

THEORETICAL ASPECTS OF THE TERRITORIAL-FUNCTIONAL ORGANIZATION OF AGRO-ECOTOURISM IN KAZAKHSTAN

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ABSTRACT: The purpose of the work is to study and generalize the theoretical aspects of the territorial-functional organization of agro-ecotourism in Kazakhstan. The need to expand non-agricultural sectors in the country's agrarian area was established. It has been found that tourism in Kazakhstan is in decline. It was determined that the territorial-functional organization of agro-ecotourism in Kazakhstan is carried out using the adaptation method, which is based on the existence of a basic agricultural enterprise and the adaptation of an agro-ecotourism company to it and an individual method, in relation to which there is an independent agro-ecotourism enterprise. Consideration of the features of the tourist zones of Kazakhstan made it possible to establish the potential for the development of agro-ecotourism in the country. Thus, the practical significance of the study lies in the fact that certain methods and forms of the territorial-functional organization of agro-ecotourism in Kazakhstan can be used in further work of scientists on the organization of agro-ecotourism in other countries.

Keywords: *Agriculture, Adapted model, Individual model, Regional characteristics, Tourist area.*

1. INTRODUCTION

Tourism in rural areas increases the level of development of the agricultural sector. Agro-ecotourism is gaining significant popularity (Figure 1) [1]. For Kazakhstan, this type of tourism can be one of the main ways to improve economic development and social status. The main factor in the use of agro-ecotourism in Kazakhstan as a means of increasing socio-economic development is that more than 4/5 of the country's territory is occupied by rural areas [2]. The territorial-functional organization of agro-ecotourism can be one of the basic factors in the development of tourism services in the country. Therefore, the definition of theoretical aspects of the territorial-functional organization of agro-ecotourism in Kazakhstan is a rather urgent issue.

A. V. Gusko and T. V. Yakimidy [3] consider socio-economic development as an improvement in the activities of social institutions, an increase in production, an increase in the national wealth and income of the country, an improvement in the life of the population, and the development of innovations and technologies. E. V. Katsemir [4] considers agro-ecotourism as a different form of tourism associated with agriculture. For a tourist, this term means the tourist activity of a person aimed at learning about agricultural production or relaxing in the countryside. And for representatives of services in the field of agro-tourism, the essence of this term is invested in different meanings, for example, agro-sport, agro-leisure, agro-hotels or

agro-nutrition. Agro-ecotourism is characterized by the interaction of both economic and non-economic areas, can be both at the global and national levels.

M. M. Korol and A. I. Kadar [5] considered agro-ecotourism as tourism based on the growth of the ecological awareness of the population and accompanied by the activation of the rural population. The authors identify agro-ecotourism with green tourism. Agro-ecotourism is seen by H. Kothari and A. Perwej [6] as a solution for the sustainable development of rural areas. E. Togaymurodov, R. Isloмова and A. Stamatis [7] explain that agro-ecotourism assimilates national values and traditions, implements safe development of agrarian and ecological tourism, and is directly related to rural tourism. While ecotourism is a type of itinerant tourism associated with natural areas, agro-tourism is focused on agriculture and associated activities, providing visitors with a unique rural experience that promotes sustainable agricultural and environmental practices.

In Kazakhstan, where most of the country's territory belongs to rural areas and agriculture needs to be developed, agro-ecotourism and its perfect territorial and functional organization are essential for improving the socio-economic development of rural areas. While there is existing research on agro-ecotourism and its benefits, there is limited research on how to organize and structure agro-ecotourism in a way that maximizes its potential benefits. The study aims to fill this gap by providing a theoretical framework for the territorial-functional organization of agro-ecotourism in Kazakhstan.

