

ASERS

Journal of Environmental Management and Tourism

Quarterly

Volume XIII

Issue 8(64)

Winter 2022

ISSN 2068 – 7729

Journal DOI

<https://doi.org/10.14505/jemt>

ASERS
Publishing



Editor in Chief

Ramona PÎRVU

University of Craiova, Romania

Editorial Board

Omran Abdelnaser

University Sains Malaysia, Malaysia

Huong Ha

University of Newcastle, Singapore,
Australia

Harjeet Kaur

HELP University College, Malaysia

Janusz Grabara

Czestochowa University of Technology,
Poland

Vicky Katsoni

Technological Educational Institute of
Athens, Greece

Sebastian Kot

Czestochowa University of Technology,
The Institute of Logistics and International
Management, Poland

Nodar Lekishvili

Tbilisi State University, Georgia

Andreea Marin-Pantelescu

Academy of Economic Studies Bucharest,
Romania

Piotr Misztal

The Jan Kochanowski University in
Kielce, Poland

Agnieszka Mrozik

University of Silesia, Poland

Chuen-Chee Pek

Nottingham University Business School,
Malaysia

Roberta De Santis

LUISS University, Italy

Fabio Gaetano Santeramo

University of Foggia, Italy

Dan Selişteanu

University of Craiova, Romania

Lesia Kucher, Lviv Polytechnic National
University, Ukraine

Laura Ungureanu

Spiru Haret University, Romania

ASERS Publishing

<http://www.asers.eu/asers-publishing>

ISSN 2068 – 7729

Journal DOI: <https://doi.org/10.14505/jemt>

Table of Contents:

1	Tourism and Protected Areas: The Guadiana Valley Natural Park (Portugal) Victor FIGUEIRA, João ROLHA, Bruno SOUSA, Laurentina VAREIRO	2085
2	The Impact of Tourism Management on Firm Performance: Chiang Mai Tourism Industry Perspective Varattaya JANGKRAJARNG, Sainatee CHERNBUMROONG, Vimolboon CHERAPANUKORN	2094
3	Developing Cashless Tourism from a Tourist Perspective: The Role of TAM and AMO Theory Mega Fitriani Adiwarna PRAWIRA, Eko SUSANTO, Andar Danova Lastaripar GOELTOM, Chairul FURQON	2104
4	Smart Technology Effecting Tourism Development in Albania Etleva MUÇA, Irena BOBOLI, Ilir KAPAJ, Ana KAPAJ MANE	2113
5	Impact of Risk Budgeting on Enhancing the Projected Growth of the Hotel Industry under the Conditions of Enduring Uncertainty Related to the COVID-19 Pandemic. Case study by the Republic of Kazakhstan Ruslan YEMBERGENOV, Diana Baltabayevna MURATOVA, Lyudmila POPP, Maiya ARZAYEVA, Karlygash ABDYKULOVA	2122
6	Shariah-Based Hospitality, Competitive Advantage and Tourists' Revisiting Interest on Indonesia Tourism Abdul NASIR, Waridin WARIDIN, Deden Dinar ISKANDAR, Indah SUSILOWATI, Abas HIDAYAT	2134
7	Knowledge Map of Chinese Tourists Travelling to Thailand: Based on the Bibliometric Method Haiying FU, Chonlavit SUTUNYARAK	2144
8	Some Insights Concerning the Halal Tourism Researches. A Bibliometric Analysis Riduan MAS'UD, M. SYAMSURRIJAL	2161
9	Financial and Administrative Measures for the Development of Tourism after COVID-19 Marat Zh. AISIN, Madina AITKAZINA, Nurgul Hasanovna MAULINA, Dinmukhamed Saparovich ZHAKIPBEKOV, Gulnara Telmanovna SAPAROVA	2174
10	Proposing Three Potential-Interest Development Paradigm as the Local People Involvement Strategy for Tourism Destination Sustainability in Indonesia GIYOTO, Elen INDERASARI, Sri LESTARI, Hidayatul NURJANAH, Harun Joko PRAYITNO, Amri Adi Nur SALAM	2181
11	Determinants of Mentoring in the Context of Human Capital Development. Modeling the Effectiveness of the Mentoring Processes in Business Tourism Organization Małgorzata BARAN	2190
12	The Tourist Demand from the Perspective of Motivation and Satisfaction around Gastronomy: The Case of Olón, Ecuador César VILLAGÓMEZ-BUELE, Mauricio CARVACHE-FRANCO, Orly CARVACHE-FRANCO, Wilmer CARVACHE-FRANCO, Tito RAMÓN-CASAL, Irene HOLGUÍN-IBARRA	2205
13	Maqashid al-Shariah, Social Dialogue, and Tourism Development in Lombok Muh SALAHUDDIN, ABDILLAH	2213

Editor in Chief

Ramona PÎRVU

University of Craiova, Romania

Editorial Board

Omran Abdelnaser

University Sains Malaysia, Malaysia

Huong Ha

University of Newcastle, Singapore,
Australia

Harjeet Kaur

HELP University College, Malaysia

Janusz Grabara

Czestochowa University of Technology,
Poland

Vicky Katsoni

Technological Educational Institute of
Athens, Greece

Sebastian Kot

Czestochowa University of Technology,
The Institute of Logistics and International
Management, Poland

