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Table of Contents:

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Socio-Economic Consequences of the Transition to Organic Agriculture and Its Impact on Ecotourism

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Abstract:

In recent decades, the growing interest of consumers in visiting relatively less commercialized natural areas has contributed to the growth of ecotourism. The impact of mass and uncontrolled ecotourism on natural resources has increased significantly. However, research in the field of ecotourism is fragmentary, creating gaps in the modern understanding of this topic. The author tries to restore the relationship between loyalty and ecological and careful recognition, attachment to places and healthy lifestyles that contribute to the development of ecotourism, because the integration of organic agrotourism and rural tourism, organic agriculture and non-toxic and healthy environment helps tourists to escape from the hustle and bustle of the city, enjoy rural life and meet the needs of healthy and a leisurely lifestyle. The aim of the study is to analyze the socio-economic consequences of the transition to organic agriculture in the Republic of Kazakhstan and its impact on ecotourism. With the growing interest and awareness of the ecological environment, ecotourism is becoming more and more popular, but it still creates problems for the sustainable development of the environment. To solve such problems, it is necessary to review the literature on ecotourism and identify important research topics and areas for future research.

Keywords*:* ecotourism; organic agriculture; rural social infrastructure.

JEL Classification: Q57; Z32.

Introduction

Conservation of natural resources is the main task of the management of specially protected areas, as environmental pollution, the disappearance of many plant species, as well as endangered species, and global warming have increased public awareness and support for nature conservation. Ecotourism is a concept that includes measures to preserve the environment by a tourism service provider, which focuses on tourist demand The integrated ecotourism model includes a sustainable component that improves the state of the environment and is global in nature, including both environmental and socio-cultural aspects.

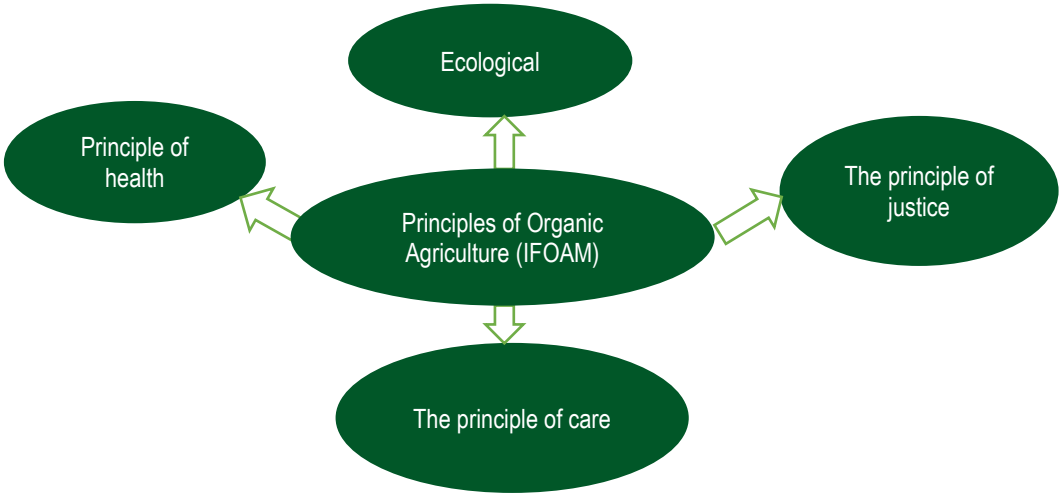
In recent decades, the growing interest of consumers in visiting relatively less commercialized natural areas has contributed to the growth of ecotourism. The impact of mass and uncontrolled ecotourism on natural resources has increased significantly. However, research in the field of ecotourism is fragmentary, creating gaps in the modern understanding of this topic. Ecotourism is widely supported by the authorities of protected areas in many countries that contribute to the sustainable development of tourism, therefore, support from local communities is an integral part of sustainable ecotourism.

Ecotourism conservation traditionally refers to the protection of natural resources and pristine landscapes without damaging factors such as land use changes. We will focus on the relationship between these areas, taking into account the opinions of scientists on the socio-economic consequences of the transition to organic farming and its impact on ecotourism.

1. Literature Review

We will focus on the relationship between these areas, taking into account the opinions of scientists on the socio-economic consequences of the transition to organic farming and its impact on ecotourism. Organic farming is a production system that supports healthy soils, ecosystems and people. This is the main direction of modern organic farming, based on natural cycles inherent in ecological processes, biodiversity and local conditions, avoiding the use of unfavorable resources. The principles of organic farming (IFOAM), which contribute to the development of ecotourism, are as follows (Figure 1):

Figure 1. Principles of organic agriculture (IFOAM) contributing to the development of ecotourism



Source: compiled by authors

- principles of health - Organic farming should preserve and improve the health of the soil, plants, animals, people and the earth as a single and indivisible whole;
- ecological principles - organic farming should be based on the principles of the existence of natural ecosystems and cycles that coexist with them and support them;
- organic farming should be based on relationships that guarantee fairness, taking into account the general environment and life chances.

Organic agriculture management should be proactive and responsible in order to protect the health and well-being of present and future generations and the environment. Organic farming involves not only the conscious minimization of the use of synthetic fertilizers, pesticides, growth regulators, additives and genetically modified organisms, but also the widespread use of many of the latest achievements of science and practice that do not pose a danger to the environment, plants and animals, as well as human health.

In the field of ecotourism, agrotourism, the productivity of farms increases thanks to the following technologies:

- predict the optimal time for harvesting;
- "smart watering";
- intelligent system for applying mineral fertilizers;
- pest and weed control system.

According to Temiraliyeva *et al.* (2021), constant transformations in various aspects in the field of tourism services have led to an increase in the importance of tourism in the development of the national economy, due to a change in the mechanism of functioning of the tourism industry, a complex impact on the economy of other industries. The development and support of the tourism industry, the development of competition and investment attractiveness depend on a wide range of factors reflecting the general state of state economic policy and the position of state institutions, for which the issues of developing the business climate, increasing investment attractiveness and, in general, the competitiveness of the tourism industry are relevant.

Many farmers are already turning to agrotourism and ecotourism as a source of additional agricultural income and opportunities in addition to regular agricultural activities. With the continuous development of society and the constant improvement of people's living standards, ecotourism is gradually gaining popularity (Fengbiao Shanga, Wenjie Zhu 2022).

Organic farming in the study of Marsis *et al.* (2019) is explained by the fact that it is the most sustainable for wildlife, because it helps to save energy, pollutes the environment less with aerosols, emits less carbon dioxide, prevents global warming, does not produce polluting waste and is used as an agricultural crop or production product. Some districts are striving for extensive development and the use of limited areas, creating multifunctional high-tech agricultural parks. In addition, the corridor is carefully planned into a special agroecological corridor with tourist characteristics, which can supply fresh agricultural products to form a multi-purpose ecological agricultural system (Turner *et al.* 2019).

According to Sigalat-Signes *et al.* (2020) ecotourism is a new type of agriculture that can integrate regional economy, cultural characteristics and organic ecology. In addition, it allows many tourists across the country to experience the ecological beauty and natural charm in a rich historical and cultural atmosphere, but can also appreciate the wonderful traditions in the process of leisure and recreation against the background of the pastoral beauty of nature.