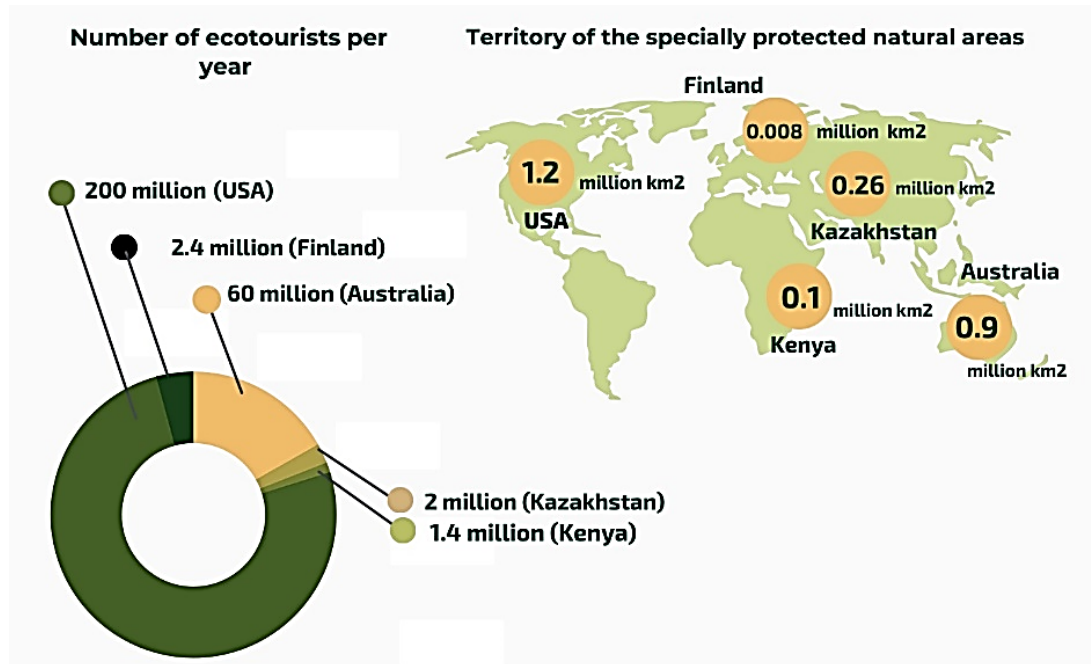


Fig.1 Ecotourism in the World and in Kazakhstan

2. RESEARCH SIGNIFICANCE

This study provides a theoretical basis for the territorial-functional organization of agro-ecotourism in Kazakhstan. It identifies the need to expand non-agricultural sectors in the country's agrarian area and establishes the potential for the development of agro-ecotourism in Kazakhstan. The research can contribute to the promotion of responsible tourism practices that take into account environmental and cultural sustainability, leading to a more sustainable tourism industry worldwide.

3. MATERIALS AND METHODS

The theory and methodology of the study are based on the main studies of experts and scientists from Kazakhstan, Uzbekistan, Thailand, the European Union (EU), Belarus, Ukraine, and the United States of America (USA) on the territorial and functional organization of agro-ecotourism. The method of researching concepts was applied to establish the features of the meaning of the category "agro-ecotourism" and to determine the main methods and forms of the territorial-functional organization of agro-ecotourism.

The analysis method was used to determine the features of the state of development of the economy, agriculture, and tourism development in Kazakhstan in 2013-2021. Also, this method helped to systematize data on indicators of agricultural land area relative to the share of the total land area, the share of the rural population in the total population, the indicator of the percentage of agriculture, forestry, and fisheries relative to Kazakhstan's GDP

(gross domestic product) and data on grain yields. This method was used to study the dynamics of international tourism travel spending, international tourism arrivals and receipts.

Using the scientific method, based on a preliminary study of the theoretical foundations of the organization of agro-ecotourism, methods were developed for the territorial-functional organization of agro-ecotourism in Kazakhstan and an adaptive and individual method was formed. This method helped to consider the features of adaptation to the basic agricultural enterprise of an agro-ecotourism company and the existence of an independent agro-ecotourism enterprise. The scientific method was applied in determining the forms of territorial-functional organization of agro-ecotourism in Kazakhstan.