Nodar Lekishvili

Tbilisi State University, Georgia

Andreea Marin-Pantelescu

Academy of Economic Studies Bucharest,
Romania

Piotr Misztal

The Jan Kochanowski University in
Kielce, Poland

Agnieszka Mrozik

University of Silesia, Poland

Chuen-Chee Pek

Nottingham University Business School,
Malaysia

Roberta De Santis

LUISS University, Italy

Fabio Gaetano Santeramo

University of Foggia, Italy

Dan Selişteanu

University of Craiova, Romania

Lesia Kucher, Lviv Polytechnic National
University, Ukraine

Laura Ungureanu

Spiru Haret University, Romania

- 14 **Prospects for the Formation of a Smart Destination as a Determining Factor in the Modernization of Urban Infrastructure and a Means of Sustainable Urban Tourism Development in Kazakhstan** 2222
Amina BERDIBEKOVA, Guldana SADYKOVA, Sholpan ALPEISSOVA,
Lyazzat PARIMBEKOVA, Zhanar ZHANABAYEVA
- 15 **Moderating Effect of Perceived Behavioural Control on Tourists' Revisit Intention in Island Tourism Industry: A Conceptual Model** 2230
Nur Akmal ROSLI, Zaliha ZAINUDDIN, Mohd Yusoff YUSLIZA, Zikri MUHAMMAD,
Jumadil SAPUTRA, Aleff Omar Shah NORDIN, Shahriman Abdul HAMID
- 16 **The Effectiveness of Attractions in Increasing the Visits of Tourists in Samosir, North Sumatera** 2240
Erika REVIDA, Rizabuana ISMAIL, Prihatin LUMBANRAJA, Februati TRIMURNI,
Sri Alem Br SEMBIRING, Sukarman PURBA
- 17 **Identification of Regional Factors Affecting Management of Territories: Formation of Residence and Social Infrastructure System in Urban and Rural Settlements in Kazakhstan** 2248
Alla A. KORNILOVA, Seimur E. MAMEDOV, Gani A. KARABAYEV,
Yevgeniya M. KHOROVETSKAYA, Irina V. LAPTEVA
- 18 **Analysis of Spatial Concentration of Accommodation Establishments Using Machine Learning Techniques and Spatial Analysis Tools** 2255
Helien PARRA, Diana M. Ayala VALDERRAMA, Sebastián MORENO
- 19 **Hotel Recovery Post Pandemic: Is Rebranding Required?** 2263
Ni Made ERNAWATI, Mihai VODĂ, I Wayan JENDRA, Gusti Ayu Diah TANTRI,
Eleonora Laura AVRAM
- 20 **Influencing Factors for Employability of University Graduates in the Tourism Industry** 2271
Zhibek OMARKHANOVA, Murat BESPÆV, Zamira MUKHAMBETOVA,
Raushan MUSSINA, Gulzhan KUNAFINA, Anargul RYSMAGANBETOVA
- 21 **Issues of Attracting Foreign Investment in the Tourism Industry of Kazakhstan** 2284
Askar SADUOV, Beibut MUKANOV, Saule MAZHITOVA, Almas TOLEUULY,
Zoya GELMANOVA, Turiybek KAZBEKOV
- 22 **The Determinants of Loyalty to Ecotourism against the Background of Consumer Satisfaction** 2295
Sinh Duc HOANG, Ngoc Thuyen NGO, Diep T.N. NGUYEN, Thi Thu Huong NGUYEN
Zuzana TUČKOVÁ
- 23 **Role of Development of the Agro-Industrial Complex to Create Areas of Agritourism** 2311
Madina RAKHIMBERDINOVA, Elvira NUREKENOVA, Mainur ORDABAYEVA,
Medet KONYRBEKOV, Yulia SAIFULLINA, Nurgul KUTTYBAEVA
- 24 **Community-Based Agritourism: A Qualitative Research of the Impacts, Opportunities, and Constraints in a Tourist Village** 2320
Pudin SAEPUDIN, Fajar Kusnadi Kusumah PUTRA, Andre HERNOWO, Ita MAEMUNAH,
Nenden DIANAWATI
- 25 **The Online Reputation of Tourism Brands and their Dependence on Pandemic Scenarios: An Analysis of the "Hospederías De Extremadura" Brand before and During COVID-19** 2333
Marcelino SÁNCHEZ RIVERO, Luis MURILLO GONZÁLEZ,
María Cristina RODRÍGUEZ RANGEL
- 26 **New Practices of Tourism Industry as Effects of Development of the Agricultural Land Market** 2348
Aisulu KULMAGANBETOVA, Bazarkhan RUSTEMBAEV, Olessya MISNIK,
Almaz BAYARLIN, Shynar RAMAZANOVA, Samat BEKTENOV

Call for Papers Spring Issues 2023 Journal of Environmental Management and Tourism

Journal of Environmental Management and Tourism is an interdisciplinary research journal, aimed to publish articles and original research papers that should contribute to the development of both experimental and theoretical nature in the field of Environmental Management and Tourism Sciences.

Journal will publish original research and seeks to cover a wide range of topics regarding environmental management and engineering, environmental management and health, environmental chemistry, environmental protection technologies (water, air, soil), pollution reduction at source and waste minimization, energy and environment, modeling, simulation and optimization for environmental protection; environmental biotechnology, environmental education and sustainable development, environmental strategies and policies, etc. This topic may include the fields indicated above, but are not limited to these.

Authors are encouraged to submit high quality, original works that discuss the latest developments in environmental management research and application with the certain scope to share experiences and research findings and to stimulate more ideas and useful insights regarding current best-practices and future directions in environmental management.

Journal of Environmental Management and Tourism is indexed in SCOPUS, RePEc, CEEOL, ProQuest, and Cabell Directory databases.

All the papers will be first considered by the Editors for general relevance, originality and significance. If accepted for review, papers will then be subject to double blind peer review.

Deadline for submission:	21 st April 2023
Expected publication date:	June 2023
Website:	https://journals.aserspublishing.eu/jemt
E-mail:	jemt@aserspublishing.eu

To prepare your paper for submission, please see full author guidelines in the following file: [JEMT Full Paper Template.docx](#), then send it via email at jemt@aserspublishing.eu.



DOI: [https://doi.org/10.14505/jemt.v13.8\(64\).26](https://doi.org/10.14505/jemt.v13.8(64).26)

New Practices of Tourism Industry as Effects of Development of the Agricultural Land Market

Aisulu KULMAGANBETOVA

S. Seifullin Kazakh Agrotechnical University, Kazakhstan

aisulu.5@mail.ru

Bazarkhan RUSTEMBAEV

LLP Kazakh Research Institute of Economics
of the Agro-Industrial Complex and Rural Development, Kazakhstan

diartur@mail.ru

Olessya MISNIK

Esil University, Kazakhstan

olesiyomis@mail.ru

Almaz BAYARLIN

S. Seifullin Kazakh Agrotechnical University, Kazakhstan

abayarlin@mail.ru

Shynar RAMAZANOVA

North Kazakhstan University
named after Manash Kozybayev Petropavlovsk, Kazakhstan

kitrus_77@mail.ru

Samat BEKTENOV

Kazakh National University of Arts, Kazakhstan

Bektenov81@mail.ru

Suggested Citation:

Kulmaganbetova, A., *et al.* (2022). New Practices of Tourism Industry as Effects of Development of the Agricultural Land Market. *Journal of Environmental Management and Tourism*, (Volume XIII, Winter), 8(64): 2348 - 2357. DOI:[10.14505/jemt.v13.8\(64\).26](https://doi.org/10.14505/jemt.v13.8(64).26)

Article's History:

Received 12th of September 2022; Received in revised form 27th of September 2022; Accepted 31st of October 2022; Published 30th of December 2022. Copyright © 2022 by ASERS® Publishing. All rights reserved.

Abstract

The aim of this study is to identify and analyze new practice of the tourism industry which are in deep relation with the agricultural land market. The development of the agricultural land market causes an intensification of its role in the tourism industry, contributing also to the enhancement of other tourism sub-sectors, such as eco-agricultural tourism, rural tourism, eco-tourism, forest tourism industry, so it is a good reason to boost the need to establish a positive relationship between these two different types of land use. The tourism industry provides 10% of the turnover of the production and service market of the planet through the national product, investments, consumer spending, tax revenues and the organization of new jobs. This is facilitated by natural resources of each country, their hospitality, cultural and ethnic diversity, their individual tourist infrastructure with their burden of change and improvement within each country. Kazakhstan is rich in natural resources, has huge agricultural areas with a full range of agricultural destinations but also for other kind of activities which that can generate income, such are tourism activities

Keywords: tourism; land resources; agriculture; ecotourism; forestry tourism; eco-agricultural tourism; rural tourism.

