

## РЕГІОНАЛЬНА ЕКОНОМІКА

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**R. I. Rozum**, Candidate of Technical Sciences, Associate Professor,  
**I. V. Liubezna**, Candidate of Economic Sciences, Associate Professor,  
**O. M. Kalchenko**, Candidate of Economic Sciences, Associate Professor

**Р. І. Розум**, к. т. н., доцент,  
**І. В. Любезна**, к. е. н., доцент,  
**О. Н. Кальченко**, к. е. н., доцент

## IMPROVING EFFICIENCY OF USING AGRICULTURAL LAND

## ПІДВИЩЕННЯ ЕФЕКТИВНОСТІ ВИКОРИСТАННЯ ЗЕМЕЛЬ СІЛЬСЬКОГОСПОДАРСЬКОГО ПРИЗНАЧЕННЯ

**Urgency of the research.** Full and effective use of the potential of land resources as one of the competitive advantages of agricultural production.

**Target setting.** Effective and rational use of land resources is of great importance for the national economy of Ukraine.

**Actual scientific researches and issues analysis.** Specifics of the effective use of agricultural lands were studied by such scholars as Balayev A. D., Balyuk S. A., Hrekov V. A., Krymska L. O., Koval M. V., Medvedev V. V., Melnychuk L. S., Tarariko O. H. and others.

**Uninvestigated parts of general matters defining.** Scientists do not adequately cover the issue of structuring the problems of increasing the efficiency of agricultural land use.

**The research objective.** The article is intended to identify and structure the main issues, the effectiveness of the use of agricultural land and determine the ways of their solution.

**The statement of basic materials.** The article considers and structures the issues of efficient use of agricultural land in Ukraine. The influence of ecological and economic factors on the efficiency of land resources use negatively affecting the quality and fertility of the land is analysed.

**Conclusions.** Effective use of land resources provides for the creation of a material base for ensuring the conservation, reproduction and further increase of the level of economic return of land.

**Keywords:** soil; land; agricultural land; agricultural production.

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**Urgency of the research.** Land is a considerable factor in agricultural production that plays a special role in the development of social relations. Since land is one of the main natural resources, today the issue of research on the effectiveness of its use by agricultural producers is becoming relevant. In the land, as the basis of agriculture, the economic processes of production and reproduction are integrated with natural ones. In comparison with other means of production, which, when used intensively, tend to wear out and can fail, the main difference of the land is that, when it is used rationally, it has the ability to improve its properties, acquire new qualities, and increase its fertility.

**Target setting.** Effective and rational use of land resources is of great importance for the national economy of Ukraine.

**Актуальність теми дослідження.** Повне й ефективне використання потенціалу земельних ресурсів як одна із конкурентних переваг сільськогосподарського виробництва.

**Постановка проблеми.** Ефективне і раціональне використання земельних ресурсів має важливе значення для національної економіки України.

**Аналіз останніх досліджень і публікацій.** Особливості ефективного використання земель сільськогосподарського призначення досліджували такі вчені, як Балаєв А. Д., Балюк С. А., Греков В. О., Кримська Л. О., Коваль М. О., Медведєв В. В., Мельничук Л. С., Тараріко О. Г. та ін.

**Виділення недосліджених частин загальної проблеми.** Науковцями недостатньо висвітлюється питання структуризації проблем підвищення ефективності використання сільськогосподарських земель.

**Постановка завдання.** Стаття покликана виявити та структурувати основні проблеми, ефективності використання земель сільськогосподарського призначення та окреслити напрямки їх вирішення.

**Виклад основного матеріалу.** У статті розглянуто та структуровано проблеми ефективного використання земель сільськогосподарського призначення в Україні. Проаналізовано вплив еколого-економічних чинників на ефективність використання земельних ресурсів, що негативно впливають на якість і родючість землі.

**Висновок.** Ефективне використання земельних ресурсів передбачає створення матеріальної бази для забезпечення збереження, відтворення та подальшого підвищення рівня економічної віддачі земель.

**Ключові слова:** земля; земельні ресурси; сільськогосподарські землі; сільськогосподарське виробництво.

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**Actual scientific researches and issues analysis.** Features of effective use of agricultural land have been studied by such scholars as Balaiev A. D., Baliuk S. A., Hrekov V. O., Krymska L. O., Koval M. O., Medvediev V. V., Melnychuk L. S., Tarariko O. H. The works of these scholars laid an important theoretical and methodological basis for the effective use of land resources.

**Uninvestigated parts of general matters defining.** Scientists do not adequately cover the issue of structuring the problems of increasing the efficiency of agricultural land use.

**The research objective.** The purpose of the article is to identify and structure the weighty issues concerning the effective use of agricultural land and determine the directions for their solution.

**The statement of basic materials.** Modern land use in our state is characterized by an extremely high rate of development of living space. Structural and environmental imbalance of land resources leads to a deterioration in the efficiency of land resources use and the functioning of agrolandscapes in general.

The peculiarity of socio-economic and historical conditions in the large-scale transformation of land relations has a negative impact on the environment, an intensification of degradation processes take place, primarily erosion of land, which results in a decrease in productivity, and hence the efficiency of land use by agricultural producers.

Efficiency of land use is the economic result of the use of land resources, characterized by the ratio of the resulting effect (expressed in natural and value indicators) to the area, taking into account the quality and remoteness of the land. Increasing the efficiency of land use can be achieved by following a number of factors: rational soil cultivation, regulation of water regime, protection of soil from wind and water erosion, liming of acid and gypsum of saline soils, control of weeds, improvement of forage lands, management of crop rotation, organizational economic and social activities in the land use system.