The method of induction helped to consider the territorial and functional features of the ostrich farm, Akkum-Kalkan tourist zone, Merke sanctuary, West Altai Nature Reserve, Akunchuk tract, Katon-Karagai National Park waterfall, Poperechnoye village, Aktas Mountain with Konir-Aulie cave [8]. The information base of the study is the work of scientists from different countries and research by experts from the Universiti Tun Hussein Onn Malaysia, Center for International Studies [9, 10]. The basis for determining indicators of the percentage of agriculture, forestry, and fisheries in relation to the GDP of the country, the area of agricultural land in relation to the share of the total land area, the share of the rural population in the total population, and data on grain yields, GDP, exports of goods and services, imports of goods and services, inflation (GDP deflator), general

unemployment rate, GDP per capita, international tourism travel expenditures, number of international tourism arrivals and receipts (% of total exports) of international tourism data from the World Bank.

4. RESULTS

In recent years, it is the tourism industry that is gaining momentum in the world market, because there are global tourist flows and a steady increase in income from the sale of tourism services [7]. Agro-ecotourism is a network of the tourism industry, which is primarily focused on the use of natural, cultural, historical and other resources of the countryside and its features are to create an integrated tourism product. A significant positive social component of agricultural tourism is the employment of the rural population through the provision of services to the village [11-13]. The active development of agro-ecotourism is accompanied by a set of specific factors in accordance with the regional affiliations based on the territorial and functional organization of tourism, which in turn allows the implementation of tourism services in each region. Kazakhstan today is characterized by the active development of agro-ecotourism, which is accompanied by the improvement of entrepreneurial activity in the field of cognitive and relaxation leisure and is stimulated by the relevant state-targeted programs [14-16].

Such trends are accompanied by a high potential for the development of agriculture in Kazakhstan (Table 1). Although the size of agricultural land

during 2013-2020 decreased by 1.4%, in general, the area occupies more than 79% of the total territory of the country. At the same time, there is a negative trend in the decrease in the rural population. The agricultural sector in Kazakhstan occupies the main part of the country and requires the attraction of human capital. In general, such changes in the indicators of agricultural activity indicate the need to expand non-agricultural sectors in the agrarian areas of the country.

Table 2 shows that the level of GDP in Kazakhstan during 2013-2021 tended to decrease by 27% and at the end of 2021 amounted to 1908 billion USD. At the same time, the export of goods and services in the country under study during 2013-2021 decreased by 21%, while imports also tended to decrease by 3%, respectively. Kazakhstan needs changes that should be focused on the development of rural areas. At the same time, an increase in inflation by 1.11% is observed. The indicator that characterizes the social development of the country most has a positive trend because the unemployment rate decreased by 5.8% during 2013-2021 and in the final period amounted to 4.9% of the total labour force of the country. The indicator of GDP per capita during the study period decreased by 27.7%. That is, it is observed that with the outflow of the rural population, the level of socio-economic development of Kazakhstan also decreases. The country needs to create and expand jobs in rural areas. The development of agro-ecotourism will not only create new jobs with the involvement of physical strength but also concentrate intellectual resources in rural areas.

Table 1 Dynamics of agricultural development characteristics in Kazakhstan during 2013-2021 [2; 17-20]

Index	2013	2014	2015	2016	2017	2018	2019	2020	2021	Growth rate, %
Agricultural land (% of land area)	80.38	80.30	80.11	80.10	80.09	80.02	79.26	79.27	n	-1.4
Rural population (% of total population)	42.95	42.88	42.81	42.74	42.66	42.57	42.46	42.33	42.18	-1.8
Agriculture, forestry and fisheries, value added (% of GDP)	4.50	4.33	4.71	4.56	4.52	4.40	4.47	5.39	5.11	13.4
Grain yield (kg/ha)	1164.9	1172.7	1278.1	1347.7	1355	1359.2	1154.0	1288.3	n	10.6

Table 2 Dynamics of the characteristics of the socio-economic development of Kazakhstan during 2013-2021 [21-26]

