

## Factors for the Development of Bee Tourism

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### Abstract

*The report includes an analysis of the state, trends and prospects of beekeeping and its relationship with tourism in Bulgaria. Beekeeping is considered as a branch of agriculture from its inception after the Liberation to our time and dynamics of development. The report presents the resource base (traditions, condition, production and sale of honey). For the needs of the analysis, data from the NSI, the Ministry of Agriculture and Food, the associations of beekeepers, processors and traders of honey and bee products, the Ministry of Tourism and branch tourist organizations and a survey of the author were used. Beekeeping is presented in the relation as a resource for the development of apitourism (bee tourism), as a non-traditional attractive specialized species, supporting farmers through non-agricultural practices.*

*Keywords: api-tourism, bee tourism, bee products, bees, environment, traditions and culture.*

*JEL Code: Z32*

### Introduction

Bees were bred by humans 10,000 years ago. for honey and other bee products. In China and India, beekeeping was highly developed after the 4th millennium BC. The Indians used honey in medicine and considered it one of the five elixirs of immortality. In China, two thousand years before the new era, the use of honey as a universal remedy was recommended. Honey was a favorite food of the peoples of ancient Spain, Egypt, China, India, the Assyrians, the Arabs, the Greeks, the Romans and the Indians. They used honey as food and medicine, and propolis - to treat wounds. In Bulgaria, the development of beekeeping dates back to the times when the proto-Bulgarians inhabited the lands around the Sea of Azov and the rivers Kama and Volga. For hundreds of years our country has been famous as one of the largest producers of honey and high-quality wax.

The 21st century is a period of intensive economic development and increasing degradation of the natural environment. Biodiversity loss and the malfunctioning of many ecosystems are problems we face every day. A progressive process of globalization threatens the behavior, traditions and culture of local communities and from an ecological point of view it is necessary to counteract negative processes. Tourism is a sector of the economy that requires the preservation of cultural and natural values. In recent years there has been a tendency to direct interest in ecological forms of travel: eco-tourism, Agri-tourism, travel in nature, cultural tourism and others. Tourists are looking for opportunities to acquire new experiences, to meet natural and cultural values of a region. (Neshkov, M., St. Marinov, V. Kazandzhieva, 2014).

Ecotourism is any type and form of specialized and sustainable tourism, through which one gets to know, experience and preserve an authentic natural and cultural environment and increases the well-being of the host population in the tourist place. There are different types and forms of ecotourism that can be distinguished by motivation and organization. According to the motives of the tourists the main types of ecotourism are: cognitive tourism; ornithological tourism “bird watching; photo tourism; adventure tourism; cave tourism; hiking; cycling; the practice of rock climbing; air sports; orienteering; rafting; collecting herbs, mushrooms and more. (Marinov, S., 2011)

A very suitable example of such a form of travel is bee tourism, also known as api-tourism,

associated with the Latin name for "bee" - "apis". This is a form of tourism aimed at beekeeping and bee products as a traditional profession, linked in environmental, nutritional and medical aspects. Activities within the scope of bee tourism include visits to open-air bee families and bee museums, where the tourist has the opportunity to observe the work of the beekeeper, the method of extracting honey, to learn about its properties and specifics (including tasting of different types of honey), also to find out about other bee products (pollen, wax, bee bread, royal jelly, etc.), to observe how the bee family lives, to get acquainted with the ecological correlation between man and bees. Bee tourism can be developed on the basis of already existing bee families (apiaries, bee farms). (Bench, 2020).

The development of bee tourism is an opportunity to activate rural areas, create new jobs, as well as an opportunity to renew the traditions and culture of the regions. In recent years there has been a dynamic development of bee tourism in the countries: Poland, Germany, Czech Republic, Lithuania, Ukraine, but the leader in this type of tourism is Slovenia. (URBACT, 2020)

The main goal of this report is to study the opportunities for development of bee tourism in Bulgaria - to understand the attitudes of the people and to show that Bulgaria has the resources and opportunities for this special kind of tourism. To achieve this goal, the following research tasks have been performed:

- Study of the beekeeping sector in Bulgaria and in particular the Northeast region.
- Processing, structuring and analysis of data on bee farms, bee families and the amount of honey harvested in Bulgaria during the period 2105-2018.
- Conducting a survey and presenting the relation beekeeping - apiturism

