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I. Vinichenko,

*Doctor of Economic Sciences, Head of the Department of Economics,
Dnipro State University of Agrarian and Economics
ORCID ID: <https://orcid.org/0000-0002-9527-1625>*

A. Sitkovska,

*Doctor of Economic Sciences,
Dnipro State Agrarian and Economic University
ORCID ID: <https://orcid.org/0000-0003-1892-6314>*

V. Susla,

*student group MzEK3-1-25,
Dnipro State University of Agrarian and Economics
ORCID ID: <https://orcid.org/0009-0008-1071-3705>*

**DEVELOPMENT OF INTEGRATION FORMS OF AGRIBUSINESS
FOR THE PRODUCTION AND PROCESSING OF AGRICULTURAL
PRODUCTS**

I. I. Вініченко,

*д. е. н., професор, завідувач кафедри економіки,
Дніпровський державний аграрно-економічний університет*

A. O. Сітковська,

*д. е. н., професор кафедри економіки,
Дніпровський державний аграрно-економічний університет*

B. B. Сула,

*здобувач групи МгЕКз-1-25
Дніпровський державний аграрно-економічний університет*

РОЗВИТОК ІНТЕГРАЦІЙНИХ ФОРМ АГРОБІЗНЕСУ З ВИРОБНИЦТВА І ПЕРЕРОБКИ СІЛЬСЬКОГОСПОДАРСЬКОЇ ПРОДУКЦІЇ

The article studies theoretical and practical aspects of the development of integration processes in the field of agribusiness and their impact on improving economic efficiency and food security. It has been determined that agro-industrial integration is an important factor in the formation of a competitive agricultural sector, as it provides effective interaction between production, processing, logistics and marketing of agricultural products. Scientific approaches to the interpretation of the concept of agro-industrial integration as a process of combining economic, technological, organizational and financial resources of participants in the agri-food chain in order to obtain a synergistic effect are generalized.

It is determined that modern integration processes go beyond the traditional agro-industrial complex and cover the banking sector, IT technologies, insurance, logistics and investment structures. The main forms of integration in the agricultural sector are analyzed: vertical, horizontal, conglomerate and cluster, as well as their role in improving the efficiency of management. It has been substantiated that the transition to integrated forms of agribusiness is a natural stage in the development of the economy, which contributes to the concentration of

resources, reducing risks, increasing investment attractiveness and competitiveness of products. Particular attention is paid to the activities of agro-industrial formations of the holding type, which provide comprehensive management of production, financial and logistics processes. It is proved that integrated structures create conditions for modernization of production, introduction of innovative technologies, optimization of contractual relations between producers of raw materials and processing enterprises. It identifies perspective directions of improvement of integration processes, including development of cluster models, digitalization of agri-food chains, introduction of precision farming technologies and formation of an effective institutional environment.

У статті досліджено теоретичні та практичні аспекти розвитку інтеграційних процесів у сфері агробізнесу та їх вплив на підвищення економічної ефективності й продовольчої безпеки. Встановлено, що агропромислова інтеграція є важливим чинником формування конкурентоспроможного аграрного сектору, оскільки забезпечує ефективну взаємодію між виробництвом, переробкою, логістикою та збутом сільськогосподарської продукції. Узагальнено наукові підходи до трактування поняття агропромислової інтеграції як процесу об'єднання економічних, технологічних, організаційних і фінансових ресурсів учасників агропродовольчого ланцюга з метою отримання синергетичного ефекту.

Визначено, що сучасні інтеграційні процеси виходять за межі традиційного агропромислового комплексу та охоплюють банківський сектор, ІТ-технології, страхування, логістику й інвестиційні структури. Проаналізовано основні форми інтеграції в аграрному секторі: вертикальну, горизонтальну, конгломератну та кластерну, а також їх роль у підвищенні ефективності господарювання. Обґрунтовано, що перехід до інтегрованих форм агробізнесу є закономірним етапом розвитку економіки, який сприяє концентрації ресурсів, зниженню ризиків, підвищенню інвестиційної

привабливості та конкурентоспроможності продукції. Особливу увагу приділено діяльності агропромислових формувань холдингового типу, які забезпечують комплексне управління виробничими, фінансовими та логістичними процесами. Доведено, що інтегровані структури створюють умови для модернізації виробництва, впровадження інноваційних технологій, оптимізації договірних відносин між виробниками сировини та переробними підприємствами. Визначено перспективні напрями вдосконалення інтеграційних процесів, серед яких розвиток кластерних моделей, цифровізація агропродовольчих ланцюгів, впровадження технологій точного землеробства та формування ефективного інституційного середовища.