Index	2013	2014	2015	2016	2017	2018	2019	2020	2021	Growth rate, %
GDP, a number of billions USD	2366	2214	1844	1373	1668	1793	1817	1711	1908	-27.7
Export of goods and services (% of GDP)	38.62	39.34	28.52	31.84	32.40	37.63	36.44	30.23	n	-21.7
Import of goods and services (% of GDP)	26.79	25.63	24.53	28.47	24.43	25.90	28.42	25.99	n	-3.0
Inflation, GDP deflator (annual %)	9.50	5.77	1.82	13.64	11.21	9.21	7.63	4.21	10.61	11.7
Total unemployment rate (% of total labour force) (the International Labour Organization model estimate)	5.20	5.06	4.93	4.96	4.90	4.85	4.80	4.89	4.90	-5.8
GDP per capita (current USD)	13891	12807	10511	7715	9248	9813	9813	9122	10041	-27.7

Table 3 Dynamics of tourism development indicators in Kazakhstan during 2013-2020 [27-30]

Index	2013	2014	2015	2016	2017	2018	2019	2020	Growth rate, %
International tourism, travel spending (the number of billions USD)	34.7	35.2	28.7	24.5	25.6	26.9	27.6	8.3	-76.2
International tourism, number of millions of arrivals	103.6	134.1	197.4	240.4	286.9	311.9	318.8	41.2	-60.3
International tourism receipts (% of total exports)	2.6	2.6	3.6	4.9	4.4	3.9	4.4	1.1	-56.7

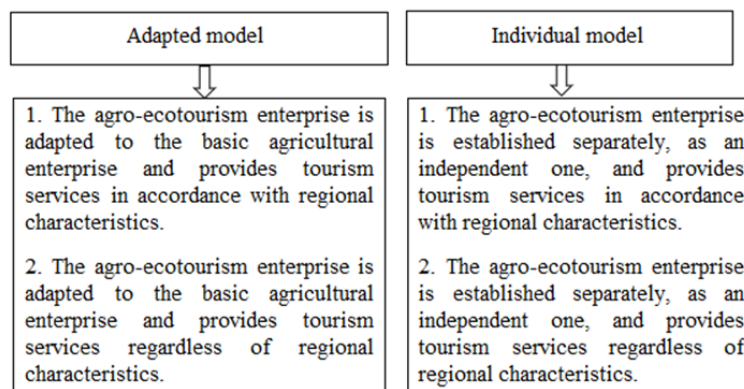


Fig. 2 Models of territorial and functional organization of agro-ecotourism in Kazakhstan

Table 3 shows that tourism in Kazakhstan is in decline. After all, the cost of international tourism travel during 2013-2020 decreased by 76.2%. This is due to a decrease in the number of international tourist arrivals in the country by 60.3%. Kazakhstan needs immediate improvement in tourism development. More than 79% of the country's territory is occupied by rural areas, and agro-ecotourism is the most effective and potential type of tourism development. The territorial-functional organization of agro-ecotourism in Kazakhstan can be built on the basis of two main models: adapted and individual (Figure 2). With an adapted model, agro-enterprises always have the main advantage and such cooperation is mainly focused on the basis of regional features of the area. Although sometimes the agro-ecotourism enterprise can be

adapted to the basic agricultural enterprise and provide tourism services independent of regional characteristics. The individual model of the territorial-functional organization of agro-ecotourism in Kazakhstan is that this tourist enterprise is created separately and independently and provides tourist services both accordingly and regardless of the regional characteristics of the area. In practice, in order to attract a high number of customers and increase demand for agro-ecotourism services, these enterprises, in accordance with an individual model, introduce tourism services that are not typical for the region of location. It is important to note that the territorially functional organization of agro-ecotourism in Kazakhstan is carried out on the basis of forms (Figure 3).