JEL Classification: Z31; Z32.

Introduction

Considering the development of the tourism industry, it is necessary to pay attention to the state program for the development of the tourism sector of Kazakhstan for 2019-2025, which provides a clear vision and understanding of a new form of tourism, including the creation and provision of comprehensive services for accommodation, hospitality, nutrition, acquisition of knowledge and skills characteristic of rural areas engaged in active types of specific tourism. Indeed, the launch and expansion of such programs contribute to the overall development of the tourism industry, and also have a direct and strong connection with new branches of the tourism industry (agrotourism, ecotourism, eco-agrotourism, forest tourism, etc.).

These characteristics, in the present-day situation of great threats upon land resources and the environment, contribute at the apparition of new ways in which tourism in could action, widely recognized and highly appreciated by the society due its constructive effects. The expansion of existing land resources and the assessment of the development potential of eco-agricultural resources and forest tourism are also factors that can influence the blooming opportunities of tourism activities in new forms and practices.

1. Literature Review

Thanks to multifunctional agriculture, in recent years there has been a trend towards the recreational aspect of the landscape, the interest of which is due to the importance of the development of associations with rural tourism, which are developing rapidly and cause significant processes of local growth. The authors consider the relationship existing between possible types of tourism and agricultural land markets from the point of view of sustainable regional development.

According to Morrison (2022) Tourism development is highly dependent on the quantity, quality and characteristics of the available land. Therefore, issues that affect land resources tend to also have a positive or negative impact on tourism. However, many issues are related to the acquisition and use of land for tourism, recreation and leisure purposes. Some of these issues are related to the protection and conservation of natural resources and cultural heritage resources in protected areas and other parts of tourist destinations (Chen, Zhu and Meng 2022).

In the context of the development of agriculture, with some experience in this area, there is a place to develop new forms of tourism development, such as agricultural tourism, using the agricultural landscape (Shang and Zhu 2022). In order to develop this direction of the agricultural tourism industry, a recreational transformation is necessary in order to survive and search for market incentives. But in this direction, there are problems and factors affecting effective planning, which include a low level of operation and management, the lack of a scientific and theoretical system of ecological agriculture.

Eco-agricultural tourism presupposes the availability of aesthetics, ecology, principles of economics and the theory of sustainable development as resources, with the use of human and natural resources for the development of ecological and agricultural tourism, as well as standards of eco-tourism

According to Flachs and Richards (2018) the development of agricultural tourism involves the unification of agricultural production, the use of new agricultural technologies and the participation of tourists in sightseeing, the exhibition of agronomic products, as well as the development of the rural ecological environment, so that tourists can get acquainted with the modernization of agriculture and landscaping of rural areas.

In order to develop the agricultural tourism industry, is offered to the tourists to participate in rural life, for example, collecting seasonal fruits and vegetables, as well as observing characteristic flowers and plants using intelligent technologies. Such interaction will contribute to the further integration of eco-agricultural production and the socio-economic function of ecotourism, environmental protection and promotion of ecological sustainable development Park and Oh (2018).

Ecological and agricultural tourism focuses on 2 ways of development:

- Forms of leisure that focus on entertainment functions; this type of eco-agricultural tourism is more popular mainly in the countries of Central and Eastern Europe, including Hungary, Finland and other places;
- personal contact with agricultural land, which is a joint vacation (Alpey and Bonsall 2018), contributing to the fact that in the future tourists want to grow themselves, independently collect products, experience the joys of rural life, which is popular in Japan, the USA and other countries.

The same opinion is shared by Marcis *et al.* (2019) explaining that organic farming is the most sustainable, helping to save energy, because it pollutes the environment less with aerosols, emits less carbon dioxide, prevents the greenhouse effect, does not form polluting waste and is used for growing crops.

According to Muller *et al.* (2018), many foreign countries use their own scientific and technological advantages, introduce technologies into ecological and agricultural tourism and create a modern agricultural scientific and technical park as a means of achieving advanced technologies and goals with high added value.

In some countries, the agricultural science and technology park is managed by a well-known team of experts and a large number of practitioners of science and technology (Adama *et al.* 2018). A variety of natural farms provide their advanced agricultural technologies to global agricultural investors and employ a large number of experts and scientists to promote agricultural technologies (Duan, Chan and Marafa 2019). Forming recreational agricultural tourism (Sigalat-Signes *et al.* 2020), the integration of the local economy and its cultural characteristics takes place. In addition, many tourists across the country can experience the rich historical and cultural atmosphere, ecological beauty and natural charm, as well as appreciate the wonderful traditions in the process of leisure and recreation against the background of the pastoral beauty of nature.

Horthy tourism is one of the newest forms of agrotourism, some researchers conducted a SWOT analysis to identify the advantages and disadvantages, opportunities and problems of this type of tourism with great potential (Gyawali *et al.* 2022).

As a result of the development of new forms of tourist destinations, such as ecotourism, it is necessary to introduce innovative ways of developing the tourism sector and the hotel business (Li *et al.* 2020). To achieve this goal, it is time to act in accordance with the strategy of confident development, which should include certain stages discussed by Omarova *et al.* (2021), such as the development of innovative activities of the tourism industry and tourist services, the development and implementation of environmental protection measures, the development of transport infrastructure.

The sustainable development trend is gaining momentum on a global scale and creates new niches for large companies and for the country, and new opportunities that will significantly affect the activities of companies both within the country and in foreign economic activity.

2. Main Long-Term Trends in the Tourism Industry

The main long-term trends were noticeable in the field of innovative technologies which boost the tourism industry though some specifics related to intensive development of air traffic through the introduction of new routes, the creation of new (budget) air carriers, applications for smartphones related to tourism and hospitality, GPS for cars, *etc.*, as well as the use of various technological applications in all areas related to tourism (Doszhan *et al.* 2020).

Approaching of new practices for tourist destinations, we must adopt innovations in tourism, which allow us creating those conditions for the development of various forms of tourist destinations which increase the level of satisfaction of cultural needs and determine the apparition of innovations in small and medium-sized businesses (Mambetova *et al.* 2020).

