

ASERS

Journal of Environmental Management and Tourism

Quarterly

Volume XIV

Issue 5(69)

Fall 2023

ISSN 2068 – 7729

Journal DOI

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

 **ASERS**
Publishing



Table of Contents:

	Waste Utilization Potential of Oil Palm Industry in North Kalimantan Province, Indonesia	
1	Mohamad Nur UTOMO, Ahmad MUBARAK, Sulistya Rini PRATIWI, Najmudin NAJMUDIN	2159
	Legal Regulation of Civil Liability for Environmental Damage: How Appropriate are Civil Liability Provisions with the Privacy of Environmental Damage?	
2	Lana AL-KHALAILEH, Tareq AL-BILLEH, Majd MANASRA, Abdullah ALKHSEILAT, Noor ALZYUOD, Noor AL-KHAWAJAH	2174
	Study the Nexus between Indicators of Surface Water Quality on the Small River for Better Basin Management	
3	Olena MITRYASOVA, Andrii MATS, Ivan SALAMON, Victor SMYRNOV, Vadym CHVYR	2187
	Attracting Investment for Rural Development: Introduction of Organic Agriculture and ESG Principles in Kazakhstan	
4	Marzhan KUANDYKOVA, Aidos AKPANOV, Santay TLEUBAYEVA, Anuar BELGIBAYEV, Askar MAKHMUDOV, Aigul ATCHABAROVA	2196
	Forty-Seven Years of Environmental Management Accounting Research: A Bibliometric Analysis	
5	Chetanraj DB, Senthil Kumar JP	2207
	Accumulation of Heavy Metals in the Needles of Scots Pine of the Semipalatinsk Pre-Irtysh Region and Burabay National Park	
6	Botakoz YELKENOVA, Raikhan BEISENOVA, Rumiya TAZITDINOVA, Zhanar RAKHYMZHAN, Nurziya KARIPBAEVA	2242
	Identifying Karst Aquifer Recharge Area Using Environmental Stable Isotopes and Hydrochemical Data: A Case Study in Nusa Penida Island	
7	I Ketut ARIANTANA, Made Sudiana MAHENDRA, I Wayan NUARSA, I Wayan Sandi ADNYANA, Lambok HUTASOIT, Irwan ISKANDAR, MUSTIATIN, Putu Doddy Heka ARDANA	2253
	Regulatory and Legal Support for the Development of Digital Infrastructure in Rural areas as a Factor in Improving the Level of Sustainable Development and Quality of Life of the Rural Population	
8	Serikbai YDYRYS, Nazgul IBRAYEVA, Fariza ABUGALIYEVA, Mira ZHASKAIRAT, Aiman UVALIYEVA	2271
	Do Environmentally Responsible Practices in Accommodation Establishments Matter?	
9	Lulama NDZUNGU, Carina KLEYNHANS, Antoinette ROELOFFZE	2281
	Development of a Model of Strategic Priorities for Sustainable Development of Rural Areas in Kazakhstan until 2030. Example of the East Kazakhstan Region	
10	Kalamkas NURALINA, Raisa BAIZHLOVA, Yergali ABENOV, Dinara MUKHIYAYEVA, Yerkezhan MOLDAKENOVA	2290
	Investing in Human Capital for Green and Sustainable Development	
11	Ansagan BEISEMBINA, Alla GIZZATOVA, Yerlan KUNYAZOV, Takhir ERNAZAROV, Nurlan MASHRAPOV, Sergey DONTSOV	2300
	Top Management Support, Green Intellectual Capital and Green HRM: A Proposed Framework for Sustainability	
12	Abdur Rachman ALKAF, Mohd Yusoff YUSLIZA, Amauche Justina EHIDO, Jumadil SAPUTRA, Zikri MUHAMMAD	2308
	Human Capital Management Based on the Principles of Green Economy and the Creation of Green Jobs for Sustainable Territorial Development	
13	Gulmira RAKHIMZHANOVA, Aigul MAIDYROVA, Ainura KOCHERBAEVA	2319

Editor in Chief:

Ramona Pirvu,
University of Craiova, Romania

Co-Editor:

Cristina Mihaela Barbu,
Spiru Haret University, Romania

Editorial Advisory Board:

Omrans Abdelnaser, University Sains
Malaysia, Malaysia

Huong Ha, Singapore University of Social
Sciences, Singapore

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

Andreea Marin-Pantelescu, Academy of
Economic Studies Bucharest, Romania

Piotr Misztal, The Jan Kochanowski
University in Kielce, Faculty of Management
and Administration, Poland

Agnieszka Mrozik, Faculty of Biology and
Environmental Protection, University of
Silesia, Katowice, Poland

Chuen-Chee Pek, Nottingham University
Business School, Malaysia

Roberta De Santis, LUISS University, Italy

Fabio Gaetano Santeramo, University of
Foggia, Italy

Dan Selisteanu, University of Craiova,
Romania

Lesia Kucher, Lviv Polytechnic National
University, Ukraine

Lóránt Dénes Dávid, Eötvös Loránd
University, Hungary

Laura Ungureanu, Spiru Haret University,
Romania

Sergey Evgenievich Barykin, Peter the
Great St. Petersburg Polytechnic University,
Russian Federation

Omar Abedalla Alananzeh, Faculty of
Tourism and Hotel Management, Yarmouk
University, Jordan

Marco Martins, Polytechnic Institute of
Tomar, Portugal

Konstantinos Antoniadis, University of
Macedonia Thessaloniki, Greece

Editor in Chief:

Ramona Pîrvu,
University of Craiova, Romania

Co-Editor:

Cristina Mihaela Barbu,
Spiru Haret University, Romania

Editorial Advisory Board:

Omrans Abdelnaser, University Sains
Malaysia, Malaysia

Huong Ha, Singapore University of Social
Sciences, Singapore

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

Andreea Marin-Pantelescu, Academy of
Economic Studies Bucharest, Romania

Piotr Misztal, The Jan Kochanowski
University in Kielce, Faculty of Management
and Administration, Poland

Agnieszka Mroziak, Faculty of Biology and
Environmental Protection, University of
Silesia, Katowice, 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

Lóránt Dénes Dávid, Eötvös Loránd
University, Hungary

Laura Ungureanu, Spiru Haret University,
Romania

Sergey Evgenievich Barykin, Peter the
Great St. Petersburg Polytechnic University,
Russian Federation

Omar Abedalla Alananzeh, Faculty of
Tourism and Hotel Management, Yarmouk
University, Jordan

Marco Martins, Polytechnic Institute of
Tomar, Portugal

Konstantinos Antoniadis, University of
Macedonia Thessaloniki, Greece

ASERS Publishing

<http://www.aserspublishing.eu>

ISSN 2068 – 7729

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

14	Integrated Urban Solid Waste Management: Knowledge, Practices, and Implementation Riza Stephanie A. ALFARAS	2328
15	Issues Concerning the Improving Organizational and Legal Support of Victimological Prevention for Environmental Crimes DaurenMALIKOV, Natalya SIDOROVA, Saltanat ATAKHANOVA, Manshuk RAKHIMGULOVA, Sholpan MALIKOVA, Larissa KUSSAINOVA	2336
16	Management of Bioculture Potential with Environmental Perspective Based on Local Wisdom Trio Beni PUTRA, Thamrin THAMRIN, Zulfan SAAM, Sofyan HUSEIN	2345
17	Analysis of the Environment Impact on the Inclusion of Children with Special Educational Needs Marzhan TURLUBEKOVA, Valeriy BIRYUKOV, Zulfiya MAGRUPOVA, Galiya KISHIBEKOVA, Roza BUGUBAYEVA	2354
18	Perception and Awareness of Marine Plastic Pollution in Selected Tourism Beaches of Barobo, Surigao del Sur, Philippines Sherley Ann T. INOCENTE, Carlo S. GUTIERREZ, Maria Pia M. SISON, John Roderick V. MADARCOS, Judea Christine M. REQUIRON, Christine Joy M. PACILAN, Shiela Mae M. GABOY, Jayson Leigh M. SEGOVIA, Hernando P. BACOSA	2367
19	Role of State Institutions in Protecting the Environment. Improving Management System of the Public Services Yuliya KIM, Serik DARIBEKOV, Laura KUNDAKOVA, Dinar SIKHIMBAYEVA, Gulnara SRAILOVA	2379
20	Interactive Planning as Part of a Territorial Strategy to Develop Tourism Sites Edwin RAMIREZ-ASIS, Abu Bakar Bin Abdul HAMID, Nor Hazila Binti Mohd ZAIN, Mohsin RAZA, Jose RODRIGUEZ-KONG, Cinthy ESPINOZA-REQUEJO	2390
21	Travels and Sustainable Tourism in Italy. Selected Dilemmas Michał MROZEK	2398
22	Safety Management Model of Tourism City Municipalities in Eastern Economic Corridor Chayapoj LEE-ANANT	2406
23	Impact of War on the Natural Preserve Fund: Challenges for the Development of Ecological Tourism and Environmental Protection Anatolii KUCHER, Anna HONCHAROVA, Lesia KUCHER, Mariia BIELOBORODOVA, Liudmyla BONDARENKO	2414
24	Sustainable Development and Environmental Tourism. The Case of Lake Karla – Thessaly, Greece Georgia TRAKALA, Aristotelis MARTINIS, Georgios KARRIS, Charicleia MINOTOU, Achilleas TSIROUKIS	2426
25	Post-COVID-19 Community-Based Tourism Sustainable Development in China. Study Case of Hebian Village Mingjing QU, Wong Ming WONG	2440
26	Predicting the Intention to Implement Green Practices by Small and Medium Sized Hotels in South Africa Proceed Lerato MASEBE, Olawale FATOKI	2455

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

Journal of Environmental Management and Tourism is an open access, peer-reviewed interdisciplinary research journal, aimed to publish articles and original research papers that contribute to the development of both experimental and theoretical nature in the field of Environmental Management and Tourism Sciences. The Journal publishes 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, modelling, simulation and optimization for environmental protection; environmental biotechnology, environmental education and sustainable development, environmental strategies and policies.

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.

Also, this journal is committed to a broad range of topics regarding Tourism and Travel Management, leisure and recreation studies and the emerging field of event management. It contains both theoretical and applied research papers and encourages obtaining results through collaboration between researchers and those working in the tourism industry.

The journal takes an interdisciplinary approach and includes planning and policy aspects of international, national and regional tourism as well as specific management studies. Case studies are welcomed when the authors indicate the wider applications of their insights or techniques, emphasizing the global perspective of the problem they address.

This issue has a special importance for us, marking a new stage in the history of this journal. So, starting with Issue 5(69), Fall 2023 **Journal of Environmental Management and Tourism** will be published in Open Access system. Journal of Environmental Management and Tourism' articles are published under the [Creative Commons Attribution 4.0 International License BB CY](https://creativecommons.org/licenses/by/4.0/), which permits unrestricted use, distribution, and reproduction in any medium, provided the original authors and the source are credited.