***Key words:** integration, agribusiness, integrated structures, agricultural production and processing, economic efficiency, food security, digitalization*

***Ключові слова:** інтеграція, агробізнес, інтегровані структури, виробництва і переробки сільськогосподарської продукції, економічна ефективність, продовольча безпека, цифровізація*

INTRODUCTION

In the current conditions of global instability caused by climatic changes, fluctuations in the world food markets and the growth of logistical risks, ensuring the economic security of national food systems is of particular relevance. For Ukraine, this issue is strategic, since the agricultural sector remains one of the key drivers of the economy and a guarantor of food stability.

In this context, integration processes in agribusiness are considered as an important tool for strengthening economic security both at the regional and national levels. Current trends indicate the active spread of integration in all areas of the agro-industrial complex - from the production of equipment and agro-service services to processing, logistics and sales of products. Deepening of interaction between producers of agricultural raw materials, processing enterprises and trade

structures creates prerequisites for increasing the efficiency of their activities and strengthening competitive positions in the food market.

The development of integration ties contributes to the formation of a coordinated system of intersectoral interaction, which allows more rational use of the existing resource potential and improve the quality and competitiveness of domestic products. At the same time, the implementation of these opportunities requires an integrated approach that takes into account the specifics of regional development, the institutional conditions for the functioning of the market and the peculiarities of the organization of agricultural production.

The intensification of integration processes is primarily due to the objective needs of commodity producers themselves in consolidating resources and reducing risks, as well as to the state policy aimed at supporting the creation of effective agro-industrial formations. Such approaches are designed not only to overcome the existing imbalances in the agricultural sector, but also to ensure the formation of stable competitive advantages in foreign markets.

At the same time, the existing potential of integration in the agribusiness of Ukraine is not fully used, due to the influence of a number of restraining factors - from institutional restrictions to the insufficient level of coordination between market participants. This necessitates further scientific research aimed at substantiating effective directions for the development of integration processes and increasing their effectiveness in modern conditions.

The article is aimed at studying the peculiarities of the development of integration structures in the agrarian business and developing recommendations for optimizing integration processes, strengthening the country's food independence.

A significant contribution to the study of the problems of the emergence, functioning and prospects for the development of integrated structures is presented in the works of domestic and foreign scientists: V. Andriychuk, O. Borodina, V. Valentinova, O. Hudzya, A. Dankevich, M. Gladia, O. Mogilny, O. Khodakovskaya, M. Porter; A. Williamson, S. Grossman, S. Hart, A. Chandler, K. Dahlman and others, revealing modern development trends, critical assessments of

deepening integration ties between agricultural and industrial enterprises, etc. At the same time, modern challenges faced by domestic agricultural enterprises actualize the need for in-depth study of the potential of integration structures. This opens up opportunities for increasing their efficiency and competitiveness, strengthening the country's food security, intensifying innovation, as well as stimulating the socio-economic development of rural areas.

RESULTS OF THE STUDY

Domestic and foreign scientists consider the formation and development of integrated structures in the field of agrarian business one of the most important factors for improving economic efficiency. At the same time, most authors agree that the processes of rapprochement, merger of various spheres of agribusiness should be economically justified, that is, integration participants should eventually receive an additional economic effect from joint activities. World experience shows that large companies are the most efficient and competitive. Along with the fact that they hold the market for products, they have the opportunity to motivate producers of raw materials, while using different areas of integration.

Integration is usually interpreted as any form of economic interaction between economic entities, accompanied by their unification to achieve common goals [1]. Globalization processes create favorable conditions for the development of such integration forms in the agricultural sector, because they stimulate the strengthening of ties between the participants in the value chain. As a result, integration makes it possible to increase the efficiency of interaction between the production, processing and marketing of products, without depriving each participant of its economic independence. Therefore, integration is the process of strengthening the connections between the elements of a system or transforming several loosely connected systems into a more coherent structure. Considering that for economic systems the relationships between their elements are decisive, integration is the process of their convergence and unification at the level of subsystems.

Integration should be analyzed through the following aspects:

1. multi-level nature (countries, corporations, enterprises, etc.);
2. expansion and deepening of relationships between elements, which is not limited to one enterprise and does not necessarily lead to loss of independence of participants;
3. the formation of new, qualitatively different ties in the system of interaction of integrated structures.

