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CONCEPTUAL ASPECTS OF THE DEVELOPMENT OF ECOLOGICALLY ORIENTED ENTREPRENEURSHIP IN THE AGRICULTURAL SECTOR OF THE CARPATHIAN REGION OF UKRAINE

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The goal – reveal the conceptual aspects of the development of ecologically oriented entrepreneurship in the agricultural sector at the regional level. **Methods.** General and special scientific methods were applied: dialectical, deductive, inductive, analysis and synthesis, grouping, graphic, SWOT analysis. **The results.** Trends in the concentration of land resources in larger farms were analyzed. A SWOT analysis of ecologically oriented agricultural production in the Carpathian region of Ukraine was carried out, as well as substantiation and development of legal support in order to determine the criteria for classifying areas as mountainous; implementation of regional agro-industrial programs, which would reflect strategically important issues of stimulating production and reviving traditional areas of specialization in mountainous areas; state support for economic entities that carry out production activities in difficult conditions on sloping lands, which are characterized by relatively low soil quality; formulation of environmental principles of management in the charter of business entities.

Conclusions. The results of research can be used to justify the competitive environmental strategy of agricultural enterprises of the Carpathian region of Ukraine, which can become an effective mechanism for realizing their production and resource potential as well as contribute to the expansion of the capacity of the domestic agro-food market of high-quality and safe products that meet world standards.

Keywords: *environment, land use, production and resource potential, strategy, products, geographical indication, market*

Introduction. An important condition for ensuring the effective and competitive development of the agricultural sector of the domestic economy is the consideration of the environmental component at all stages of its functioning. At the national level, modern trends in land use are characterized by the spread of degradation processes in agroecosystems, non-compliance with technological requirements in the process of carrying out production activities and a low level of responsibility for violations of environmental legislation. At the same time, there is a trend towards consumer awareness of the environmental friendliness of products and a growing demand for them. In this regard, the problem of creating organizational and economic prerequisites for ecologically oriented business activity, which meets the specified criteria, is actualized: enshrining in the organization's charter as the main goal of performing works and services aimed at preserving the environment;

implementation of nature protection programs of national and regional importance; production of products, which includes costs for the implementation of environmentally safe measures.

Analysis of recent research and publications. Environmental problems in the production activity of agricultural enterprises, which can be solved on the basis of information and institutional support, use and improvement of the levers of state regulation, were studied by well-known domestic scientists: L. Lipych, P. Melnyk, A. Sokhnych, Z. Zhyvko, O. Drebot, O. Khodakivska, E. Mishenin, V. Chudovska, O. Shkuratov [1-8]. However, insufficient attention to the conceptual aspects of the formation and development of ecologically oriented entrepreneurship in the conditions of the realities of domestic economy and its integration into the world economic system makes it necessary to consider this issue at the national and regional levels. Domestic and foreign experience shows that the ecologically oriented strategy of agricultural enterprises is considered as a source of their competitiveness and an important prerequisite for the increase of high-quality and safe crop and livestock products to satisfy consumer demand in the domestic and foreign markets.

The purpose of the study is to reveal the conceptual aspects of the development of ecologically oriented entrepreneurship in the agricultural sector at the regional level. The object of the study is the process of systematic transition of regional commodity producers from traditional to ecologically oriented entrepreneurship in the conditions of sustainable development of rural areas.

Research methods. In the research process, a number of scientific methods were used, which made it possible to obtain substantiated results. In addition to general scientific methods: dialectical, deductive and inductive analysis and synthesis were used – to study, generalize, systematize the organizational and economic prerequisites for the transformation of traditional agricultural production to ecologically oriented; grouping – to justify the trends in the use of land resources in farms, taking into account the area of agricultural land; graphic – for visual visualization of data and illustration of the studied phenomena; matrix analysis for substantiating the prospects for the formation and development of ecologically oriented agricultural production in the Carpathian region of Ukraine (SWOT analysis).

