му платежів у вигляді комбінації диференційованої плати за земельну ділянку на основі вартості та встановлення диференційованої ставки оподаткування з прибутку з урахуванням рентної складової в загальній величині прибутку [1, с. 88]. Застосування цих платежів повинно створити однакові умови господарювання для всіх суб'єктів та гарантувати державі стабільний дохід і, таким чином, бути ефективним інструментом рентного механізму.

Рентний механізм у сільськогосподарському землекористуванні складається об'єктивно, а його оптимізація можлива в рамках усіх існуючих законодавчих обмежень, у тому числі й за відсутності вільного ринкового обігу земель сільськогосподарського призначення. Перехід до ринкової системи землекористування в аграрному секторі дасть можливість, зменшивши регуляторні обмеження, забезпечити більш справедливий розподіл доходів від використання природних ресурсів і створити стимули для більш раціонального використання обмежених земельних ресурсів.

ВИСНОВКИ

Рентний механізм в аграрному секторі має важливе значення для підвищення ефективності землекористування, а дієвість його інструментів може бути підвищена через цілеспрямоване вдосконалення державної земельно-рентної політики. При цьому, якщо методологічні засади реформування теоретично розроблені, то практичні кроки щодо їх застосування потребують подальшого дослідження з використанням кількісних методів оцінювання розміру земельної ренти в умовах певних сценаріїв розвитку.

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ECOLOGICAL AND ECONOMIC SUBSTANTIATION OF MEASURES TO PROTECT AGRICULTURAL LANDS

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Виявлені умови підвищення ефективності та взаємозв'язок елементів системи охорони земель в сільському господарстві на кожному рівні управління земельними ресурсами. Уточнені теоретико-методичні положення щодо еколого-економічного обґрунтування заходів з охорони сільськогосподарських земель, що враховують природно-кліматичні та організаційно-економічні умови виробництва, а також екологічний стан земельних ресурсів.

Ключові слова*: сільськогосподарські землі, охорона, еколого-економічні засади, землевпорядкування, землеустрій.*

The nature of land use in agriculture, the qualitative state, available opportunities to reproduce and improve soil fertility affect not only provision of people with food, but also the preservation and creation of a favorable natural environment for human life and health. This makes into the category the priorities for the conservation of soil fertility and also organization of the protection and sustainable use [1, p. 19–20]. Therefore, in the present conditions the tools of preservation and reproduction of land resources, implemented through the system of land protection in agriculture, should be a priority for Ukraine in the sphere of land relations and agricultural policy.

Despite the fact that the ecological and economic challenges of rational use of land resources is a research subject to a wide range of domestic scientists, including I.K. Bystryakov, V.M. Budzyak, D.S. Dobryak, O.S. Dorosh, L.Ya. Novakovskiy, A.M. Tretyak, M.M. Fedorov and other, issues over introduction of effective measures on protection and reproduction of agricultural land are not regulated. Systematic approach to justify environmental and economic issues for the protection of agricultural land,

which allows to consider the consequences of violation of security of the land, is required in modern conditions.

At the present stage of the agricultural sector development, the land use effectiveness is largely determined by compliance with the essential elements of used farming systems, soil fertility level and intensity of erosion, as well as the availability of resources for reproduction of soil fertility without harming the environment. In environmental terms, solution of this challenge is to increase the proportion of eco-stabilizing production conditions [2; 3].

The current state and trends of land use show that farming systems applied do not always take into account the agroecological factors of production by means of which the preservation and increasing of soil fertility is ensured. It is therefore necessary differentiation of ways to use the agricultural land and applied measures to protect land in agriculture depending on the soil fertility, the prevailing natural and climatic, technological, economic conditions of management.

Timely measures of protection and rational use of land enables to mitigate the impact of negative processes on the state of land resources and contributes to the preservation of fertile land for agricultural use. The complexity and diversity of natural, environmental and socio-economic conditions necessitates a systematic approach to land protection [1; 3]. This approach involves the formation of protection system of land, as a set of interrelated elements with the environment that make up a certain unity to address the conservation of land. The interconnectedness of elements of organizational and economic mechanism of land protection should be ensured both in territorial terms, and in terms of compliance with each level of land resource management (State — Regional — Local — Business) [4] (Fig. 1). In addition, the planned activities under this mechanism should be linked to the interests of land users of different forms of ownership and management.