### **Statement**

The development of beekeeping in the Bulgarian land's dates back to ancient times - Thracians, Slavs and Bulgarians have mastered to perfection the art of beekeeping. For centuries, our country is famous for its large production of honey and high-quality wax. After the liberation in 1878, beekeeping began to be modernized. The primitive, twig-woven hives, also called "grass" hives, are gradually being replaced by modern "greenhouse hives", but the traditions in beekeeping and the production of honey and bee products are preserved to this day. (Mladenova, G., 2021)

Despite the traditions and natural resources, in the XXI century beekeeping in Bulgaria remains mainly a hobby. There are few who have turned beekeeping into a profession due to the unpopularity of the sector, despite the Agriculture Fund's programs aimed at increasing bee colonies. The natural resources of the country and especially the diversity of honey vegetation allow to obtain pure high-quality honey, royal jelly, pollen, propolis, beeswax, bee venom and other bee products. (BG Bees, 2021). Bulgarian honey is successfully exported to EU countries - and especially to Germany, which is one of the largest consumers of honey in the EU. (Valcheva, T., 2020). The development of this sub-sector of animal husbandry is favored by the appropriate natural and climatic conditions. Our country is one of the first places in Europe in terms of species diversity of vegetation. Much of the country's terrain allows for beekeeping, but it is relatively weak compared to other EU countries. Interest in beekeeping today is growing rapidly due to the desire of modern society to live in harmony with the environment, to eat organic food and consume organic products. (Friends of the Earth, 2021). In addition to honey and wax in our country, beekeepers began to collect and produce other products such as royal jelly, pollen and bee glue. Prerequisite for this are mainly two factors. On the one hand, the biological value of honey and bee products, which is due to the bouquet of nutrients:

- enzymes / diastase, invertase, amylase /;

- amino acids - 18 types / lysine, proline, methionine, tryptophan, arginine, leucine, etc./;
- vitamins / A, C, E, K, and from the group B - B1, B2, B3, B5, B6, B7 and B9 /;
- trace elements / calcium; sodium; potassium; phosphorus; sulfur; magnesium; iron; chrome; zinc; manganese, etc./;
- natural antibiotic substances.

On the other hand, this bouquet of useful nutrients determines their use not only as food for humans, but also finds wide application in medicine and tourism through api therapy in balneology, spa and wellness tourism. Most of these components are taken by bees from medicinal plants. They are used in the preparation of "mild ointment" for wounds; to strengthen immunity in children and the elderly; in the treatment of lung and gastrointestinal diseases, etc.

A trend in recent years is an increase in honey production and an increase in the number of bee colonies, despite the reduction in the number of farms registered in the sector. Due to the above facts, it should be noted that beekeeping can and should be used as a resource for the development of bee tourism. To this end, in Table 1 we presented data on bee farms, bee families and honey production in Bulgaria over the past four years.

Table 1. Number of bee farms, families and honey produced in Bulgaria.

<b>Indicator /Year</b>	<b>2015</b>	<b>2016</b>	<b>2017</b>	<b>2018</b>
<b>Number of bee farms</b>	17 969	15 306	13 431	12 260
<b>Number of bee families</b>	747 434	754 105	765 772	783 348
<b>Extracted honey (tonnes)</b>	9 268	10 218	11 388	10 388

*Source: MAFF, Agrostistics Department, Beekeeping in Bulgaria surveys*

Table 2 presents data on the number of bee families, bee farms and honey harvested in the Northeastern region of Bulgaria.

Table 2. Number of bee farms, families and honey produced in the Northeastern region of Bulgaria.

<b>Indicator /Year</b>	<b>2016</b>	<b>2017</b>	<b>2018</b>
<b>Number of bee farms</b>	2 448	2 179	1 976
<b>Number of bee families</b>	172 246	166 656	172 637
<b>Extracted honey (tonnes)</b>	2 888	2 997	2494

*Source: MAFF, Agrostistics Department, Beekeeping in Bulgaria surveys*

From the data in the table we can conclude that in the Northeast region of the country there is potential for development of beekeeping, respectively of bee tourism. Prerequisites for development include the favorable climate of the region and the variety of honey plants.

