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# Eco-organic tourism as an element of the sustainable development of territories

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**Abstract.** Organic agricultural production is an ecologically oriented alternative to traditional agriculture and is aimed at ensuring food and environmental safety of the population and territories. The development of ecological tourism on the basis of organic production farms is considered as a promising direction in the development of regional programs for the sustainable development of territories. Studies have shown that, farms engaged in the production of organic products in the Republic of Tatarstan have a significant potential for the development of eco-organic tourism using elements of the nature protection structure.

## 1. Introduction

The concept of Sustainable Development, adopted in 1992 at the United Nations conference on environment and development in Rio de Janeiro, affects all branches of the world economy, including agriculture, the basic basis of the economies of states and regions of the world. The concept is based on four major principles: satisfaction of the basic needs of all living people, equal standards of this satisfaction for the entire population of the planet; sensible, careful use of natural resources; preservation of opportunities for future generations to realize their basic needs [1].

Traditional agriculture is a significant source of anthropogenic pollution of the environment on a global and regional scale. The large-scale use of synthetic mineral fertilizers, pesticides, genetically modified organisms, antibiotics and growth hormones led to a deterioration in the quality of agricultural products, which is hazardous to human health and sharply raised the issue of the need for an alternative, environmentally oriented type of agricultural production that meets the principles of sustainable development. In many countries of the world, organic farming has been developing in recent decades, aimed at the production of natural foods that are not capable of causing negative reactions in the living body and produced in ecologically clean territory.

The Codex Alimentarius, developed by FAO-UNESCO and the WHO to establish harmonized international food standards to protect consumers' health and ensure fair trade in food, defines organic farming as "an integrated production management system that stimulates and enhances the well-being of the agrarian ecosystem, including biological diversity, biological cycles and soil biological activity, which is achieved by using all possible agronomic, biological and mechanical methods as opposed to the use of synthetic materials to perform specific functions within the system" [2].

The most active organic agriculture is developing in the countries of the European Union, where much has been done and is being done for its development, including the principles and rules of



organic farming [3-5]. According to directives of the European Union No. 834/2007 of 28.06.2007, organic agriculture should fulfill its integrated social role, ensuring food security by producing high-quality healthy food, promoting the development of rural areas, protecting and preserving the natural environment [4].

In recent years in the Republic of Tatarstan, one of the most economically developed regions of the Russian Federation, having highly developed agriculture, specializing in the cultivation of grain crops, sugar beets and potatoes, and in the production of meat, milk and eggs, there has been a significant demand from the population for natural food. At the same time it should be noted that, the development of organic farming in Tatarstan, as in Russia as a whole, is in the making. In the local mass media, there are many proposals of purchasing "eco-friendly foods". However, their compliance with the requirements and standards of organic farming is almost impossible to establish, as the system of organic certification in Tatarstan is not yet established.

The law on organic production has not been adopted in Russia, unlike the United States or the European Union, where the national organic standards operate. In addition, the by-laws that regulate the rules and procedures for certification and accreditation of certifying bodies are not adopted.

State standard R 56508-2015 [6] on organic products, introduced in 2016, has not radically changed the situation, there are no accredited organizations in the country for certification under this standard. It is important to note that, certification requires not only an assessment of the conformity of agricultural technology in the field of crop production, livestock and food production to the requirements of organic agricultural production, but also an integral assessment of the environmental situation of the territory on which the agricultural enterprise is located.

## **2. Materials and methods**

In 2015, a study was conducted on farms in Tatarstan for compliance with the requirements of organic farming. Based on its results, 39 farms in 21 municipal districts were allocated for producing products that can be certified as organic [7]. All farms are classified as small and medium-sized businesses, the most suitable for organizing various areas of environmentally oriented tourism, such as relaxing ones in ecologically clean places with beautiful landscapes, excursions to natural and cultural heritage sites, communication with animals, participation in harvesting and in various activities.