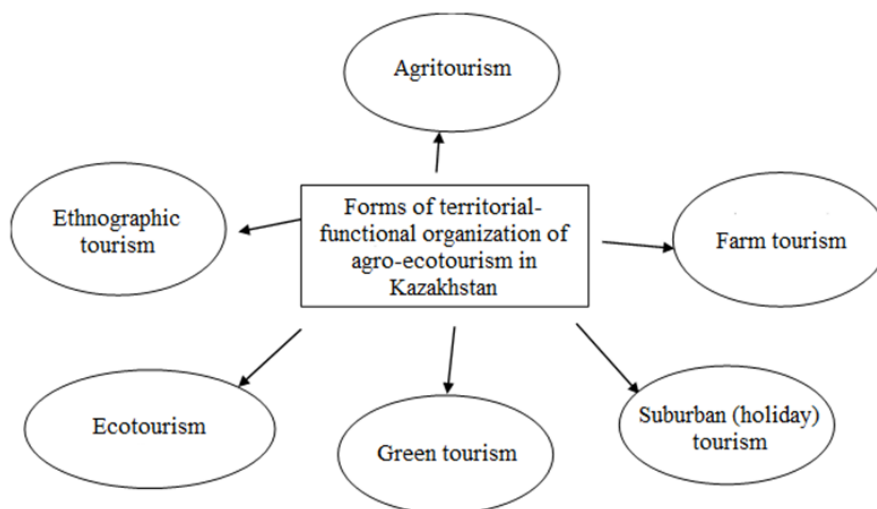


Fig. 3 Forms of territorial-functional organization of agro-ecotourism in Kazakhstan

Table 4 Territorial-Functional Models for Agro-Ecotourism in Kazakhstan: Forms and Subtypes

Form of Agro-Ecotourism	Description	Accommodation
Farm	Visit farms with animals or birds	Private housing stock optional
Ecotourism	Visit natural areas (national parks, reserves)	Private housing stock optional
Green	Outdoor recreation in ecologically clean areas	Private housing stock optional
Suburban (Holiday)	Accommodation in client's own rural housing stock	Private housing stock
Agritourism	Participation in agricultural activities	Private housing stock of peasant/farm enterprise
Ethnographic	Get acquainted with historical and cultural heritage, crafts, life, and participation in holidays and rituals	Private housing stock of rural household

Figure 3 and Table 4 show that agro-ecotourism can be organized in different forms. The agritourism form of the territorial-functional organization of agro-ecotourism in Kazakhstan is based on the placement of tourists in rural areas in the private housing stock of rural households. In this form of the territorially functional organization of agro-ecotourism in Kazakhstan, the main interest of the tourist and the base of the lodging for the night is a peasant or farm enterprise. The ethnographic form is also based on the accommodation of tourists in rural areas in the private housing stock of a rural household, but the goal here is to get acquainted with the historical and cultural heritage. Ethnic tourism can be both external (the study of traditions, language, rituals, life, customs of the peoples of other countries), and internal (applies only to one's own country). In Kazakhstan, the most popular is the internal ethnographic form of the territorial-functional organization of agro-ecotourism [28-30].

The farm form of the territorial-functional organization of agro-ecotourism in Kazakhstan is mostly of an excursion nature and consists in visiting farms with animals or birds by tourists. The ecotourism form of the territorial-functional organization of agro-ecotourism in Kazakhstan consists in tourists visiting natural areas, which are represented mainly by national and natural parks, reserves and other types of natural areas protected by the state. The green form of the territorial-functional organization of agro-ecotourism in Kazakhstan is based on the organization of outdoor recreation in ecologically clean areas (on the territory of landscape parks, hydroparks, arboretums). Quite the newest and low-used form of territorial-functional organization of agro-ecotourism in Kazakhstan is suburban (holiday) tourism. This form of agro-ecotourism provides for the organization of the client's accommodation on the basis of their own housing stock in rural areas.

Today in Kazakhstan, it helps to organize agro-ecotourism "Ethno-ecotourism center of Kazakhstan Association Agro&Rural Tourism" [8]. This grouping organizes marketing activities to attract customers to the agro-ecotourism sector. It is quite popular in Kazakhstan to visit the ostrich farm, which is located at the foot of the Zailiysky Alatau in the Almaty region of Kazakhstan. Akkum-Kalkan ("Singing Mountain"), which is a

sand dune located in the Altyn-Emel park, 180 km from Almaty, also attracts tourists. This dune has a generated rumble that can change the tone and strength of the sound depending on the weather. The Merke sanctuary is also quite well known, which allows us to trace the development of the culture of the Turkic nomads for almost a whole millennium. West Altai nature reserve in East Kazakhstan region, Akunchuk tract, waterfall in Katon-Karagay national park, Kazakhstan steppe, house-museum of folk crafts "Wonderful washing of the Cross at the edge of Rudny Altai, Mount Aktas with the cave Konir-Auli" and others. Kazakhstan is a rich country in agro-ecotourism, but marketing activities are not effective, as evidenced by the decrease in international tourism development indicators.

