Ecological and Economic Aspects of Agricultural Sector Development in the Context of Cross-Border Cooperation

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Abstract

The dynamics of indicators of total support of the agricultural sector of Ukraine and the EU are analyzed %. Calculated integral indicator of economic and environmental development of the agricultural sector in border territories in Ukraine for the period 2010–2018 years. Determined ecological and economic aspects development of the agricultural sector in the context of cross-border cooperation. Proved that the modernization of the management system of the development of the agricultural sector of Ukraine in particular in the border areas should focus primarily on a new concept of their further development - multifunctional in form and environmentally balanced in content.

Keywords: agriculture, agricultural sector, cross-border cooperation, border regions.

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Formulation of the problem

Today, the regional public policy is a gradual path of development, because the main stages of development are output Ukraine in the European space, as well as cross-border cooperation in the context of increasing sales and export-import relations, etc. One of the positive points is the border regions, which significantly easier to implement connections on both sides of the border, the location of these regions has a certain essence, national, family, religious ties, and traditions.

Cross-border cooperation plays an important role, which belongs to the stage of stimulating cross-border cooperation between agro-industrial enterprises, as well as ensuring the balanced development of investment and innovation mechanism for the introduction of agro-industrial enterprises and other economic entities in border and cross-border regions.

In recent years, Ukraine has intensified its efforts to improve political and economic cooperation with the European Union (EU) to join the European Community. Preparation for EU accession and membership has a significant impact on agriculture and public agricultural policy. Current trends actualize the need to research the policy of supporting the agricultural sector of the EU member states as a component of economic security and an integral part of the European development strategy. Since the creation of the EU and to this day, the characteristics of the current model of agricultural relations in European countries are determined by the Common Agrarian Policy (CAP). For many decades, the CAP has changed the basic principles and approaches to supporting the agricultural sector of the economy. Today, the main direction of the CAP is to develop an effective and adequate agricultural policy by providing basic "public goods" and establishing supportive legislative, administrative and regulatory systems to stimulate private investment in agriculture. The CAP's activities include measures to support the competitiveness of the EU agricultural sector on the world stage without the

use of export subsidies, reduce support methods that lead to trade distortions, and, to a greater extent, rural development, environmental protection, and food security [1].

It should be noted that Ukraine is an agricultural country, decide coexistence in cross-border territories is difficult and impractical, especially in industries where production conditions inherent in a small area. Many scientists propose to transform such cooperation into territorial communities, which can increase the environmental, economic, and social efficiency of agricultural production.

The essence of the problem facing humanity at the present stage of its evolution is that people do not have time to adapt their ecological culture by the changes that they make in this world, and the sources of this crisis - inside, not outside the human history, which is seen as an individual and as a collective.

ANALYSIS OF THE LASTS RESEARCH AND PUBLICATIONS

Analysis of the state of agriculture Ukraine to pay attention to many scientists, including: O. Pavlenko [2], O.M. Barylovych [3], V.S. Boichenko ta M.V. Lynnyk [4], I. V. Kazakova [5], O.H. Sula [6], O. Flonts [7]. At the same time, some aspects of the problem remain insufficiently processed and covered in the scientific literature. First of all, it's about the need to implement as soon as possible an integrated approach to solving the problems of agricultural development and environmental and economic aspects in border and cross-border areas.

The article aims to identify environmental and economic aspects of the agricultural sector development in the context of cross-border cooperation.

Presentation of the main research material.

For successful and effective implementation of tasks common cross-border cooperation, the agricultural sector of Ukraine has enough prerequisites: rich natural resources and export potential, significant human capital, gradually increasing

the investment attractiveness of border regions, preserved rural life, and centuries-old traditions of agriculture. In this context, research and scientific understanding of the experience of forming the European agricultural model will contribute to the implementation of structural reforms in the field of agriculture and increase the competitiveness of agri-food products in European and world markets. [8, c. 108–113].

Assessment of the main political, economic, social, environmental, scientific, technical, and educational-professional factors of the model of European integration, the analysis of which gives grounds to consider the integration process in the agricultural sector not as a one-time charge in the socio-economic environment, but as a complex permanent process aimed at macroeconomic stabilization, creating a favorable investment and innovation climate, improving the quality of labor, diversification of the rural economy, price equilibrium of the agricultural market and stability of financing [9].