Health-oriented tourism is developing rapidly both domestically and abroad, and this trend will continue for a long time (Cooper *et al.* 2018). Tired of a tense, polluted and stressful environment, people start looking for a better environment. Travel can relieve physical and mental stress, so more and more people want to gain physical, mental and mental health through travel and increase happiness (Kim *et al.* 2018).

Chu and Jamal (2019) propose the concept of eco-organic farm tourism and argue that new types of tourism can contribute to sustainable agriculture, regional development, cultural and environmental protection, well-being and learning. Privitera (2020) believes that organic agrotourism can protect both the environment and natural resources.

Oshkordina, Okhrimenko, and Goncharova (2021) identify rural tourism (ecotourism), the development of which increases the socio-cultural, financial and economic level of the agricultural region, identify factors for the development and implementation of agro technologies of organic farming, which positively affect the development of agriculture. They form the demand for tourism and tourist products. With the growing interest in the ecological environment and the growing awareness of ecology, ecotourism has become more widespread, and the demand for tourism is growing every year. But this growth leads to a number of environmental, social and economic problems in the development of ecotourism. For example, due to low public awareness of ecotourism, the increase in the number of tourists had many negative consequences on the local ecological environment, culture and economy, including disrespect for local culture and environmental protection, which led to an increase in infrastructure construction and economic burden to meet the needs of tourists ((Ahmad *et al.* 2018, Chiu *et al.* 2018, Shasha, *et al.* 2020, Xu *et al.* 2020). Such challenges and contradictions are urgent issues that need to be addressed within the framework of sustainable ecotourism development.

The complexity inherent in natural ecotourism makes it difficult to develop a business in the field of sustainable ecotourism, therefore it is important to expand the participation of stakeholders in the community (Sobhani *et al.* 2022) suggests that in order to protect threatened natural areas, leaders and decision makers-decision makers, It is necessary to increase citizen participation and education in order to encourage communities to participate more actively in the development of sustainable ecotourism.

According to Agardi (2018), the multifaceted goals of ecotourism are to reduce environmental problems, support democratic and decentralized communities, improve local livelihoods, improve natural resource management and reduce poverty in poor and rural areas. With the growing interest and awareness of the environment, ecotourism has become more widespread and in demand (Xu *et al.* 2022, Blau and Panagopoulos 2022) examines ecotourism from the point of view of how sustainable development of tourist destinations in a sensitive environment should be carried out on the basis of an environmentally conscious approach that meets the needs of current and future generations for resources and services without compromising the health of the ecosystems that provide them.

For example, well-planned tourism can provide economic and political incentives for management and conservation and provide additional benefits to local communities and the local economy. Examples of how nature tourism is well integrated into multi-use plans can be found in Quintana Roo, Mexico; Lesser Antilles; and Australia and other regions.

Phelan, Ruhanen and Mair (2020) the results show that the 3 main aspects in which communities seeking ecotourism most need multilateral support are waste management, hospitality skills and market access. Based on these findings, we note that public ecotourism plays an important role in creating effective mechanisms for the conservation of nature and cultural heritage, as well as important interactions between communities, local economies and coastal ecosystems.

Ecotourism is the practice of traveling to relatively little-used natural places to understand natural conditions, gain knowledge about wildlife, and enjoy local culture in an authentic setting while preserving the destination environment (Lee and Jan 2019). Ecotourism is widely supported by the authorities of protected areas in many countries and contributes to the sustainable development of tourism.

The right choice of location for sustainable ecotourism development depends on a comprehensive survey based on socio-geographical issues and positive opinions of local authorities providing infrastructure (Hashemi and Habibi 2018, Yee *et al.* 2021). These infrastructures include physical facilities (hotels, canteens, roads, water supply), local culture (communities, festivals, traditional art, clothing, food) and services (banks, travel agencies, tour operators).

Thus, organic farming is a cultural evolution originating from an ecological culture that focuses on the demand for healthy products with high quality standards that limit the use of chemicals. There is a clear link between organic farming and agro-tourism and tourism services, which play an important role in the future development of rural areas.

2. Research Framework and Methodology

Methods of statistical economy, analysis and comparative analysis were used to characterize the current state of organic agriculture in Kazakhstan. When describing spatial and temporal changes and generalizing the main results, systematic, monographic, computational and constructive approaches were used. According to the annual report "The World of Organic Agriculture" by FiBL and IFOAM-Organics International, published in 2022/2/15, the area of agricultural land certified in accordance with the standards of organic production in Kazakhstan reached 114,886 hectares in 2021.

In total, the following types of products were exported in 2021:

- 9,992 tons of organic wheat in the amount of 2,705 thousand dollars and 29,219 thousand euros. For comparison, in 2020, 1,237 tons worth 380 thousand dollars and 5,576 thousand euros, and in 2019 reatched at 967,7 tons worth 28,375 thousand dollars;
- 12,070 tons of organic flax seeds in the amount of 10,586 thousand euros. Less flax was shipped, but the price was higher. In 2020, 14, 8618 tons in the amount of 727, and in 2019, 7,3721 tons in the amount of 040 thousand euros;
- 9,547 tons of soybeans worth 9610 thousand dollars. For comparison, 2020, 23,4 thousand dollars for 173.5 tons. In 2019, the total cost of 200 tons reached $2.080 million. All volumes were exported to Sweden.
- sunflower seeds around 562,1 tons worth 921,5 thousand dollars. The entire volume was shipped to China. In 2020, those 227,5 tons worth 567,2 thousand euros were sent to the Czech Republic.
- Millet reached 328 tons and worth 85.3 thousand euros.

The total volume of exports of Kazakhstan organic products in 2021: 20,101 thousand dollars and 13,376 thousand euros. In 2020, exports reached 1,457 thousand dollars and 9,225.5 thousand euros, and in 2019 exports reached 11,757 thousand dollars and 3,721 thousand euros. The geography of exports of organic

products is expanding, for the first time there were deliveries to Ukraine, China. The focus continues to be on Germany, Sweden, the United Kingdom, Belgium, the Czech Republic and Lithuania. In addition, sunflower oil, vodka, honey (transitional period), a small number of wild plants are exported. In monetary terms, the annual volume of exports of organic products from Kazakhstan has increased by 3 times compared to 2020.

The above achievements of domestic agricultural enterprises (about 70 producers of organic raw materials, storage and transportation enterprises) are certified by institutions accredited by the European Commission.

3. Research Findings and Results

Organic agriculture can contribute to solving a number of social, environmental, economic and agronomic problems and can bring numerous benefits to the environment, economy and society. As for the economic results of the transition to organic agriculture, we can talk about the following factors:

- farmers and organic food production operate under market conditions and are subject to fundamental economic and market laws. There are several factors that determine the prices of agricultural products, including organic ones. Among them, the most important are:
  - production cost;
  - number of products;
  - less economies of scale;
  - product quality;
  - the intended benefits of the products;
  - market laws of supply and demand;
  - seasonality of products;
  - number of manufacturers;
  - traders' profit margin;
  - state policy.
- whether an organic farmer produces a large number of products depends on the size of his production, which is determined by the scale of production (the number of hectares and livestock) and the yield received. In practice, organic farmers who produce a large number of products can offer it at a lower price than farmers with a small number of products. But when the quantity of a product on the market is large, it leads to a decrease in price and vice versa. A reasonable price is obtained when there is an equilibrium.