Research results. The existing system of production in the agrarian sector of the domestic economy significantly disrupts the natural balance and does not contribute to conservation of the natural environment. Modern economic development is carried out in the conditions of a global ecological crisis caused by anthropogenic and man-made factors. The impact of business activity on the environment has reached a critical point, as a result of which the environmental crisis can turn into a catastrophe of a global scale, which determines the objective need for a meaningful rethinking of the interaction of modern production processes and the natural environment, as well as the justification of new approaches to the ecological and economic management of enterprises [9].

World practice highlights the following principles of ecologically oriented agricultural production:

- 1) establishment of agricultural management rules – the Code of Good Agricultural Practices (UNDP/GEF project "Reduction of environmental pollution

through changes in agricultural policy and demonstration of pilot projects" for the Danube River basin); Code of Good Agricultural Practice (regulated by the EU Directives "On the Protection of Water Resources from Nitrate Pollution from Agricultural Facilities"; "Good Agricultural and Environmental Conditions" (EU Directive 1782/2003/EEC); "Common Standards of Good Farming Practice" (EU Directive 1257/1999/EEC), etc.;

2) spread of low-cost (balanced, compromise, adaptive) production systems: analogues of LISA / LEISA (Low (external) input sustainable agriculture – low-cost supporting agriculture, mini-agriculture (Biointensive Mini-Farming), Biodynamic Agriculture, EM-technologies (Effective Microorganism Technologies), etc. LISA / LEISA technologies have become the most widespread in the world and state support in this group;

3) the development of organic (biological, ecological) production – involves the wide use of biological approaches in agricultural production (manure, siderates, minimization of soil treatment, biological loosening and structuring of the soil, biological conversion of nitrogen into organic compounds, biological control of weeds, pathogens and pests), refusal to use pesticides or their regulated use only in seed treatment, ban on using genetically modified organisms, etc. In the European Union, organic production is regulated by Directives No. 2092/91 and No. 834/2007 dated 28.06.2007 on organic products and their labeling, basic standards of the International Federation of Organic Agriculture Movements (IFOAM), the Standard of Food and the Food and Agriculture Organization of the United Nations (FAO) and the World Health Organization – Codex Alimentarius;

4) the combination of agricultural production technologies with environmental protection measures (for example, we are talking about subsowing or sowing in the fields of plants that support the food chain of local animals) [10].

Entrepreneurial activity, which is based on the above-mentioned principles, ensures the mutual coherence of economic and ecological processes, contributes to the sustainable development of rural areas. However, it should be noted that in the conditions of the functioning of the agricultural sector of Ukraine, only one of these principles – organic production – is given due attention: the legal support is substantiated and the directions and volumes of state support are regulated.

With regard to the specifics of the functioning and development of the agrarian sphere of the domestic economy, it is noted that "in modern business conditions, taking into account the difficult financial and economic condition of the vast majority of small and medium-sized agricultural enterprises and at the same time the management of powerful agricultural holdings on leased lands that do not care about the protection of agricultural lands, the qualitative state of the soil cover, it is appropriate to use the term "ecologically oriented entrepreneurship", which to one degree or another takes into account the ecological component at all stages of production activity and provides for compliance with environmental legislation [11]". In national legislation, attention is focused on entrepreneurship as a type of economic activity characterized by a certain degree of risk: Article 42 of the Economic Code of Ukraine dated January 16, 2003 declares that entrepreneurship is an independent, initiative, systematic, at one's own risk economic activity, which is carried out by business entities (entrepreneurs) with the aim of achieving economic and social results and making a profit. Taking into account the high costs of implementing

environmental protection measures, their prolonged impact on the environment and a significant payback period, or even the low level of effectiveness of using the term entrepreneurship, which is considered through the prism of riskiness, is fully justified and deserves wide use in the methodology of scientific research.

In the economically developed countries of the world, the term ecologically oriented entrepreneurship is not used, which is due to strict ecological requirements at all stages of production activity, a high level of legal responsibility, wide use of the environmental management system, the use of the system of analysis of dangerous factors and control at critical points (HACCP). On an international scale, the concept of proactive enterprise development and building business models combining economic, social and environmental aspects is supported. The implementation of this concept is facilitated by the decisions of international organizations, as well as the processes taking place in the investment markets. A special role is played by the United Nations Organization, which prepared the Principles of Responsible Investment with attention to environmental aspects [12].