Theoretical approaches to the study of integration processes in the agrarian business and their impact on the economic security of food systems are characterized by multi-aspect. In the modern scientific literature, various concepts of agro-industrial integration have been formed, reflecting the evolution of ideas about the factors and mechanisms of this process. Agro-industrial integration as a process of combining economic, organizational, technological, intellectual and other resources of participants in the food chain in order to obtain a synergistic effect and ensure sustainable development of the agro-industrial complex [8]; the process of combining individual links of agro-industrial production into an integrated system or as establishing effective interaction between previously disconnected market participants - from producers of raw materials to processors and distributors [6]. This approach focuses on the complex nature of integration processes covering various aspects of the functioning of the agro-industrial complex. According to other researchers, this concept is complex, combining technical, technological, organizational, managerial and economic processes that provide a coordinated and continuous interaction of all stages: the production of agricultural products, their harvesting, transportation, storage and further processing [2]. This statement to a greater extent covers the essence of integration.

Agro-industrial integration is a process of close cooperation and unification of the agricultural and industrial sectors, aimed at coordinating the activities of production, processing, financial, sales and service enterprises, the main purpose of such cooperation is to increase the efficiency of all participants in the agricultural market and achieve the best final economic results [7]. It should be noted that agro-industrial integration should not be considered exclusively within the agro-

industrial complex. Modern economic conditions demonstrate that this process is increasingly involved in areas that are only indirectly related to agricultural production: the banking sector, IT technologies, insurance, international logistics and investment structures. That is why the narrow interpretation of integration as the interaction of only agricultural and processing enterprises no longer fully corresponds to the realities of the modern economy. Noting the versatility of this concept, we note the unity of the views of scientists that the processes of unification and rapprochement of various spheres of the agro-industrial complex should be economically feasible and bring additional benefits and financial results from joint activities to the integration participants. That is why the decision to integrate individual agribusiness entities should be made on the basis of a detailed analysis, taking into account possible risks and prospects for cooperation. In other words, such processes should be based on clearly defined principles, and not be spontaneous or unreasonable.

A number of authors emphasize the institutional aspects of integration, pointing to the need to form effective mechanisms for coordinating the interests of participants in agri-food chains and creating integrated structures of a new type focused on innovative development and ensuring food security [3]. A significant contribution to the study of problems of agro-industrial integration is the classification of forms of integration processes in the agricultural sector, depending on the nature of the interaction of participants and the degree of concentration of production [4].

In accordance with this classification, the following main forms of integration are distinguished:

- vertical integration, providing for the unification of enterprises of different stages of the technological cycle of food production;
- horizontal integration based on the association of enterprises of one industry;
- conglomerate integration, characterized by a combination of enterprises not connected by production or technological ties;

- cluster integration, which involves the formation of territorial-production complexes with the participation of scientific, educational and infrastructure organizations.

The transition to integrated forms of management in agribusiness is a natural stage in the development of the agrarian economy. This is due to the fact that traditional forms of intersectoral interaction no longer provide the necessary level of efficiency. This process opens up new opportunities, in particular: rational allocation of resources, reduction of seasonal fluctuations in production and income, reduces risks associated with natural and climatic conditions, strengthens market positions and reduces the cost of concluding transactions. In addition, integration helps to increase the investment attractiveness of the industry.

Integration ties play a key role in the development of agribusiness, which ensure the integrity of the processes of growing, transporting, storing and processing agricultural products. In this context, it is expedient not only the technological combination of these stages, but also the creation of a single organizational and economic system that will contribute to achieving a synergistic effect. At the same time, there is a need to improve coordination mechanisms between participants in the agricultural and processing sectors, as well as to form effective models for the distribution of financial resources and profits. Ensuring sustainable growth in food production depends to a large extent on coordinated interaction between agricultural producers and enterprises of the processing industry. An important factor is the common interest in increasing crop yields, improving the quality characteristics of raw materials, efficient storage of crops and minimizing losses at all stages, namely from cultivation to deep processing. Of particular relevance is the formation of a single production and processing chain, which allows you to focus on the final result and increase the added value of products [5].

Integrated structures, as a rule, operate on the basis of self-financing and are characterized by high economic activity. This allows them to develop effectively without significant dependence on state support. The creation of such associations

is a promising direction of economic policy aimed at the formation of a competitive agricultural sector.