5. DISCUSSION

The issue regarding the theoretical aspects of the territorial-functional organization of agro-ecotourism in Kazakhstan is uncertain today and has not been previously considered by scientists. I.I. Ostapenko [18] considered theoretical models of the territorial-functional organization of agro-ecotourism in Kazakhstan. The author determined that agro-ecotourism is an actively developing business industry and, at the same time, is stimulated by the relevant sections of the state program. The researcher found that companies conducting agro-ecotourism activities, in accordance with the territorial-functional organization at the regional level, are organized by adapting a part of the agro-enterprise at the expense of a joint territorial-resource-technological base with it and by cooperating with the agro-enterprise on the basis of allocation from the main volume for reproduction, exposition work on a territorial-resource-technological base (Table 5).

Y.A. Kumar and K.G. Sheryazdanova [31] noted that Kazakhstan is rich in natural landscapes. The authors explain that the development of the tourism sector has the potential to support employment, generate profits and actively help the market in order to stimulate renewable activities in the natural areas of Kazakhstan. Geographically, Kazakhstan represents different types of ecological tourism in different regions. For example, in the eastern part of the country, tourism is presented in

the form of skiing, hiking and visiting various types of national parks, natural areas and reserves. The western part of the country has mountains, hiking trails, bike trails, and historical mausoleums.

Table 5 Models of Territorial-Functional Organization for Agro-Ecotourism in Kazakhstan

No	Description
1	An agro-ecotourism enterprise is attached to a base agricultural enterprise that produces agricultural products exclusively within the regional natural-climatic-landscape range and is of an appropriate seasonal nature.
2	Similar to model 1, but the base agricultural enterprise produces agricultural products within the regional natural and climatic landscape range, as well as other products that are not typical for the region, and has both seasonal and year-round works.
3	The agro-ecotourism enterprise is adapted to a base agricultural enterprise that produces agricultural products that are inaccessible within the regional natural and climatic landscape context. A room is provided for the release of these products, and year-round operations are available in accordance with the exposure.
4	The agro-ecotourism enterprise cooperates with a base agricultural enterprise that produces agricultural products exclusively within the regional natural-climatic-landscape range and has seasonal work cycles characteristic of the region.
5	Similar to model 4, but the base agricultural enterprise also has a year-round cycle.
6	The cooperative enterprise produces agricultural products within the year-round unavailable regional natural and climatic landscape range, as well as products that are not typical for the region.
7	An agro-ecotourism enterprise independently produces agricultural products exclusively within the regional natural-climatic-landscape range and has seasonal work cycles characteristic of the region.
8	Similar to model 7, but the agro-ecotourism enterprise can also produce products that are not typical for the region and has both seasonal and year-round cycles.
9	The agro-ecotourism enterprise independently produces agricultural products uncharacteristic of the region using year-round work.

Scientists [31] have found that thanks to recent government initiatives, interest in the future development of state national parks has significantly increased, especially if paying attention to the above-mentioned official government plans for the further development, financing, and implementation of new ecotourism projects and support for the development of existing national parks in Kazakhstan. At the same time, according to Kazakhstani legislation, the state is responsible for national natural parks, including in relation to the tasks of developing and implementing scientific measures for nature protection, organizing and implementing environmental monitoring in order to restore, preserve and protect natural complexes.

There are no other studies on the territorial-functional organization of agro-ecotourism in Kazakhstan in scientific spaces, but there are works

in other countries. J. Danaher, J. Fatal, J. Letourneau and M. McMahon [32] found that in recent years, farmers in Costa Rica have been moving from conventional to sustainable farming methods, accompanied by high costs and low returns, because they do not have the attention of consumers. Through establishing ideal tourist facilities and conducting a farm assessment, the researchers offered recommendations for route design and community promotion.

