

ANALYSIS OF THE ECONOMIC SIZE OF BEEKEEPING HOLDINGS IN ROMANIA

ANALIZA DIMENSIUNII ECONOMICE A EXPLOATAȚIILOR APICOLE DIN ROMÂNIA

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Abstract. *The proposed paper belongs to the objectives of the second implementation phase of the project PN II no. 51-058/2007, entitled "Development and implementation of models of beekeeping holdings that are viable in the European economic context" (APIMODEL). An average size of 21.1 bee families has been obtained after data processing.*

Key words: beekeeping, average production, economic dimension, Romania

Rezumat. *Lucrarea propusă face parte din obiectivele etapei a II-a de implementare a proiectului PN II nr. 51-058/2007, cu titlul „Elaborarea și implementarea unor modele de exploatații apicole viabile în contextul economic european” (APIMODEL). În urma prelucrării datelor a rezultat o dimensiune medie de 21,1 familii de albine.*

Cuvinte cheie: apicultură, producție medie, dimensiune medie, România

INTRODUCTION

The sampling method has been used to analyze the economic size.

For the regional development of beekeeping, important is to know the economic size of the beekeeping holdings in Romania. [2]

MATERIAL AND METHOD

For the policies concerning development policies, the starting point is represented by knowing the development level of these branch. [1]

The used method was the interview. In the field-applied version, the interview guide included 49 questions and it has been applied in 21 counties. The total number of filled-in questionnaires was 126.

RESULTS AND DISCUSSIONS

By data processing resulted the following:

In the year 2008, the largest number of bee-families belongs to Mureș County (38,6 thousand bee families), followed by Caraș-Severin County (37,7 thousand), Argeș (35,9 thousand), Arad (34,9 thousand), Vâlcea (33,3 thousand) and Iași with 31,8 thousand bee families (table 1).

At the opposite side is Ilfov County with 7,8 thousand bee families. Brăila County has 7.7 thousand bee families due to the large arable surface that may

offer in the bee season a rich harvest for the bee families; afterwards the honey-producing potential is very much reduced.

Within the territorial profile, the holdings' average size is 21,1 thousand bee families thousand bee families by county. [3] The number of bee families by county has equal distribution, being registered 22 counties with more than the average number and 20 counties with less than the average number. This phenomenon proofs that there are no very large discrepancies from a region to another.

Taking into account that the counties do not have the same areas, the number of bee families by area unit has been calculated.

Table 1

Distribution of bee families by county

Nr. Crt.	Counties	Bee families	Nr. Crt.	Counties	Bee families
0	Total	888.180	21	Harghita	16.642
			22	Hunedoara	19.873
1	Alba	26.802	23	Ialomița	12.273
2	Arad	34.915	24	Iași	31.774
3	Argeș	35.927	25	Ilfov	7.694
4	Bacău	24.080	26	Maramureș	22.494
5	Bihor	27.832	27	Mehedinți	20.210
6	Bistrița-Năsăud	16.118	28	București	9.590
7	Botoșani	20.346	29	Mureș	38.638
8	Brașov	15.039	30	Neamț	18.831
9	Brăila	7.724	31	Olt	17.679
10	Buzău	19.964	32	Prahova	21.526
11	Caraș-Severin	37.666	33	Satu Mare	12.853
12	Călărași	17.031	34	Sălaj	29.126
13	Cluj	14.725	35	Sibiu	25.311
14	Constanța	26.601	36	Suceava	15.890
15	Covasna	11.118	37	Teleorman	25.023
16	Dâmbovița	23.969	38	Timiș	14.690
17	Dolj	21.485	39	Tulcea	19.963
18	Galați	20.742	40	Vâlcea	33.267
19	Giurgiu	8.562	41	Vaslui	25.280
20	Gorj	24.782	42	Vrancea	14.125

This indicator illustrates the overspreading degree of the melliferous potential (table 2). The average of this indicator at national level is 4,7 thousand bee families. The average is very high due to Ilfov County; without it, the average will be 3,8 thousand bee families /100 ha.