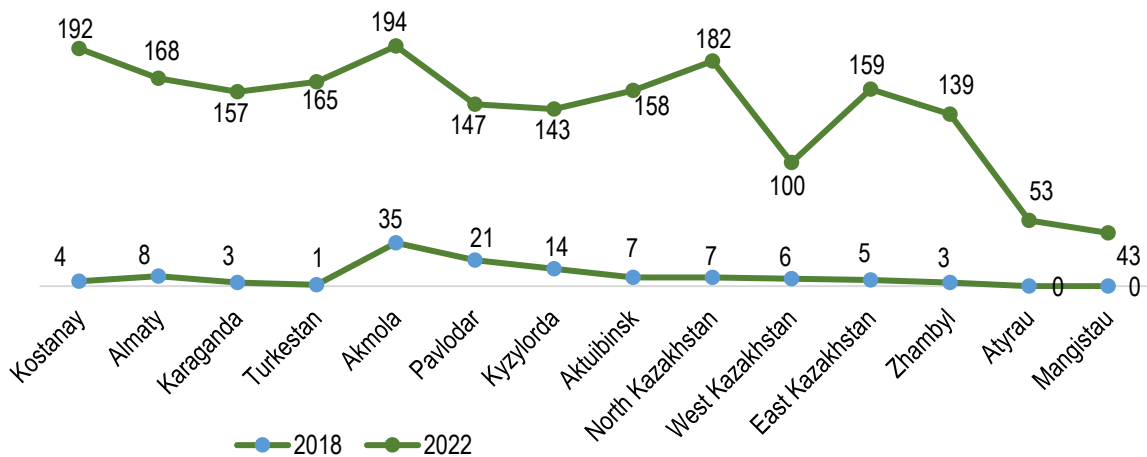
In order to shape a digital strategy for tourism industry enterprises and further implement innovative ideas in the field of tourism, new insights about how family business from tourism industry should adapt to the advantages of the new digital-based economy were analyzed to build-up more capacities and capabilities that to provide different avenues of innovation and adaptation of digital tools through a proactive approach (Zapata-Cantu, Sanguino, Barroso and Nicola-Gavrila 2022).

The better usage of up-to-date technologies induces new practices and various forms for attracting foreign investment, granting preferences to investors, exemption from certain types of taxes, co-financing aimed to improving the efficiency of investments in the management system of investment processes in the tourism industry and last but not least more effective public policy.

In the field of ecotourism, agrotourism, for example, farm productivity increases thanks to technologies such as forecasting the optimal harvest time, "smart watering", intelligent fertilizer application systems, pest and weed control systems. This is the basis of the company's competitiveness, which is characterized by a competitive advantage that gives it an advantage over competitors in terms of economic, technical and organizational activities, makes it possible to manage the available resources more effectively and should be understood as a system of a certain exceptional value. Such companies have a sustainable competitive advantage, which represents a unique value created by exceptional strategies, and which can benefit over a long period of time (Tukach 2018).

Apostolopoulos, Ratten, Petropoulos, Liargovas and Anastasopoulou (2021) point out that agri-food entrepreneurship is facing many problems, and the crisis may create new opportunities in the future. In this regard, using best practices of already implemented projects, Kazakhstan is introducing advanced farms and new farms, planning to develop ecotourism by pioneering 1 digital farm in each region (Figure 1).

Figure 1. Forecast indicators of the development of advanced farms in the regional aspect

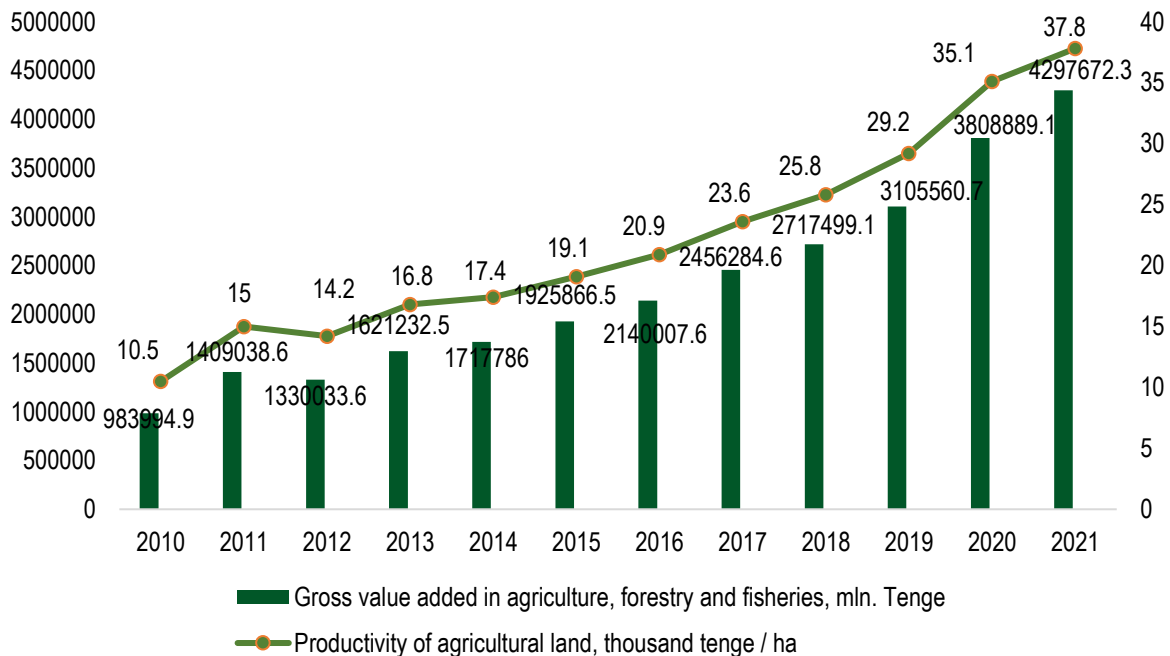


Source: Based on E-APK Program

3. Agricultural Land Market and Agriculture as Basis for Development Priorities of New Forms of Tourism Industry in Kazakhstan

Kazakhstan seeks to diversify its industry from a resource-dependent economy to sustainable development and strives to promote tourism as one of the priority industries with great opportunities to attract tourists from niche segments such as ecotourism, agrotourism, rural tourism and forest tourism. For the successful growth of the tourism sector and the cumulative positive effect on the economy of Kazakhstan, it is possible with a clear and consistent implementation of the country's industrial development strategy. Almost a quarter of the territory of Kazakhstan is occupied by steppes, semi-deserts and deserts, and the remaining quarter is hilly areas. 80% of the country's territory is occupied by arable land, their area is more than 200 million hectares. However, only 40% of the area, or 96 million hectares, is used for agriculture (Figure 2).

Figure 2. Indicators characterizing agriculture in the Republic of Kazakhstan



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

In terms of directions, the distribution of subsidies is leveled off with a slight advantage in favor of crop production (Table 1).

Table 1. Distribution of subsidies in the Republic of Kazakhstan by areas

Subsidies	Crop production - thousand tenge-	Animal husbandry -thousand tenge-	Total -thousand tenge-
Animal husbandry	-	40.673.246.839	40.673.246.839
Fertilizer	19.138.436.739	-	19.138.436.739
Pesticides	26.800.767.236	-	26.800.767.236
Seeds	9.497.363.160	-	9.497.363.160
Hectare subsidy	7.667.397.000	-	7.667.397.000
Total	43.965.527.396	40.673.246.839	84.638.774.235
%	51,9	48,1	100

Source: compiled by authors according to [https:// www.subsidies.goldau.kz](https://www.subsidies.goldau.kz)

The creation of a perfect system of land tenure and land use based on the development of the agricultural land market plays a special role in the implementation of increasing the efficiency of agriculture. Agriculture and other sectors, as well as tourism as an industry as a whole has the following positive effects on the economy of the state - as an inflow of foreign currency, raises the balance of payments and total exports, increases employment, affects the development of dozens of sectors of the economy, contributes to the development of infrastructure of the country and provides economic and food security of the country.

