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# MANAGEMENT OF SUSTAINABLE DEVELOPMENT OF RURAL TERRITORIES AS AN INNOVATIVE FACTOR OF ECONOMIC GROWTH OF KAZAKHSTAN

**Abstract.** Expanded reproduction in agricultural organizations, self-organization of economic entities, diversification of the rural economy and technological renewal of its industries in the agro-industrial complex; attraction of investments - the main directions of increasing the sustainability of rural development, promoting optimal use of resources, stable development of the rural economy, profitability of agricultural producers, improving the quality and standard of living of the rural population. Within the boundaries of concrete rural territories, the vital activity of the population living here is carried out and a certain way of life is formed. That is why the rural territory serves as the fundamental and most important object for the development of agriculture and the agri-food complex as a whole. The rural population is the custodian of traditional culture and morality of the population of Kazakhstan.

Keywords: sustainable, rural areas, innovation, agriculture, agriculture.

## INTRODUCTION

The sustainable development of rural areas is understood as a complete dynamic process of positive changes in indicators that determine the social, financial and ecological condition of rural lands, aimed at expanded reproduction of agricultural producers through a forecast system. diversification of their agricultural production, attraction of investments, application of innovations with the help of effective actions of state authorities, local initiatives and components of self-organization of economic entities, providing for resource potential and historical and cultural specifics of rural settlements [1].

Stability - resilience, consistency, exposure to the risk of loss and loss.

## **MAIN PART**

The author identifies such characteristic features of rural areas as (in addition to the above characteristics of a general nature):

- several settlements located near each other and united by a particular attribute or infrastructure into a rural territory;
  - agricultural area, located in the geographical boundaries of the same local authorities;
- on the territory there are economic entities engaged in various types of activities related to agriculture
  - social infrastructure objects are located on the territory.

Sustainability is a complex, multifaceted concept. There are different approaches to the definition of the concept of "sustainability" (Table 1). The diversity of approaches to the interpretation of the concept of "sustainability" allows us to conclude about the multidimensionality of this category.

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Table 1 - The essence of the category of economic "sustainability"

Author	Definition
Raizberg B.A. [2]	The sustainability of an enterprise is the financial condition of an enterprise whose business activity in normal conditions ensures the fulfillment of all its obligations to employees, other organizations, and the state thanks to sufficient income and compliance with income and expenses.
Kulbak N.A. [3]	Sustainability is an equilibrium balanced state of economic resources that provides stable profitability and normal conditions for expanded reproduction and sustainable economic growth, in the long term, taking into account the most important external factors.
Afanasyev V.P. [4]	Sustainability is consistently increasing volumes of consumer values with minimal impact of adverse conditions, improving their structure with optimal efficiency, ensuring expanded reproduction.
Golovaneva U.V. [5]	Sustainability is the ability of all elements that make up the enterprise system to maintain a state of rest, and if possible, a positive movement with both external influences and internal to the activities of the enterprise.
Bryantseva I.V. [6]	Economic sustainability is a state of an enterprise in which the socio-economic parameters that characterize it retain their original equilibrium and are within specified limits when exposed to the internal and external environment.
Zakharchenko V.I. [7]	The economic sustainability of an enterprise is a complex of organizational, innovation, logistic, production, financial and credit properties, taking into account their mutual influence and interaction.
Compiled by the authors on the basis of sources [2], [3], [4], [5], [6], [7].	

Summarizing the above definitions, it can be noted that economic sustainability, in the opinion of most authors, is the ability of a system to restore certain of its parameters when they deviate as a result of environmental factors.

Solving problems in the field of sustainable development of rural areas is impossible without their comprehensive assessment, which reflects the socio-economic status of rural areas and allows you to develop effective organizational and economic measures to improve their sustainable development, taking into account the resource potential, territorial, historical and cultural characteristics. State regulation of sustainable development of rural areas contributes to the development of measures to ensure the legal aspect of the implementation of social, economic and environmental components of rural areas.

Expanded reproduction in agricultural organizations, self-organization of economic entities, diversification of the rural economy and technological renewal of its industries in the agro-industrial complex; attraction of investments - the main directions of increasing the sustainability of rural development, promoting optimal use of resources, stable development of the rural economy, profitability of agricultural producers, improving the quality and standard of living of the rural population.

Today, the level of financing of social infrastructure in rural areas is largely dependent on local budgets, which, in turn, depend on the production activities of enterprises operating in the territory of the respective local councils.

In addition, the results of the research of V. Gorevy and other scientists determine:

- that the level of improvement of rural housing for the most part does not meet modern requirements;
  - in an unsatisfactory condition in the village there are objects of education, health care and culture;
- accessibility of the rural population to social services is constantly decreasing from year to year, their assortment and quality is also deteriorating" (46.5% of the total number of villages without first-aid and obstetric centers, only 31.2% of villages are provided with children's institutions, 48.7% schools, 57.8% cultural institutions of club type), etc.

