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სოფლის მეურნეობის სექტორის გარემოსდაცვითი უსაფრთხოების სახელმწიფო პოლიტიკა

ოლგა რუდენკო

მეცნიერებათა დოქტორი
სახელმწიფო მმართველობაში,
ეროვნული უნივერსიტეტის
«ჩერნიგოვის პოლიტექნიკის»
პროფესორი
ჩერნიგოვი, უკრაინა
E-mail: rudenkolgam27@gmail.com
orcid.org 0000-0002-2807-1957

პავლო ჰალიმონი

მკვლევარი, ეროვნული
უნივერსიტეტის «ჩერნიგოვის
პოლიტექნიკა»
ჩერნიგოვი, უკრაინა
E-mail: super.halimon@ukr.net
orcid.org/0000-0003-3259-597X

ქვეყნის განვითარების დონე დამოკიდებულია განხორციელებულ სახელმწიფო პოლიტიკაზე არა მხოლოდ ინოვაციების, არამედ სოციალურ-ეკონომიკური და გარემოს განვითარების სფეროებში. უკრაინას პრაქტიკულად არანაირი პირობები არ აქვს სოფლის მეურნეობის სექტორში ეფექტური ინოვაციების მისაღებად. ამიტომ, სოფლის მეურნეობის სექტორის ინოვაციური განვითარების სახელმწიფო პოლიტიკის გაუმჯობესება გარკვეული ღონისძიებების განხორციელებით, უკრაინის სახელმწიფო პოლიტიკის გადაუდებელი ამოცანაა, რომლის განხორციელება ქვეყანაში ინოვაციური პროცესების რადიკალურ აღორძინებას გამოიწვევს.

სოფლის მეურნეობის მართვის თანამედროვე პირობები საჭიროებს სოფლის მეურნეობის ეკონომიკის სექტორის განვითარების სტრატეგიის შეცვლას გარემოზე მოთხოვნების გათვალისწინებით, ამასთან პრიორიტეტია გარემოს უსაფრთხოების შესაბამისი ინსტრუმენტების შექმნა. ასეთ პირობებში, სოფლის მეურნეობის ეკონომიკის სექტორს სჭირდება სახელმწიფო მმართველობის სისტემის ტრანსფორმაცია, რაც საშუალებას მისცემს განახორციელოს ეკონომიკური ზრდის პროგრამა, გაზარდოს გარემოს უსაფრთხოება გარე და შიდა საფრთხეებზე რეაგირების მოქნილი სისტემის შექმნით. ამრიგად, ეკოლოგიური უსაფრთხოების მართვის პრობლემების ოპერატიული და მოტივირებული გადაწყვეტა შესაძლებელია მისი სახელმწიფო მართვის ეფექტური მექანიზმის საშუალებით.

სტატიაში განხილულია უკრაინის აგრარულ სექტორში ეკოლოგიური უსაფრთხოების სახელმწიფო მართვის მექანიზმის შექმნის აქტუალური საკითხები. შემოთავაზებულია უკრაინაში აგრარული წარმოების ინოვაციური და ეკოლოგიური მართვის ორგანიზაციის სისტემა. დადგენილია, რომ გარემოს უსაფრთხოების უზრუნველყოფა მოითხოვს სოფლის მეურნეობის სექტორის მოდერნიზაციას და ითვალისწინებს საწარმოო პოტენციალის

ყოველმხრივ განვითარებას, რაც გულისხმობს საწარმოო სისტემების სტრუქტურული და ტექნოლოგიური მოდერნიზაციის ტემპის დაჩქარებას და ინოვაციური განვითარების პოტენციალის რეალიზაციის პირობების შექმნას. აღნიშნულია, რომ სოფლის მეურნეობის სექტორის ინოვაციური განვითარების სტრუქტურაში საჭიროა გამოიყოს წარმოებისა და ეკოლოგიური სისტემების ფუნქციონალური შევსება და დავახასიათოთ ურთიერთობები, რომლებიც წარმოიქმნება სოფლის მეურნეობის სექტორის ინოვაციური განვითარების სახელმწიფო პოლიტიკის განხორციელების პროცესში უკრაინაში.