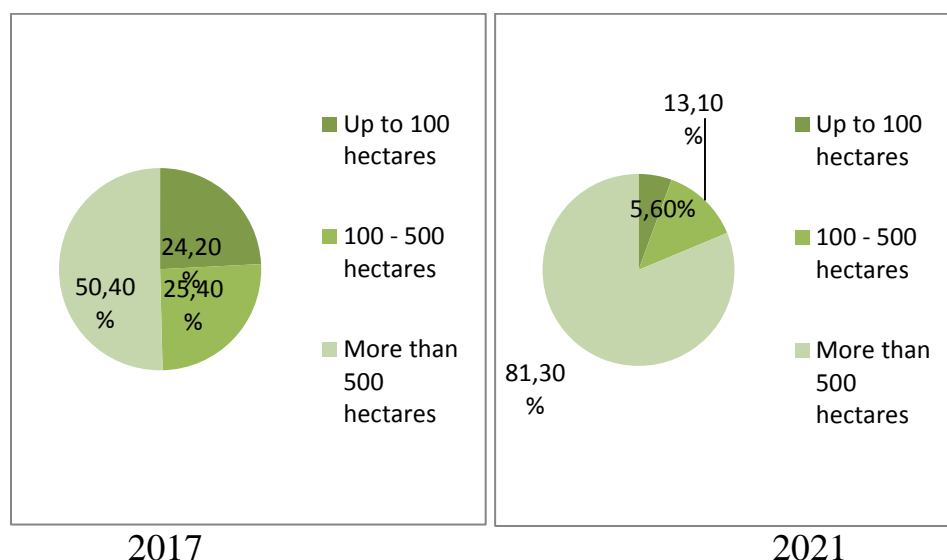
The Carpathian region of Ukraine is characterized by specific natural and climatic conditions and a relatively lower level of environmental pollution. The most important strategic documents aimed at preserving the nature reserve and increasing the effectiveness of the use of the production and resource potential of the Ukrainian Carpathians are the Framework Convention on the Protection and Sustainable Development of the Carpathians, the Law of Ukraine "On the Status of Mountainous Settlements in Ukraine", the Law of Ukraine "On Stimulation of Development regions", Law of Ukraine "On cross-border cooperation", Concept of development of mountainous territories of the Ukrainian Carpathians.

Approved by Resolution No. 880 of the Cabinet of Ministers of Ukraine dated October 20, 2019, the State Program for the Development of the Ukrainian Carpathian Region for 2020-2022 was developed for the comprehensive solution of the primary existing problems in the economic sphere, provided that the interests of the growth of the quality of life of the population of mountainous areas and the preservation of their ecosystems are balanced. Due to the lack of targeted funding from the state budget of this Program, its implementation in 2020 was only 76.0%.

In the studied region, in conditions of permanent destructive impact of agricultural production on the environment, important determinants of the development of ecologically oriented entrepreneurship in agricultural production are: the presence of specific ecological and geological features for the formation of a regional brand based on the production of high-quality and safe products with a geographical indication; a significant share of small farms (18.7%) with a land area of up to 500 hectares, as potential adherents of the ecological way of farming; high capacity of the food market due to the presence of potential consumers of the middle class and the functioning of the tourist and recreational sphere.

Considering the aggravation of the ecological situation at the macro level, which is caused by highly intensive agricultural production and the military aggression of the russians against Ukraine, the development of ecologically oriented entrepreneurship in the Carpathian region, which has a favorable geopolitical position and significant land-resource potential and is characterized by a relatively low level of environmental pollution, is now of strategic importance. The experience of economically developed countries of the world shows that for the purpose of

sustainable development of rural areas, considerable attention is paid to farms that contribute to the employment of the working population and the preservation of the natural environment. According to the data of the State Statistics Service of Ukraine, for five years (2017-2021) in the Carpathian region of Ukraine, there is a tendency to decrease the number of farms with a land area of up to 100 and from 100 to 500 hectares due to their transition under the control of business entities from a larger land bank (Fig. 1).



