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EVALUATION OF AGRICULTURAL LAND: THEORETICAL ASPECTS

АУЫЛ ШАРУАШЫЛЫҒЫ МАҚСАТЫНДАҒЫ ЖЕРЛЕРДІ БАҒАЛАУ: ТЕОРИЯЛЫҚ АСПЕКТІЛЕР

ОЦЕНКА ЗЕМЕЛЬ СЕЛЬСКОХОЗЯЙСТВЕННОГО НАЗНАЧЕНИЯ: ТЕОРЕТИЧЕСКИЕ АСПЕКТЫ

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Abstract. Purpose - the currently existing market prices for land in the republic, various types of payment for it on a single methodological basis are considered. Methods - analysis and synthesis, a systematic approach, logical, in order to ensure the rational use and protection of land, protect the rights of owners, land users and tenants, create an objective basis for setting land prices, land tax and rent. Results - the author states that in Kazakhstan market prices for land have not yet been formed, and the mechanism of payment for it does not stimulate the rational use of land resources. There is an obvious need to improve the economic mechanism for regulating land relations, reflecting differences in the quality of soils, depending on natural and artificial fertility, natural and climatic conditions of a certain area, location of land plots that affect such important indicators as gross production, gross and net income, profit. It has been justified that the economic assessment of the land value, i.e. determination of the comparative land value as a means of production in agri-culture, contributes to the development of financial instruments of land and property policy of the country, region, stimulation of investment and the development of entrepreneurship, Conclusions – the value of a land plot should be determined taking into account all expected income and benefits from its use. In this sense, the evaluation of agricultural land in market conditions is the identification with the income they generate, which is based on the theory of land rent.

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Аңдатпа. *Мақсаты –* республикада қазіргі уақытта бар жерге нарықтық бағалар, оған бірыңғай әдіснамалық база бойынша түрлі төлем түрлері қаралған. Ә*дістері* – талдау және синтездеу, жерді ұтымды пайдалану мен қорғауды қамтамасыз ету, меншік иелерінің, жер пайдаланушылар мен жалға алушылардың құқықтарын қорғау, жер бағасын, жер салығын және жалдау ақысын белгілеу үшін объективті негіз құру мақсатында логикалық тәсіл. *Нәтижелері* – автор Қазақстанда жерге нарықтық бағалар әлі қалыптаспағанын, ал ол үшін төлем тетігі жер ресурстарын ұтымды пайдалануды ынталандырмайтынын атап көрсетеді. Жалпы өнім, жалпы және таза табыс, пайда сияқты маңызды көрсеткіштерге әсер ететін жердің табиғи және жасанды құнарлылығына, осы аймақтың климаттық жағдайларына, орналасқан жеріне байланысты топырақ сапасының айырмашылығын көрсететін жер қатынастарын реттеудің экономикалық тетігін жетілдіру қажеттілігі айқын. Жер алқаптарының құнын экономикалық бағалау, яғни ауыл шаруашылығындағы өндіріс құралы ретінде жердің салыстырмалы құндылығын анықтау елдің, аймақтың жер-мүлік саясатының қаржылық құралдарын әзірлеуге, инвестицияларды ынталандыруға және кәсіпкерлікті дамытуға ықпал етеді. Кортындылар – жер учаскесінің құндық көрінісі оны пайдаланудан күтілетін барлық кірістер мен пайданы ескере отырып анықталуы керек. Осы тұрғыдан алғанда, ауыл шаруашылығы жерлерін нарық жағдайында бағалау жер рентасы теориясына негізделген олардан түсетін табыспен сәйкестендіруден басқа ештеңе емес.

Аннотация. *Цель* – рассмотрены существующие в настоящее время рыночные цены на землю в республике, различные виды платы на нее по единой методологической базе. Методы – анализа и синтеза, системного подхода, логический в целях обеспечения рационального использования и охраны земель, защиты прав собственников, землепользователей и арендаторов, создания объективной основы для установления цены на землю, земельного налога и арендной платы. *Результаты –* автор констатирует, что в Казахстане рыночные цены на землю еще не сложились, а механизм платы за нее не стимулирует рациональное использование земельных ресурсов. Очевидна необходимость совершенствования экономического механизма регулирования земельных отношений, отражающего различия в качестве почв, в зависимости от естественного и искусственного плодородия, природно-климатических условий данного района, месторасположения земельных участков, влияющих на такие важные показатели, как валовая продукция, валовой и чистый доход, прибыль. Обосновано, что экономическая оценка стоимости земельных угодий, т.е. определение сравнительной ценности земли как средства производства в сельском хозяйстве, способствует разработке финансовых инструментов земельно-имущественной политики страны, региона, стимулированию инвестиций и развитию предпринимательства. Выводы – стоимостное выражение земельного надела должно определяться с учетом всех ожидаемых доходов и выгод от его использования. В этом смысле оценка земель сельскохозяйственного назначения в рыночных условиях есть не что иное, как отождествление с создаваемым ими доходом, в основе которого лежит теория земельной ренты.