The agricultural sector in Kazakhstan has always been considered a fundamental component of the national economy. This affirmation is based on a number of advantages that the Kazakhstan has and implies a lot of opportunities for new tourism's practices and forms (Lukpanova *et al.* 2020):

- the presence of a large area, in terms of the number of agricultural lands per capita, Kazakhstan ranks second in the world;
- being one of the largest exporters of grain and flour;
- growing demand for food from neighboring countries (China, Central Asia, EEC, CIS).

Kazakhstan is trying to diversify industries from a resource-dependent economy towards sustainable development and is striving to promote tourism as one of the priority industries with great chances to attract tourists from such niche segments as ecotourism, agrotourism, rural tourism, forestry tourism. It is important to understand that the successful growth of the tourism industry and the cumulative positive effect on the economy of Kazakhstan are possible only with a clear and consistent implementation of the country's strategy for the development of the industry over several years.

Investments in agriculture are aimed at ensuring the long-term development of economic entities occurring under conditions of uncertainty, where indicators reflecting the development of environmental responsibility of the company are the percentage of investments in fixed assets aimed at environmental protection and rational use of natural resources (Grebennikova *et al.* 2020).

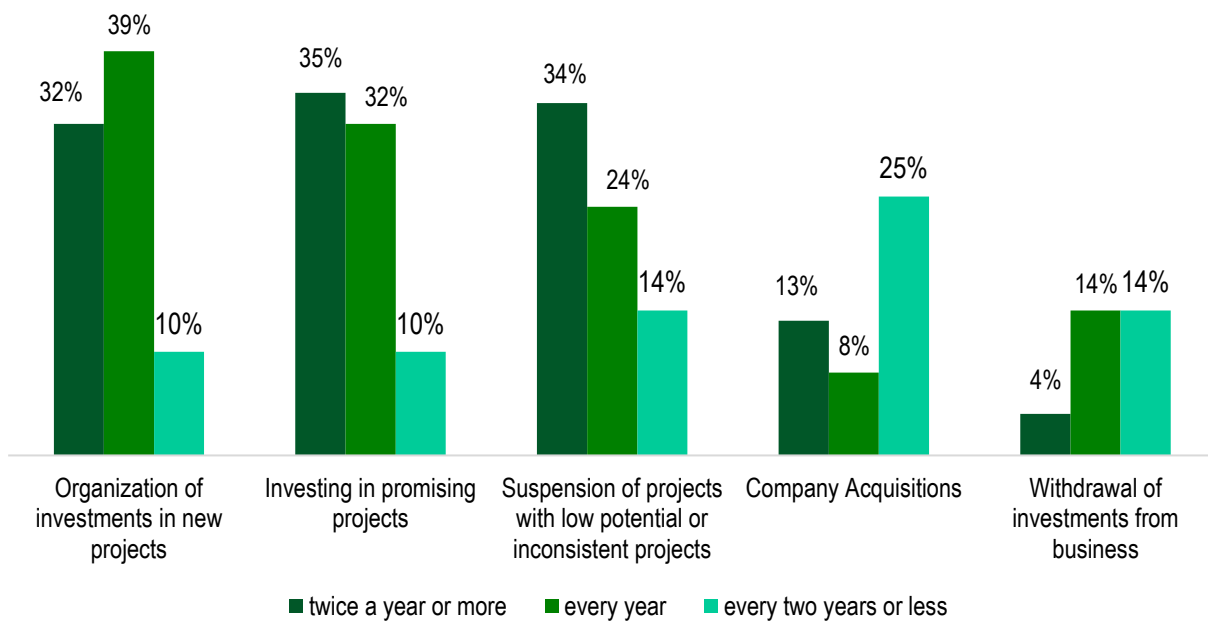
3.1. The Effectiveness of Investments in the Management System of Investment Processes in the Newest Forms of Tourism Industry

The conditions for the effective functioning of investment processes are to increase the scientific validity of management decisions in the field of investments and to ensure the interaction of the main elements of the management system, such as principles, methods, management functions and tools that guide the implementation of investment projects to achieve the necessary results and levels of efficiency.

Among the Kazakhstan's companies in the field of investment activities, a survey was conducted to study what characterizes and which is the frequency of attracting investments in the tourism industry; as a result of which it can be noted that many companies attract investments twice a year, or even more often (Figure 3). The number of enterprises in the field of accommodation and food services, art, entertainment and recreation has been on the increase over the past 10 years. Despite the pandemic, in 2020, according to the indicators considered, the number of enterprises in the industry as a whole is growing.

Over the past 3 years, in the forestry, the sown areas of Kazakhstan have increased by 295.9 thousand hectares. Almost half (48.4%) of the sown area allocated for fodder crops falls on 4 regions of the country: Akmola (11.1%), Kostanay (16.8%), North Kazakhstan (11.0%), Pavlodar (9.6%) region. The volumes of products (services) in forestry also tend to grow, as evidenced by the data presented in Figure 4.