The main tasks of the state level include: development and implementation of the concept of ensuring the competitiveness of the agricultural sector of the economy in the context of European integration; structural restructuring of the agroindustrial complex; ensuring the adaptation of agro-industrial enterprises taking into account Ukraine's accession to the WTO and integration into the EU; increasing exports of agricultural products; creating conditions for the development of effective entrepreneurship in agriculture; increasing the volume of investments, including foreign ones and their innovative direction; creation of civilized living conditions in rural areas as the basis influx of working-age strata [10; 11]

To develop effective policy in Ukraine, the development of border areas important to consider the experience of reforms of the Common Agricultural Policy (CAP), the EU, the result of which was the dominance of rural development on its other tasks. This forms the basis for the formation of the Western European model of rural development, the main guidelines for which are a quality living environment, a highly diversified agricultural sector, food security, and environmental well-being [12; 13].

In Ukraine, in recent years, when the priorities of state regional policy have changed based on the best European experience, the policy of agricultural sector development has been defined as part of regional development policy. For Ukraine, where the level of urbanization is one of the lowest in Europe, and the share of agricultural production in the structure of GDP is the highest among European countries, rural development policy should be one of the main in the state regional policy [14].

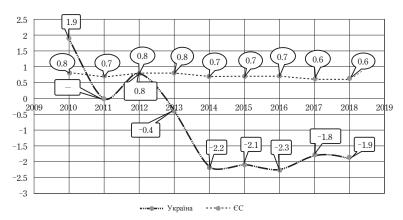


Fig. 1 Dynamics of the indicator of total support of the agricultural sector of Ukraine and the EU, %.

Source: [15].

Note that the indicators of the level of total support for the agricultural sector of Ukraine and the EU for the period 2010-2019, but as we can see from Figure 1 there are slight fluctuations in individual years, which tend to increase significantly.

Despite the rather difficult internal situation, the agricultural sector has a significant impact on the recovery and sustainable growth of the national economy. The current state of the agricultural sector of the economy is characterized by an imbalance of its development, due to the focus of the state on the economic component, without taking into account social, environmental, institutional, and other features that affect and determine the level of its development. This objectively hinders, first of all, the proper provision of food security of the state, the formation and development of agricultural entities, reduces the quality of life of the population, strengthens ecologically depleting agricultural land use, which are systemic threats to the economic security of Ukraine [16; 17; 18].

Table 1. Dynamics of integrated indicators of economic development of the agricultural sector of the border territories of Ukraine for the period 2010-2018 years.

Regions	2010	2011	2012	2013	2014	2015	2016	2017	2018
Ukraine	0,348	0,347	0,347	0,377	0,386	0,376	0,383	0,391	0,402
Vinnytsia	0,776	0,785	0,841	0,833	0,895	0,684	0,767	0,792	0,821
Volyn	0,465	0,431	0,46	0,37	0,385	0,49	0,417	0,479	0,498
Zhytomyr	0,432	0,417	0,535	0,47	0,464	0,424	0,477	0,551	0,652
Zakarpattya	0,363	0,306	0,333	0,225	0,195	0,242	0,203	0,243	0,275
Ivano-Frankivsk	0,488	0,459	0,511	0,455	0,411	0,595	0,391	0,407	0,432
Kyiv	0,654	0,637	0,63	0,582	0,577	0,587	0,598	0,581	0,594
Lviv	0,36	0,346	0,314	0,268	0,284	0,296	0,294	0,323	0,345
Odesa	0,266	0,219	0,132	0,187	0,192	0,167	0,235	0,236	0,245
Rivne	0,418	0,411	0,416	0,379	0,383	0,371	0,354	0,483	0,495
Sumy	0,375	0,436	0,503	0,541	0,604	0,573	0,574	0,645	0,675
Chernivtsi	0,613	0,511	0,507	0,45	0,493	0,407	0,361	0,412	0,435
Chernihiv	0,52	0,527	0,625	0,57	0,569	0,574	0,582	0,681	0,712

Source: formed by the author based on statistical data

As we can see from (Table 1) Vinnytsia, Zhytomyr, Sumy, Chernihiv, Kyiv regions, which have the highest integrated indicator of economic development of

the agricultural sector among the border regions. And Odesa, Zakarpattia, Lviv regions, which have the lowest integrated indicator, indicate the problems of development of the agricultural sector in the context of the economy. At present, the state does not pay enough attention to ensure economic security and increase the stage of economic efficiency in the agricultural sector of the economy.