Of particular interest in the aspect under study is the use of alternative sources of electricity generation for providing tourist accommodation places. The most widespread sources of energy in international practice regarding the subject under investigation are helio and wind energy. However, for Kazakhstan today hydropower is the most low-cost and highly profitable.

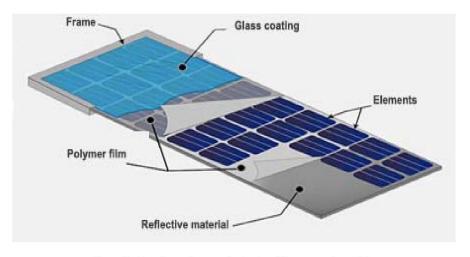
The method of using solar energy is based on the conversion of solar radiation into electricity through the use of specialized technologies and is called "solar generation". Solar radiation used to transform into electricity by solar generation is electromagnetic radiation with a range of 2.8 - 3.0 microns. In this case, for solar generation, 3 types of electromagnetic waves are used, namely, ultraviolet waves, light waves and infrared radiation waves. Light waves form the basis, occupying 49% of the total volume in the process of solar generation. Unfortunately, the number of sunny days in the Akmola region does not prevail over cloudy, and therefore the use of solar radiation is not an efficient way to produce energy for this region.

In turn, wind energy is an indirect form of solar energy, which is a consequence of the temperature difference in the atmosphere of the earth.

About 2% of the incoming solar energy to Earth is converted into wind energy. The wind is a very large renewable source of energy. His energy can be used in almost all areas of the Earth. This gives grounds to assert that the production of electricity from wind power plants is extremely attractive, but at the same time technically challenging, the main difficulties in relation to which are a high degree of distraction of wind energy and its variability [8].

Speaking about the method of realization of solar generation, it should be noted that such is carried out by means of photovoltaic cells. In turn, the main technologies of solar generation, the most widely used in modern practice, are photovoltaics, and solar thermal energy.

The production of electricity through the photovoltaic effect is carried out according to the principle of accumulation on the installed photocell of sunlight, the energy of which, reacting, is absorbed by electrons, which sets electrons in motion, which in turn generates an electrical voltage. Solar cells (batteries) are used as photovoltaic cells for this technology of solar energy production [9]. The panels are assembled from several elements - modules, which in turn represent a complex of photoelectric converters (FEP) installed on the reflective material, as the basis of the module, between which is placed a polymer film. Visually, the photovoltaic mole and its structure are displayed using figure 9.

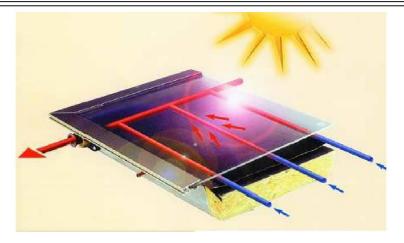


Compiled by the author on the basis of literature data [56] Figure 10 - Structure of the solar panel module

Also in recent years, solar thermal energy has gained special popularity. The production of electricity using this technology is based on the use of solar radiation to heat a fluid located in a special vessel of the solar thermal installation. When heated, the liquid is converted into steam by means of which the turbine of the installation is rotated, which leads to the production of electricity. In addition to the water tank, the installation also includes a set of thermal solar panels located around the tank, which contribute to the heating of water.

Clearly, the principle of using the technology of solar thermal energy is displayed using Figure 11.

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Compiled by the author on the basis of literature data [9] Figure 11 - The principle of operation of a solar thermal installation

Unlike photovoltaics, solar thermal power plants are mainly used for the production of hot water and thermal control of buildings.

In the context of the economic assessment of the resource potential of agricultural areas of the region, statistical data are collected and calculated in such areas as:

- land resources and the assessment of legal restrictions on their use;
- the share of agricultural land in the structure of the total land fund;
- the share of arable land in the structure of agricultural land and in the structure of the total land fund
- mineral resources of agricultural lands;
- assessment of soil quality by their natural properties (grading);
- assessment of production volumes and structure of crop production, livestock production and secondary types of agricultural activities;
- evaluation of the effectiveness of agricultural land use by calculating the volume of production from 1 ha;
  - features and efficiency of restoration of arable land in the region.