Among the modern forms of integration, a special place is occupied by agro-industrial associations of the holding type. They combine within a single structure agricultural production, processing industry, logistics, trade and financial institutions. This model provides an integrated approach to resource management and allows you to effectively organize the movement of capital - financial, production and commodity. In the conditions of the modern economy, there is often a disunity of various forms of capital, which reduces the overall efficiency of management [10]. Integrated agro-industrial structures allow to overcome this problem by combining investment flows and directing them to priority areas of development of production, processing, scientific research. For investors, investing exclusively in agricultural production is associated with increased risks. Instead, investments in the processing and marketing of products that provide a more stable income are more attractive. This, in turn, stimulates the development of partnerships between producers of raw materials and processing enterprises.

Practice shows that it is processing enterprises that often initiate integration processes, as they are interested in stable provision of high-quality raw materials. This contributes to the modernization of agricultural production, the introduction of new technologies and improving the efficiency of management.

The participation of agricultural enterprises in integrated structures allows them to maintain production potential, gain access to investments, update the material and technical base and ensure guaranteed sales of products. In turn, the creation of agro-industrial holdings contributes to the solution of a number of strategic tasks: the concentration of financial resources, increasing the competitiveness of products, optimizing market infrastructure, reducing the role of intermediaries and introducing innovations. The efficiency of integrated production is achieved on condition of close interaction of all its components. It is important that the increase in efficiency occurs both at the level of individual stages of the production process, and within the entire chain of creating the final product.

Perspective is the gradual development of integration structures to the level of complex corporate associations, which take into account the economic interests of all participants.

The experience of functioning of agro-industrial formations shows that the improvement of contractual relations between producers of raw materials and processing enterprises is an important reserve for improving the efficiency of the industry. It is through coherence of actions and joint responsibility for the final result that the maximum economic effect is achieved in the production and processing of agricultural products [9].

The main directions of improvement of integration processes in agribusiness to improve economic security at meso- and macro-levels are:

- ensuring a balance of interests of all participants in integration processes, which will avoid monopolization of local food markets and ensure the development of rural areas;

- development of diversified models of integration taking into account regional specifics, which provides for the optimal combination of vertical and horizontal integration, cluster approach and network forms of interaction between participants in the agri-food chain;

- stimulation of the innovative component of integration processes through the formation of agro-innovative clusters with the participation of research, educational organizations and innovative enterprises, which will increase the technological level of agro-industrial production and ensure the competitiveness of products in the domestic and foreign markets;

- improvement of the institutional environment for the development of integration processes, development of the advisory system, etc.

Particular attention should be paid to the formation of "smart" integrated structures based on the widespread use of digital technologies, including precision farming, the Internet of Things, blockchain technologies, and decision support systems based on artificial intelligence. Digitalization of integration processes will

significantly increase the efficiency of managing agri-food chains and reduce transaction costs of participants.

To increase the efficiency of integration processes and their positive impact on the economic security of food systems, it is necessary to ensure the balanced development of various forms of integration, taking into account regional specifics, to stimulate the innovative component of integration processes, to improve the institutional environment and mechanisms of state support, to develop interregional integration and digital technologies in the management of agri-food chains.

CONCLUSIONS

The creation of integration structures of agribusiness will ensure the conduct of joint economic activity, based on a more rational use of production, financial, labor resources, as well as a coordinated scientific, technical and innovation policy. Consolidation of resources, operational ties, interaction of economic entities engaged in various activities, allows them to conduct joint economic activities with greater efficiency compared to if they functioned separately. Agro-industrial integration through the mobilization of the resource and technological potential of the territories can significantly strengthen the competitiveness of the sectors of the agro-industrial complex, and, as a result, affect the macroeconomic indicators of the country's development as a whole.

Література

1. Багаліка Т.О. Теоретичні аспекти формування кооперації та інтеграції в аграрному секторі економіки. *Економічний простір*. 2025. № 197. С.135- 140. DOI: <https://doi.org/10.30838/EP.197.135-140>
2. Власенко Т., Третьяк А. Інноваційні підходи до управління трансформацією організаційних структур інтегрованих аграрних підприємств. *Modeling the development of the economic systems*. 2024. №3. С. 236-241. DOI: <https://doi.org/10.31891/mdes/2024-13-33>