The dynamics of the environmental integrated indicator allow us to analyze the presence of several destructive aspects in the context of the agricultural sector. Vinnytsia, Volyn, Odesa regions with the lowest environmental sustainability among the border regions of Ukraine, indicate a lack of investment in environmental protection and rational use of natural resources, negative impact on the environment is the introduction of fertilizers, pesticides, and other chemicals used in agriculture, etc. The highest indicator of ecological sustainability is in Kyiv, Ivano-Frankivsk, and Zakarpattia regions (Table 2).

The priority today for the Ukrainian agricultural sector is the joint efforts of lo-

Table 2. Dynamics of integrated indicators of ecological sustainability of the agricultural sector of the border territories of Ukraine for the period 2010-2018 years.

Regions	2010	2011	2012	2013	2014	2015	2016	2017	2018
Ukraine	0,368	0,453	0,422	0,403	0,421	0,413	0,407	0,343	0,398
Vinnytsia	0,287	0,258	0,325	0,216	0,25	0,281	0,286	0,225	0,198
Volyn	0,421	0,437	0,452	0,378	0,416	0,424	0,422	0,314	0,279
Zhytomyr	0,4	0,422	0,372	0,307	0,344	0,332	0,374	0,293	0,321
Zakarpattya	0,503	0,462	0,424	0,443	0,751	0,414	0,441	0,427	0,412
Ivano-Frankivsk	0,551	0,54	0,507	0,483	0,488	0,555	0,605	0,539	0,598
Kyiv	0,377	0,398	0,41	0,407	0,331	0,319	0,278	0,584	0,612
Lviv	0,366	0,322	0,328	0,29	0,367	0,344	0,365	0,339	0,354
Odesa	0,379	0,334	0,285	0,248	0,246	0,269	0,257	0,243	0,265
Rivne	0,319	0,327	0,328	0,282	0,315	0,279	0,295	0,346	0,376
Sumy	0,39	0,534	0,472	0,428	0,414	0,404	0,441	0,347	0,397
Chernivtsi	0,384	0,427	0,405	0,398	0,379	0,376	0,494	0,365	0,387
Chernihiv	0,429	0,421	0,38	0,458	0,367	0,348	0,311	0,292	0,345

Source: formed by the author based on statistical data

Ecological and Economic Aspects of Agricultural Sector Development in the cal communities and agricultural producers, which in turn will increase the competitiveness of agriculture and promote rural development based on the principles of sustainable development and by EU and international standards. Among the strategic priorities of reforms in the agrarian sector of Ukraine allocated:

- creation of a stable legal system that meets international and European standards, in particular through the implementation of the Association Agreement between Ukraine and the EU;
 - rural development the revival of the Ukrainian village;
- promoting the development of agricultural education, science, and advisory services;
- environmental protection and management of natural resources, in particular forestry and fisheries [19].

In our view, modernization of management of development of the agricultural sector of Ukraine in particular in border areas should focus primarily on the new concept of further development -multifunctional in form and environmentally balanced in content. An important reference point is the EU's Common Agricultural Policy, which in recent years has increasingly focused on achieving a balance between its two main vectors: market policy and promoting the development of this industry.

Conclusions

The analysis allows us to conclude that the development of the agricultural sector in Ukraine is under a stage of development in comparison with EU standards. It is determined that the main tasks of the Ukrainian agricultural sector today are to unite the efforts of local communities and agricultural producers, which will increase the competitiveness of agriculture and promote rural development in border and cross-border areas on both sides of the border based on the principles of balanced development and by EU standards and international standards.

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