

The Promotion of Agro-tourism in Terms of Agriculture Ecologization in the Krasnodar Region

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Abstract: The Krasnodar Region is an agriculture-oriented territory where agriculture plays a significant role in the economy. It provides a substantial percentage of gross regional product. To date, the agricultural sector needs to develop new directions of functioning in the Krasnodar Region in connection with the growing environmental threat and the need to preserve natural resources in the long term. In this regard, the development of agro-tourism as an eco-friendly direction of the functioning of agriculture is of high relevance. The provision of agro-tourism services is possible not only on the basis of agricultural organizations in the traditional field of gastronomic, wine and other tourism. Enterprises specializing in the processing of agricultural products can also form a competitive agro-tourism product, which will increase their efficiency without harm to the environment.

1 INTRODUCTION

The agro-industry is one of the priority of economic development in the Krasnodar Region.

In recent years, the environmental threat has been formed in relation to the development of the agro-industry in response to the increasing intensification of agricultural production. This situation is due to the growing number of enterprises in the agro-industry which contravene environmental law (Wahyuni et al., 2020).

In this regard, it is necessary to choose alternative development of the agricultural sector, which would allow, on the one hand, to ensure the efficiency of the agricultural holdings, on the other hand, to maintain the ecological balance in the Krasnodar Region and to preserve the natural environment. One of the eco-friendly direction of the agriculture functioning is the agro-tourism development.

2 METHODOLOGY

Features of functioning, problems and prospects of the agro-tourism development in the Russian

Federation are presented in the works of M.T. Davletova, A.E. Usynina and others. The works of D.A. Shapova, R.A. Shikova, (Davletova and Tursambaeva, 2013; Klochko and Kovalenko, 2020; Shapova and Fomichenko, 2016; Shikova et al., 2016) focus on the searching new directions of the agro-tourism development taking into account the characteristics of regional and rural territories development.

It should be noted that the agro-tourism in the modern scientific works is considered in the context of its economic and social significance. However, there is no consensus on the development model of agro-tourism subjects, as well as on the system of factors that affect its implementation within the agricultural organizations which are not traditional subjects of the agro-tourism.

Familiarization with the development experience of agro-tourism in Western countries and some constituent entities of the Russian Federation is the main source for writing this article. The article is based on the use of methods of theoretical research, systemic analysis, allowing to consider processes and phenomena in their interrelationship.

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3 RESULTS

Agriculture is the most important factor of the economy development for such the agriculture-oriented territories as the Krasnodar Region.

The main aim of the subjects of agricultural production is to maximize harvests in the crop production or to increase livestock production. In accordance with the focus of the agro-industry on the intensification of production, the activities of producers of agricultural products imply a large-scale use of technology and the implementation of chemicalization of the production process. As a result, the intensification of agricultural production is in conflict with the need to maintain ecological balance in the natural environment.

Farming had nothing to do with preserving the environment in recent decades of the last century. This has been a sustainable model for the food production system throughout much of the world.

Now, due to this current situation, there is a negative effect of the functioning of the agro-industry in many countries represented by depleted soil, chemical pollution of water resources, destruction of traditional family farming, general deterioration in public health and etc.

However, there is currently a positive dynamic in agriculture, namely, an approach that combines innovation and tradition which could change a method of growing plants and food production in the future has emerged.

Much of the world has traditionally budgeted for costs of an industrial approach that determines the development of much of the agriculture with its dependence on chemicals and monoculture.

New accounting systems known as “true cost accounting” provide data on the industrial agriculture funding, impact of soil erosion, climate change and public health. At the same time, an increasing number of countries, motivated by small grocery chains and medium-sized farms, are actively moving towards the investment policies for agro-ecological food systems (Zelinskaya and Kovalenko, 2020).

Today, the ecologization of agriculture is the priority of the agro-industry development in the Russian Federation.

The agro-industry management practice of the Krasnodar Region shows the implementation of massive ploughing, as well as the repeated use of chemical soil treatment, which leads to the systemic land degradation.