The scheme of developing measures for the protection and efficient use of agricultural

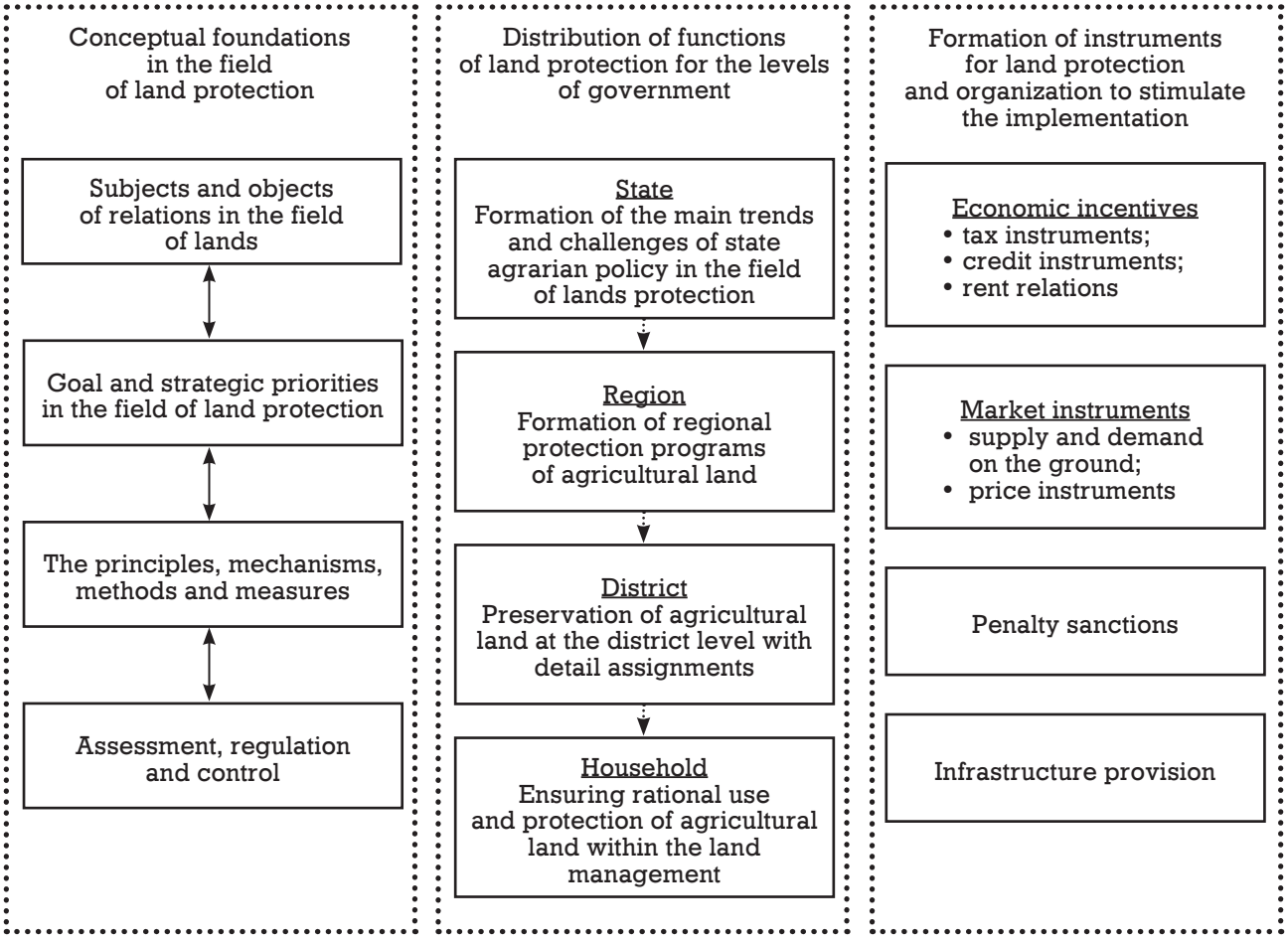

Fig. 1. Structural-logical scheme of the agricultural land protection system

land is shown in Fig. 2. The suggested scheme shows three blocks of ecological and economic conditions that affect the state and nature of the agricultural lands use. Nature protection measures that are able to ensure the protection and efficient use of land resources, as each separately and interacting with each other, are formed based on the analysis. This is zonal climatic condition, environmental condition of land resources, organizational and economic conditions of agricultural production that characterize most opportunities for agricultural producers and the level of state support provided to perform land-protective measures.