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STATE POLICY FOR ENVIRONMENTAL SAFETY OF THE AGRICULTURAL SECTOR

OLGA RUDENKO

Doctor of Science in Public
Administration, Professor of the
National University «Chernihiv
Polytechnic»
E-mail: rudenkolgam27@gmail.com
orcid.org/0000-0002-2807-1957

PAVLO HALIMON

Getter, National University «Chernihiv
Polytechnic»
E-mail: super.halimon@ukr.net
orcid.org/0000-0003-3259-597X

The level of development of the country depends on the implemented state policy not only in the field of innovation, but also in the field of socio-economic and environmental development. Ukraine has virtually no conditions for effective innovation in the agricultural sector. Therefore, improving the state policy of innovative development of the agricultural sector through the implementation of certain measures is an urgent task of Ukrainian state policy, the implementation of which will lead to a radical revival of innovation processes in the country. Modern conditions of agricultural nature management necessitate a change in the strategy of development of the agricultural sector of the economy taking into account environmental requirements, in connection with which the priority is to form appropriate tools for environmental safety. In such conditions, the agricultural sector of the economy needs a transformation of the system of public administration, which would allow to implement the program of economic growth, increase environmental security through the creation of a flexible system of response to external and internal threats. Thus the operative and motivated decision of problems of management of ecological safety is possible by means of the effective mechanism of its state management.

The article deals with topical issues of establishing the mechanism of state management of ecological safety in the agrarian sector of Ukraine. The system of organization of innovative and ecological management of agrarian production in Ukraine is offered. It is established that ensuring environmental security requires modernization of the agricultural sector and provides for a comprehensive targeted development of production potential, which implies the acceleration of the pace of structural and technological modernization of production systems and creation of conditions for realizing the potential of innovative development and growth. It is stated that in the structure of innovative development of the agricultural sector it is necessary to distinguish the functional

filling of production and ecological systems and to characterize the relations that arise in the process of realization of the state policy of innovative development of the agricultural sector in Ukraine.

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Analysis of recent research and publications.

Many works, including such scientists as O. Veklych, V. Kravtsiv, L. Melnyk, V. Prypoten, M. Samoilik, L. Cherchyk and others. A thorough analysis of the concept of environmental safety paid attention to Nykyforov A.Ye., who interprets the concept as a characteristic of the set of material, energy and information flows, processes and phenomena that cause, accompany and are their consequences and constitute the entire life cycle of food as a factor that to some extent affects the stability of the system «human environment» and directly to man [1].

Skoryk M.O. appropriately notes that environmentally friendly agricultural products may contain maximum permissible concentrations of harmful substances, therefore, in its production can be used pesticides, agrochemicals, plant protection products, and the production of environmentally friendly products should be based on organic farming technologies in specially prepared conditions. areas remote from industrial enterprises, in environmentally friendly, radiation-contaminated areas, without the use of advances in genetic engineering [2]. At the same time, the multifaceted, complex and insufficient study of the problems of state management of environmental safety in the agricultural sector of the economy require further research.

Aim and research objectives. The purpose of the article is to study the scientific and applied principles of assessing the effectiveness of public management of environmental safety of the agricultural sector in Ukraine.

The main objectives of the study are:

- to identify promising areas for improving the mechanism of state management of environmental safety in the agricultural sector of Ukraine;

- substantiate the current vectors of modernization of the agricultural sector;

- to systematize the structure of the system of innovative development of the agricultural sector on the basis of environmental friendliness.

Presenting the main materials.