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

Details regarding the publication in this journal are here: <https://journals.aserspublishing.eu/jemt/about>

Deadline for submission:	21 st October 2023
Expected publication date:	December 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.v14.5\(69\).10](https://doi.org/10.14505/jemt.v14.5(69).10)

Development of a Model of Strategic Priorities for Sustainable Development of Rural Areas in Kazakhstan until 2030. Example of the East Kazakhstan Region

Kalamkas NURALINA

Eurasian National University named after L.N. Gumilyov, Republic of Kazakhstan

ORCID: 0000-0002-4516-9200; Researcher ID: JBS-6716-2023

nuralina73@mail.ru

Raisa BAIZHOLOVA

Eurasian National University named after L.N. Gumilyov, Republic of Kazakhstan

ORCID: 0000-0003-3873-6753; Researcher ID: P-7321-2014

aizholova_55@mail.ru

Yergali ABENOV

Eurasian National University named after L.N. Gumilyov, Republic of Kazakhstan

ORCID: 0000-0002-0243-9223; Researcher ID: JBS-7614-2023

aem11186@mail.ru

Dinara MUKHIYAYEVA

Eurasian National University named after L.N. Gumilyov, Republic of Kazakhstan

ORCID: 0000-0001-7141-724X; Researcher ID: P-7329-2014

dinara_muhiyaeva@mail.ru

Yerkezhan MOLDAKENOVA

Eurasian National University named after L.N. Gumilyov, Republic of Kazakhstan

ORCID: 0000-0003-4753-2672; Researcher ID: JBS-7625-2023

erke_totai_77@mail.ru

Article info: Received 28 March 2023; Received in revised form 21 April 2023; Accepted for publication 15 June 2023; Published 1 September 2023. Copyright© 2023 The Author(s). Published by ASERS Publishing 2023. This is an open access article distributed under the terms of CC-BY 4.0 license.

Abstract

The problems of sustainable development have been actively investigated by the scientific community. However, due to the difficulties of implementing this concept in practice, the focus of research is increasingly shifted to the study of certain aspects affecting the sustainable development of territories. In particular, this concerns the sustainable development of agriculture and rural areas, especially in socio-demographic, economic, and institutional aspects. The purpose of the article is to develop a model of strategic priorities for the sustainable development of rural areas in Kazakhstan until 2030. The article presents a model of strategic priorities for sustainable development of rural areas in the East Kazakhstan region according to socio-demographic and economic vectors, as well as institutional support with appropriate strategic goals, indicators, and target values. Solving the problem of sustainable development of rural territories is a long-term task, which can be achieved through the development of the economy of territories. The transition of rural territories to a sustainable development strategy will ensure effective farming, orientation to high standards of social protection of the rural population, multifunctional use of rural territories, preservation of the quality of the natural environment, and adaptation of institutional mechanisms to the functioning of rural agriculture and rural development.

Keywords: rural areas; strategic priorities; socio-demographic vector; economic vector; institutional support; transformation of economic processes.

JEL Classification: O18; O44; Q15.

Introduction

Considering modern global challenges, first of all, problems of ecology, rational use of natural resources, and food provision for all segments of the population (Syahidun and Nawangsari 2022, 154), the trend of socio-economic policy at the international and national level of developed countries is the concept of sustainable development (Ábel and Kóbor 2022; Michurina 2022, 349).

The full-fledged existence and sustainable socio-economic development of rural areas, including in Kazakhstan (Nardin and Nardina 2021, 1242), directly affects the level of food, environmental, and, consequently, economic security of the country (Marhasova *et al.* 2022, 441) and, in turn, depends not only on the efficiency of the functioning of agro-industrial enterprises located on them but above all on effective state policy (Voronov *et al.* 2023, 61).

In this connection, the need to substantiate the strategic priorities of sustainable rural development determines the relevance of the topic under consideration.

1. Literature Review

At the present stage of the development of social relations, rural territories are considered complex natural and economic territorial systems (Khoruzhy *et al.* 2023), the development of which is determined mainly by the degree of maturity of the internal systemic integration links between the economy (Lošonczi *et al.* 2022, 1411), social environment, and governing bodies (Agibalov and Kleimenov 2017). They are characterized by manifestations of the following specific qualities: integrity (unity of goals, functions, and structure), autonomy (striving for better orderliness), relative stability (preservation and development of internal structure), and two-dimensionality of management (allocation of common regional priorities, differentiation of economic standards of the state and economic interests of agricultural entities, local initiatives of rural population) (Merenkova 2017).

Researchers understand rural development as the sustainable development of rural areas, which ensures the growth, diversification, and improvement of the efficiency of the rural economy (Menshchikova 2013, 75), stabilization of the population and an increase in life expectancy (Brylev and Turchaeva 2020, 76), full and productive employment of the able-bodied population (Irkhina and Khrestina 2020, 58), improvement of the level and quality of life in rural areas (Molchanova and Abryandina 2016, 103), and rational use and reproduction of their natural resource potential (Grekov 2014, 62).

The issue of sustainable development of rural areas, according to scholars, is caused by the following reasons: fatigue of people in many countries from too highly urbanized civilization (Germanovich *et al.* 2020, 965) and the growing prestige of rural lifestyle as an alternative to urban (Tulla *et al.* 2017, 25); understanding that progress and harmonious development of society as a whole are impossible without sustainable development of rural areas (Masot and Gascón 2021); the growing crisis of rural life and the transformation of rural regions into zones of poverty and social disadvantage (Shaporova and Tsvetysykh 2020, 23); inefficiency/impossibility of using development mechanisms suitable for urban communities in rural areas (Loskutova 2013, 67).

According to researchers, sustainable development of rural areas has two directions: 1) sustainable development of rural settlements intended for the development and residence of the population with the development of appropriate engineering, transport, and other infrastructure (Sagaidak and Selyanskii 2021, 432); 2) stable development of rural settlements and their surrounding territories in terms of increasing agricultural production and agricultural efficiency, achieving full employment of the rural population, improving their standard of living, and rational use of land (Martynov 2014, 28).