Since the organic market is only a subset of the traditional market, organic production has less economies of scale than traditional production, which prevents organic producers from offering their products at a lower price. However, this may change as organic production increases.

Thus, the higher the quality of agricultural products, the better the price. Most organic products have a longer shelf life than conventional products, which is an advantage in the market. When there are few organic producers, demand will exceed supply, which will lead to an increase in prices. But if there are many producers, the price will be reduced due to market price competitiveness. If there are too few competitors selling the same product on the market, organic producers will raise their prices. However, in practice, this is more difficult, since wholesalers and retailers, as a rule, supply organic food products from other regions or countries to the market. In many Western countries, the demand for organic food is growing faster than the supply of organic food.

The organic food market is one of the fastest growing in the world. From 2001 to 2021, it grew more than seven times (from 18 to 129 billion US dollars), demonstrating maximum growth between 2019 and 2021 by more than 16% per year (Table 1). Naturally, an increase in the production of organic products requires an increase in the necessary resources, primarily sown areas and natural pastures in the world. Table 1 shows the data on the areas of organic lands.

Correlation analysis was used to study the relationship between the production of organic products and the area of its sowing. The essence of correlation analysis is the determination of the correlation coefficient $r_{x,y} \epsilon[0;1]$. If the correlation coefficient $r_{x,y}$ closer to 1, then it is considered that the relationship between the studied factors is close, if closer to 0, then weak. If the relationship between the analyzed factors is significant, then you can use regression analysis, the essence of which is the output of the model that displays the form of the relationship with the calculation of the corresponding parameters.

Table 1. The dynamics of the development of organics in the world

№	Year	Area of organic land, million ha	Retail sales of org products, billion dollars
1	2001	11,0	15,2
2	2003	17,3	20,9
3	2005	25,7	25,5
4	2007	29,2	33,2
5	2009	31,5	46,1
6	2011	36,3	54,9
7	2013	35,7	59,1
8	2015	37,6	72,0
9	2017	43,7	81,6
10	2019	69,8	97,0
11	2021	72,3	129,0

Source: compiled by authors

So, the correlation-regression analysis of organic production showed the following: the correlation coefficient between the area factors of organic products and retail sales was $r_{x,y}$ = 0,95. Therefore, there is a close statistical relationship between the studied factors. Based on this, a regression model can be built. It looks like this:

$$Y = -7,9 + 1,75X \quad (3.1)$$

where: *Y* – sale of organic products; *X*- area of organic production

Regression determination coefficient R^2 = 0,91 which means the confidence level of the model is 91%. The parameter 7.9 suggests that if there were no land, the average sale of organic products was equal to -7.9 billion dollars. Often this parameter does not make economic sense. A parameter of 1.75 indicates that with an increase in the area under cultivation by 1 million hectares, the sale of organic products in the world, on average, increases by $1.75 billion.

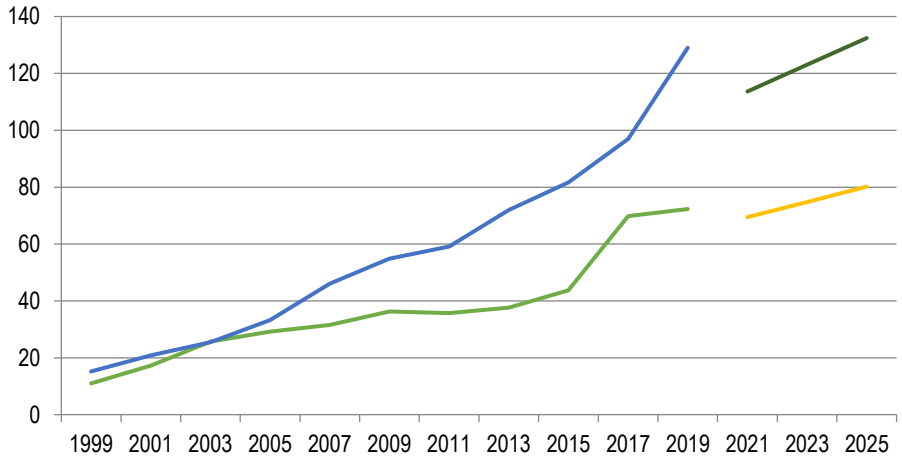
The study used trend models that allow you to describe the dynamics of the process. So, if the area growth rate is maintained, then a model is developed

$$Y = 5,01 + 5,37X \quad (3.2)$$

where: *Y* represents organic area; *X* is time.

The parameter 5.37 indicates that the area of organic matter in the world is increasing by an average of 5.37 million hectares. Then you can insert this parameter of the trend model into the regression model and you can get forecast values for the sale of organics in the world in 2023 and 2025. They amounted to the following value in 2023, the sale of organics will be in the limit of 123 billion dollars and, accordingly, in 2025, 132.43 billion dollars. The adequacy of the developed regression model can be seen from Figure 2. It should be noted that the actual data covers 1999-2019, that is, the pre-pandemic period.

Figure 2. Dynamics of development of organic matter



Source: compiled by authors

The above model covers macroeconomic indicators. At the micro level, the large price difference between organic and non-organic food is due to the fact that traders make much more profit from organic food than from conventional food. In particular, in a joint study with the Avalon Foundation, a comparative table of the cost of organic and non-organic food is given, see Table 2.

Table 2. Average price of selected organic products in the US in June 2020 (Roberts 2020)

Product	Organic food, in pounds	Non-organic food, in pounds
Apple	1.95	1.63
Blueberry	3.57	2.57
Celery	2.10	1.21
Cherry	4.89	3.44
Nectarine	2.54	1.95
Peach	2.54	1.64
Strawberry	3.12	2.23
Watermelon	4.39	3.03
Potato	3.38	2.47
Green pea	3.59	1.61
Cabbage	1.70	1.18
Lettuce leaves	2.26	1.29
Summer squash	1.97	1.27

Source: compiled by authors

From this Table 2, we can conclude that farmers can earn income by selling 25-100% more organic products than non-organic ones. Supermarkets and other retailers use premium organic labels to increase their price surcharges. This is confirmed by studying the markets of the studied regions, as a rule, in Kostanay, Akmola, North Kazakhstan and Karaganda regions there is a similar list of goods in the assortment of organic products. The products are supplied mainly from Russia and Belarus, as well as from abroad. For comparison, an example of a crop such as rice can be used to demonstrate the difference between organic and inorganic products in the stores of the studied region. Organic products were investigated: 1. Tasty Bite Organic Basmati Rice, 250 grams price 2,063 tenge; 2. Lundberg wild rice, 454 grams, price 3,459 tenge; 3. Seeds of Change organic brown Basmati rice, 240 grams, price 2,113 tenge, 4. Lundberg organic white long-grain rice, 907 grams, price 5,037 tenge. And non-organic products such as: 1. Rice "Kamolino", 400 grams, price 800 tenge; 2. Long-grain rice "ViP", 800 grams, 488 tenge; 3. Rice Basmati Zeeba, 1 kg, 1600 tenge. From the above example, it can be seen that when converted to 1 kilogram of products, the difference ranges from 300 to 600%.