Thus, the highest density of bee families is registered in Ilfov County with 40,3 bee families /100ha, with almost 33 families more than the next ranked county. This phenomenon is caused primarily by the large population volume, the

existence of some beekeeping exploitations of large size that are using moving beekeeping and the reduced area in comparison to the others territories.

Following Ilfov County, the largest density of bee family is registered in Sălaj County with 7,5 families /100ha, followed by Dâmbovița County with 5,9 families /100ha, followed by Iași, Vâlcea and Mureș Counties with 5,8 families /100ha.

Table 2

Honey production (tones)					
Nr. crt.	County	Extracted honey	Nr. crt.	County	Extracted honey
	Total	17704	21	Gorj	477
			22	Harghita	300
1	Alba	562	23	Hunedoara	550
2	Arad	552	24	Ialomița	254
3	Argeș	745	25	Iași	576
4	Bacău	467	26	Ilfov	185
5	Bihor	732	27	Maramureș	501
6	Bistrița-Năsăud	263	28	Mehedinți	414
7	Botoșani	285	29	Mureș	1113
8	Brașov	634	30	Neamț	394
9	Brăila	169	31	Olt	267
10	București	63	32	Prahova	283
11	Buzău	457	33	Satu Mare	203
12	Caraș-Severin	1003	34	Sălaj	408
13	Călărași	336	35	Sibiu	365
14	Cluj	300	36	Suceava	373
15	Constanța	450	37	Teleorman	406
16	Covasna	239	38	Timiș	304
17	Dâmbovița	501	39	Tulcea	456
18	Dolj	438	40	Vâlcea	353
19	Galați	437	41	Vaslui	459
20	Giurgiu	179	42	Vrancea	251

The lowest density with less than 2 bee families /100ha is characteristic for Suceava, Timiș and Brăila Counties.

The counties from the eastern border, namely Botoșani, Iași, Vaslui and Galați have a high favorable degree for beekeeping due to the micro-climate conditions in Lunca Prutului. This situation exists also in the pre-mountain zone of Podișul Transilvaniei.

In the year 2008, in România were 41.311 beekeeping holdings.

The counties with the largest holdings are Teleorman (1625 beekeeping holdings), Argeș (1577 holdings) and Vaslui (1576 holdings). The lowest number of holdings is registered in Ilfov County (326 holdings), followed by Covasna County with 335 beekeeping holdings.

The national average of the holding number by county is 993, with the highest value of 1299 holdings. Both the holding number, as well as the

distribution by county wouldn't worry if the size could be optimum. The average size by holding is 22,6 bee families, taking into consideration that the economic level of farm viability is 50 bee families.

The maximal size is registered in Constanța County with 43,1 bee families by holding, in Tulcea County with 32,8 bee families by holding and in Covasna County with 32,8 bee families by holding.

The smallest holdings are registered in Timiș County (10,1 bee families), Suceava County (10,8 families) and Cluj County with 11,7 families by holding. These units are not economic viable, a great part are used for leisure in a productive manner, or to use some reduced melliferous resources that do not allow the setting up of some large bee gardens or represents a subsequent activity for economic units with another profile of activity (mostly agricultural). In these conditions we don't talk about efficiency, but about the consumption of available and perishable resources.

In Romania it noticed that the farms or the holdings with the highest capacity of production are situated in the extreme South-East of the country, in the counties located near the Black Sea, in the Center and in North-West. The mountain and sub-mountain zone includes holdings of average size, and the counties with small holdings are relatively randomly located.

Another analyzed indicator is represented by the average production. The average production by country, in the year 2008, was 19,9 kg/bee family, higher than the previous years.

CONCLUSIONS

1. In the territorial profile, the average size of the beekeeping holdings is 21,1 thousand families by county.

2. The average size of the beekeeping holding is 22,6 bee families.

3. The honey average production by country in the year 2008 was 19,9 kg/bee family.

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