

Abstract

The increase of population worldwide, the technical - scientifically and socio-economical revolution determined the increase of necessities and diversification of food.

In these conditions, beekeeping attains an important role as supplier of food products (honey) and also as a vector for the growth of beekeeping production through pollination of entomophilous cultivation. Also, it provides different products to maintain health population through with great prophylactic and therapeutic value.

From the social and economical point of view, it is well known that this area of activity contributes to the assuring of population prosperity, especially for the rural environment, through a supplementary source of income and the superior use of natural and human recourses.

Also, beekeeping acquires an increased importance to sustain and stimulate natural environment through unquestioned effects over the floristic biodiversity.

The level of development for beekeeping worldwide registers important values from one continent to another, so the production capacity point of view (the effective for bee families) also the level of registered productions.

According to FAO statistics from 2005, it estimates that worldwide it exists 62.626 bee-hives from which it is obtained a total production of 1.164.000 t honey, resulting a medium production of 18,6 kg per bee family and an offer of 179g per inhabitant. The wax production by world level reaches 365 thousand tones results a medium production of 1,08kg per bee-hives.

In Romania, bee keeping is a millennial tradition, bee products like honey and wax are appreciated very much, as well as internal and international, due to its special qualities.

There were major variations in our country, as well as the number of bee families and the honey production, on one hand due to reduction of honey potential. Through the transformation of an important part of forestry in agricultural land and on the other hand through intervention and implementing the practise of systematic hive, a honey extraction centrifuge from honeycombs and synthetic honeycombs.

The foundation which based the establishment of objectives for this work consists in offering for the further of knowledge put across two main directions: the increase of bee keepers prosperity

and the social environment for them to evolve on one hand and on the other hand to sustain and protect the natural environment.

The sustaining for population prosperity consists in the achievement and presentation of landmarks for the increase in quantity and quality of the technical economical outcomes of the beekeeping exploitations and the social environment in which the beekeeper evolves is supported and stimulated through the increase of the family and society outcome because the bees from the hives he possesses actually pollinates the crops and plantations from households from the fly radius by its simple existence in that area. Also the population from which the beekeeper emanates benefit from food products of certified quality.

On the other hand the research included in this work participates indirectly to the sustaining and stimulation of the natural environment because the bee was sustained by other man tends to be the only constant pollination device of the entomophilous spontaneous flora.

These phenomenon due to the fact that year to year the percentage of natural pollination devices is shortening, a fact that is disturbing due to the chemical substances used to fertilize and disprove diseases and pests from agriculture. In this category is situated the colonies which live spontaneous without the human support. But, these are decimated by diseases and specific pests.

Aftermath, the bee supported by man is the only vector for pollination of the entomophilous spontaneous flora and with implications to the perpetual of life on earth.

Businesslike this research have a modest objective, to help the beekeeper to develop its activity because it represents an important actor for the social economical environment in which he evolves.

The objectives of this work are to diagnose the level of development for beekeeping in the researched area regarding the production capacity and the acquired outcomes, as well as the identification of the ways to improve that.

The level of development for beekeeping is determined by the establishment of the effective of the bee-hives, obtained productions and the consumption of production factories, to quantify the economical efficiency of the beekeeping farms.

The ways to increase the economical efficiency is identified by the obtained results by beekeeping families which proved to make performance by the level and structure of productions, dimensions and cost composition and the adopted organization and management system. By this regards there were elaborated models of profitable beekeeping exploitations which are beneficiary for the environment in which they operate.

To obtain a clear image of the fact state of beekeeping, I proceeded to the establishment of sample beekeepers from the researched area regarding the size of the sample and the geographic placement. The used method of sample was the quota because it was a small number of exploitations in each commune which didn't permitted to use probabilistic methods.