The reason why there are no Kazakhstani organic products on the shelves of domestic stores is that there are no producers certified by domestic certification bodies. All companies in the studied regions are certified by foreign certification bodies and ship their products outside of Kazakhstan. With the transition to organic agricultural production and certification by the state certification body, Kazakhstani farmers will receive the advantages of the domestic market.

The analysis of the world market of organic products shows the specifics and heterogeneity of the formation and development of markets by country. This is due to the current situation in agribusiness, the availability of the necessary regulatory framework and a system of environmental certification and standardization, which is associated with the activities of various initiative groups.

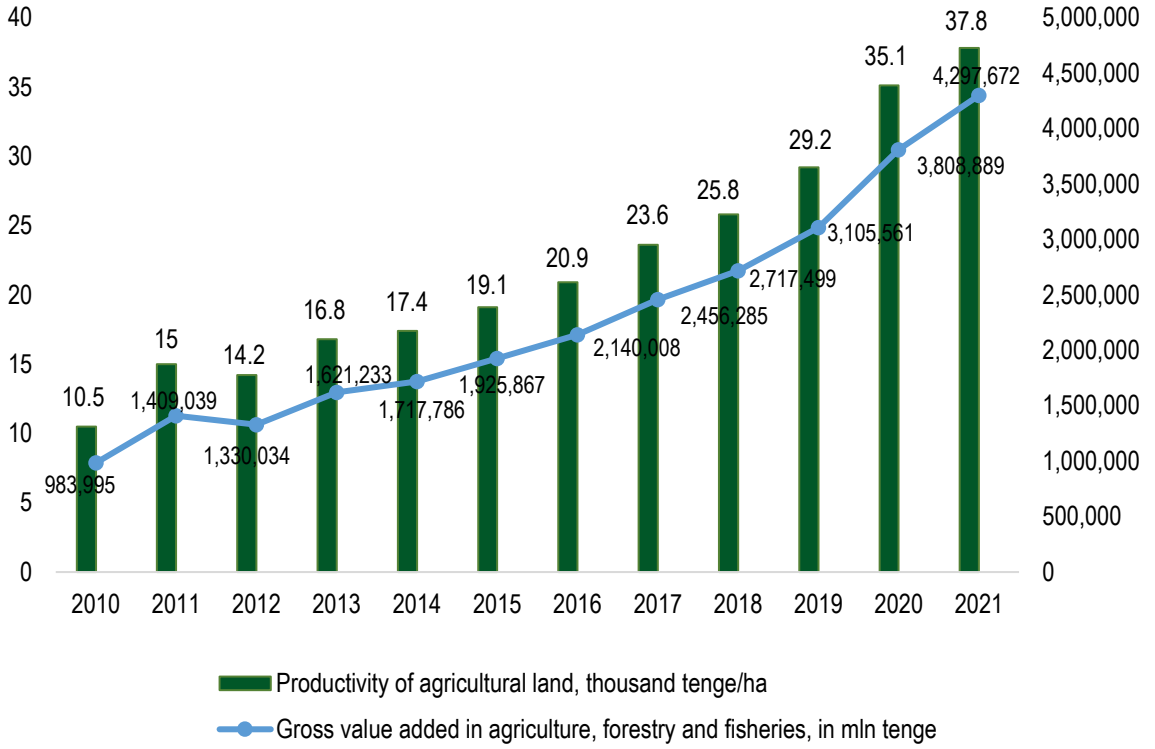
4. Discussion

Considering the current problems and challenges faced by agriculture, according to (Lukpanova *et al.* 2022), only highly mechanized solutions in this area can give significant results. identification of environmental problems related to the development of the agro-industrial complex and the analysis of its financing in the Republic of Kazakhstan, as well as the creation of an environmentally oriented system for the disposal of agricultural waste.

Over the past 3 years, the acreage of Kazakhstan has increased by 295.9 thousand hectares. Almost half (48.4%) of the acreage allocated for fodder crops falls on 4 regions of the country:

- Akmola region (11.1%);
- Kostanay (16.8%);
- Northern Kazakhstan (11.0%);
- Pavlodar (9.6%) region.

Figure 3. Indicators characterizing agriculture, Republic of Kazakhstan

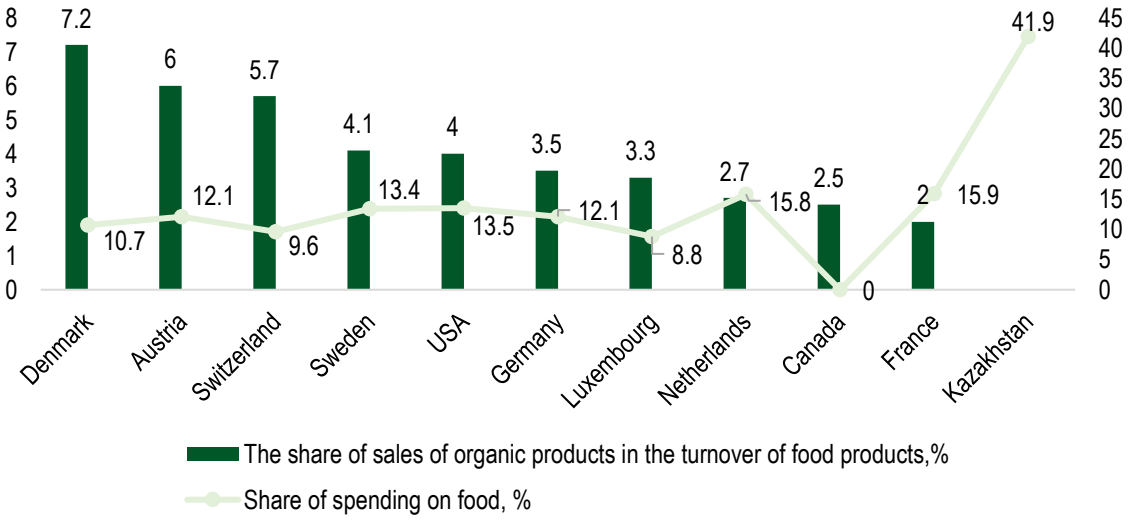


Source: compiled by authors according to http://www.stat.gov.kz

The development of organic production in Kazakhstan is in an active stage of formation. Currently, there are about 30 producers certified in accordance with international standards, which occupy more than 30 million hectares of land developed for the production of organic products. Currently, this production is mainly export-oriented, but if the necessary conditions are created, Kazakhstan can produce products for the domestic market.