Modern agriculture of the world due to the evolutionary development of technologies is at stage 4.0 (“Agriculture 4.0”) and is focused on the use of environmentally friendly natural resources (sun, sea water), advanced innovative technologies of smart, precision agriculture, including genetic modification, nanobiotechnology, extracurricular plant growing and vertical agriculture (based on hydro-, aqua - and aeroponics), as well as complex technological systems of satellite navigation, robots, unmanned aerial vehicles / drones, 3D food printing, Internet of Things, blockchain, etc. These global technologies will allow farms to be more profitable, efficient, safe and environmentally friendly and aimed at: 1) improving the management and implementation of agricultural processes throughout the value chain, reducing risks and limiting vulnerabilities due to external influences (from equipment failure to bad weather, droughts, diseases, etc.); 2) the formation of agricultural ecosystems, including integrated networks that combine digital data obtained in real time from both internal sources (farm sensor readings) and external (provided by other participants in the ecosystem), to make effective management decisions, and also bring together ecosystem actors to ensure the effectiveness of the value chain; 3) digitization of agricultural machinery using modern technical means - sensors, sensors, which are the largest data generators.

Effective functioning of the agricultural sector in Ukraine is impossible without taking a system of measures to ensure balanced and harmonious development of social and natural relations, the main characteristic of which is the achieved

level of greening of agricultural production, environmental safety of raw materials and food.

An important method in the system of public administration is the method of financial support, or the provision of funds for specific measures for the protection of natural objects. Sources of funding for such activities may include funds from state and local budgets, own funds of enterprises, credit resources of banks and cash contributions of environmental funds and organizations.

An effective tool of public administration is the reasonable use of material incentives, which ensures the realization of the interest of economic entities in the implementation of environmental activities and environmental management. The proposed system (Fig. 1) for this purpose provides for the use, along with incentives, compensation for environmental damage and liability for environmental violations.

The activity on creation of ecological funds is an effective economic measure on the organization of maintenance of innovation-oriented development of branches of national economy. In this context, funds can be defined as institutions aimed at providing material assistance, as well as the actual funds and sources of their formation. In particular, environmental funds receive payments from enterprises for nature management and which are used to implement priority and high-value measures for the protection of natural objects. Multilevel environmental funds also perform the function of environmental insurance through appropriate contributions.

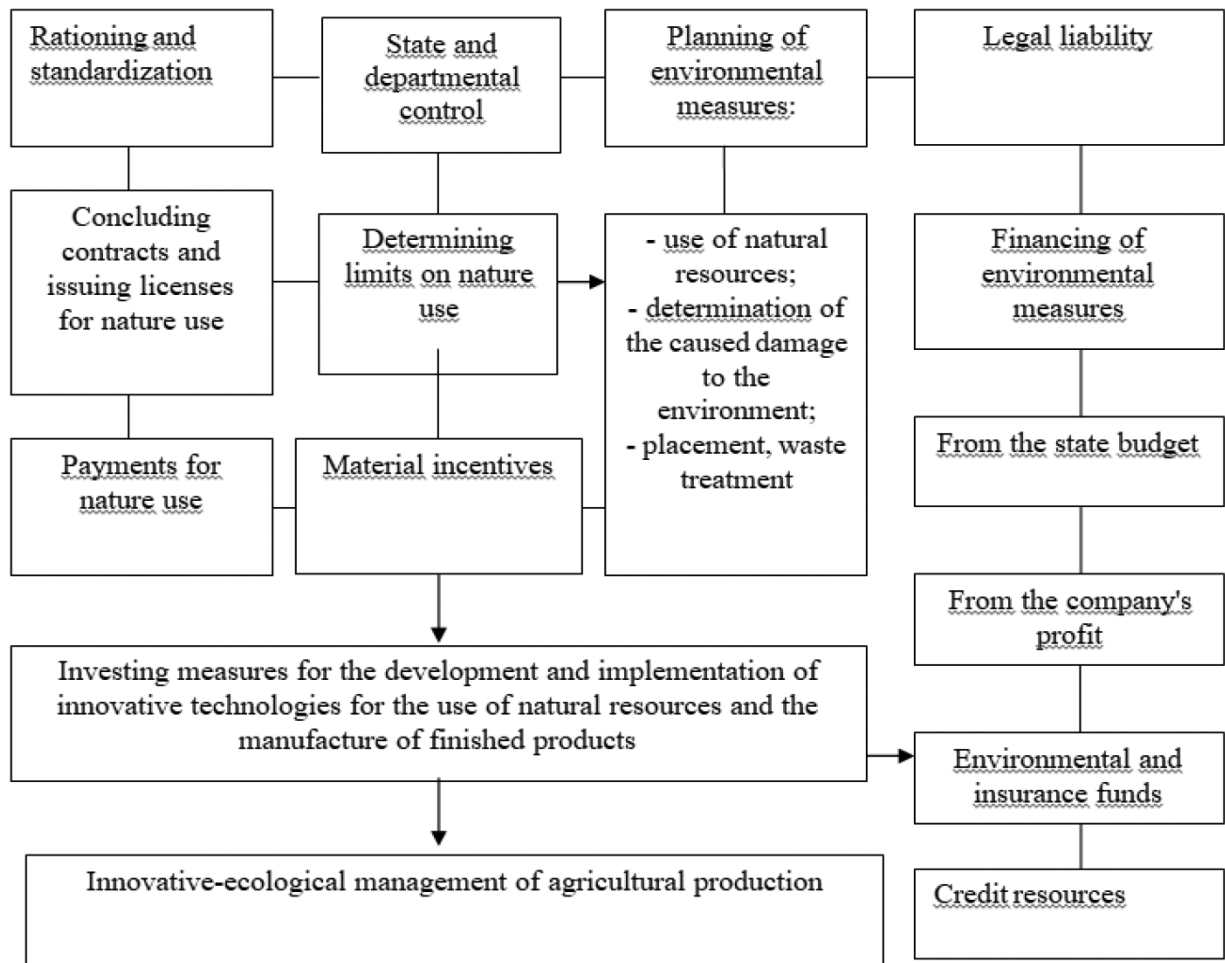
Of course, it would be expedient for the agricultural sector to prefer to solve existing environmental problems by replacing obsolete and physically obsolete equipment, introduction of low- and zero-waste technologies, establishing comprehensive waste recycling, reducing