Modern use of land resources in Ukraine does not meet the requirements of rational nature management. The natural components that are most affected by man-made and anthropogenic activities are soils, their relief. An ecologically permissible ratio of arable land has been raised. Land plowing is the highest in the world and reaches almost 80% of agricultural land. Intensive use of land leads to a decrease in soil fertility [1].

To date, the state of soil fertility is critical, as they lose their self-replicating properties. Because of the lack of certain state priorities for the conservation and restoration of soil fertility, they lead to their degradation, which has a negative impact on the volume of agricultural production.

The rational use of land resources issue is almost the main reason for increasing the efficiency of both agricultural and social production in general, is determined mainly by the structure of land use, optimizing the ratio of its main components.

Rational land use means maximum involvement in the economic circulation of all lands and their effective use for the main designated purpose, creating favorable conditions for high productivity of agricultural land and obtaining the maximum quantity of production per unit area with the least expenditure of labor and resources [2].

Unfortunately, the problem of monitoring the state of soils in Ukraine is not given due attention. This concerns the scientific sphere, where due to insufficient funding, full-scale studies of the distribution, causes and ways of eliminating degradation are not conducted. The same applies to the legislative and executive authorities, where effective control measures have been developed. In general, the society did not create an atmosphere of maximum assistance to preserve the soil cover as an indispensable national asset.

Statistics show that in Ukraine: more than 800 thousand hectares of degraded, unproductive and technologically contaminated land are subject to conservation; 141 thousand hectares of disturbed lands require reclamation and 253 thousand hectares of unproductive land - improvement; 13300000. Ha, including 10.6 million ha of arable land, - land is eroded; Ravines occupy 140.4 thousand hectares; Wind erosion systematically subjected to more than 6 million hectares of land, and in years with dust storms - up to 20 million hectares. The qualitative state of land resources is also significantly affected by hydrometeorological and dangerous exogenous geological processes and phenomena (mudslides, landslides, karst, subsidence of soil, abrasion, destruction of the banks of res-

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ervoirs, etc.), spread over 50% of the territory. The processes of soil cover degradation have intensified due to technogenic pollution: contamination of soils with radionuclides, heavy metals, pathogens [3].

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The decrease in the weighted average indicator of humus content affects the changes in the redistribution of areas by its provision, that is, the loss of humus of the soil passes from a group with a high to a group with low security.

One of the most significant factors in reducing the productivity of the land is erosion. It is this factor that is causing great damage to agricultural production today.

Analyzing the reasons for the activation of erosion processes, it is necessary to pay attention to mass cases of ignoring simple agrotechnical measures, imperfection of land management in terms of erosion protection, underestimation of agroforestry, ineffective use of funds directed to combat erosion. Further intensive use of eroded lands can lead to negative consequences for Ukraine.

The basis for the development of a system of soil protection from erosion should be the organization of the territory of farms, providing for a rational distribution of land by land, the correct location of crop rotation fields with the appropriate set of crops and protective forest plantations.

In Ukraine, there are favorable conditions for becoming a leading agrarian power with a large export potential of agricultural products. Given this, it is necessary to solve a number of problems, such as:

- ensuring the rational use and conservation of soils as an important component of the environment;
- application of soil protection technologies and other measures to prevent pollution and soil degradation during economic and other activities;
- constant monitoring of soils and agrochemical certification of agricultural land;
- identification of negative changes in soil conditions and mandatory measures to restore degraded soils;
- scientific substantiation of measures for soil protection;
- ensuring the publicity, completeness and reliability of information on the state of soils and the amount of measures taken to protect soil;
- ensuring public participation in decision-making in the field of soil protection and the inevitability of liability for damage to soils [4].

Modern land use is an integral part of a single natural complex and is considered not only as a natural and organizational formation, but as a basis for people's livelihoods.

The strategic task of state policy in the field of agrarian land use should be to ensure the rational use and protection of productive lands, conservation, reproduction and multiplying their fertility.

The environmental and economic efficiency of land use is influenced by such factors as the state of land resources; Ratio of soil-improving and soil-depleting crops in crop rotations; Implementation of anti-erosion measures and the use of intensive technologies; soil fertility [5]. A rational system of farming should be considered as a compromise between environmental safety and economic expediency. In such an option, its construction becomes an environmental and economic issue.

The ecologization of agricultural lands at the enterprise level can be ensured by applying modern resource-saving technologies, the newest techno-technological production systems, scientifically

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grounded soil fertilizers based on beneficial microorganisms and biofertilizers, introducing higher doses of organic fertilizers, chemical meliorants, reducing to optimal fertilizer application rates, using less energy-intensive equipment, increasing the area under perennial grasses, optimizing the structure of sown areas, the introduction of anti-erosion measures system. The suggested directions of ecologization are important factors for conservation, reproduction, improvement of soil fertility and improvement of the ecological state of the environment.

In order to successfully solve the problems of efficient use of agricultural land that take place in the sphere of agricultural land use it is necessary: to develop and legislatively approve state and regional programs for the protection of lands, conservation and reproduction of soil fertility; Increase the level of financial support for soil and environmental protection measures; To increase the responsibility of landowners and land users for negligent land use and to establish an effective economic mechanism to stimulate them for preserving and improving the ecological condition of lands. The solution of the above tasks is quite complicated, since it requires the introduction of a unified state policy in the sphere of conservation, reproduction, soil fertility, land protection and rational use, and calls for coordinated action by state authorities, local governments, land users and the scientific community.

**Conclusion.** Since land is a limited natural resource, society must carefully and economically dispose of its national wealth. Particular attention should be given to justifying proposals to improve conditions and mechanisms for effective land use, to take measures that motivate land users to use the land resource more efficiently, that is, to profit, but with the least loss of quality for the land.

Effective use of land resources provides for the creation of a material base for ensuring the conservation, reproduction and further increase in the level of economic returns of land.

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