The study of the situation in the social sphere of the village reflects the processes that ensure human life in society (Kashina *et al.* 2022, 2413). Its impact on the sustainable development of territories (Bantserova and Kasimova 2023, 939) can be divided into the following areas: the demographic sphere, the socio-industrial sphere, and the level and quality of life (Vartanova 2019, 1925). Improving the level and quality of life of the rural population, on the one hand, is a goal; on the other, it is a necessary condition for ensuring sustainable development of rural areas (Satybalidin *et al.* 2021, 6).

Criteria for assessing the level and quality of life of the rural population as indicators of sustainable development of rural areas are identified based on the concept of sustainable economic development of society (Moroz *et al.* 2020, 166). The main among them are the growth of real income and reduction of the gap from urban indicators (Skalnaya 2018, 62); reduction of poverty and social differences and formation of population groups with average incomes (Kizimbayeva and Saubetova 2021, 22); fair assessment of the level of wages and absence of delay of all types of payments (Gushchin and Kuznetsova 2014, 126); improvement of socio-psychological state and the confidence of rural the population in their future and the future of their children (Digilina *et al.* 2017, 125); improvement of the quality and level of social services available to rural residents and

preservation of the core of social infrastructure (Akupiyan and Kapinos 2018, 50). To no less extent, the sustainable development of rural areas depends on the filling of local budgets, a significant part of which is formed at the expense of their tax revenues (Anichin *et al.* 2020, 118).

Studies of sustainable development of rural territories in the Republic of Kazakhstan are focused on ensuring balanced economic, demographic, and social development of rural territories based on increasing competitiveness (Muhardi *et al.* 2020, 1025), the profitability of agricultural production and expansion of non-agricultural entrepreneurship in rural areas (Figus and Shaikin 2019, 27), protection and rational use of natural, labor, and production resources of rural territories (Seidakhmetova *et al.* 2022, 1993), and achievement of social standards and living standards for the rural population (Kornilova *et al.* 2022, 2248). However, in general, the problem of strategic priorities for the sustainable development of rural areas in the scientific literature of Kazakhstan remains little explored.

In this connection, the purpose of the article is to determine the strategic priorities of sustainable development of rural areas based on the example of the East Kazakhstan region.

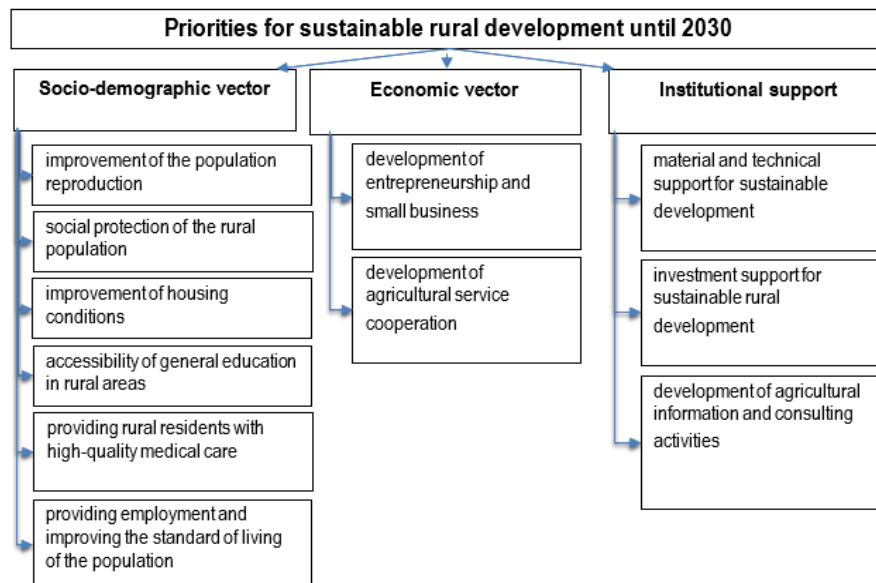
2. Methods

The study was conducted in the period from November 30, 2022, to December 30, 2022. We performed both field (at enterprises and organizations of the East Kazakhstan region) and desk research (at the Eurasian National University named after L.N. Gumilyov).

A qualitative approach to the study was chosen to achieve the research goal.

The rural population in Kazakhstan accounts for 38.3% of the available population (as of October 1, 2022), and agricultural land accounts for more than 70% of the country's land fund. The sustainability of rural development largely determines the sustainable socio-economic development of the country as a whole. Based on the need to understand the priorities of sustainable development, we developed a model of priorities for sustainable development of rural areas in Kazakhstan until 2030 (Figure 1).

Figure 1. Model of priorities for sustainable development of rural areas in Kazakhstan until 2030



To determine the indicators and targets (2030), we analyzed the Internet resources of the district Akimats of the East Kazakhstan region, based on which the selection of experts was carried out, including employees of Akimats responsible for the development of rural areas.

The expert sample consisted of 48 experts, three employees from each district Akimat, to whom e-mails were sent indicating the purpose and program of the research. Of the experts to whom letters were sent, 44 experts agreed to participate in the study and provide the necessary information.

The field study consisted in analyzing the current situation with the development of rural areas in the districts of the East Kazakhstan region and in-depth interviews with experts to determine the priorities of sustainable development of rural areas in the East Kazakhstan region.

During the interview, the purpose of the study was explained, and open-ended questions were asked, outlined to clarify the views and opinions of the experts on the priorities of sustainable rural development. The duration of each interview averaged 25-30 minutes.

During the desk study, the analysis of scientific sources on the problem of sustainable development of rural areas, as well as strategic and/or program documents of district Akimats provided by the experts by e-mail, aimed at solving the problem of sustainable development of rural areas in the East Kazakhstan region, was carried out.

3. Results

We justified the strategic priorities of sustainable rural development for the period until 2030 based on the results of the expert survey and the analysis of the strategic and program documents.

Strategic priorities with corresponding indicators and their target values are presented in Tables 1-3.