Figure 3. Companies attracting investments in the tourism industry

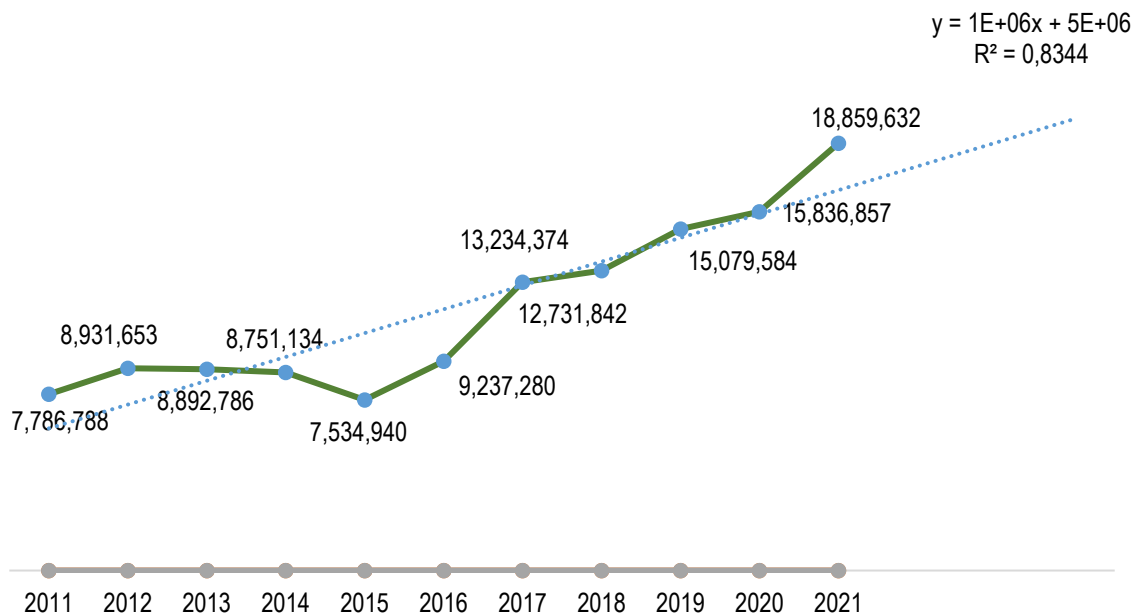


Source: Compiled by authors according to <http://www.stat.gov.kz>

Integrated land use planning provides an essential strategic framework for balancing different types of land use and provides an opportunity for further policy improvement in this industry.

State policy and the sequence of decisions taken in the field of ecological and agricultural tourism can significantly affect the nature of changes in land use.

Figure 4. Dynamics of the volume of products/services in the forestry of Kazakhstan, 2011-2021, thousand tenge



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

If we consider the volume of products (services) in forestry in the regional aspect, then the situation is as follows (Table 2).

Table 2. Volumes of products (services) in forestry for the period from 2014-2021, thousand tenge

Region	2014	2015	2016	2017	2018	2019	2020	2021
Republic Kazakhstan	8.751.134	7.534.940	9.237.280	12.731.842	13.234.374	15.079.584	15.836.857	18.859.632
Akmola	812.341	937.630	1.465.753	3.041.560	3.106.713	3.127.163	2.042.699	3.262.587
Aktuinsk	350.222	431.422	413.057	524.630	494.610	628.790	937.682	1.379.262
Almaty	536.636	645.914	1.106.630	1.247.689	1.920.792	2.079.407	1.902.844	1.963.466
Atyrau	4.631	5.186	5.482	5.427	79.471	29.065	5.306	7.382
West Kazakhstan	14.609	9.878	89.408	13.985	25.365	43.683	25.498	38.030
Zhambyl	305.839	141.568	165.215	793.404	485.824	535.258	605.462	678.234
Karaganda	229.902	114.707	88.483	240.206	60.113	198.792	233.311	208.495
Kostanay	390.817	377.415	350.038	443.461	647.550	1.057.110	1.156.120	891.428
Kyzylorda	79.205	59.515	16.676	14.528	119.867	166.978	305.474	123.627
Mangistau	88.046	95.700	150.448	164.768	162.667	164.416	451.119	106.385
South Kazakhstan	366.548	311.094	362.338	351.577	..	..	..	..
Turkestan	..	..	..	..	320.479	443.266	2.224.990	2.545.138
Pavlodar	309.957	147.595	276.091	375.461	360.256	431.072	407.491	594.815
North Kazakhstan	1.779.769	1.654.555	1.338.587	1.492.746	1.540.606	1.829.965	1.792.750	2.322.254
East Kazakhstan	1.229.294	689.550	1.239.889	1.369.797	1.635.797	1.269.188	1.243.349	1.428.507
Nur-Sultan city	1.712.996	1.686.724	1.972.350	2.072.551	1.734.475	2.468.246	2.032.989	2.817.835
Almaty city	540.322	226.487	196.835	580.052	523.927	590.095	440.671	492.187
Shymkent city	..	..	..	..	15.862	17.090	29.102	-

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

3.2. Empirical Analysis of Some Projected Values. Indicator "Volume of Products/Services in Forestry"

To determine the forecast values of the indicator "Volume of products/services in forestry" for 2023-2025. The following steps were carried out:

- Checking the time series for anomalous observations. For this, the Irwin criterion was used (Table 3).

Table 3. Checking for anomalous observations in a time series

Year	The volume of products (services) in forestry, thousand tenge	Observed value of the Irwin criterion	Calculation formulas
2011	7.786.788		<ul style="list-style-type: none"> Observed value of the Irwin criterion $\lambda_t = \frac{|y_t - y_{t-1}|}{\sigma_y}, t = \overline{2, 11}$ Critical value of the Irwin criterion $\lambda_{0,05} = 1,5$
2012	8.931.653	0,3685	
2013	8.892.786	0,0125	
2014	8.751.134	0,0456	
2015	7.534.940	0,3915	
2016	9.237.280	0,5480	
2017	12.731.842	1,1249	
2018	13.234.374	0,1618	
2019	15.079.584	0,5940	
2020	15.836.857	0,2438	
2021	18.859.632	0,9731	

Source: compiled and calculated by authors

Since all observed values of the Irwin criterion are less than the critical value, then with a probability of 95% it can be argued that the original time series does not contain anomalous observations.

- Using the criterion of "ascending" and "descending" series, it was found that the considered time series contains a trend component (Table 4).
- To approximate the initial data, a polynomial of the first degree was chosen as the growth curve:

$y_t = a_0 + a_1 t + \varepsilon_t$. The parameters of the selected curve were estimated using the least squares method. As a result of data approximation, the following trend model was obtained:

$$y = 5.222.871,16 + 1.051.898,28t$$

- An assessment of the quality of the resulting model was carried out in two directions: checking the adequacy and assessing the accuracy of the model.

Table 4. Checking for a trend

General view of the criterion of "ascending" and "descending" series (violation of at least one inequality is sufficient for a trend to exist)	Estimated values with a chance of error $0,05 < \alpha < 0,0975$
$v(n) > \left[\frac{2n-1}{3} - 1,96\sqrt{\frac{16n-29}{90}} \right]$	$3 < 4$
$K_{max} < [K_0(n)]$	$6 > 5$

To test the adequacy of the model, a number of residuals were examined, i.e., discrepancy between the levels calculated by the model and actual observations. The most important properties of the residual component are: the equality of the mathematical expectation to zero, the randomness of the residuals and their compliance with the normal distribution law. The results of the analysis of a number of residuals in order to check the model for adequacy are shown in Table 5.

Table 5. Checking the adequacy of the model

Property under test	Used statistics		The border	Conclusion
	Name, calculation formula	Received value		
Accident	<ul style="list-style-type: none"> Criterion of "peaks" (turning points) $p > \left[\frac{2}{3}(n-2) - 1,96\sqrt{\frac{16n-29}{90}} \right]$	$6 > 3$	3	Adequate
Normality	<ul style="list-style-type: none"> RS- criterion: $RS = \frac{e_{max} - e_{min}}{S}$ 	3,39	2,80 -3,91	Adequate
Equality of the mathematical expectation of the levels of a series of residues to zero	<ul style="list-style-type: none"> t- Student's statistic: $t_{observ..} = \frac{|e^-|}{S} \sqrt{n}$	0	2,23	Adequate

Source: compiled and calculated by authors

To assess the accuracy of the model, the average relative approximation error was calculated:

$$E_{rel..} = \frac{1}{n} \sum_{i=1}^n \frac{|e_t|}{y_t} \cdot 100\% = 12,11\%$$

a value that indicates an acceptable level of model accuracy. Thus, the model is of sufficient quality and can be used for forecasting.