Studying natural and climatic features allows to reasonably approach to the territorial location of production and the formation of the structure of production and sown areas under these features. Thus the establishment of agricultural lands is made based on the principles of agroecological typing, category of fitness and prospects of agricultural production, the projected level of intensity of land use, internal economic specialization, placement of livestock farms and other production facilities, set requirements and restrictions on land use [5, p. 274]. Organization of the territory also includes placing of production facilities of farms, securing of land for the production units, determination of sanitary protection, water conservation and protection zones.

Environmental assessment of land resources aims to save natural potential of soil cover, as well as prevent the negative effects of human impact on the environment in the process of agricultural production. It includes an assessment of the natural potential, the level of degradation, pollution and violation of agricultural lands.

Initial assessment of natural potential of agricultural land allows one to identify spread of the soil degradation process and vegetation cover in the region, identify problematic territories in the ecological sense, develop schemes on the lands protection from further degradation, establish procedures for the agricultural lands use according to the qualitative characteristics and natural features. For this purpose zoning of territories is carried out, land surveying work in agricultural organizations and other agricultural producers are conducted based on the use of evidence-based farming systems. Based on the materials of land monitoring, including soil, geobotanical, agrochemical, phytosanitary, ecotoxicological and radiological examination car-

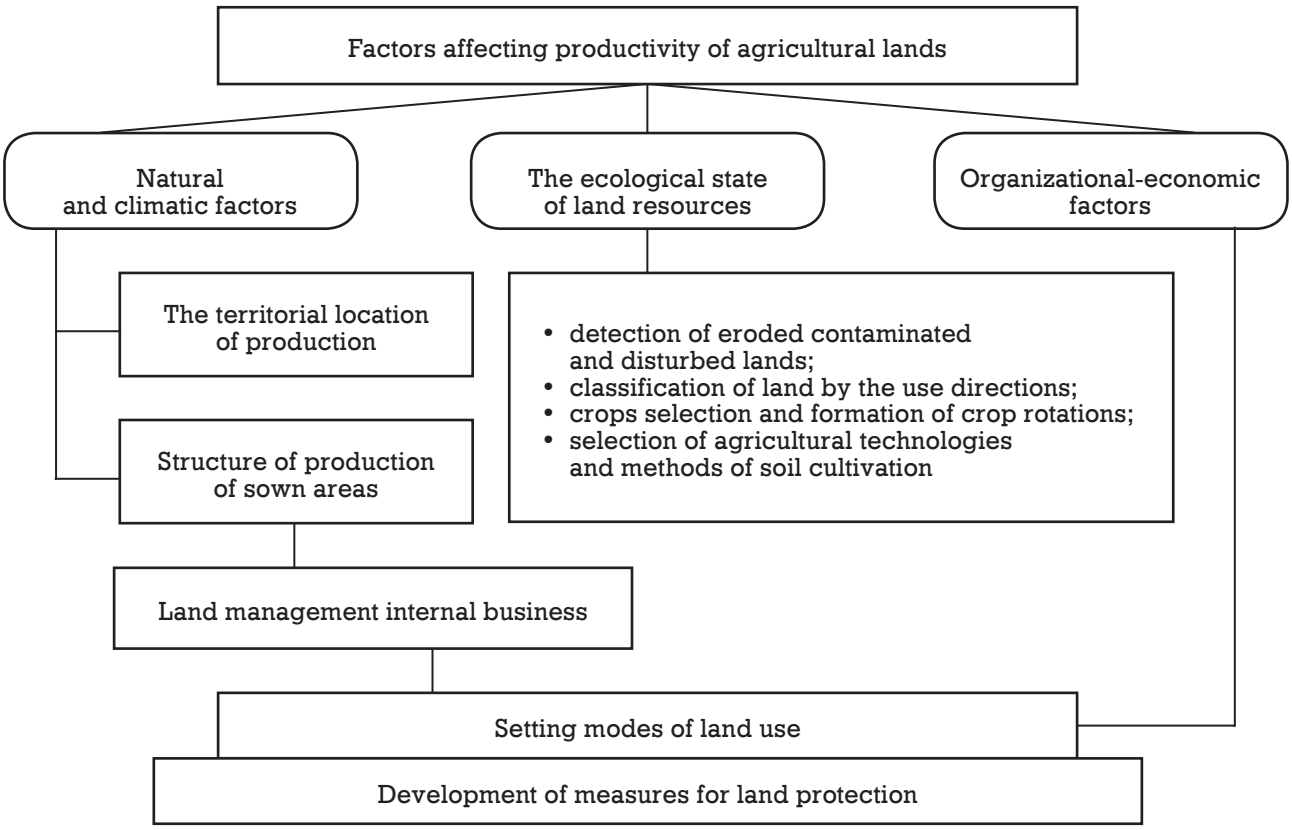

Fig. 2. Scheme of developing measures for the protection and efficient use of agricultural lands

ried out at the appropriate approved methods, in due course, overall assessment of qualitative condition of land is composed, needed additional investments in prevention of further degradation are determined.