Sequel to that, I selected 8 communes in each district representative for the three areas in the district (Moldova plain, Bârlad Plateau and Suceava Plateau from Iasi district, plateau and plain, pre-mountain area and mountain area from Neamț district) by the percentage possessed from the total area of the district. Hereby in Iasi district there were selected communes for each of the two area of plateau and 4 communes for Moldova plateau and in Neamț district there were selected two communes for the plateau, plain and pre-mountain areas and 4 communes for the mountain areas. The size of the hives was scaled by size intervals: 0-30 families, 30-50 families, 50-100 families and over 100 families.

The total effective of bee colonies from the two districts is about 45,2 thousand bee families, 28.5 thousand from Iasi district and 16,7 thousand in Neamț district. Reported to the total territorial fund the density of this effective is 3,9 colonies to 100 ha, 5,2 colonies to 100 ha for Iasi district and 2,8 in Neamț district.

The acquired honey production from the researched area was pursuant to the medium of the period 1999-2004 of 819,0t, in Iasi district the medium was 517,8t and in Neamț district was 301,2 t of honey. This represents 5,7% from the medium of the national production and by districts 3,6% (Iasi) and 2,1% (Neamț).

The secondary production can be appreciated as being shortened but through the transformation by conventional honey units it reaches 203,8 t in the whole area, which has determined a growth of total production by 25,1% in Iasi district (130,0 t conventional honey) and by 24,5% in Neamț district, (73,8 t conventional honey).

The research does not show the necessity to establish a global optimal dimension for beekeeping exploitations, as the hypothesis of this work was revealed, but as a adaptation of these to the existent recourses in each commune by the complete use of these principle. From this reason alone, I consider that a 10 family hive as well as a 350 family hive has the same benefit for beekeepers and the environment if it uses profitable the available recourses, especially the honey potential.

Pursuant to the evaluation of the honey potential, the quantity of honey which can be made in an year of vegetation in Iasi district is 8887,8t and in Neamț district 3461,4t resulting a total quantity of

12349,3t. The variability on short term for this indicator is about 4,7% and on medium term is 0,8% for the total area. From the point of view regarding the influence of the natural factors over the variation of the honey potential is 13,5% in Iași district and the one from Neamț district is 3,2%.

The medium work time necessary for maintaining a bee family is quite short (1,99 days by fixed position and 2,49 days by pastoral) but the maximum effective for colonies which can be supported by a beekeeper is limited to the works necessity from March and April months, regarding climatic evolution. In this case the work normative by beekeeper in the year 2005 had values between 72 and 85 colonies regarding the weekly work time allocated in these months.

General speaking, Iași and Neamț districts had a beekeeping which doesn't dispose by an effective management although there are sufficient resources for this. This result dues to the low interest towards the economic information, generally, and management information specially, which is a reason to impose the dissemination for specific management models for beekeeping exploitations in beekeepers meetings from professional associations, organized meetings by state organisms which have a role in sustaining and development of rural environment such as Agricultural and Rural Development Directions, District Offices for Agricultural Consultancy, etc.

The beekeeping activity from the two districts characterises by a medium rate of profitability of 115,3% but the majority of exploitations (56%) are being under the value of this indicator, some of them registering values under 64,5 monetary units to 100 spent units. This phenomenon is owing to the existence of hives which didn't have the main purpose to obtain profit in this activity but to assure family consumption with bee products or to be sustained by passion for beekeeping. These hives, although there are losing units, it makes a service to beekeeping by disseminating the quality of the products and the importance of bees although it does not represent trashes but seeds for future medium and large hives.

The medium of safety margin (69,1%) show a good economic steadiness but it shows the same important variations. It is extraordinary the fact that 81,0% of hives have a safety margin larger than 50% which indicate a favourable situation, regarding the pronounced looseness of the economic situation.

The length to recuperate the investment register a medium of 15,9 years and the economic efficiency indicator has values between 9,8 and 188,7 RON to 1000 RON investment, for inefficient exploitations registering losses.

The growth for economic efficiency of the investments can be made be the increase of the level of production, it s diversification, the obtaining of a higher price through categorizing the products

by a different quality category, reducing of fixed costs through the increase of the effective of sustained families and those variable through the use of methods and proceedings which presume a higher ratio of economic efficiency.