#### **The relation beekeeping - apiturism**

The tourism industry specializes in Bulgaria within the EU. It is a source of job creation and an important tool for combating unemployment at regional and local level. A careful study of the

impact of the tourism industry shows a number of economic, cultural and environmental consequences (investment mistakes, hidden costs associated with mass tourism, wrong tourism policies and strategies). Excessive concentration of tourism can destroy local communities, local cultures, ecosystems and the landscape. Sustainable tourism practices, developed as an alternative to traditional mass tourism, try to prevent the deterioration of the environment caused by mass tourism and to ensure good competitiveness of Bulgaria as a tourist destination and sustainable development of the tourism industry. Sustainable tourism, which essentially seeks to preserve and develop natural and cultural resources, is the new face of alternative tourism. The basis of the sustainable development of tourism is the creation of harmony between the social and cultural environment, as well as the maintenance of the balance between ecology and economy in the long run. Alternative tourism or specialized tourism is a set of sustainable tourist forms and practices that are aimed simultaneously at meeting the individual interests and needs of the tourist and the preservation of nature and culture. The emphasis here is on the hitherto preserved environment, authentic atmosphere and preserved traditions. Such an unusual and original alternative species is bee tourism or apiturism - from the name of the honey (domestic) bee - *Apis mellifera*, from Latin: *apis* - bee; *meli* - honey; *ferre* - to carry, gather. The resource base of apiturism is beekeeping - the location of the apiaries, the number of bee families and the quantity and quality of honey and bee products. According to the Law on Tourism in Bulgaria, the tourist activities directly related to apiturism are the provision of "thematically oriented additional tourist services in the field of rural, eco, adventure and other types of tourism. And 21 categories are defined as tourist sites, of which for the needs of apitourism we can use:

- Tourist roads / paths and bicycle routes "- to the respective apiaries, organic farms, etc .;
- Amusement and theme parks "specific apiaries and / or farms turned into attractions, museums, etc .;
- Wildlife and bird watching sites - specific places for wild bees, bumble bees and / or honey bees.
- Unfortunately, the examples of good practices for apiturism in our country are extremely few, but we must note some of them:
  - Museum of Bees in Nessebar;
  - The honey house in the village of Prilep;
  - Apiary in the Poda area;
  - Bormalian Bee Farm
  - Bio apiary RuMa;

The location of some bee farms where bee tourism develops, is usually associated with pedestrian crossings of visitors. This fact contributes to the combination of bee tourism with hiking. According to the definition given by S. Plyakov, "hiking is an individual or group walk in nature with the following goals: recreation and entertainment; to get acquainted with historical, geographical and cultural landmarks; for direct, healthy communication with the nature of the region" (S. Plyakov, 2021).

**A survey was conducted** to gather information on people's attitudes about awareness of this type of tourism and readiness to visit places that develop bee tourism. The total number of respondents was 201. The first question we asked was whether the respondents would participate in this type of tourism, where 70% of respondents answered "YES" and the remaining 30% answered in the negative (Fig. 1).

To the question "Do you know what bee tourism is and what do you think it is?", We received answers presented in fig. 2.