material and energy consumption, abandoning environmentally hazardous raw materials and components. As world experience shows, the ratification of such measures depends on the financial and economic situation and can be implemented only in stages. Therefore, it is important to carry out scientific substantiation of the order of development and implementation of nature-reproductive measures, which can in the shortest possible time affect the dynamics of the quality of agricultural resources, reduce the level and scale of morbidity, which can reduce environmental payments, payments for material and energy resources, reduction or even, ultimately, elimination of payments for damages that may be caused to agricultural resources of the environment [3].

From the above it is clear that for agricultural enterprises that produce products using similar technologies, environmental measures and the order of their implementation should be individual, which is related to economic and geographical location, in particular, remoteness from settlements, sources of raw materials, rivers, financial impact -economic status for the development of the region with an impact on the agri-environmental situation.

But there may potentially be a situation where each polluter's desire to minimize their own environmental costs will cause pollution to fall to a level where further reductions will only cost as much as the additional damage from pollution. Therefore, it will be economically impractical for a particular enterprise to reduce the amount of pollution, as the cost of cleaning may be greater than the amount of damage. Therefore, one of the main criteria for assessing the nature of enterprises is the process of obtaining results, which allows to achieve production goals while minimizing the cost of material, financial and other agricultural natural

Fig. 1. The system of organization of innovative and ecological management of agricultural production in Ukraine *



* Source: built by the author [4]

resources, which will significantly reduce the burden on environmental resources.

The level of development of the agricultural sector affects the security of food security and food independence of the country. However, recently there has been a decline in the quality of food, which occurs under conditions of deterioration of the ecological condition of agricultural lands and a decrease in soil fertility - an indispensable source of life. Thus, due to soil erosion, the fertile layer of the soil is lost, the humus content decreases, the areas of acidic and solonchic soils increase, and 38% of the country's arable lands are compacted. Such processes have

a negative impact on the environmental safety of food industry products. A significant part of the food products produced does not meet world standards. At the same time, in the EU and in the world as a whole, organic production is rapidly developing, aimed at improving the health of the population through the production of high-quality food, raw materials and other products, crops. At the end of the last millennium, the era of global revision of world strategies for the development of the food industry began and continues to this day. The existing agricultural model «more and cheaper» is replaced by a new model «better and safer» [6].