Table 1. Strategic priorities for the socio-demographic vector

Indicators	Targets (2030)
Improvement of the population reproduction	
increase in the total fertility rate of the rural population	12.4 people per 1,000 people of the existing population
increase in the total fertility rate of the rural population	2.215 children per woman
reduction of the overall mortality rate of the rural population	12.4 people per 1,000 people of the existing population
stabilization of the rural population	12,450 thousand people of the rural population
Social protection of the rural population	
coverage of rural residents by the social protection system through the introduction of social packages for employees and the creation of a mobile social service network in rural areas; increasing the level of provision of rural disabled people with the necessary means of rehabilitation (prosthetic and orthopedic products, self-service transport, etc.)	100% coverage of social services for pensioners, disabled, and single disabled citizens in rural areas
	annual increase in the share of social benefits to the poor who live in rural areas by 5-10%
Providing rural residents with high-quality medical care	
construction of new and restoration of the functioning of hospitals in large (more than 1 thousand) and medium (more than 500 inhabitants) settlements; maintenance of health care facilities in the rural settlement network following regulatory requirements	construction of new hospital facilities in large and medium-sized villages, as well as the restoration and repair of old hospital facilities in them, which will increase the security of the settlement network by 1,520% and significantly improve the quality of medical care for the rural population
Accessibility of general education in rural areas	
restoration of preschool institutions in those localities where there is a need for it; the opening of schools in large (more than 1,000 residents) villages that do not have them, but 50 children or more aged 6-17 years live in them; construction of new and major repairs of schools in large and medium (until 500 residents) rural settlements where 2,050 children live	opening of new preschool institutions and schools in large villages; carrying out major repairs in 35% of the existing number of preschool institutions and 40% of the existing schools in rural areas
Improvement of housing conditions in rural areas	
increasing the housing stock in rural areas providing young families with housing and land plots for the construction of new housing	an increase in the housing stock in rural areas by 3.3% according to the optimistic forecast (according to the pessimistic forecast by 1%)
	providing young families with housing within the norm (21 m ² per inhabitant)
Providing employment and improving the standard of living of the rural population	
increasing and stabilizing the level of employment in rural areas	employment rate of the population in rural areas is 80%
increasing the level of formal employment in rural areas	share of the informally employed rural population in the total number of employed in rural areas is 10%
growth in the volume and share of wages and income from entrepreneurial activity in the monetary income of households	share of wages and income from entrepreneurial activity in the monetary income of households is 80%

Note: compiled by the authors based on the expert survey and analysis of strategic and program documents of district Akimats

Table 2 - Strategic priorities for the economic vector

Indicators	Targets (2030)
Development of entrepreneurship and small-scale farming in rural areas	
increase in the number of small and medium-sized businesses and employment in business structures operating in rural areas; an increase in the share of income of rural households from entrepreneurship and self-employment	creation of business structures in all rural settlements based on transformed personal farms; annual creation of new small enterprises in rural areas at the level of 1.5-2 thousand units
	share of income of rural households from entrepreneurship and self-employment is 13%
Development of agricultural service cooperation	
creation of a network of agricultural service cooperatives and the formation of new jobs in cooperative structures; the level of coverage of farms of the population agricultural we cooperatives	creation of agricultural service cooperatives (1 cooperative for 3-4 rural settlements)
	creation of 50 thousand new jobs in the rural cooperative network; coverage by agricultural cooperatives of over 30% of households; achievement of a 15% share of cooperative trade in the total volume

Note: compiled by the author based on the expert survey and analysis of strategic and program documents of district Akimats

Table 3. Strategic priorities for institutional support

Indicators	Targets (2030)
Material and technical support for rural development	
formation of the material and technical base following the regulatory need	increasing the volume of fixed assets of production to the standard level
increasing the supply of agricultural machinery, including national producers	achievement of the annual technological need for technical means, provision of technological needs with equipment of national production at the level of 55%
increasing security of agriculture with environmentally safe means of production	provision of agricultural production with fixed assets that meet environmental standards at the level of 50%
Investment support for rural development	
level of ensuring the production of agricultural products with capital investments	increase in capital investments in agricultural production up to \$170-220 per 1 ha of agricultural land
increasing capital investment in agricultural production	annual increase in capital investment in agricultural production by 10-12% the ratio of own and attracted financial resources of rural producers 2 : 1
increasing the investment potential of rural producers in the context an optimal ratio between their own and attracted sources of financing resources	ratio between own and attracted financial resources of rural producers 2 : 1
support for investment in small agricultural businesses	ensuring the needs of personal peasant and farm households in attracted sources of investment financing by 100% through the support of small agribusiness investments
Development of agricultural information and consulting activities	
integrated system of information and consulting activities developed at the local level	creation of an effective information and consulting system based on a mixed model, where the state component is the main one
percentage of consulting services coverage	achievement of 90% coverage of the population of rural areas with socially oriented consulting services
increase in revenues to budgets of various levels	increase in income due to the increase in the efficiency of agricultural production and the development of rural entrepreneurship

Note: compiled by the author based on the expert survey and analysis of strategic and program documents of district Akimats

3. Discussion

The development of rural areas in Kazakhstan is conditioned by the urgent demand for modernity to get rid of the negative realities that have accumulated in the agricultural and social spheres of the village. Therefore, the model of the rural development strategy developed by us is based on the preservation and enrichment of the human potential of the village. The main strategic priority of the experts was identified as "Improving the reproduction of the population". The achievement of its goals is based on the satisfaction of human needs and the creation of attractive conditions for living and working in rural areas, which determine the economic and social vectors of sustainable development consistent with the results of the study ((Vartanova 2019, 1925).