1. The specific weight of farms in the Carpathian region of Ukraine with land area up to 100 hectares and from 100 to 500 hectares (2017 and 2021), %.

Statistical data on the concentration of land use in larger farms testify to the advantages of large-scale production, which allows obtaining a higher profit per unit of agricultural land. At the same time, the presented group of farms is able to form the appropriate level of marketability of the grown products, as well as ensure the reduction of its supply chains.

The conducted SWOT analysis regarding the prospects for the formation and development of ecologically oriented agricultural production in the Carpathian region of Ukraine made it possible to identify strengths that can act as competitive advantages. At the same time, a detailed analysis of weaknesses allows to reduce or avoid their negative impact (Table 1).

1. SWOT - analysis of the prospects for the formation and development of ecologically oriented agricultural production in the Carpathian region of Ukraine

STRENGTHS (S)	WEAKNESSES (W)
1. Favorable natural and climatic conditions for growing the main types of plant and animal products	1. Deterioration of the quality of agricultural lands due to the spread of degradation processes
2. A significant share of the rural	2. A high degree of wear and tear of the

population of working age employed in farms	main production assets
3. Advantageous cross-border placement	3. Lack of state support for regional agricultural producers who have difficult farming conditions (sloping land, relatively low soil quality indicators)
4. High prices for organic, local, traditional products with geographical indication	4. Formation of small batches of wholesale products in farms
5. Creation of a brand with a geographical indication	5. Relatively low level of purchasing power of potential consumers of certified products with a geographical indication
OPPORTUNITIES (O)	THREATS (T)
1. Expansion of foreign economic relations as a result of cross-border cooperation	1. Differentiation of salary levels in various sectors of the economy, outflow of the working population to countries near and far abroad
2. Increasing the efficiency of the use of production capacities of processing enterprises of the food industry	2. Establishing quotas for the export of plant and animal products
3. Increasing level of use of tourism and recreation potential	3. Low level of solvent demand of the population for products with high added value
4. Wide use of ecological marketing and the development of the brand trade network	4. Activation and emergence of unscrupulous competitors
5. The economic mechanism of environmental regulation (for example, the use of green public procurement)	5. The absence of a differentiated approach to state support for agricultural producers, taking into account their organizational and economic conditions of business

Source: developed by the author

In the Carpathian region of Ukraine, the environmentalization of agricultural production creates favorable organizational and economic prerequisites for increasing the volume of traditional types of agricultural products with geographical indication. In this context, it is necessary to emphasize not only the legal protection of the names of goods of the European Union (EU) with geographical indication, but also the use of the quality term "mountain product".

The growth of agricultural production in the studied region is accompanied by the concentration of land in agroholding-type enterprises, which rent them in lowland areas and specialize mainly in the cultivation of export-oriented and stably profitable plant products. For agricultural producers, who carry out production and economic activities in difficult conditions on the slopes of the Carpathian region of Ukraine, a

narrow branch specialization – dairy and meat cattle breeding – is scientifically based and traditionally important. The revival of this industry in the foothills and mountainous areas by applying a price premium to products with a geographical indication will ensure an increase in the share of family farms in the overall structure of agricultural production and their competitive development.

In Ukraine, no legislative act defines the conditions and criteria for classifying localities as mountainous, in contrast to the regulatory and legal requirements, which are provided for the justification of the category of mountainous settlements, regulated by Art. 1 of the Law of Ukraine "On the status of mountain settlements in Ukraine". Despite the more difficult management conditions of agricultural enterprises operating in the Carpathian region of Ukraine (use of agricultural land on sloping lands, relatively low quality indicators of soil cover), and at the same time the existing land resource potential at the legislative level, direct and indirect (indirect) methods of state influence are not provided for them.