In the context of assessing the main macroeconomic indicators of agricultural areas of the region, statistical data are collected and calculated on indicators such as:

- gross regional product (nominal and real);
- gross regional product per capita;
- national income of the region
- level of inflationary influence
- The ratio of consumption growth and investment in fixed capital;
- the growth of the export potential of the region;
- an index of the physical volume of industrial output (in comparable prices);
- degree of depreciation of fixed production assets;
- the proportion of unprofitable enterprises;
- the index of the ratio of GRP and tax revenues to the regional budget;
- budgetary provision of the region;
- The state of payables and receivables in the region, including taxes. [10]

Sustainable development of rural areas will provide an opportunity to ensure sustainable growth of the rural economy; to increase employment, the level and state of life, also to reduce the rate of movement of the rural population, to save the environment. It is believed that it is possible to identify 4 interrelated components of sustainable rural development: financial, social, environmental and institutional. The diversification of the rural economy, the expansion of the income sources of the rural population, their employment, etc., depend on the level of economic sustainability. [11]

Financial sustainability directly affects the social, as it reflects the improvement of the living conditions of the rural population, the restoration and development of social infrastructure, etc. [12]. Environmental sustainability involves the rational use of natural resources. The institutional component

provides for the development of legal, financial, organizational and other institutions that contribute to the sustainable development of rural areas. For the purpose of sustainable development of rural areas, it is necessary to develop an existing organizational and economic mechanism in accordance with the concept.

## **CONCLUSION**

Within the boundaries of concrete rural territories, the vital activity of the population living here is carried out and a certain way of life is formed. That is why the rural territory serves as the fundamental and most important object for the development of agriculture and the agri-food complex as a whole. The rural population is the custodian of traditional culture and morality of the population of Kazakhstan.

Solving problems in the field of sustainable development of rural areas is impossible without their comprehensive assessment, which reflects the socio-economic status of rural areas and allows you to develop effective organizational and economic measures to improve their sustainable development, taking into account the resource potential, territorial, historical and cultural characteristics. State regulation of sustainable development of rural areas contributes to the development of measures to ensure the legal aspect of the implementation of social, economic and environmental components of rural areas.

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## ҚАЗАҚСТАННЫҢ ЭКОНОМИКАЛЫҚ ӨСУДІҢ ИННОВАЦИЯЛЫҚ ФАКТОРЫ ЖЕРЛЕРІНІҢ ТҰРАҚТЫ ДАМУЫНЫҢ ТҰРАҚТЫ ДАМУЫНЫҢ БАСҚАРУЫ

Аннотация. Агроөнеркәсіптік кешенде ауыл шаруашылық ұйымдары арасында кеңейтілген көбею, шаруашылық субъектілерінің өзін-өзі ұйымдастыру, ауыл шаруашылығын әртараптандыру және оның филиалдарының технологиялық жаңаруы; инвестицияларды тарту - ауылдарды дамытудың тұрақтылығын арттыру, ресурстарды оңтайлы пайдалану, ауыл шаруашылығын тұрақты дамыту, ауыл шаруашылығы тауарын өндірушілердің табыстылығы, ауыл халқының өмір сүру сапасы мен сапасын көтерудің негізгі бағыттары. Нақты ауылдық аумақтар шекарасында осы жерде тұратын халықтың өмірлік белсенділігі жүзеге асырылады және белгілі бір өмір салты қалыптасады. Сондықтан ауылдық аумақ ауыл шаруашылығын дамытуға және тұтастай алғанда агроөнеркәсіп кешенін дамытудың іргелі және ең маңызды объектісі болып табылады. Ауыл тұрғындары - Қазақстан халқының дәстүрлі мәдениеті мен адамгершілігінің қамқоршысы.

Түйін сөздер: тұрақты, ауылдық аудандар, инновация, ауыл шаруашылығы, ауыл шаруашылығы

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## УПРАВЛЕНИЕ УСТОЙЧИВЫМ РАЗВИТИЕМ СЕЛЬСКИХ ТЕРРИТОРИЙ КАК ИННОВАЦИОННЫМ ФАКТОРОМ ЭКОНОМИЧЕСКОГО РОСТА КАЗАХСТАНА

Аннотация. Расширенное воспроизводство у сельскохозяйственных организаций, самоорганизация хозяйствующих субъектов, диверсификация сельской экономики и технологическое обновление ее отраслей в агропромышленном комплексе; привлечение инвестиций — основные направления повышения устойчивости развития сельских территорий, способствующего оптимальному использованию ресурсов, стабильному развитию сельской экономики, доходности сельскохозяйственных товаропроизводителей, улучшению качества и уровня жизни сельского населения. В границах конкретных сельских территорий осуществляется жизнедеятельность проживающего здесь населения и формируется определенный уклад жизни. Именно поэтому сельская территория выступает в качестве основополагающего и наиболее важного объекта развития сельского хозяйства и агропродовольственного комплекса в целом. Сельское население является хранителем традиционной культуры и нравственности населения Казахстана.

**Ключевые слова**: устойчивое, сельские территории, инновации, агропромышленный комплекс, сельское хозяйство.

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