S. Kongdit and T. Ratanapongtra [33] found that Thailand is characterized by a wealth of natural resources suitable for ecotourism, which in turn can be combined with agritourism. The authors found that the Tourism Authority of Thailand has integrated agriculture together, which allows tourists to observe and see agricultural products and learn about the culture of people in the region. The researchers gave an example that one of the activities of the Amazing Thailand campaign is tourism-friendly agriculture and allows tourists to get acquainted with the features of growing rice, cutting flowers, aspects of fruit gardening, vegetable growing, animal husbandry and attending a food festival.

M. Kaini [34] considered the features of the development of ecotourism in Nepal. The author found that ecotourism has an environmental, social and economic impact on the community, nation and the whole world. The author determines that ecotourism has helped in shaping the sustainable development of Nepal and the world, while preserving the environment, increasing employment, improving livelihoods and promoting culture and traditions. There is a need for cooperation between various stakeholders, training tourism entrepreneurs in the field relating to ecotourism, and implementation of appropriate management policies for the sustainable introduction of ecotourism projects [35; 36].

Thus, having familiarized ourselves with the studies on the territorial-functional organization of agro-ecotourism in Kazakhstan, it can be concluded that the features of building adaptations of this individual model were not previously considered, and there was no study of the forms of territorial-functional organization of agro-ecotourism in Kazakhstan. The methods and forms of the territorial-functional organization of agro-ecotourism used in Kazakhstan could potentially be used in other countries (Costa Rica, Thailand, Nepal). The studies discussed various examples of successful agro-ecotourism development in different countries, highlighting the importance of sustainable practices, community involvement, and cooperation between stakeholders. These are all factors that could be applied in other countries to develop successful agro-ecotourism projects. However, it's important to note that the success of

agro-ecotourism depends on various factors, such as the availability of natural resources, cultural and historical significance, and local infrastructure. Therefore, it's essential to conduct a feasibility study before implementing any agro-ecotourism project in a new location.

6. CONCLUSIONS

So, an analysis of the theoretical aspects of the territorial-functional organization of agro-ecotourism in Kazakhstan has been carried out, which showed that tourism in the country is declining. In general, there is a decrease in the level of socio-economic development of Kazakhstan, which is accompanied by a decrease in the level of GDP, a narrowing of exports and imports, an increase in inflation and a decrease in the level of GDP per capita. At the same time, agricultural activity in Kazakhstan is developing by increasing productivity and expanding agriculture, forestry, and fisheries. The rural area in Kazakhstan occupies more than 79% of the total area of the country, but the existing outflow of the rural population reduces the potential of the agricultural sector.

Agro-ecotourism can be one of the determining methods not only for the development of the agricultural sector but can become the main factor in socio-economic growth. After all, through the implementation of agro-ecotourism services, it is possible to use human resource not only as a physical force but also as an intellectual means of attracting profits.

The development of agro-ecotourism in rural areas of Kazakhstan will reduce the outflow of the rural population and help to replenish the country's budget through the implementation of tourism services of this type both for its own population and for international tourists. Also, according to the purpose of the study, it was determined that the territorial-functional organization of agro-ecotourism in Kazakhstan can be carried out on the basis of two models. Such models are an adapted model and an individual model of the territorial-functional organization of agro-ecotourism. Accordingly, the division of models is carried out with respect to the functioning of an agro-ecotourism company, because it can be adapted to the basic agricultural enterprise, or it can conduct individual independent activities.

The study also showed that it is advisable to single out the forms of territorial-functional organization of agro-ecotourism in Kazakhstan. Agritourism, ethnographic tourism, ecotourism, farm tourism, green tourism and suburban tourism are singled out as such forms in relation to the country under study. When organizing agro-ecotourism, it is important to determine the form of tourism, which is established precisely by the

purpose of the tour by the client. Familiarization with the features of the agro-ecotourism zones of Kazakhstan showed that the country has a fairly high potential and is rich in interesting agro-ecotourism resources.

Further research in the aspect of the territorial and functional organization of agro-ecotourism in Kazakhstan should be based on the study of new agro-ecotourism zones and should be aimed at developing and introducing measures to improve the organization and support of agro-ecotourism in Kazakhstan.

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