The soils of the Krasnodar Region are unique and diverse in accordance with their natural and economic features. In addition to a substantial chernozem soils

volume, the region has gray and brown forest soils, brown podzolic forest soils, brown chernozem soils, soddy calcareous soils, as well as unique mountain meadow soils located in the Alpine highlands.

The useful characteristics of the presented soil system provide the formation of a significant capacity for the agro-industry development, the production of high-quality agricultural products.

However, the intensification of agriculture, incorrect (excessive or insufficient) using mineral fertilizers have a negative impact on the soils in the Krasnodar Region (Klochko and Kovalenko, 2020).

Figure 1 shows the characteristics of the current soil degradation in the region.

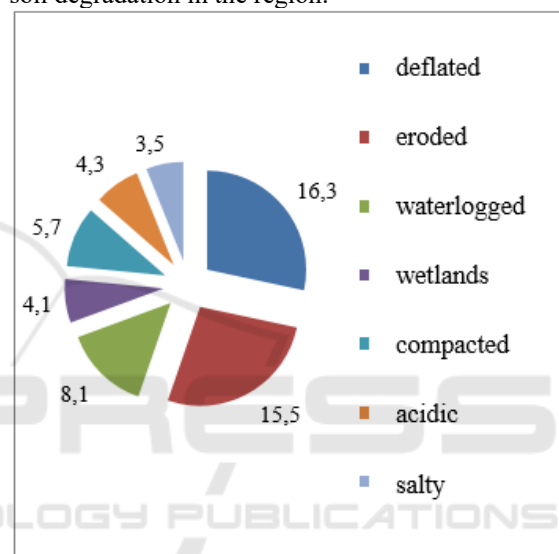


Figure 1: The characteristics of the soil degradation in the Krasnodar Region.

According to the graphical data presented, 16.3% of soils in the Krasnodar Region are deflated, 15.5% - eroded, more than 8% - waterlogged, which is caused by the intensification of the agro-industry.

Also, a significant share of degrading agricultural land is occupied by compacted, acidic and waterlogged soils.

A number of experts in the field of economics and agriculture are of the opinion that the spread of the conservation agriculture technologies is the solution to this situation. However, it is necessary to create qualitatively new integrated directions for the agro-industry development to eliminate the growing environmental threat in the Krasnodar Region, affecting both the functioning of the agriculture sector and related industries of the national economy.

Experience of the agricultural production subjects shows that many agricultural enterprises get fines as a result of violation of the environmental law and

non-adherence to the relevant norms and standards (Table 1).

According to the results of the presented analysis, it can be seen that the number of enterprises that got a fine of 400 to 700 thousand rubles has increased by almost one third over the past five years, and of 700 thousand rubles - by two-thirds, which indicates an increase in the environmental threat to the functioning of the agro-industry.

Table 1: The structure of the number of the enterprises that got fines as a result of violation of the environmental law, units.

Indicator	2016	2017	2018	2019	2020	2020 to 2016, %
Up to 400 thousand rubles	1344	1321	1396	1380	1410	104,9
400 – 700 thousand rubles	817	856	921	944	1080	132,2
Over 700 thousand rubles	21	29	18	26	35	166,7

Thus, to date, the agro-industry of the Krasnodar Region needs large-scale ecologization, the aim of which is to minimize the negative impact of the agricultural enterprises in relation to the ecological system, as well as to form qualitatively new directions for the industry functioning that do not cause significant harm to the environment.

According to the constructive experience of a number of Western countries in this field, the development of agro-tourism is an effective direction of the eco-friendly functioning of the agricultural sector.

In the world market, agro-tourism is a highly profitable branch of the tourism industry (Dunets et al., 2020), functioning within the framework of the agriculture development.

It is important to note that the creation of a tourism product in agro-tourism is impossible without the use of high-quality natural, agricultural and other resources, which are also used in the production of agricultural products. At the same time, agro-tourism seems to be of high quality if the functioning of the agro-tourism subjects is as close as possible to nature and the natural movement of its subsystems, which ensures the environmental friendliness of the presented direction.