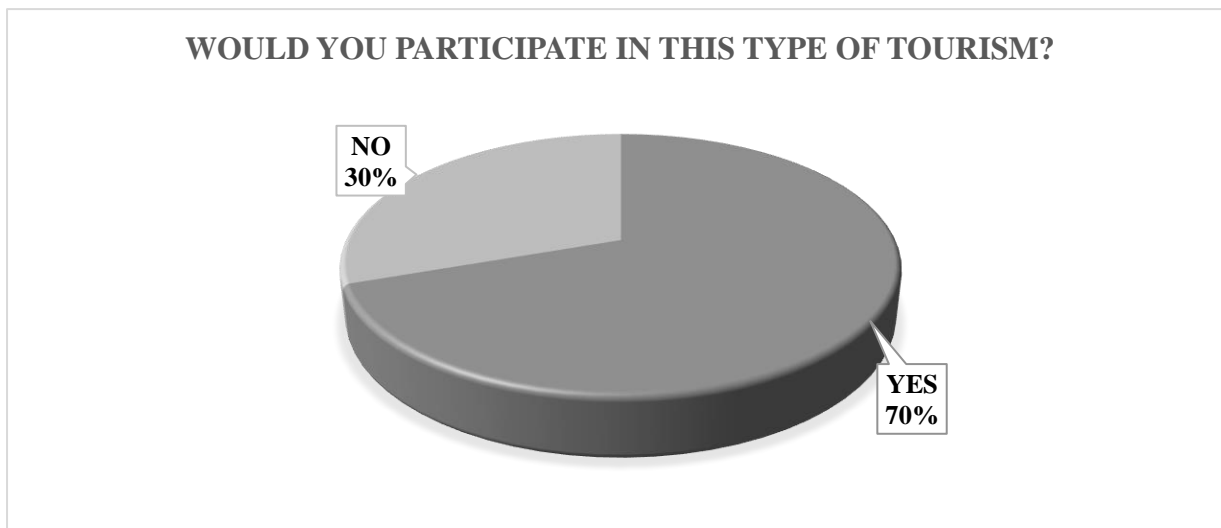


Fig. 1. Would you participate in this type of tourism?

*source: Author's survey.*

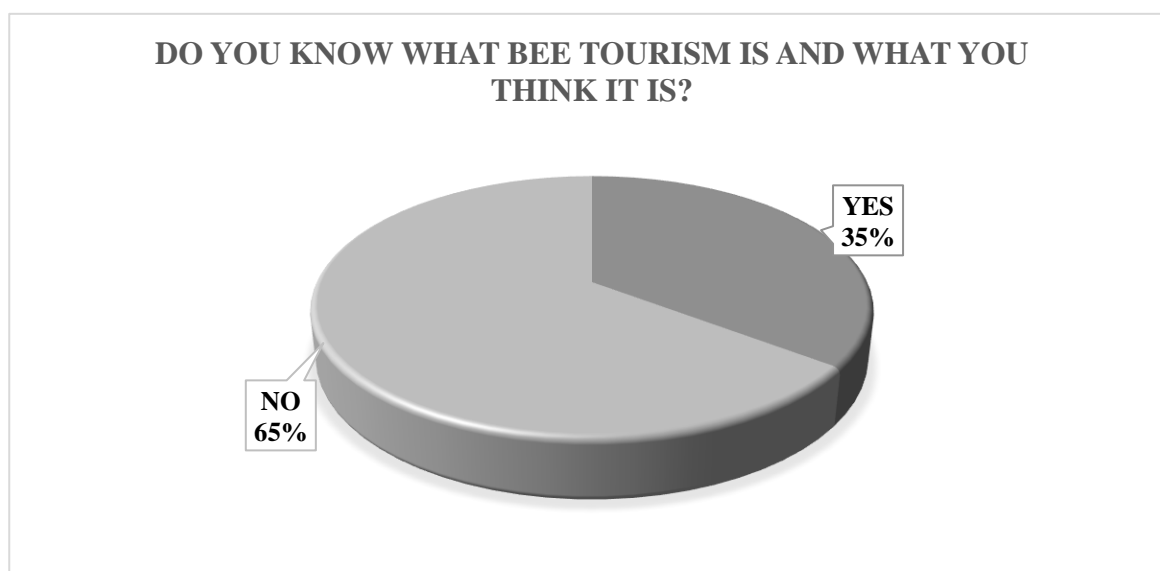


Fig. 2. Do you know what bee tourism is and what you think it is?

*Source: Author's survey.*

Table 3 presents some of the answers of the respondents who know what bee tourism is.

Table 3 Answers of the respondents who know what bee tourism is.

"Apitourism is a form of tourism related to beekeeping as a traditional profession and bee products in environmental, nutritional and medical aspects. Activities related to bee tourism include visits to apiaries, open-air museums and bee museums, where tourists have the opportunity to observe the work of the beekeeper, the method of preparation of honey, its properties and specifics, to learn about other bee products to look at how bee colonies live and recognize the ecological dependence between humans and bees. Bee tourism can also be associated with travel for apitherapy.