In organic production, the conformity of the organic system of agriculture and food industry products to certain standards is ensured, which provides an opportunity to label products in an appropriate manner. The peculiarity of organic production is that the production, processing, packaging and storage of products are subject to certification by the relevant authorized institutions. The absence of own national standards for organic products makes it necessary to carry out certification with the help of international standards and national standards. Under such conditions, the obtained products are exported mainly to the countries authorized by the relevant certification bodies. In addition, the development of domestic organic production is complicated by the underdevelopment of the regulatory framework. Organic production allows realizing the food industry's goals, natural resource conservation and ensuring the safety and quality of products, a favorable environment and the development of the natural environment.

Management of state management of ecological preservation should be presented as interconnected blocks: 1. «Planning of rational use of natural resources and environmental protection». 2. «Financial and resource provision». 3. «Stimulating the introduction of innovations for the rational use of natural resources and environmental protection.»

Given the current trends in the formation of environmental problems, the relationship with socio-economic and political factors, issues of innovation development should be decisive in developing a national development strategy of Ukraine. Society needs to guarantee security, including environmental, which is determined

by a number of legal, economic, technological and other factors, and requires constant consideration in carrying out any activity [7].

In the process of innovative development of the agricultural sector, to ensure the competitiveness of agricultural enterprises, a system of relations is formed, which is defined by a set of production and environmental systems and determined by a number of functions, content characteristics and tasks for their implementation (Table 1).

Results and discussion.

In ensuring the competitiveness of the agricultural sector, the formation of state agricultural policy taking into account the factor of environmental safety requires consideration of the levers of resource economics. Therefore, in the structure of innovative development of the agricultural sector it is necessary to distinguish the functional content of production and environmental systems and to characterize the relations that arise in the process of implementing the state policy of innovative development of the agricultural sector in Ukraine.

The natural and production component of the state policy of innovative development of the agricultural sector in Ukraine is implemented by performing a number of functions in the general management system, which include: environment-forming, environment-protection, environment-regulatory and resource-protection functions. and rational location of agricultural production in accordance with the natural and climatic conditions of the environment, functioning taking into account the cost of local resources and economic and geographical location of the object of innovative development [8].

The information function of the state policy of innovative development of the agricultural sector in Ukraine is realized through the

provision of necessary information on innovative developments in the organization of agricultural production, market conditions, markets, etc., which contributes to the development of

partnerships between the state, agricultural producers and research institutions. technical and technological support, breeding, seed production, genetic and breeding activities.

Table 1

Functional and semantic characteristics of the system of forming the tools of the state policy of ecological development of the agricultural sector in Ukraine

Functions	Semantic characteristics	Tasks for implementation
Natural and economic	- environment-forming, - regulatory environment, - security environment, - resource protection in the general system the regulatory environment;	Creating conditions for deepening specialization and rational placement of agricultural production in accordance with the natural and climatic conditions of the environment of economic and geographical location and cost of resources.
Information	Providing information on existing innovative developments, organization of production and marketing, market conditions, etc .;	Development of partnership relations between the state, agricultural producers and scientific institutions on technical and technological support, breeding, genetic and breeding activities, etc.
Scientific and technical	- Research, - design and search, - normative-technical and technological bases of functioning;	Creation and implementation of a modern scientific and technical base for the introduction of a mechanism for coordinating economic interests in the system "science-production-processing-implementation".
Production and technological	Providing the production process with the necessary labor, material and financial resources, implementing the achievements of scientific and technological progress, improving production management;	Procurement, storage, transportation, packaging, repair and maintenance, agrochemical and veterinary and sanitary services, providing increased production readiness for the preliminary preparation of material resources for consumption, the introduction of resource-saving technologies.
Organizational and commercial	Ensuring the continuity of the reproduction process in all areas and divisions, bringing products from producer to consumer	Creation of innovation-ecological infrastructure and formation of a system of free access of domestic producers to the expanded network of warehousing, storage and sale of products.
Marketing and logistics	- Comprehensive research of the market and an economic conjuncture, the analysis of industrial and sales possibilities of the enterprise, the organization of system of commodity movement	Determining the demand for goods and placing orders for production among producers; purchase of goods to order of consumers; small wholesale and retail trade; sale to the consumer in the form of specially assembled batches of goods.
Settlement and credit	Increasing the efficiency of money circulation, accumulation and use of temporarily free funds	Assistance in logistics and sales of enterprises by providing financial settlements and soft loans.
Accompanying	Legal and economic consulting, after-sales support	For entities that need assistance in resolving business matters and protecting their interests in public and private entities.