One of the strengths of the organic market is the growing consumer demand for organic products. This is evidenced by the development of trade in organic products via the Internet, the emergence of specialty stores and surveys of the population. In Kazakhstan, the share of household spending on food in the structure of consumer spending is still high, up to 41.9%, but with the level of improvement in people's well-being, this indicator decreases (Figure 4).

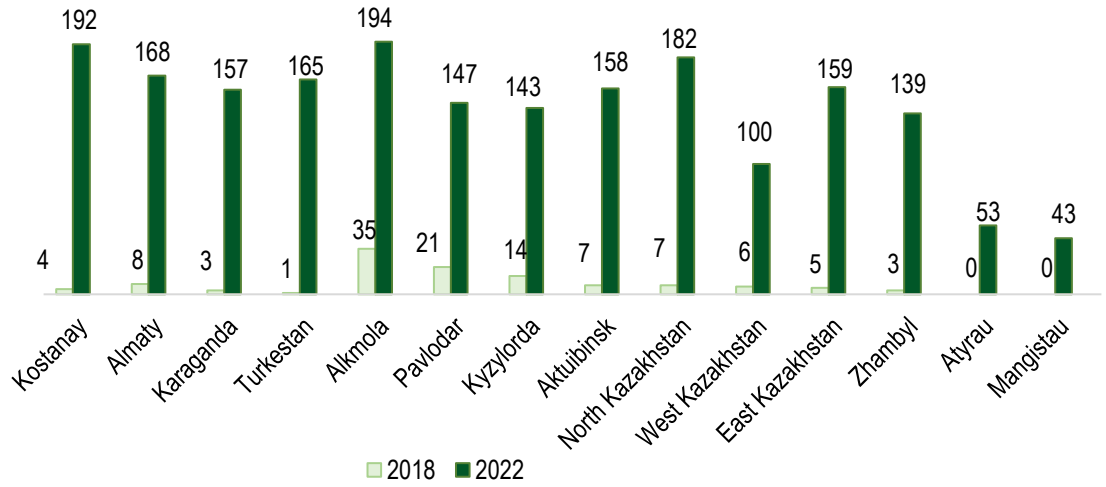
Figure 4. Share of food spending in countries with the highest share of organic food sales



Source: compiled by authors according to https://www.fao.org/documents/card/ru

Indicators of the development of advanced farms in the regional aspect by 2022 in Kazakhstan show what changes have occurred recently. Agriculture in Kazakhstan is one of the priority areas of economic development and has great potential and reserves (Figure 5).

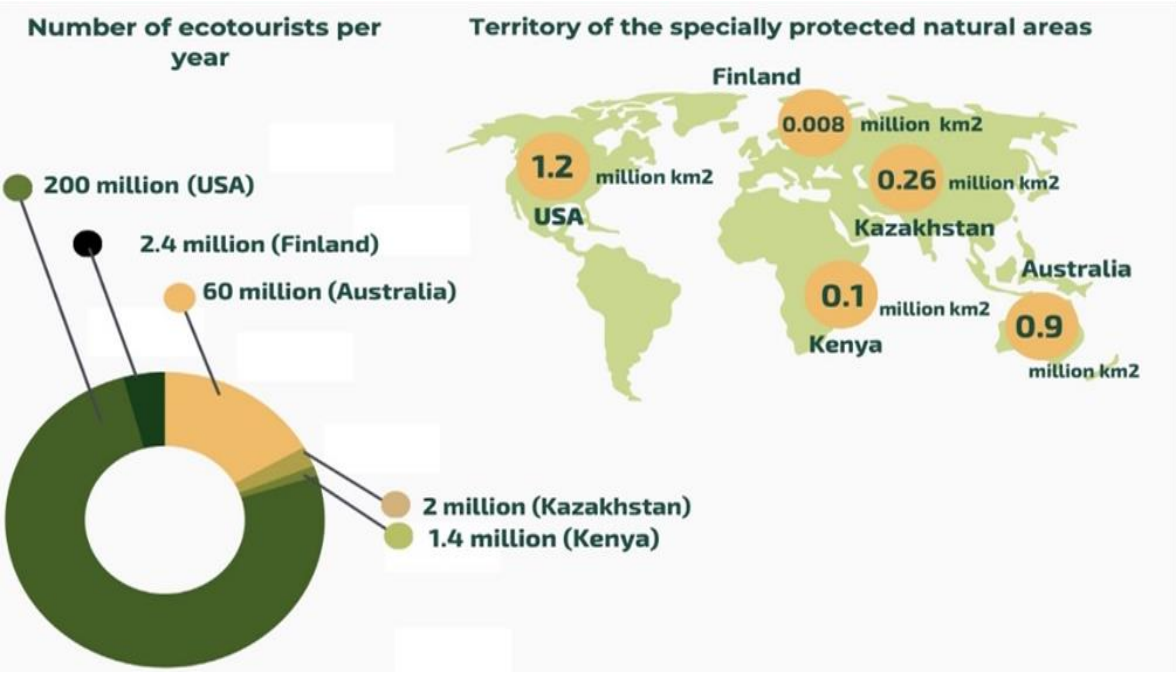
Figure 5. Forecast indicators of the development of advanced farms in the regional aspect, Kazakhstan, 2022



Source: compiled by authors according to E-APK Program

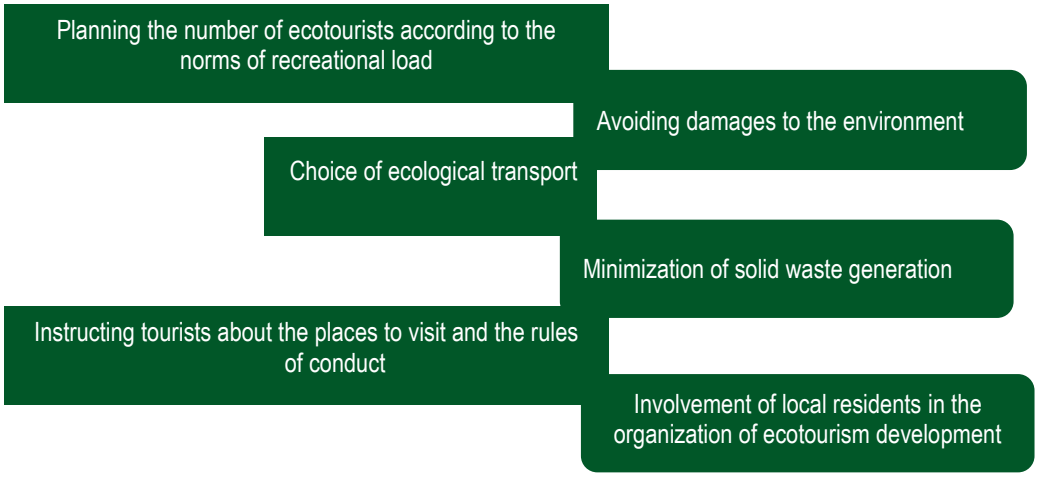
Indicators reflecting the development of the company's environmental responsibility are the share of investments in fixed assets aimed at environmental protection and rational use of natural resources at the expense of the company's own funds in the total volume of these investments. This contributes to the development of ecotourism. One of the trends in the development of organic agriculture is the development of ecotourism. From year to year, ecotourism tends to develop.