Overall assessment of the qualitative condition of agricultural lands allows one to emphasize lands, possessing better natural and economic conditions and suitable for cultivation of all agricultural crops zoned in this area, and focus all available labor, financial and material resources for the organization of rational and efficient use. Location, size, land composition, types and degree of degradation, pollution and contamination of land at the time of the identification should be established on other grounds, verification of soil conformity to environmental standards should be implemented [1; 3; 6].

In general, on assessment results of agricultural land, directions for the use are determined, as well as corresponding to these areas protection measures and effective use of lands considering natural and economic zoning are developed.

Analysis of organizational and economic conditions for agricultural production allows to evaluate the level of provision of agricultural producers with own material, labor and financial resources, that can be directed at improving the organization of production, systems of agriculture, improving of land use, increased production of qualitative agricultural products [5, p. 298]. One also need to determine the actual formed level of public support for possibility to involve a foreign investment.

On the basis of summarizing information on condition quality of land and natural climatic and economic conditions of production, the concrete measures to protect and improve the use of lands for specific land users are developed. Justification of measures to protect and sustainable use of agricultural lands is completed by the development of land management projects. Land management schemes in this project should include mandatory land protection measures, taking into account the peculiarities of economic activity of agricultural enterprises, natural and other conditions that affect the qualitative state of lands including:

- measures to improve agricultural lands and development of new lands;
- measures to protect lands from erosion and other negative impacts as a result of which there is land degradation;
- measures to protect land from land pollution by chemical and radioactive substances;
- measures on reclamation of disturbed lands;
- measures on preservation of stability of landscapes;
- conservation measures, such as on arrangement of protection zones and other.

In its turn, all these measures should be invested in the framework of land management projects, land management schemes of specific land uses are composed based on which, as well as monitoring of compliance with the protection and sustainable use of agricultural lands is carried out, resulting in measures of state support of specific land users are set. Land management project should include four main blocks [3, p. 88]: analysis of the production conditions, designing land-protective measures, land management organizing and organization of project financing (Table. 1).

Land management schemes of specific land uses are based on land management project and monitoring of compliance with the protection and sustainable use of agricultural lands is carried out, as well as measures of state support of particular land users are set.

Table 1

Structure of land management project of agrarian enterprise with substantiation of land-protective measures

Name of project elements	The essence of the elements of the land-protective measures
Analysis of production conditions in the agricultural enterprise	Description of economy, characteristic of natural climatic features and location
	Characteristics of the economic activity conditions
	Characteristic of the soil quality, susceptibility to harmful influences with the allotment of degraded, erosion-hazardous and contaminated areas
Designing of measures to protect and improve soil fertility	Measures on radical improvement of arable land and pastures
	Measures to improve the structure of production and sown areas, land and crop rotation organizations
	Measures on land and the environment protection

The end of Table 1

Name of project elements	The essence of the elements of the land-protective measures
Organization of land management, taking into account projected measures on protection and rational use of lands	Charting the change in the composition of lands
	Organization of lands and territories of crop rotation and grasslands
	Charting of internal land management with a list of the necessary measures to protect the land and the environment
Organization of the projected measures implementation funding	Calculation of the projected measures
	Evaluating the effectiveness of the suggested measures development
	The calculation of the need for additional financing of project implementation

Source: adapted by author [3].

Thus, the role of government to protect agricultural land is very important and it is to determine the order of the use, which is set based on consideration of all the changes occurring on land resources. At the same time the need for land users to fulfill compliance with the requirements of established «order to use» lands is mandatory, appropriate for its ecological condition, which is the basis for application to them measures to stimulate or measures of responsibility on the part of management of land resources.

CONCLUSIONS

Thus, to provide state support of land protection, it is necessary to justify measures on preventing further loss of the fertility of land resources and and deterioration of ecological status by studying factors, forming conditions of effective land use (natural climatic, environmental, organizational and economic) and the factors that affect the productivity of agricultural lands. To this end, we offer to conduct ecological and economic assessment of measures to protect agricultural lands with be reflected in the land use and land management projects.

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