According to the results of an expert survey, the accessibility of the rural population to social services is low; therefore, the formation of conditions for sustainable development of rural areas is closely related to solving the social problems of the village and achieving social standards and living standards for the rural population. In this connection, the following strategic priorities are defined:

- "Social protection of the rural population", the general purpose of which is to create the social usefulness of rural areas to ensure everyone's access to vital social benefits regardless of the place of residence, which is consistent with the opinion expressed in the work (Sagaidak and Selyanskii 2021, 432);
- "Providing rural residents with high-quality medical care", the purpose of which is to form a qualitatively new system of qualified medical care based on the maximum preservation of the existing and development of a new network of healthcare institutions, the development of new progressive forms of medical care, and the preservation of its accessibility, which is consistent with the opinion expressed in (Grekov 2014, 62);
- "Accessibility of general education in rural areas", which provides for ensuring optimal accessibility of high-quality preschool, general secondary (mandatory) education to every rural child, extracurricular, vocational, special secondary, and higher (optional) education to every citizen, regardless of their place of residence, health status, social background, and financial opportunities;
- "Improvement of housing conditions in rural areas", which means providing residents with comfortable housing that will meet the modern needs of various categories of the rural population and technological, economic, and environmental requirements.

Speaking about the economic vector of strategic priorities for sustainable development of rural areas, the experts noted that the financial ability to develop rural areas is fundamental. The determining factor in the growth of Akimats' incomes is to ensure the fullest and most productive employment of rural residents with an increase in their income in terms of wages and business activities.

The problem of poverty in rural areas, which has a large-scale and consistent nature, remains unresolved and leads to harmful long-term effects (Skalnaya 2018, 62). Traditionally, the total resources and monetary incomes of households in urban settlements are greater than in rural areas (by 7-10%) (Digilina *et al.* 2017, 125). The level of wages in agriculture, as in the main sphere of employment of rural residents, is lower than the average for the national economy (in the last 5 years by 23-40%), and incomes from entrepreneurial activity in rural areas do not exceed 6% of total incomes (Kizimbayeva and Saubetova 2021, 22). Therewith, employment problems remain acute in rural areas:

- there is a steady downward trend in the number of the economically active population in rural areas and employment in rural areas, which does not exceed 61%;
- rural employment, unlike urban settlements, is characterized by instability, proving significant fluctuations in the levels of economic activity and employment in rural areas;
- in rural areas, the problem of informal employment is particularly acute, because the share of informally employed in the total number of employed aged 15-70 is 40-50%.

Considering the above, as one of the strategic priorities, "Ensuring employment and improving the standard of living of the rural population" is justified. Its strategic goal is to guarantee the right to work to every able-bodied resident of the village to provide opportunities to implement their knowledge and professional and entrepreneurial abilities and to receive remuneration for their work that corresponds to a decent standard of living.

Ensuring employment is associated with the development of entrepreneurship in rural areas, therefore, the next strategic priority is defined as "Development of entrepreneurship and small forms of farming in rural areas", the purpose of which is to form a competitive business environment capable of providing employment and income growth for the able-bodied rural population, promoting agricultural products on the most favorable terms for agricultural producers and increasing the incomes of rural enterprises, households, and communities.

In the developed countries of the world, the successful business model of the rural economy is cooperation. Considering the proven success of this business model (Tulla *et al.* 2017, 25), one of the strategic

priorities is "Development of agricultural service cooperation", the strategic goal of which is the further formation of the cooperative sector for the development of an effective system of servicing agricultural producers and the population on the most favorable conditions for them and with their direct participation.

The experts substantiated strategic priorities for creating institutional conditions for development to ensure the implementation of the main directions of sustainable development of rural areas by social and economic vectors.

- "Material and technical support for the development of production and rural areas", aimed at increasing, both quantitatively and qualitatively, the provision of rural areas with capital investments that guarantee the effective execution of the entire volume of agricultural production based on modern environmentally friendly technologies and the creation of a material and technical base for business activity in the rural areas;

- "Investment support for the development of production and rural areas", providing for the establishment of the adequate conditions in order to increase the production of agricultural products based on the use of high technologies and the export orientation of the agricultural producer, meeting the needs of its own citizens in agricultural products, increasing the number of jobs in rural areas and increasing the income of rural residents.

The rapid change in production technologies and legislation, changes in demand in the market for the products of the rural economy, lead to an increase in the need for rural entrepreneurs and local authorities in consulting services. The lack of a system of advisory services developed at the local level, their low coverage due to the lack of a sufficient volume of supply hinders the development of rural entrepreneurship.

This leads to the justification of such a strategic priority as "Development of agricultural information and consulting activities", the purpose of which is to form an effective system of consulting services for the rural population aimed at improving the skills of conducting agricultural, entrepreneurial and other activities.

Conclusion

The model of the sustainable development strategy developed by us is focused on long-term economic development (as a basis for meeting human needs) and is based on certain conditions and standards (indicators). For the sustainable development of rural areas, regional and local programs for the socio-economic development of rural areas should be adopted and implemented, primarily aimed at increasing employment and incomes of the rural population, developing local self-government, and stimulating entrepreneurship in rural areas.

The implementation of the proposed model of sustainable development of rural areas is a long-term task, which can be achieved through the development of the economy of the territories. The limitation of the research results that affect the implementation of the proposed model is the attraction of long-term investments and the effective organization of economic programs and projects that can create the necessary financial flows to ensure the successful implementation of the model of sustainable socio-economic development of rural areas in Kazakhstan.

The transition of rural territories to a sustainable development strategy will ensure effective farming, orientation to high standards of social protection of the rural population, multifunctional use of rural territories, preservation of the quality of the natural environment, and adaptation of institutional mechanisms to the functioning of agriculture and rural development.

Acknowledgments

No funds, grants, or other support was received.

Credit Authorship Contribution Statement

Kalamkas Nuralina: Conceptualization, Investigation, Formal Analysis, Writing – original draft.

Raisa Baizholova: Conceptualization, Methodology, Supervision, Validation, Writing – review and editing.