Figure 6. International ecotourism statistics



Source: https://www.biofin.org/news

Figure 7. Principles of ecotourism for the implementation of tourism activities in specially protected natural area



Source: compiled by authors

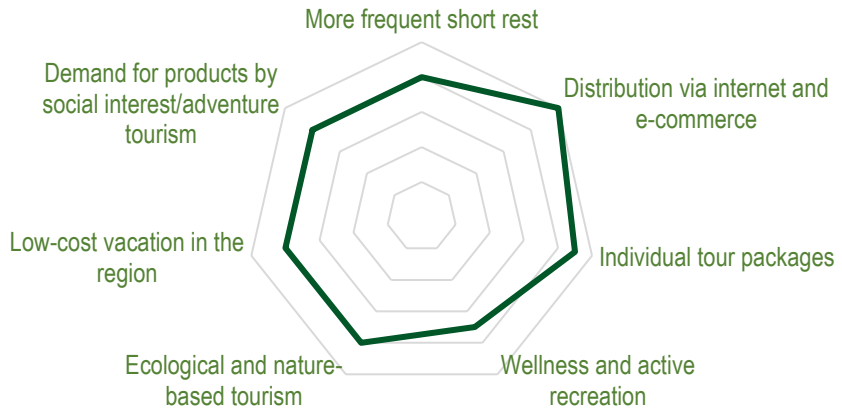
According to the research of Temirgaliyeva *et al.* (2021), focused work is needed to improve the state system of strategic management in the tourism sector of the Republic of Kazakhstan. Table 3 indicates the main branches of the tourism sector with potential and reveals that ecotourism has a positive trend.

Table 3. Branches of tourism sector with potential

Indicator	Therapeutic and wellness	Business tourism	Sports tourism	Religious tourism	Educational tourism	Social tourism	Cultural-cognitive	Adventure tourism	Congress tourism	Eco tourism
MICE-tourism		+							+	
Beach tourism	+		+					+		+
Short break	+		+	+	+	+	+	+		+
Rest in mountains and on lakes	+		+		+	+	+	+		+
Active and adventure holidays			+			+		+		+
Cultural tourism				+	+	+	+			+

Source: compiled by authors

Figure 8. Opportunities with impact on ecotourism

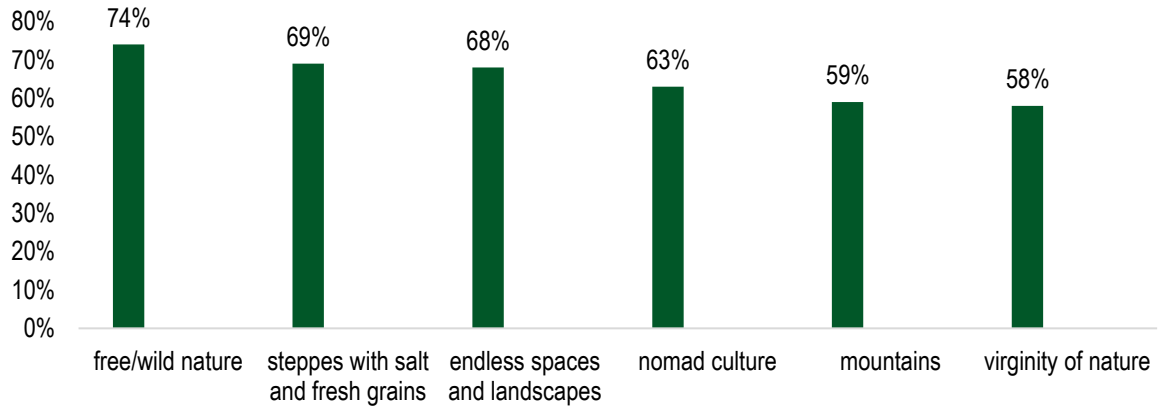


Source: compiled by authors

In our trying to identify some opportunity areas with impact on ecotourism, Figure 8 reveals these in strength relation with socio-economic consequences of the transition to organic agriculture. The political and economic changes taking place in Kazakhstan undoubtedly dictate the need to restore agriculture, the need to change working and living conditions in rural areas, the development of ecotourism is one of the main ways to revitalize rural areas.

Almost 20 years ago, the International Consulting Group for Worldview Monitoring (IPK Group, World Travel Monitor company) identified the diversity of natural landscapes (from wide meadows to snowy peaks) and local residents as the main motivation for trips to Kazakhstan (E-APK Program - Astana 2022, www.https://unece.org/). The following places were identified as the most attractive for tourists in Kazakhstan (Figure 9).

Figure 9. The most attractive places in the development of ecotourism in Kazakhstan

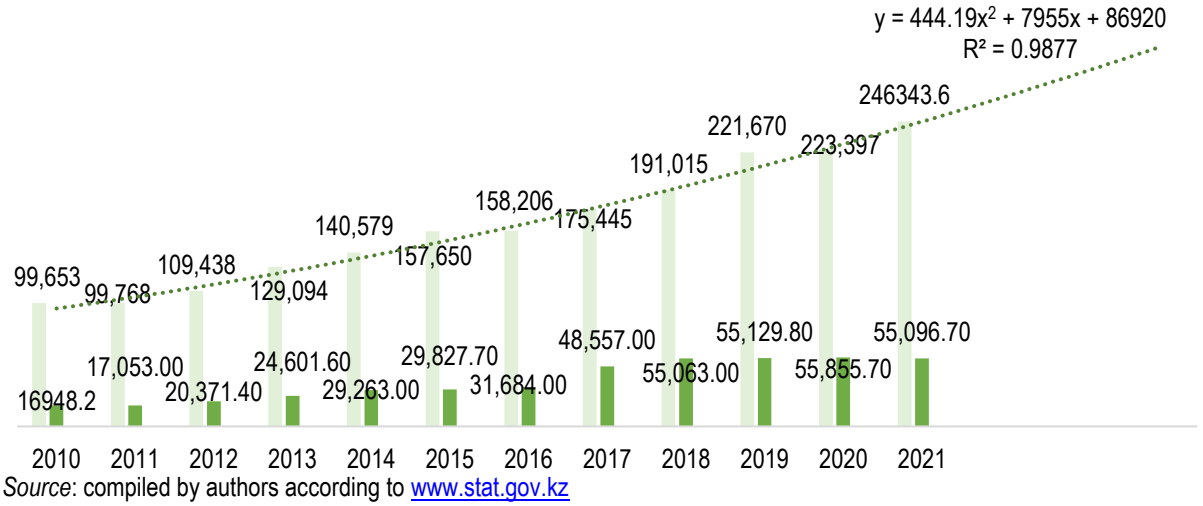


Source: compiled by authors

The importance of ecotourism in rural areas is based on the fact that agricultural enterprises engaged in this type of activity can receive additional income. The financial resources received by the participants of tourism activities as a result of work for the benefit of ecotourism will eventually reach a wider range of rural residents. The state program for the development of the tourism sector of the Republic of Kazakhstan is aimed at ensuring the share of tourism in GDP at least 8% by 2025 and increasing the number of people employed in the industry to 65 million. This means that the growth rate of the industry is on average 2 times higher than the growth rate of GDP. The main components of success in achieving such goals are prioritization and targeted use of resources, for example, the identification of several priority areas. Effective government support through targeted and stimulating infrastructure investments is crucial. Work should be carried out to attract and support private investment in this sector, as well as develop a comprehensive marketing strategy for tourism promotion.