In the conditions of limited state financial resources, the use of market mechanisms of environmentalization of production activities in agricultural enterprises becomes fundamentally important. In the European Union, which is considered the flagship of environmental policy on a global scale, special attention is paid to an indirect method of state economic regulation – green public procurement (GPP), which is a strong incentive for eco-innovation and requires the inclusion of clear and verified environmental criteria for products and services in the process of announcement tender offers. In the future, in the world economy, this economic tool should play a decisive role in the functioning of a resource-efficient economy. In this regard, in the Carpathian region of Ukraine, in the regional programs of agro-industrial development, it is necessary to envisage the use of agricultural production facilities, which will contribute to the ecological modernization and transformation of agricultural enterprises.

Conclusions.

Taking into account the strategic importance of ecologically oriented entrepreneurial activity in the agricultural sector of the Carpathian region of Ukraine, the following conceptual aspects of its development become especially relevant: substantiation and development of regulatory and legal support in order to determine the criteria for classifying areas as mountainous; formulation of environmental principles of management in the charter of business entities; implementation of regional agro-industrial programs, which would reflect the regional peculiarities of production activities in mountainous areas and the role of state regulation methods.

A systematic approach to the implementation of the transition of the Carpathian region of Ukraine from traditional agricultural production to ecologically oriented is a key condition for solving the most important problems of its sustainable development: rational use of agroecosystems, increasing employment of the working population, improving the level and quality of life of rural residents; formation of sufficient volumes of high-quality and safe products with geographical indication.

Bibliography

1. *Lipych L. H., Yushchyshyna L. O.* Information provision of ecological and economic interests of the enterprise. *Aktualni problemy ekonomiky*. 2013. No. 12. P. 124–131.
2. *Melnyk P. P.* Ecological and economic foundations of nature management in agroecosystems. K.: DIA, 2016. 328 p.
3. *Sokhnych A. Ya., Zhyvko Z. B.* State management of land resources in the system of management of the economy of Ukraine: institutional aspect. *Vestnik ekonomicheskoi nauki Ukrainy*. 2018. (1 (34)). P.164-169.
4. *Drebot O.I., Sakharnatska L.I., Vysochanska M.Ya.* Model of the efficiency of the use of the economic mechanism of agricultural land. *Efektivnist derzhavnoho upravlinnia : zb. nauk. pr.* Lviv: LRIDU NADU, 2018. No. 4 (57). Part 2. 163–177 p.
5. *Khodakivska O.V.* Greening of agricultural production: monograph. K.: NNC IAE, 2015. 350 p.
6. *Mishenin E. V., Yarova I. E., Dutchenko O. M.* Environmental and economic security of agrarian land management: conceptual guidelines and organizational mechanisms. *Zbalansovane pryrodokorystuvannia*. 2017. No. 2. P.145-151.
7. *Chudovska V. A.* Mechanism of state regulation of eco-safe use of land resources. *Zbalansovane pryrodokorystuvannia*. 2015. No. 1. P. 65–69. 2.
8. *Shkuratov O. I.* Organizational and economic foundations of ecological security in the agricultural sector of Ukraine: theory, methodology, practice. K.: DKS-Center, 2016. 356 p.
9. *Shvydanenko G. O., Kryvoruchkina O. V., Matukova D. G.* Enterprise development on ecological and economic principles: monograph. K.: KNEU, 2017. 184 p.
10. Regarding the improvement of agro-ecological conditions for the functioning of agriculture: an analytical note of the National Institute for Strategic Studies under the President of Ukraine. URL: <http://www.niss.gov.ua/articles/1437>.
11. *Palenichak O.* Ecologically oriented entrepreneurship in the agricultural sector of the Carpathian region of Ukraine. Collective monograph: Science for modern agriculture in the Carpathian region. ScientificWorld-NetAkhatAV Karlsruhe. 2021 pp. 101-115.
12. *Chodyński A.* Odpowiedzialność ekologiczna w proaktywnym rozwoju przedsiębiorstw. Kraków. Krakowskiej Akademii im. Andrzeja Frycza Modrzewskiego. 2011. 264 p.