3. Гавкалова Н., Денисюк О. Інтеграційні процеси в агропромисловому комплексі національної економіки. *Вісник Хмельницького національного університету. Економічні науки*. 2023. № 3. С. 220-225.
4. Гримак О.Я., Остафійчук А.Г., Табацкова Г.В. Інтеграційні перспективи розвитку агропродовольчої сфери в контексті соціальної безпеки та зайнятості населення. *Актуальні питання економічної науки*. 2026. № 3. <https://a-economics.com.ua/index.php/home/about>
5. Зінчук Т.О. Європейська інтеграція: проблеми адаптації аграрного сектора економіки України: моногр. Житомир: ДВНЗ «Держ. агрокол. ун-т», 2018. 384 с.
6. Іщук М.А., Голуб Х.А. Перспективи розвитку аграрного сектора України в контексті економічних та геополітичних викликів. *Вчені записки ТНУ імені В. І. Вернадського. Серія: Економіка і управління*. 2025. № 2, Том 36 (75). С.21-27. DOI: <https://doi.org/10.32782/2523-4803/75-2-4>
7. Ковбаса О., Мазний В. Сучасні аспекти розвитку інтеграційних процесів в аграрному секторі України. *Економіка та суспільство*. 2024. № 60. <https://doi.org/10.32782/2524-0072/2024-60-107>
8. Левківський Є.В. Перспективи позиціонування аграрних вертикально інтегрованих підприємств у глобальних ланцюгах вартості. *Бізнес-Інформ*. 2022. № 11. С. 155–161.
9. Третяк А.В. Чинники ефективності інтегрованих аграрних підприємств. *Український журнал прикладної економіки та техніки*. 2024. №3. С. 402-406. DOI: <https://doi.org/10.36887/2415-8453-2024-3-728>.
10. Чмельова О.С., Дергачова А.К., Агропромислова інтеграція як концептуальний напрям розвитку аграрних підприємств в Україні. *Вісник НТУ «ХПИ»*. 2014. № 64 (1106). С. 20-25.

References

1. Bahalika, T.O. (2025), “Theoretical aspects of the formation of cooperation and integration in the agricultural sector of the economy”,

Ekonomichnyj prostr, vol. 197, pp.135- 140. DOI: <https://doi.org/10.30838/EP.197.135-140>

2. Vlasenko, T. and Tretiak, A. (2024), “Innovative approaches to managing the transformation of organizational structures of integrated agricultural enterprises”, *Modeling the development of the economic systems*, vol. 3, pp. 236-241. DOI: <https://doi.org/10.31891/mdes/2024-13-33>

3. Havkalova, N. and Denysenko, O. (2023), “Integration processes in the agro-industrial complex of the national economy”, *Visnyk of Khmelnytskyi National University. Economic Sciences*, vol. 3(318), pp. 220-225.

4. Hrymak, O.Ya., Ostafijchuk, A.H., Tabatskova, H.V. (2026), “Integration prospects for the development of the agri-food sector in the context of social security and employment of the population”, *Aktual'ni pytannia ekonomichnoi nauky*, vol. 3, available at: <https://a-economics.com.ua/index.php/home/about> (Accessed 05 May 2026).

5. Zinchuk, T. O. (2018), *Yevropejs'ka intehratsiia: problemy adaptatsii ahrarnoho sektora ekonomiky Ukrainy* [European integration: problems of adaptation of the agricultural sector of Ukraine’s economy], DVNZ «Derzh. ahroekol. un-t», Zhytomyr, Ukraine.

6. Ischuk. M.A. and Holub, Kh.A. (2025), “Prospects for the development of the agricultural sector of Ukraine in the context of economic and geopolitical challenges”, *Vcheni zapysky TNU imeni V. I. Vernads'koho. Serii: Ekonomika i upravlinnia*, vol. 2, no. 36 (75), pp.21-27. DOI: <https://doi.org/10.32782/2523-4803/75-2-4>

7. Kovbasam O. and Maznyjm V. (2024), “Modern aspects of the development of integration processes in the agricultural sector of Ukraine”, *Ekonomika ta suspil'stvo*, vol. 60. <https://doi.org/10.32782/2524-0072/2024-60-107>

8. Levkivs'kyj, Ye.V. (2022), “Prospects for positioning agricultural vertically integrated enterprises in global value chains”, *Biznes-Inform*, vol. 11, pp. 155–161.

9. Tretiak, A.V. (2024), “Effectiveness factors of integrated agricultural enterprises”, *Ukrains'kyj zhurnal prykladnoi ekonomiky ta tekhniky*, vol. 3, pp. 402-406. DOI: <https://doi.org/10.36887/2415-8453-2024-3-728>.

10. Chmel'ova, O.S. and Derhachova, A.K. (2014), “Agricultural integration as a conceptual direction for the development of agricultural enterprises in Ukraine”, *Visnyk NTU «KhPI»*, vol. 64 (1106), pp. 20-25.

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