Key words: agricultural land, economic assessment, cadastre, rent, soil fertility, efficiency, gross income, land tax, investments, agribusiness.

Түйінді сөздер: ауыл шаруашылығы мақсатындағы жерлер, экономикалық бағалау, кадастр, жалдау ақысы, топырақтың құнарлылығы, тиімділік, жалпы табыс, жер салығы, инвестициялар, агробизнес.

Ключевые слова: земли сельхозназначения, экономическая оценка, кадастр, арендная плата, плодородие почвы, эффективность, валовой доход, земельный налог, инвестиции, агробизнес.

Introduction. All signs the basis of land as a means of production of theory and practice of rational agriculture. A human can influence soil fertility. This impact is determined by the level of development of their technological application in agriculture and productive forces.

The importance of soil fertility is characterized by its ability to provide plant needs with nutrients at all stages of growth and development. However, soil fertility

depends not only on the state of the nutrients contained in it, moisture, its structure, but also on additional investments in the process of processing and growing plants (reclamation, application of organic and mineral fertilizers, etc.). Consequently, fertile soil is the result of various factors.

In economic science natural, artificial and economic soil fertility is distinguished. Natural fertility (natural) was formed as a result of the soil-forming process under the influence of the

natural forces of nature - the sun, wind, water. It is characterized by certain physical, chemical and biological properties and is of decisive importance for agriculture.

The natural fertility of the soil expresses the potential wealth of the land. The level of its practical use is determined by the development of agronomic and agrochemical science, the degree of agricultural mechanization and a number of many factors of production. The most important task of agriculture is the most complete and rational use of the natural fertility of the land. Here, an important role is played by the assessment of agricultural land.

The value of a land plot should be determined taking into account all the expected income and benefits from the use of such a plot. In this sense, the valuation of land is nothing more than an assessment of the income generated by the land.

Material and methods of research. The research methodology is based on the general economic system and assumes strict adherence to the principles of a systematic and integrated approach in the study of economic processes and phenomena associated with the object and subjects of research in constant motion and change, their close connection and conditionality, general provisions of economic science, concepts, categories, as well as differences of the agricultural sector from other sectors of the economy in production, in the market and in socio-economic relations.

When studying the theoretical provisions of the work, substantiating the conditions and factors for the formation of the value of agricultural land, the methods of collecting and summarizing facts, analysis and synthesis, induction and deduction, historical and logical were used.

In the analysis of agricultural land and their rational use, statistical methods, time series, average values, index and sample studies were used, which made it possible to determine the causes and factors of a decrease in their efficiency.

The study is based on statistical data, the results of cadastral works, as well as reporting and reportin g data of subjects of the country's agro-industrial complex, conducted in the regions of the country.

The state land cadastre is maintained in order to ensure the rational use and protection of land, protect the rights of owners, land users and tenants and create an objective basis for setting the price of land, land tax, and rent.

Results and their discussion. In land management, the land registry has an

important role to play. The cadastre provides a certain system of reliable information and documents about the legal status, quality, quantity, and valuation of land. The land cadastre is formed by carrying out special state measures for the description, accounting and valuation of land [1].

The state land cadastre is maintained to protect land and ensure rational use, protect the rights of owners, land users and tenants and create an objective basis for setting the price of land, land tax, rent.

The basis for setting the price of land, land tax and rent are based on the results of assessing the value of land, the theoretical provisions of which were developed by the outstanding scientists of the 18th century A.Smith and D. Ricardo [2, 3]. In particular, A. Smith considered land rent as a product of the force of nature, which allows the owner of the land to provide the tenant as well as a loan, the amount of which depends on the degree of natural and artificially created fertility of the land. D. Ricardo, who developed the theory of rent, adhered to a similar view. It substantiating, he proceeded from the concepts of different quality of land plots, determined by their productive force.

I. Thünen supplemented and developed the provisions developed by A. Smith and D. Ricardo. In substantiating agricultural systems, he developed the theory of rent, proposed to supplement it with rent arising from the different location of land plots and substantiated its dependence on the distance to the market.

Consequently it is to them A.Smith, D.Ricardo and I.Tünen are credited with creating the theory of rent, which is a ram valuation of land, at the present time. In modern economics, this rent is known as differential rent.

In subsequent studies of economic relations associated with the ownership, use and disposition of land in a capitalist economy, in addition to differential rent, the existence and operation of absolute and monopoly rent are substantiated.

