varies from a country to another and from a continent to another. Europe absorbs 60% of world import, being followed by Americas with 20%, Asia 17% and Middle East 5%. In the EU and USA, about 50% of domestic demand is covered by import [1].

Taking into account this international background, Romania has become more focused on honey export selling abroad about 60-70%. This has a positive impact on currency flow because honey price is higher on the external market.

Table 8 Honey export and import, Romania, 2005-2009 (tons)

	2005	2006	2007	2008	2009	2009/2005 %
Exported honey	6,632	9,606	6,255	7,125	10,653	160.63
Imported honey	21	63	315	777	516	2,457.14

Source: CRPCIS. Own calculations.

The amount of exported honey reached 10,653 tons in 2009, being by 60% higher than in 2005. The main Romania's clients in the international market are: Germany with a share of 60% in total honey export, United Kingdom 14%, Italy 9.7%, Austria 2.4%, Belgium 2%, Luxembourg 2%, France 1.9%, the Netherlands 1.5%, the USA 0.2%, Canada 0.1%, Japan 0.9% [2]. Therefore, the EU absorbs about 94% of Romania's honey export.

Despite that Romania is a honey producing and exporting country, in the last years it imported honey. In 2009, its import accounted for 516 tons. Domestic market is negatively influenced by the fact that import growth is higher than export growth. However, honey trade balance is still a positive one (Table 8).

In 2009, the main honey suppliers for Romania were Czech Republic with a share of 46% in honey import value, followed by China with 18.58%, Germany 13.50%,

Hungary 6.5%, Spain 2.25%, Austria 1.83%, France 0.66%, the Netherlands 0.29%, United Kingdom 0.20% [2].

Romania's honey export value increased 2.96 times in the period 2005-2009, reaching Euro 29,977 thousand in 2009. According to honey export value in 2009, Romania ranked 11 in world export, after Argentina, China, Germany, Mexico, Brazil, Spain, New Zealand, Hungary and Canada.

Import value accounted for Euro 1,200 thousand in 2009, being 35 times higher than in 2005. It represents 0.1% of global honey import value.

Taking into account that export exceeds import, honey trade balance is a positive one showing that Romania is a net exporting country [9]. (Table 9).

Romanian honey is exported in bulk which allows external recipients to blend and bottle it and to better capitalize it on the market.

Table 9 Honey export and import value, Romania, 2005-2009 (Euro thousand)

	2005	2006	2007	2008	2009	2009/2005 %
Export value	10,105	16,329	12,139	17,955	29,977	296.65
Import value	34	126	580	1,561	1,200	3,529.41
Honey Balance	10,071	16,203	11,559	16,394	28,777	285.74

Source: CRPCIS/www.traderom.ro. Own calculations

In 2009, Romania exported 50% that is 2,800 tons organic honey, of which 80% in Germany and Nordic countries and the remaining in Japan at prices by 20% higher than the one for conventional honey.

Number of beekeepers is about 45,000 at present compared to 80,000 in 1980. But a positive aspect is the fact that beekeeping is an important additional income source for rural population [10].

The EU agricultural policy provides support for beekeeping practiced in associative bodies, funding the purchase of bee families and inventory. Also, young apiarists under 40 years old are encouraged to establish apiaries receiving Euro 25,000 for the beginning.

CONCLUSIONS

Beekeeping is an important sector contributing to the increase of agricultural production and keepers income, to the reduction of unemployment among rural population, to a better coverage of consumption and a better trade balance.

Honey production increased because of a higher number of bee families and a higher productivity, modern technologies applied, a more efficient honey chain: production, collection, processing, embottling, labeling, packaging, marketing on the domestic and foreign market.

Romania comes on the 19th position in the world for honey production and 11th position for honey export.

The main directions which should contribute to the further development of beekeeping are: genetic improvement and production of selected queens, maintaining genetic heritage, extending bee resources, production diversification and increase of honey quality, strengthening of beekeepers

associations to become effective professional organizations.

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