- To calculate the point forecast, the corresponding values of the factor were substituted into the constructed model $t = n + k$. To build an interval forecast, a confidence interval was determined at a significance level $\alpha = 0,05$. The width of the confidence interval was calculated using the formula:

$$U(k) = S_e t_\alpha \sqrt{1 + \frac{1}{n} + \frac{(n+k-t)^2}{\sum_{t=1}^n (t-\bar{t})^2}}$$

, the results of building point and interval forecasts for 2023-2025 are presented in Table 6.

Table 6. Point and interval forecasts of the indicator "Volume of products/services in forestry"

Year	n+ k	U(k)	Point forecast, thousand tenge	Interval forecast, thousand tenge	
				Max	Min
2023	13	4.594.480,79	18.897.548,95	14.303.068,15	23.492.029,74
2024	14	4.794.043,82	19.949.447,24	15.155.403,42	24.743.491,06
2025	15	5.010.615,95	21.001.345,53	15.990.729,58	26.011.961,48

Source: compiled by authors

Forest tourism has become an important part of the modernization of forestry, its rational development has provided urban residents with a place to relax and preserve their health, local villages and the economy, but currently there are few studies in the world devoted to assessing the potential for the development of forest

tourism land resources and planning and development of forest land resources. Supporting most plant and animal species, many of which are threatened with extinction. Forests are also a major source of livelihood for millions of people, contributing to economic growth and employment.

The growth of the economy and the well-being of rural populations are directly dependent on the sustainable use of forest resources: food, fodder, shelter, medicines. The use of forest biodiversity in ecotourism also has a positive impact on the well-being of rural communities. For example, 8 billion visits to protected areas worldwide occur in places covered by forests. In addition, forests are the habitat of millions of animal and plant species.

Thanks to the efforts aimed at protection of forests, their restoration and rational use, in recent years in Kazakhstan there is a tendency to increase forest areas and accordingly to provide services in the forest tourism industry. I would also like to note that under the Concept of Agribusiness Development for 2021-2030, it is planned to introduce precision farming technology and digitalization of all technological processes.

Conclusion

Implementing of the new practices of tourism industry due to effects of Development of the Agricultural Land Market, identified in this paper contributes also to the enriches of land recourses, improvement environmental protection measures, all these being in line with new trends what we expect to see in next years: tech-empowered travel, sustainability initiatives of tourism businesses, safety and health-focused measures, etc.

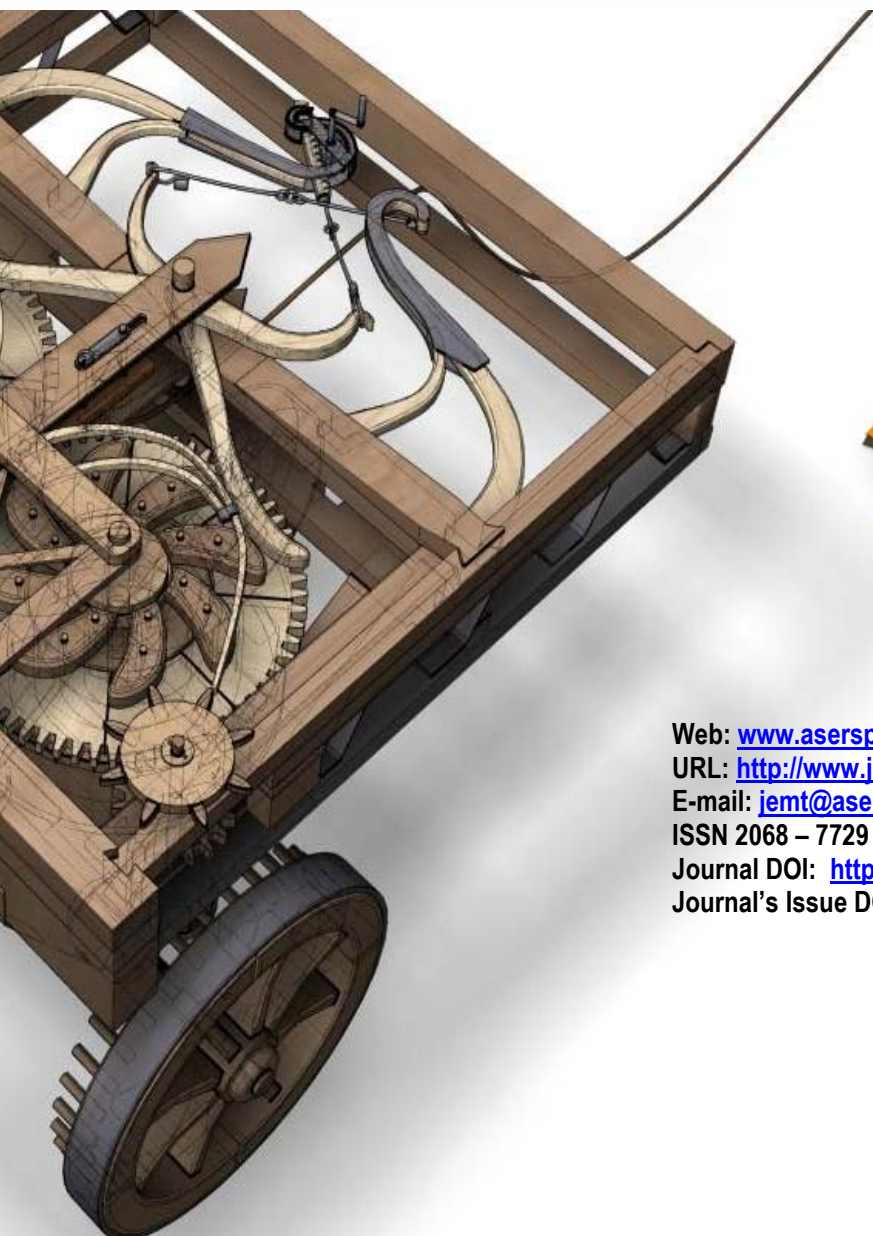
Based on the results of the analysis made and current situation in the development of new forms of tourism in relation with Kazakhstan land reserves plus the assessment of its development potential, we concluded that: The forest tourism industry is in the stage of rapid development, but the quality of development is low, The assessment of the development potential of forest tourism is one of the main factors that could influencing the development of the entire forestry industry; to assess the development potential of forest tourism land resources, it is necessary to identify indicators that affect the development potential of forest tourism land resources.