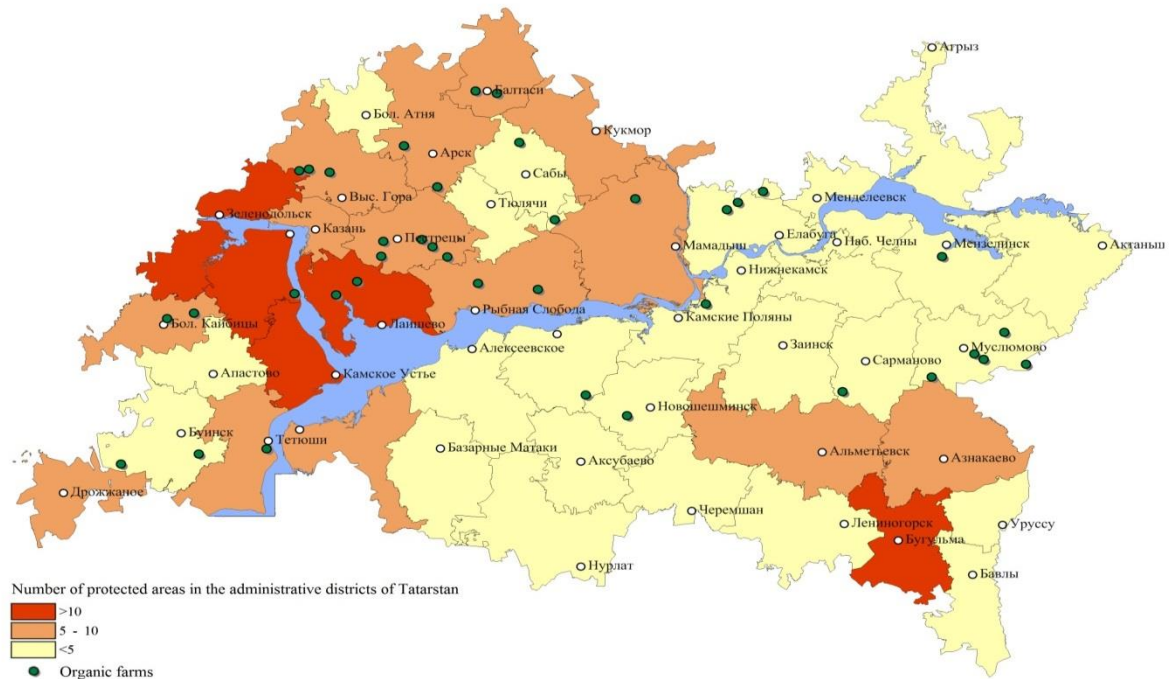
## **3. Results and discussions**

Considering the location of organic farms across the territory of the Republic of Tatarstan, it should be noted that, most of the organic farms are concentrated in the areas adjacent to the capital of the republic of Kazan, which is largely due to their orientation towards a general consumer. All of the organic farms are located in ecologically safe areas with a large concentration of specially protected natural territories, which allows organizing excursions to these unique natural heritage sites (figure 1).

The regional system of specially protected natural territories includes 171 objects of various categories, status and protection regimes, including federal, regional and local importance and is an important part of the tourist and recreational potential of the Republic of Tatarstan [8]. However, the existing rich tourist and recreational potential of specially protected natural territories is not adequately reflected in the programs of tourist services. Studies have shown that, the key problem of development of tourist and recreational activities in specially protected natural territories is the lack of the tourist infrastructure [9]. In many respects, the reasons for its absence are related not only to the fact that they are usually located at a considerable distance from large settlements, but also with the fact that initially they did not have the task of receiving visitors. Transport distance, as well as poor development of road infrastructure exacerbates the situation with visiting unique natural sites, not allowing visiting them during a day, without the organization of spending a night.

An effective way to solve this problem can be the development of tourism on the basis of farms engaged or aimed at the production of organic products. They have an orientation toward rational use of natural, cultural, historical and other resources of the locality and its specifics in creating a tourist product that does not violate the integrity of ecosystems, involving local people in the tourist business.

At the same time, infrastructure problems are solved, including organization of reception of people with disabilities [10].



**Figure 1.** Spatial distribution of specially protected natural territories and organic farms across the territory of the Republic of Tatarstan.

Despite the undoubted advantages of eco-organic tourism for both holidaymakers and those who provide this service, only a small part (25%) of the investigated farms of organic farming are currently actively developing tourist services. The rest of the farms are ready to develop such an environmentally oriented business, subject of the support of the state.

To study the problems and possibilities of development of eco-organic tourism in the territory of the Republic of Tatarstan, a SWOT analysis was carried out (table 1). The analysis showed that, farms engaged in the production of organic products have a significant potential for the development of eco-organic tourism, including organization of excursion trips to specially protected natural territories. This is due to their location on the territory with a high concentration of unique natural objects and a growing demand for their products. Identified strengths and external opportunities can be considered as the basis for a competitive strategy for the development of eco-organic tourism based on organic farming and should be implemented through a system of activities aimed at their use and strengthening. It should be noted that, the complex problems present in the sphere of development of this type of tourism are quite acute and systemic. Eco-organic tourism can and should become an important element of sustainable development of territories. A scientific approach, based on a thorough study of the possibilities for receiving visitors to each individual farm of organic farming, as well as each natural facility is required.