<p>Apitourism is a special tour of a country or region to present all things related to bees, such as collection demonstrations, honey tastings, presentations of bee products and beeswax sculptures, and more. ”</p>
<p>"I perceive it as a subspecies of rural tourism, but if there are natural and other nearby. sights, (as in Kaliakra, for example), can be a kind of alternative tourism, supporting part of its income and the protection of bees and our health. And for most people, it may have a cognitive-educational element. "</p>
<p>"Visiting places where bee colonies are raised. The tourist gets acquainted with everything related to beekeeping and honey production. "</p>
<p>"Introduction to honey production and the importance of bees for maintaining bio-balance. Honey tasting at certified producers in a clean environment, spa therapy and relaxing procedures with bee products. "</p>
<p>"This is a type of tourism that includes: therapies with hive air, acquainting tourists with the beneficial properties of bee products - honey, royal jelly, propolis, bee venom, learning about the interesting life of bees."</p>
<p>"Yes, it is about attracting tourists by using the healthy qualities of honey and other bee products, as well as the healthy air in places where there are bees."</p>

*Source: Author's survey.*

To the question "Would you participate in bee tourism in order to treat and strengthen health?" 86% of respondents answered YES and only 14% with NO. This means that many people would get involved, which is another prerequisite for the development of this type of tourism (Fig. 3).

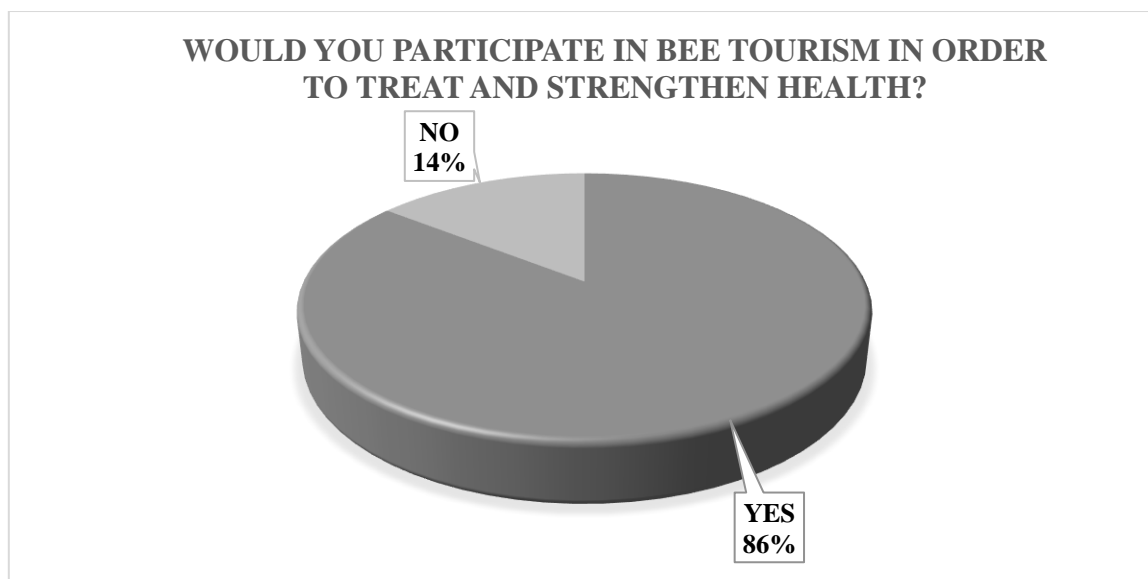


Fig. 3. Would you participate in bee tourism in order to treat and strengthen health?

*Source: Author's survey.*

To the last question from the survey "Do you like bee products?" 96% of respondents gave a positive answer and only 4% said they do not like bee products. As everyone pointed out honey as a favorite bee product, of course there are other bee products in the answers such as: propolis, royal jelly, bee pollen, beeswax and others (Fig. 4).