According to the international practice research of the agro-tourism development, this direction can be

most effectively developed in regions with rich ethnic diversity (Klochko and Zelinskaya, 2019). Despite the fact that gastronomic and wine tourism occupies a significant share in agro-tourism, tourism activities related to the cultural and educational programs dealing with the peculiarities of national land use and agricultural production, taking into account cultural and ethnic factors, are also important (Wahyuni et al., 2020).

From this point of view, the Krasnodar Region has substantial potential for the agro-tourism development. The modern practice of the agro-tourism covers the following areas of tourism activity:

- research of the results of agricultural production, as well as taking a direct involvement in the production (harvesting, inclusion in the processing agricultural products, etc.);
- tasting of agricultural products, both in raw form (for example, fresh fruits, vegetables) and provided from processing (canned products, baked goods, wines);
- conducting the tours, the aim of which is to study the functioning of the agricultural sector using the specific subjects as an example.

Figure 2 shows the structure of agro-tourism subjects in the Krasnodar Region.

As can be seen from the presented graphical data, to date, agro-tourism activities in this region are carried out by the peasant farm holdings, offering, as a rule, one specific type of agro-tourism services, for example, harvesting, tasting honey or wine, and etc.

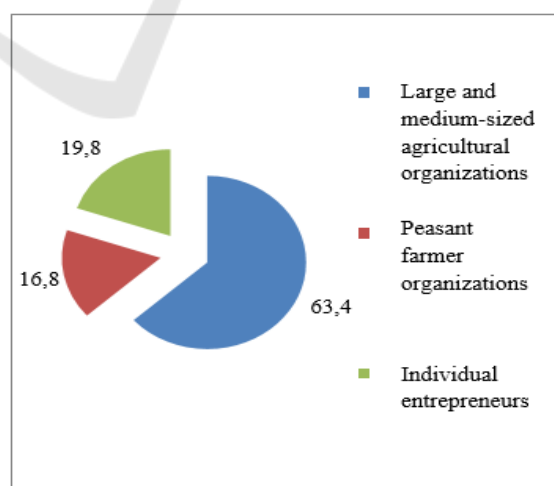


Figure 2: The structure of agro-tourism subjects in the Krasnodar Region, %.

Individual entrepreneurs as the agro-tourism subjects are also distinguished by specialization in a certain direction of the research field.

Large and medium-sized agricultural organizations that carry out activities in the agro-tourism (such as JSC “Sad-Gigant”, CJSC “Abrau-Dyurso”, etc.) often provide services for product tasting.

At the same time, many agricultural enterprises of the Krasnodar Region currently do not carry out agro-tourism activities because the production is not of mass interest for consumers of the tourism product. However, the development of this direction can become an additional source of income without harm to the environment.

Let us consider the opportunity of agro-tourism within the framework of enterprises that process agricultural products using OJSC “Malorossiysk Elevator” as an example.

Figure 3 shows the characteristics of the products manufactured by the enterprise.

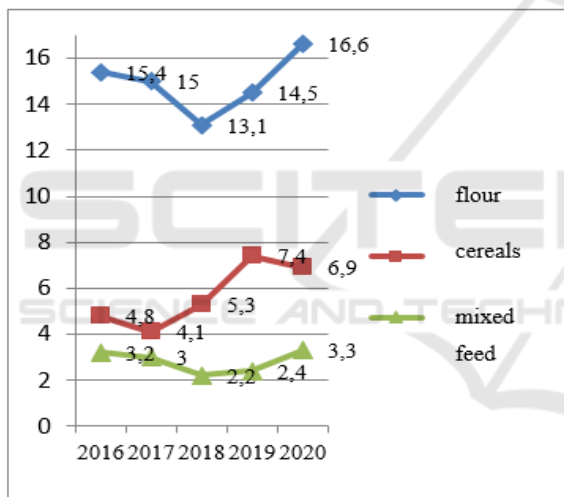


Figure 3: The dynamics of agricultural production volumes at OJSC “Malorossiysk Elevator”, thousand tons.

The analysis shows that the volume of gross output of flour, cereals and mixed feed has increased at the enterprise.

However, as can be seen from the data in Figure 4, the revenue and net profit of OJSC "Malorossiysk Elevator" is decreasing in the study period.