References

- [1] Adama, I.J., Asaleye, A.J., and Oye, A.J. 2018. Agricultural production in rural communities: Evidence from Nigeria. *Journal of Environmental Management and Tourism*, 3(27): 428–438. DOI:[https://doi.org/10.14505/jemt.v9.3\(27\).04](https://doi.org/10.14505/jemt.v9.3(27).04)
- [2] Alpey, N., and Bonsall, M.B. 2018. Genetics-based methods for agricultural insect pest management. *Agric For Entomol.*, 20(2): 131–140. DOI: <https://doi.org/10.1111/afe.12241>
- [3] Apostolopoulos, N., et al. 2021. Agri-food sector and entrepreneurship during the COVID-19 crisis: A systematic literature review and research agenda. *Strategic Change*, 30(2): 159–167. DOI:<https://doi.org/10.1002/jsc.2400>
- [4] Cheng H., Zhu L., and Meng J. 2022. Fuzzy evaluation of the ecological security of land resources in mainland China based on the Pressure-State-Response framework. *Science of the Total Environment*, 804: 150053–150114. DOI: <https://doi.org/10.1016/j.scitotenv.2021.150053>
- [5] Doszhan, R.I et al. 2020. Research of Innovative Activity of Kazakhstan Companies. Example of Tourism and Hospitality Management. *Journal of Environmental Management and Tourism*, 8(40): 1785-1795. DOI:[https://doi.org/10.14505/jemt.10.8\(40\).09](https://doi.org/10.14505/jemt.10.8(40).09)
- [6] Duan, X., Chan, C., and Marafa, L.M. 2019. Does authenticity exist in cultural theme parks? A case study of millennium City Park in Henan, China. *J Tourism Cult Change*, 17(3): 321–338. DOI:<https://doi.org/10.1080/14766825.2018.1437745>
- [7] Flachs, A., and Richards, P. 2018. Playing development roles: the political ecology of performance in agricultural development. *J Political Ecol.*, 25(1): 638–646. DOI: <https://doi.org/10.2458/v25i1.23089>
- [8] Grebennikova, V.A., and Smutkin, O.A. 2020. Actual problems of financial management of investment projects. *International Journal of Humanities and Natural Sciences*, 12-4 (51): 92-97. DOI:<https://doi.org/10.24411/2500-1000-2020-11505>
- [9] Gyawali, P., Bhandari, S., and Shrestha, J. 2022. Horti-tourism, an approach for strengthening farmers' economy in the post-covid situation. *Journal of Agriculture and Food Research*, 7: 100278. DOI:<https://doi.org/10.1016/j.jafr.2022.100278>

- [10] Li, M., *et al.* 2020. Managing agricultural water and land resources with tradeoff between economic, environmental, and social considerations: A multi-objective non-linear optimization model under uncertainty. *Agricultural Systems*, 178: 102685 – 102712. DOI: <https://doi.org/10.1016/j.agsy.2019.102685>
- [11] Lukpanova, Z. *et al.* 2020. Influence of Financial and Climate Factors on Agricultural Industry Development. *Journal of Environmental Management and Tourism*, 7(47): 1813-1828. DOI: [https://doi.org/10.14505/jemt.11.7\(47\).21](https://doi.org/10.14505/jemt.11.7(47).21)
- [12] Mambetova, S. *et al.* 2021. Digital Economy in Tourism and Hospitality Industry. *Journal of Environmental Management and Tourism*, 8(48): 2006-2019. Available at: <https://journals.aserspublishing.eu/jemt/article/view/5804>
- [13] Marcis, J., Bortoluzzi, S.C., and Lima, E.P. 2019. Sustainability performance evaluation of agricultural cooperatives' operations: A systemic review of the literature. *Environ, Dev Sustainability*, 21(3): 1111–1126. DOI: <https://doi.org/10.1007/s10668-018-0095-1>
- [14] Morrison, A.M. 2022. Editorial: Land Issues and Their Impact on Tourism Development. *Land*, 11: 658-605. DOI: <https://doi.org/10.3390/land11050658>
- [15] Mueller, N.G., Fritz, G.J., and Patton, P. 2018. Growing the lost crops of eastern North America's original agricultural system. *Nat Plants*, 3(7): 1–5. DOI: <https://doi.org/10.1038/nplants.2017.92>
- [16] Omarova, A. *et al.* 2021. Analysis of the Development of Innovative Activities of the Tourism Industry in the Influence of Pandemic. *Journal of Environmental Management and Tourism*, 6(54): 1442-1453. DOI: [https://doi.org/10.14505/jemt.v12.6\(54\).02](https://doi.org/10.14505/jemt.v12.6(54).02)
- [17] Park, J.H., and Oh, C.S. 2018. The utilization of urban park for the activation of rural area-focus on the Baelyeonje nearby tourism resources development, Gulye-gun. *J Korean Soc Rural Plann.*, 24(3): 105–115. DOI: <https://doi.org/10.7851/ksrp.2018.24.3.105>
- [18] Shang, F., and Zhu, W. 2022. Planning of ecological agricultural tourist attractions based on the concept of circular economy, *Acta Agriculturae Scandinavica, Section B Soil & Plant Science*, 72(1): 538-552. DOI: <https://doi.org/10.1080/09064710.2021.2021278>
- [19] 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>
- [20] Tukach, V.S. 2018. Formation of sustainable competitive advantages of the company based on strategic competitive analysis. *Young Scientist*, 28(132): 573-575. Available at: <https://moluch.ru/archive/132/36689/>
- [21] 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 Biolmpact metric. *Int J Life Cycle Assess*, 24(11): 1985 – 2007. DOI: <https://doi.org/10.1007/s11367-019-01627-5>
- [22] Zapata-Cantu, L., Sanguino, R., Barroso, A. and Nicola-Gavrilă, L. 2022. Family Business Adapting a New Digital-Based Economy: Opportunities and Challenges for Future Research. *Journal of Knowledge Economy*, <https://doi.org/10.1007/s13132-021-00871-1>
- [23] Distribution of subsidies in the Republic of Kazakhstan. Available at: www.subsidies.goldau.kz
- [24] Electronic resource: E-APK Program - Astana.: 2018
- [25] Official resource of Data from the Bureau of National Statistics of the Agency for Strategic Planning and Reforms of the Republic of Kazakhstan for 2011-2021. Available at: <http://www.stat.gov.kz>

ASERS



The logo for ASERS Publishing, featuring the word "ASERS" in a bold, orange, sans-serif font with a stylized fan-like graphic to the left, and the word "Publishing" in a smaller, orange, sans-serif font below it.

Web: www.aserspublishing.eu

URL: <http://www.journals.aserspublishing.eu/jemt>

E-mail: jemt@aserspublishing.eu

ISSN 2068 – 7729

Journal DOI: <https://doi.org/10.14505/jemt>

Journal's Issue DOI: [https://doi.org/10.14505/jemt.v13.8\(64\).00](https://doi.org/10.14505/jemt.v13.8(64).00)