Yergali Abenov: Conceptualization, Methodology, Supervision, Validation, Writing – review and editing.

Dinara Mukhiyayeva: Project Administration, Data Curation, Validation, Writing – review and editing.

Yerkezhan Moldakenova: Project Administration, Data Curation, Validation, Writing – review and editing.

Declaration of Competing Interest

The authors have no conflicts of interest to declare that are relevant to the content of this article.

References

- [1] Ábel, I., and Á. Kóbor. 2022. Macroeconomic components of the risks to fiscal sustainability in Hungary. *Risks* 10(11): 201. <https://doi.org/10.3390/risks10110201>

- [2] Agibalov, A.V., and D.S. Kleimenov. 2017. *Sovershenstvovanie Upravleniya Razvitiem Selskikh Territorii: Monografiya*. Voronezh: VGAU, 171 p. (in Russian)
- [3] Akupiyani, O.S., and R.V. Kapinos. 2018. Innovatsionnye podkhody k razvitiyu selskikh territorii. *Innovatsii v APK: Problemy i perspektivy: teoreticheskii i nauchno-prakticheskii zhurnal* 3: 50-59. (in Russian)
- [4] Anichin, V.L., A.I. Dobrunova, and N.P. Epifantsev. 2020. Byudzhetnye aspekty ustoichivogo razvitiya selskikh territorii. *Innovatsii v APK: Problemy i perspektivy: Teoreticheskii i nauchno-prakticheskii zhurnal* 1: 118-28. (in Russian)
- [5] Bantserova, O.L., and A.R. Kasimova. 2023. Bionic approach to the organization of architectural objects in the sustainable development paradigm. *Civil Engineering and Architecture* 11(2): 939-47. DOI:<https://doi.org/10.13189/cea.2023.110230>
- [6] Brylev, A., and I. Turchaeva. 2020. Metodologicheskie aspekty issledovaniya ustoichivogo razvitiya selskikh territorii. *APK: Ekonomika, upravlenie: Teoreticheskii i nauchno-prakticheskii zhurnal* 10: 76-94. (in Russian)
- [7] Digilina, O.B., N.D. Yesmagulova, and T.H. Raskaliyev. 2017. Regional aspects of dairy development industry in the Republic of Kazakhstan. *Problems of AgriMarket* 4: 125-32.
- [8] Figus, A., and D. Shaikin. 2019. Kazakhstan: Socio-economic development, research, and innovation. *Academic Journal of Interdisciplinary Studies* 8(4): 27-39.
- [9] Germanovich, A., O. Vasilieva, M. Ordynskaya, L. Allanina, and A. Gorokhova. 2020. Impact of tourism on sustainable development of rural areas: International experience. *Journal of Environmental Management and Tourism* 11(4): 965-72. [https://doi.org/10.14505/jemt.11.4\(44\).21](https://doi.org/10.14505/jemt.11.4(44).21)
- [10] Grekov, A.N. 2014. Osnovnye napravleniya i instrumenty obespecheniya ustoichivogo razvitiya selskikh territorii. *Nauka i biznes: Puti razvitiya* 1(31): 62-8. (in Russian)
- [11] Gushchin, N.E., and I.Yu. Kuznetsova. 2014. Ustoichivoe razvitie selskikh territorii: Pravovoe obespechenie [Sustainable development of rural areas: Legal support]. *Vestnik Saratovskoi gosudarstvennoi yuridicheskoi akademii* 2(97): 126-31. (in Russian)
- [12] Irkhina, L.N., and S.F. Khrestina. 2020. Ustoichivoe razvitie selskikh territorii kak realizatsiya gosudarstvennoi politiki. *Vestnik Nizhegorodskoi gosudarstvennoi selskokhozyaistvennoi akademii* 2: 58-64. (in Russian)
- [13] Kashina, E., G. Yanovskaya, E. Fedotkina, A. Tesalovsky, E. Vetrova, A. Shaimerdenova, and M. Aitkazina. 2022. Impact of digital farming on sustainable development and planning in agriculture and increasing the competitiveness of the agricultural business. *International Journal of Sustainable Development and Planning* 17(8): 2413-20. <https://doi.org/10.18280/ijstdp.170808>
- [14] Khoruzhy, L.I., Yu.N. Katkov, EA. Katkova, V.I. Khoruzhy, and M.K. Dzhikiya. 2023. Opportunities for the application of a model of cost management and reduction of risks in financial and economic activity based on the OLAP technology: The case of the agro-industrial sector of Russia. *Risks* 11(1): 8. DOI:<https://doi.org/10.3390/risks11010008>
- [15] Kizimbayeva, A.B., and B.S. Saubetova. 2021. Relevant issues of social and economic stability of rural areas of the Republic of Kazakhstan. *Problems of AgriMarket* 1: 22-7.
- [16] Kornilova, A., S. Mamedov, G. Karabayev, Y. Khorovetskaya, and I. Lapteva. 2022. Identification of regional factors affecting management of territories: Formation of residence and social infrastructure system in urban and rural settlements in Kazakhstan. *Journal of Environmental Management and Tourism* 13(8): 2248-54. [https://doi.org/10.14505/jemt.13.8\(64\).17](https://doi.org/10.14505/jemt.13.8(64).17)
- [17] Loskutova, M.V. 2013. Upravlenie ustoichivym razvitiem selskikh territorii v agropromyshlennom regione. *Sotsialno-ekonomicheskie yavleniya i protsessy* 9(055): 67-71.
- [18] Lošonczi, P., I. Britchenko, and O. Sokolovska. 2022. Analysis of the main threats to the system of sustainable development and planning of the region in the context of ensuring the economic security of the state. *International Journal of Sustainable Development and Planning* 17(5): 1411-6. DOI:<https://doi.org/10.18280/ijstdp.170504>