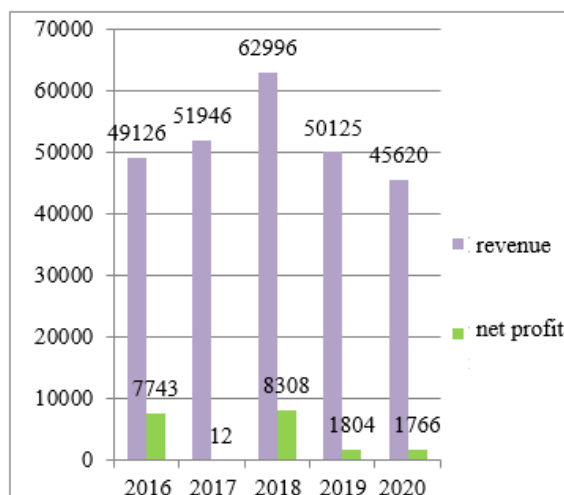


Figure 4: The structure of the revenue and net profit of OJSC "Malorossiysk Elevator".

It is due to the fact that the enterprise does not develop alternative activities, does not update the methods of intensifying production.

It is necessary to develop alternative ways of profit-making to increase the economic efficiency of the OJSC "Malorossiysk Elevator" development in the long term, which is possible by providing agro-tourism services by the enterprise both in the regional and federal markets.

According to the authors, OJSC "Malorossiysk Elevator" has substantial potential to carry out agro-tourism.

As it was revealed by the research, activities in the agricultural products processing has a number of specific features. Grain production is seasonal. Large amounts of grain accumulate in a very short period. Grain is consumed daily throughout the year. Consequently, it is necessary to have grain reserves that would satisfy the daily consumer need for grain and products of its processing in the Tikhoretsky Municipal District and the Krasnodar Region as a whole.

The enterprise not only store grain in its granaries, but also expend great effort to ensure its long-term preservation, improvement of quality without quantitative losses (Klochko and Kovalenko, 2020). In the grain turnover, which is associated with the movement of grain from producer to consumer, the enterprise occupies the central place. In fact, it is the material and technical base of this grain turnover.

The presented processing activities may be of interest to potential consumers of agro-tourism services.

Table 2 presents the characteristics of the projected directions of agro-tourism services at OJSC "Malorossiysk Elevator".

Both the technological process of processing grain products and the study of its quality in a laboratory may be of significant interest for potential consumers, due to the fact that such services are virtually absent from the structure of modern agro-tourism in the Krasnodar Region.

Table 2: The projected directions of agro-tourism services at OJSC "Malorossiysk Elevator".

The projected direction of agro-tourism services	Summary
Excursion and educational activities	Research of the technology of processing grain products
Involvement in processing of agricultural products	Taking part in assessment of the processed products properties on the basis of the laboratory
Gastronomic activities	Tasting products made from processed raw materials

In addition, tasting products made from processed raw materials will attract a wide range of consumers of agro-tourism because gastronomic activities are popular with tourists.

4 DISCUSSION OF THE RESULTS

By analyzing the activities of organizations providing agro-tourism services in the Krasnodar Region, the authors came to the conclusion that these services are mainly provided by farms that directly produce agricultural products in a certain direction (winemaking, production of honey or dairy products, etc.) at present. Thus, the provided agro-tourism services are quite repetitive, which leads to the potential loss of competitiveness.

At the same time, the effective agro-tourism activities can be provided by enterprises of the agricultural products processing. The technology of product processing, participation in laboratory assessment of its quality, as well as tasting products made from processed raw materials may be of interest to potential consumers of tourism services. In addition, the environmental friendliness of the agro-tourism development of this direction which allows to preserve the environment is critical.

5 CONCLUSION

The proposed recommendations to enhance the effectiveness of the agro-tourism services provision will increase the pace of the agro-tourism

development in the Krasnodar Region. The efficiency of the related industries (agriculture, resort and tourist complex, etc.) can be improved with an increased number of agricultural services provided at enterprises that process agricultural products.

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