Organizational-commercial and information services can be aimed at: work to provide market participants with information of a commercial nature, ie information on the organization of procurement and sale of products, especially on potential manufacturers of necessary products, pricing policy, product range, methods of product delivery; material and resource provision; sales channels of manufactured products; personnel movement; providing appropriate conditions for contacts of entrepreneurs, business exchange; advertising, marketing services [9].

The implementation of the marketing and logistics function is revealed through the definition of demand for products, their placement, ordering, manufacturing; purchase of goods to order; awareness of producers and consumers about market innovations; retail and wholesale trade; sales of products to consumers in specially formed batches of products; sales of products and provision of consumers on agreed terms.

The logistics component is determined through warehousing and transportation of products to places of further consumption, development of optimal routes and determination of the most rational types of vehicles, conclusion of contracts for transportation of products and development with coordination of schedules of such works.

Production and technological functions are aimed at providing goods with increased production attractiveness on the basis of resource-saving technologies, prior readiness for the use of material resources. Long-term lease of goods for industrial and technical purposes for a long period of use determines the lease (leasing) functions [9-10].

Settlement and credit, audit, insurance – provide financial settlements, lending conditions, insurance of audits, taking into

account commercial risks. At the same time, legal and economic consulting is aimed at providing consulting services for entities that need assistance in solving environmentally sound management and protection of their interests in public and private structures.

Conclusions and recommendations.

The state policy of ensuring the environmental safety of the agricultural sector in Ukraine is having an increasing impact on its own subsectors, and the creation of a competitive environment for agricultural production will facilitate access to new markets. The main principles of integration of the agricultural sector are, first of all, the creation of a strong national market for environmentally friendly products with financial stabilization and harmonization of domestic foreign economic legislation in accordance with the requirements of the World Trade Organization and further development of its own industries.

Thus, ensuring the effectiveness of state policy to ensure the environmental safety of the agricultural sector in Ukraine we see through:

1) creating conditions for deepening specialization and rational placement of agricultural production in accordance with the natural and climatic conditions of the operating environment;

2) creation of innovative ecologically oriented infrastructure and formation of a system of free access of domestic producers to the expanded network of warehousing, storage and sale of products;

3) development of partnership relations between the state, agricultural producers and scientific institutions on technical and technological support, selection, seed production, genetic and breeding activities, etc.;

4) introduction of the mechanism of coordi-

nation of economic interests in the system “science-production-processing-realization”;

5) increase opportunities for participation in organized market relations of all forms of management, including cooperation of small producers, to deepen cooperation in the processing and sale of products for export;

6) expanding the boundaries of production of organic products, increasing the level of responsibility for compliance with the quality and safety of agricultural products.

Summarizing the above, it should be noted that in order to comprehensively and effectively implement the tasks of organizational-institutional and regulatory support of state policy of agricultural sector development, optimal use of investments to increase the competitiveness of national agricultural producers and domestic investment attractiveness should be: improving domestic regulations -legal framework in the

context of adaptation to the requirements of international standards; formation of a favorable investment climate in the agricultural sector; implementation of state programs of socio-economic development of the village; to create favorable conditions for the formation and functioning of the scientific and technical base of agricultural production by diversifying the financing of innovative developments and their commercialization, renovation, expansion and significant re-equipment of material and technical base; support for the development of innovation infrastructure in the agricultural sector; implementation of coordinated interaction of the system of state management of the agricultural sector, which is a complex mechanism of a certain influence on pricing, financial and credit, tax system of agricultural production; attracting foreign direct investment in the agricultural sector of Ukraine.

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