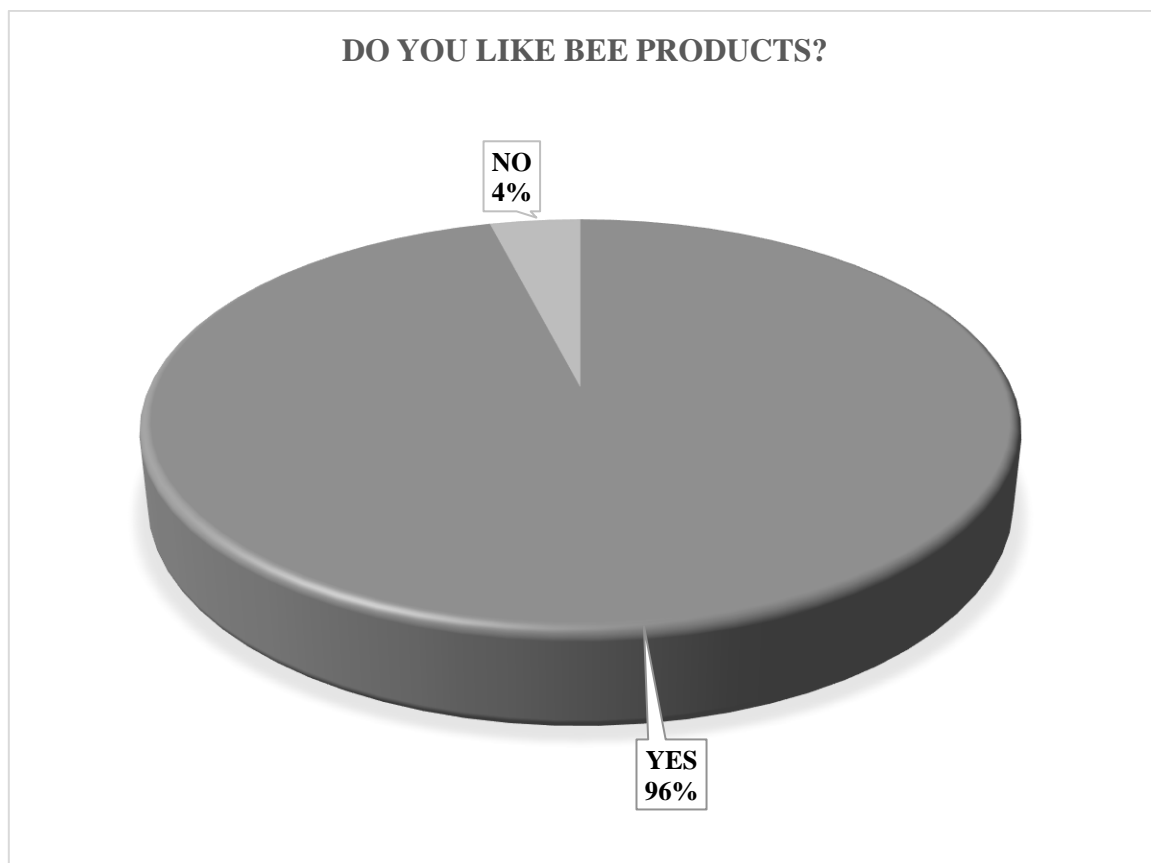


Fig. 4. Do you like bee products?

*Source: Author's survey.*

### **Conclusion**

In ancient times, traders traveled the oceans and seas in search of new foods: wine, honey, wax, oil, salt, skins, spices and exotic goods that were a valuable gift. In fact, things have not changed much today and now tourists travel and visit interesting places to try the unknown even sometimes forgotten tastes and cultures of the peoples.

In bee tourism, tourists have the opportunity to taste ready-made honey and buy ready-made products, which are offered in various variants - pure honey, with nuts, with tahini, even with pieces of honeycomb, homemade honey wine, brandy, as well as other products. and services.

Bulgaria has an excellent resource base for the development of bee tourism, this untapped tourist potential is sustainable and provides good environmental and cumulative effects, if developed. Insufficient knowledge, skills and competencies of producers of honey and bee products severely limit the sustainable use of these resources. They discourage innovation and limit the country's overall potential for sustainable use of nature. As it became clear from the survey we did, most of the people have not heard of this type of tourism, but would like to try it.

An adequate, but also advanced, territorially differentiated product policy in bee tourism is needed, which can be achieved through the development of new strategies for the development of this type of tourism.

The development of api tourism and its combination with other forms of specialized tourism is a prerequisite for the sustainable development of Bulgaria as a year-round tourist destination

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