For the development of ecotourism, it is necessary to finance the environmental protection and tourism industry, which will subsequently affect the development of small and medium-sized enterprises in the Republic of Kazakhstan (Figure 10).

Figure 10. The volume of services in the field of the tourism industry and the current costs of developing innovations in the field of ecotourism development for the period from 2010-2021, million tenge



Source: compiled by authors according to www.stat.gov.kz

Thus, we can observe an increase in current costs for the development of innovations in the field of environmental protection and the tourism industry, which is associated with an increase in the number of SMEs. In order for companies, regardless of their scale, to function normally and have prospects for development in a

competitive and business environment, it is necessary to find partners and involve SMEs in the value chains of multinational companies. This is important because the process of globalization, integration and market liberalization has created great business opportunities for SMEs where financial stability is important.

Analyzing companies in the field of ecotourism development as an economic phenomenon, it can be characterized as follows:

- creation of new jobs, which is an incentive for the development of new territories and, accordingly, the development of the economy and the growth of the standard of living of the local population;
- the possibility of forming ecotourism goods and services, attracting investments with their further payback;
- development of local infrastructure, formation of a resource base (Turekulova *et al.* 2022).

Conclusions

As a result of the research in the studied areas of Kazakhstan, the main organizational and economic conditions for the effective production and sale of organic products were identified:

- scientific developments on new and effective methods of organic production are needed;
  it is necessary to train highly qualified specialists in the field of organic farming, animal husbandry, aquaculture, marketing and sales;
- it is necessary to provide financial incentives for organic agriculture production, support for the development of small businesses and entrepreneurship in the field of organics;
- it is necessary to develop a system for protecting domestic producers from unscrupulous competitors, maintaining a positive image of Kazakhstani producers, especially taking into account the high-quality requirements for the production and sale of organic agricultural products;
- farmers transitioning to organic agriculture must be prepared to comply with the basic conditions for the transition to organic agriculture. For example, in crop production such requirements are: conversion (transitional) period; the use of natural fertilizers; a ban on the use of chemical plant protection products (except for the permitted list of drugs); prohibition of seed treatment with chemicals; ban on the use of genetically modified organisms (GMOs).

The actual conditions of managing agricultural organizations in Kazakhstan, the issue of the quality of products, its safety for public health becomes important. Improving the quality of products to a large extent determines the survival of an enterprise in market conditions, the growth of production efficiency, and the savings of many types of resources. One of the solutions to this issue is the introduction of organic production systems and the development of an internal organic market.

One of the tools to increase the efficiency of eco-innovation activity at the enterprise is the analysis of the assessment of organic agriculture as a factor of sustainable development. To develop an effective management system that takes into account environmental factors, aimed at turning ideas into specific innovative products, further development of high-tech organic agricultural products is necessary.

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References

[1] Agardi, M. T. 2018. Adapting ecotourism in multi-purpose planning of coastal and marine protected areas. *Ocean Coastal Management*, 20: 219-239. DOI: https://doi.org/10.1016/0964-5691(93)90068-A

[2] Ahmad, F., *et al.* 2018. Tourism and pollution: Evidence from Western China's Belt and Road (OBOR) provinces. *Sustainability,* 10(10): 3520. DOI: https://doi.org/10.3390/su10103520

[3] Blau, M. L., and Panagopoulos, T. 2022. Designing therapeutic destinations: a practical guide to eco-conscious tourism development. *Grounds,* 11: 1595. DOI: https://doi.org/10.3390/land11091595

[4] Chiu, Y.-T.H., Lee, W.-I., and Chen, T.-H. 2018. Environmentally responsible behavior in ecotourism: background and consequences. *Tourism Management*, 40: 321–329. DOI:https://doi.org/10.1016/j.tourman.2017.06.013

[5] Chu, H., and Jamal, T. 2019. Organic farm tourism in South Korea: A new form of ecotourism. *Journal of Sustainable Tourism,* 17 (4): 431-454. DOI: https://doi.org/10.1080/09669580802713440

[6] Cooper, M., Wafadari, K., and Hida, M. 2018. *Current issues and emerging trends in health tourism*. IGI Global: New York, NY, USA, 201pp. ISBN: 9781466685758. DOI:10.4018/978-1-4666-8574-1

[7] Han, J.-C., Lee, T. J., and Ryu, K. 2018. The promotion of health tourism products to domestic tourists. *International. Journal Tourism Research,* 20: 137-146. DOI: https://doi.org/10.1002/jtr.2161

[8] Hashemi, S. S., and Habibi, M. 2018. Zoning of ecotourism potentials. Case study: Sadeqabad, Bafg, Yazd. *Journal of Tourism Planning and Development*, 5(2): 41-50.

[9] Kim, H. D., Lee, T. J., and Ko, T. G. 2018. A comparative study of satisfaction and subjective well-being assessment of health tourism seekers: The case of Japanese and Korean tourists. *Journal Tourist Tour Tagged*, 33: 742-756. DOI: https://doi.org/10.1080/10548408.2016.1167392

[10] Lee, T. H., and Yang, F. H. 2019. Can community-based tourism contribute to sustainable development? Evidence from residents' perceptions of sustainability *Tourism Management*, 70: 368-380. DOI: https://doi.org/10.1016/j.tourman.2018.09.003

[11] Lukpanova, Z., Jumabekova, A., Mukushev, A., Mataibayeva, G., Kadrinov, M., Baimagambetova, Z. 2022. Environmental concerns associated with the development of the agro-industrial complex and analysis of its financing, *Journal of Environmental Management and Tourism*, 5 (61): 1396 – 1406. DOI: https://doi.org/10.14505/jemt.v13.5(61).15

[12] Marcis, J., Bortoluzzi, S.C., and de Lima, E.P. 2019. Sustainability performance evaluation of agricultural cooperatives' operations: A systemic review of the literature. *Environment, Development and Sustainability* 21(3):1111–1126. DOI: https://doi.org/10.1007/s10668-018-0095-1

[13] Oshkordina, A. A., Ohrimenko, E. I., and Goncharova, N. A. 2021. *Organic agriculture as a factor in the development of rural tourism in the Sverdlovsk region.* International Scientific and Practical Conference "Sustainable Development of Traditional and Organic Agriculture in the Concept of Green Economy" (SDGE 2021), 42: 420-427. DOI: https://doi.org/10.1051/bioconf/20224202015

[14] Phelan, A., Ruhanen, L., and Mair, J. 2020. An ecosystem-based approach to ecosystem services for community-based ecotourism: Towards a just and sustainable blue economy. *Journal of Sustainable Tourism*. 28: 1665-1685. DOI: https://doi.org/10.1080/09669582.2020.1747475