- [19] Marhasova, V., S. Tulchynska, O. Popelo, O. Garafonova, I. Yaroshenko, and I. Semykhulyna. 2022. Modeling the harmony of economic development of regions in the context of sustainable development. *International Journal of Sustainable Development and Planning* 17(2): 441-8. DOI:<https://doi.org/10.18280/ijstdp.170209>
- [20] Martynov, K.P. 2014. Sotsialnye problemy ustoichivogo razvitiya selskikh territorii Rossii. *Vestnik Moskovskogo gosudarstvennogo universiteta. Seriya: Ekonomika* 2: 28-36. (in Russian)
- [21] Masot, A.N., and J.L.G. Gascón. 2021. Sustainable rural development: Strategies, good practices and opportunities. *Land* 10: 366. <https://doi.org/10.3390/land10040366>
- [22] Menshchikova, V.I. 2013. Ustoichivoe razvitie selskikh territorii: Terminologicheskii analiz. *Sotsialno-ekonomicheskie yavleniya i protsessy* 9(055): 75-81. (in Russian)
- [23] Merenkova, I.N. 2017. *Ustoichivoe Razvitie Selskikh Territorii: Teoriya, Metodologiya, Praktika*. Voronezh: GNU NIIEOPK TsChR Rossii, 265 p. (in Russian)
- [24] Michurina, F. 2022. Sustainable development and environmental protection in the context of ecotourism promotion in Russia. *International Journal of Ecosystems and Ecology Science* 12(4): 349-56. DOI:<https://doi.org/10.31407/ijeess12.443>
- [25] Molchanova, A.V., and V.V. Abryandina. 2016. Aktualnye problemy ekonomicheskoi ustoichivosti selskoi mestnosti. *Ekonomika, trud, upravlenie v selskom khozyaistve: Nauchno-prakticheskii zhurnal* 1: 103-6. (in Russian)
- [26] Moroz, O. V., N.P. Karachyna, T.V. Vakar, and A.V. Vitiuk. 2020. Territorial branding as an instrument for competitiveness of rural development. *Academic Journal of Interdisciplinary Studies* 9(3): 166-75. DOI:<https://doi.org/10.36941/ajis-2020-0052>
- [27] Muhandi, M., A.Y. Mafruhah, C. Cintyawati, T.A. Ramli, R. Sabar, H. Ahmad, S. Shaharruddin, and A.M. Bohari. 2020. New holistic strategy of sustainable rural development management-experience from Indonesia: A PESTEL-SOAR analysis. *International Journal of Sustainable Development and Planning* 15(7): 1025-33. DOI: <https://doi.org/10.18280/ijstdp.150707>
- [28] Nardin, D., and S. Nardina. 2021. Management of natural-anthropogenic complexes of rural territories in the context of the post-non-classical type of scientific rationality. *Journal of Environmental Management and Tourism* 12(5): 1242-7. DOI: [https://doi.org/10.14505/jemt.v12.5\(53\).09](https://doi.org/10.14505/jemt.v12.5(53).09)
- [29] Sagaidak, A.A., and M.S. Selyanskii. 2021. Problemy ustoichivogo razvitiya selskikh territorii v sovremennykh usloviyakh. *Zemleustroistvo, kadastr i monitoring zemel: Nauchno-prakticheskii zhurnal* 6: 432-8. (in Russian)
- [30] Satybalidin, A.A., A.T. Tleuberdinova, and X.V. Kulik. 2021. Conceptualizing of rural settlements development. *Economics: The Strategy and Practice* 16(3): 6-21 (in Kazakh).
- [31] Seidakhmetova, A., D. Kaldiyarov, S. Dyrka, A. Bedelbayeva, and A. Kaldiyarov. 2022. Development of ecosystem stability as a tool for managing agricultural areas in the Republic of Kazakhstan: Problems and opportunities for their resolution. *Journal of Environmental Management and Tourism* 13(7): 1993-2001. DOI:[https://doi.org/10.14505/jemt.v13.7\(63\).19](https://doi.org/10.14505/jemt.v13.7(63).19)
- [32] Shaporova, Z.E., and A.V. Tsvettsykh. 2020. Essence and criteria for sustainable development of rural territories. *IOP Conference Series: Earth and Environmental Science* 548(2): 23-47.
- [33] Skalnaya, M. 2018. Dokhody selskogo naseleniya kak faktor sotsialnoi ustoichivosti selskikh territorii [Income of the rural population as a factor in the social sustainability of rural areas]. *APK: Ekonomika, upravlenie: Teoreticheskii i nauchno-prakticheskii zhurnal* 1: 62-71. (in Russian)
- [34] Syahidun, and L.C. Nawangsari. 2022. The effect of green human capital, green structural capital and green relation capital on company sustainability by mediating green environment management. *Academic Journal of Interdisciplinary Studies* 11(5): 154-69. DOI: <https://doi.org/10.36941/ajis-2022-0132>

- [35] Tulla, A.F., A. Vera, N. Valdeperas, and C. Guirado. 2017. New approaches to sustainable rural development: Social farming as an opportunity in Europe? *Human Geographies – Journal of Studies and Research in Human Geography* 11(1): 25-40.
- [36] Vartanova, M.L. 2019. Povyshenie urovnya i kachestva zhizni naseleniya – Glavnaya zadacha ustoichivogo razvitiya selskikh territorii. *Ekonomicheskie otnosheniya* 9(3): 1925-38. (in Russian)
- [37] Voronov, O., L. Kurnosenko, I. Bezena, N. Petryshyn, S. Kornievskyi, and B. Ilychok. 2023. Public administration of planning for the sustainable development of the region in the context of total digitalization. *International Journal of Sustainable Development and Planning* 18(1): 61-7. DOI:<https://doi.org/10.18280/ijmdp.180106>

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.v14.5\(69\).00](https://doi.org/10.14505/jemt.v14.5(69).00)