K. Marx studied in detail the problem of land rent. Analyzing the value of land as an economic category, he wrote: "Land rent is expressed in a certain amount of money that the landowner annually extracts from the lease of a known piece of land. This cash income can be capitalized, i.e. considered as a percentage of the imaginary capital. The land rent capitalized in this way forms the value of the land "[4].

The land differs from other means of production, this difference lies in the fact, that it is not a product of labor and its quantity is limited, it cannot be reproduced in full, along with this, each land plot has an owner who, and he will not allow another owner to invest his own capital without profit for itself, which gives rise to a monopoly on land and characterizes the distinctive feature of price formation in agriculture.

If in industry prices for goods are formed mainly on the basis of average production costs plus average profit, in agriculture, prices for products are formed differently. For example, on chernozem soils, the yield will be higher than on sandy soils with an equal investment of capital, therefore, the costs will be lower. The limitedness of the land does not allow satisfying the needs of society for food products grown only on black soil. Therefore the society will use other varieties of soils, but they can be involved in production if it will also be possible to make a profit on these lands capital that pays off the invested. Consequently limited land and land monopoly form the social production price of agricultural products as the cost of production on the worst land plus average profit.

As you know, the individual costs of production per unit of agricultural products produced on different types of soils will be different, on chernozem soils they will be less. But goods are sold at the social price of production, based on costs in the worst lands. As a result the products grown on the best lands and soils of average quality to the owner of these plots makes it possible to receive, in addition to the average profit, additional profit, which belongs to the owner of the land. Accordingly K. Marx substantiated the surplus profit that arose on average and better lands forms a differential land rent of the first kind.

In works on economic theory, along with the concept of rent received as a regular income from the use of land resources, the concept of quasi-rent was recognized as an additional profit that has the character of rent, but only in the short term.

A review of literary sources that researchers recognize three types of land rent: differential, monopoly and absolute. And if there are no discussions on the first two types of rent, since they are based on real differences in the natural fertility and location of land plots, as well as additional investments of capital and labor in agricultural production, the second - on the limited land with conditions favorable for the production of valuable

types of crops, then by scientific disputes are still going on about absolute rent [5].

The value of land is influenced by various factors in the theory and practice of land valuation, it is customary to distinguish four main categories of factors affecting the value of land:

- economic:
- social;
- legal, administrative and political;
- physical, related to the environment or location.

Economic factors include the general state of the world, national or regional economy, the amount of wages and incomes, solvency, availability of funding sources, and the interest rate.

Social factors encompass the basic needs of people to acquire land. These needs are manifested both in the desire of people to "group" around urban centers and in different land use options. The cost of land plots also depends on other factors of a social nature, which include the age structure, the level of education of the population, etc. [6].

Legal, administrative and political factors can affect demand both positively and negatively. The policy of providing various types of benefits contributes to efficient land use and stimulates the development of land plots. In particular, the economic, fiscal and monetary policy of the state can both stimulate and suppress economic development in general and the demand for land in particular. Governments and local governments can implement programs to stimulate or restrict land development through mechanisms such as taxation, zoning, land use and rent control. The factors in this group also include the quality of services provided by the local administration: the condition of roads, public transport, etc.

To conduct an assessment within the boundaries of a land plot in accordance with its explication in agricultural land, there are distinguished: arable land, fallow lands, hayfields, pastures, and perennial plantings. When determining rent for land it is necessary to calculate the gross income and costs of agricultural production for each of the above types of land.

Gross income calculated per unit of land plot as the product of the normative yield of an agricultural crop by its market price.

The normative yield of an agricultural crop, measured in bonitet points, determined by the fertility of the land plot.

The calculation of land rent should be carried out for a set of crops cultivated at the

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location of the land plot. The criterion for the choice of crops and their alternation is to ensure the highest income and preserve soil fertility.

The deposit is estimated by the method the same initial data are the intended use, taking into account the economic feasibility of its transfer to another type of agricultural land.

When calculating the gross income of hayfields and pastures, the standard yield serves as the initial base.

When calculating the gross income of perennial plantations, one should proceed from the frequency of their fruiting and the normative yield of fruit and berry products. In this case, it follows:

- ♦ the age of perennial plantings;
- ♦ breed and varietal composition;
- ♦ features of the spatial distribution of perennial plantations within the boundaries of the land plot;
- ♦ the possibility of receiving income from additional products obtained from the aisles of orchards and vineyards.

In assessing the land, the costs associated with agricultural production should be taken into account, while material costs are determined on the basis of technological maps that establish the standard costs of seeds, fuels and lubricants, fertilizers, etc. in kind.

To give differential rent the role of a regulator - equalizing economic conditions located on lands of different quality and location, it is necessary to establish differential rent tax rates based on withdrawals. In this case, one must proceed from the fact that differential rent I basically belongs to the owner of the land, and differential rent II should be generated in the income of the commodity producer, in particular the lessee. If the state is the owner and lessor of land, then all differential rent through the land tax system should go to the state revenue.