[15] Privitera, D. 2020. The importance of organic farming in rural tourism. *Appl. Stad. Agrobus. Commercial,* 4: 59-64. DOI: https://doi.org/10.19041/APSTRACT/2019/1-2/8

[16] Shang, F., and Zhu, W. 2022. Planning of ecological agricultural tourist attractions based on the concept of circular economy, *Acta Agriculturae Scandinavica,* 72(1): 538-552. DOI: https://doi.org/10.1080/09064710.2021.2021278

[17] Shasha, Z. T., Geng, Y., Sun, H.-P., Musakwa, W., and Sun, L. 2020. Past, current and future perspectives of ecotourism: A bibliometric survey between 2001 and 2018. *Environmental Science and Pollution Research*, 27: 23514–23528. DOI: https://doi.org/10.1007/s11356-020-08584-9

[18] Sigalat-Signes, E., Calvo-Palomares, R., and Roig-Merino, B. 2020. Transition towards a tourist innovation model: The smart tourism destination: Reality or territorial marketing? *Journal of Innovation & Knowledge*, 5(2):96–104. DOI: https://doi.org/10.1016/j.jik.2019.06.002

[19] Sobhani, P., *et al.* 2022. Analyzing the relationship of local community participation in sustainable ecotourism development in protected areas. *Iran,* 11(10): 1871. DOI: https://doi.org/10.3390/land11101871

[20] Temirgaliyeva, Z., *et al.* 2021. Economic analysis and factors influencing the development of tourism. *Journal of Environmental Management and Tourism,* 12(8): 2109 – 2120. Available at: https://journals.aserspublishing.eu/jemt/article/view/6655

[21] Turekulova, D. *et al.* 2022 Analysis of sustainable development of SMEs and factors influencing to the ecotourism industry. *Journal of Environmental Management and Tourism*, 13(1): 211-222. DOI:https://journals.aserspublishing.eu/jemt/article/view/6824

[22] Turner, P. A. M., Ximenes, F. A., and Penman, T. D. 2019. Accounting for biodiversity in life cycle impact assessments of forestry and agricultural systems - the BioImpact metric. *International Journal Life Cycle Assess*, 24(11): 1985–2007. DOI: https://doi.org/10.1007/s11367-019-01627-5

[23] Xu, L., Ao, C., Liu, B., and Cai, Z. 2022. Ecotourism and sustainable development: A scientometric review of global research trends. *Environment*, 25: 1-27. DOI: https://doi.org/10.1007/s10668-022-02190-0

[24] Xu, L., *et al.* 2020. What is more important, environmental protection or recreational service? Data from a selection experiment in Wetland Nature Resource Management. *Wetlands*, 40: 2381–2396. DOI:https://doi.org/10.1007/s13157-020-01348-8

[25] Yee, J. H., Lok, H. H., and Poh, Y. L. 2021. Socio-geographic assessment of ecosystem services in an ecotourism destination: A PGIS application in Trum Chim National Park. *Vietnam Journal of Environmental Management*, 291: 656-662. DOI: https://doi.org/10.1016/j.jenvman.2021.112656

[26] *** Official resource of Development of organic agriculture in the world and in Kazakhstan. Available at: https://www.fao.org/documents/card/ru

[27] *** Official resource of the Bureau of National Statistics of the Agency for Strategic Planning and Reforms of the Republic of Kazakhstan for 2010-2021. Available at: http://www.stat.gov.kz

[28] *** E-APK Program - Astana.: 2022

[29] *** Environmental Performance Reviews. UNECE. www.https://unece.org/

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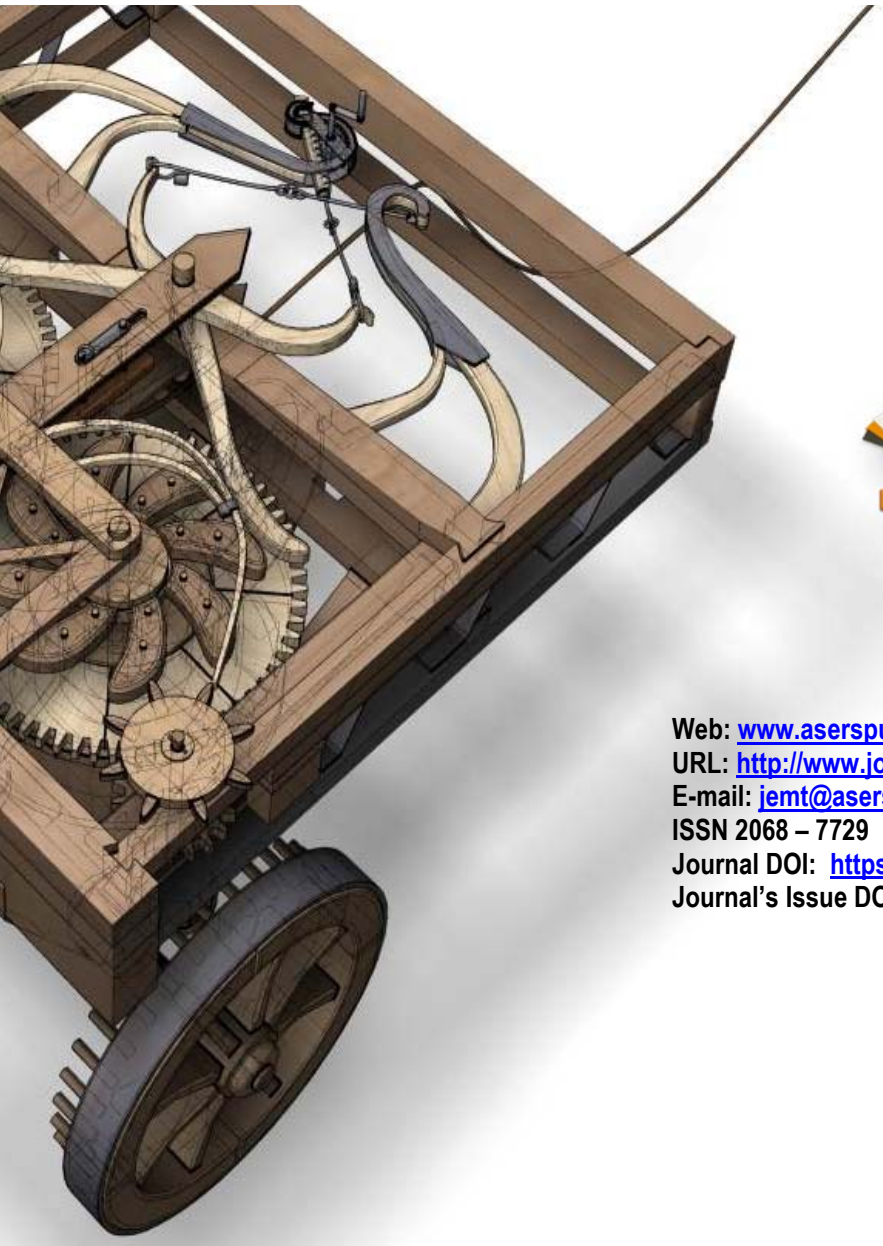

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