**Table 1.** SWOT-analysis of the potential for the development of eco-organic tourism in the Republic of Tatarstan.

Strengths	Weaknesses
<ul style="list-style-type: none"> <li>- rational use of energy and natural resources;</li> <li>- production of high-quality natural products;</li> <li>- suitable soil and climatic conditions for conducting organic farming;</li> <li>- high natural and recreational potential of the territory;</li> <li>- the presence of a developed system of specially protected natural territories;</li> <li>- availability of event events related to the history and culture of the peoples;</li> <li>- availability of infrastructure for accommodation and catering in farmsteads and farms;</li> <li>- good transport accessibility of organic farming farms;</li> <li>- favorable ecological situation in rural areas.</li> </ul>	<ul style="list-style-type: none"> <li>- poor quality of provided accommodation and nutrition services;</li> <li>- lack of specialists in the service of tourists;</li> <li>- insufficient information for supporting of organic farming;</li> <li>- seasonality of services related to climatic conditions;</li> <li>- lack of investment resources and financial support from the state;</li> <li>- the unwillingness of rural residents to host foreign people;</li> <li>- lack of developed ecological routes and observation platforms in specially protected natural areas;</li> <li>- high cost of products and services provided by organic farms.</li> </ul>
Opportunities	Threats
<ul style="list-style-type: none"> <li>- growth of popularity of ecological tourism among the population;</li> <li>- increasing the material well-being of the rural population and improving the socio-economic climate in the countryside;</li> <li>- receiving additional profits through the development of tourism;</li> <li>- an opportunity for the development of a variety of types of tourist services;</li> <li>- the possibility of free promotion of the image of farms of organic farming through social advertising;</li> <li>- replenishment of the republican and local budgets by increasing the taxable base.</li> </ul>	<ul style="list-style-type: none"> <li>- imperfection of the regulatory and legal framework for rural tourism;</li> <li>- weak entrepreneurial activity of the rural population;</li> <li>- high competition with outbound tourism;</li> <li>- deterioration of the ecological conditions of natural objects;</li> <li>- lack of a program to support organic farms engaged in rural tourism;</li> <li>- lack of calculations of the carrying capacity of natural areas;</li> <li>- deterioration of the ecological status of specially protected natural areas due to recreational impact;</li> <li>- a general decline in the living standards of the population in Russia.</li> </ul>

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**References**

- [1] 1993 The Rio Declaration on Environment and Development *UN document A/CONF.151/26/Rev1(Vol I)* (New York: UN) pp 3 – 7
- [2] 1999 *Guidelines for the production, processing, marketing and labeling of organically produced foods* (Rome: The Codex Alimentarius Commission and the FAO/WHO Food Standards Programme) p 91
- [3] European Union 2001 European Union Council Regulation No. 2092/91 of 24 June 1991 on organic production of agricultural products and indications referring thereto on agricultural products and foodstuffs *Official Journal of the European Union* **198** 101

- [4] European Union 2007 European Union Council Regulation No. 834/2007 of 28 June 2007 on organic production and labeling of organic products and repealing Regulation No. 2092/91 *Official Journal of the European Union* **189** 23
- [5] European Union 2008 European Union Council Regulation No.889/2008 of 5 September 2008 laying down detailed rules for the implementation of Council Regulation (EC) No. 834/2007 on organic production and labeling of organic products with regard to organic production, labelling and control *Official Journal of the European Union* **250** 84
- [6] 2015 *State standard R 56508-2015 Organic production products – Rules of production, storage, transportation* (Moscow: Standardinform) p 71
- [7] Grigoryan B R, Koltsova T G, Sungatullina L M and Sachabiev I A 2016 Conformity assessment of agricultural enterprises of the Republic of Tatarstan to the requirements of organic agricultural production *Russian J. of applied ecology* **4** 40 – 45
- [8] 2007 *State Register of specially protected natural territories of the Republic of Tatarstan* (Kazan: Idel-Press) p 407
- [9] Ziganshin I I and Ivanov D V 2016 Potential for accessible tourism development in specially protected natural territories of the Republic of Tatarstan *Russian J. of applied ecology* **2** 42 – 47
- [10] Ziganshin I I and Ivanov D V 2016 *Imperatives of development of hospitality infrastructure in the region: Proc. Int. Sci. Conf.* (Volgograd) 90 – 93