A generalization of the experience of regulating land relations in developed countries shows that the basis of taxation and the determination of the price of land are the results of land valuation based on net income per unit of land area. Therefore in order to modernize agriculture, achieve the competitiveness of the industry, create conditions for the development of entrepreneurship, land re-lations should be improved; in determining land rent, assessing the value of land, there is no alternative to net income per hectare of land.

Another factor that determines the size of land rent and acts as a tool for distributing it between commodity producers, the land owner and the state is the price mechanism.

The state, as a nationwide guarantor of the preservation and improvement of land in agriculture, is a subject actively involved in the regulation of land, therefore rent relations, and, accordingly, the price mechanism.

Only if the above conditions are met the necessary prerequisites will be created for the formation and distribution of land rent, the formation of an effective economic mechanism of rent relations, which will create equal opportunities for producers of reproduction, efficient management and rational use of land. Among the instruments of this mechanism, the factors mentioned above play a decisive role: pricing and the tax system.

Rational use of land (A.I. Altukhov, A.E. Shamin) should considered as the most complete involvement of land in agricultural circulation. The use of land for its intended purpose for the production of products, the establishment of the optimal structure of agricultural land and the structure of sown areas, ensuring high efficiency agricultural production through the balanced use of market mechanisms [7].

The economic efficiency of production increase achieved through the provision of freedom to commodity producers, provision of state support to the agricultural sector and social protection of rural residents. The transition to intensive forms of production requires significant capital investments. In addition to investment, a preferential tax and credit policy should be implemented. The current tax, price, credit and investment system completely upset the financial condition of agriculture, does not even provide a simple reproduction of fixed assets and normal social living conditions. A decline in agricultural production and a drop in land fertility have accompanied decline in incentives.

The productive power of the earth is limitless. The main way to increase the efficiency of land use is a consistent intensification, encompassing both additional investments and the improvement of technologies, organizations of production and labor. Very often more advanced technologies and work organization give a greater economic effect than additional investments. The increase in soil fertility is directly and directly related to the system of measures that are related: agrotechnical, forestry and hydrotechnical, biological, etc. It is intensification that is one of the most important ways to improve the efficiency of land use in the republic at this stage [8].

Improving rental relationships plays a key role in stimulating innovation. However both in theory and in practice these issues continue to remain controversial, despite the fact, that the economic mechanism of paid land use in

agriculture has been formed and is functioning, although not far from ideal, including: the price of land, land tax and rent. for land, as well as mortgage relations [9, 10].

Insufficient efficiency of the land payment system in the agricultural sector of the country's economy is primarily due to the imperfection of the so-called "cadastral valuation" of agricultural land, since it is divorced from the real market relations prevailing in agriculture and the agro-industrial

The republic has adopted and operates a legal framework that serves as the basis for determining the cadastral value of land plots provided by the state for conducting commercial agricultural production, ensuring the unity of approaches in it throughout the country. It is determined in accordance with the basic rates of payment for land plots by types of agricultural land (non-irrigated arable land, irrigated arable land, hayfields, pastures) in the context of soil types and subtypes. Using correction factors.

Increasing and decreasing correction factors to the base rates for land plots are applied to: quality condition, location, water cut (water supply), remoteness from service centers. The approved base rates do not reflect the yield of land plots and do not correlate with the yield of cultivated crops by soil types and subtypes.

The amount of land tax in the total amount of taxes is insignificant. As a result, taxes in agriculture do not stimulate the efficient use of land plots.

Conclusions

- 1. The State land cadastre is designed protection of the rights of owners, to ensure the rational use and protection of land, land users and tenants, as well as creation of an objective basis for setting the price of land, land tax, rent.
- 2. The study of economic relations associated with the ownership, use and disposal of land in a market economy allowed to identify the presence of differential, absolute and monopoly rent. determination of the price of land in the basis of taxation should be based on results of land valuation by net income per unit of land area.
- 3. The value of land is influenced by various factors in the theory and practice of land valuation, it is customary to distinguish four main categories of factors affecting the value of land: economic; social, legal, administrative and political, physical, related to the environment or location.
 - 4. The calculation of land rent should be

- carried out for a set of crops cultivated at the location of the land plot. The criterion for the choice of crops and their alternation is to ensure the highest income and preserve soil fertility.
- 5. Improving rental relations plays a key role in stimulating innovation. Insufficient efficiency of the land payment system in the agricultural sector of the country's economy is due to the imperfection of the used practice of cadastral valuation of agricultural land, which is divorced from the real market relations that have developed the agro-industrial complex and in agriculture of the Republic of Kazakhstan.

The need for radical changes in both the cadastral valuation of agricultural land and the taxation system in the industry is obvious.

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