

THE AGRICULTURAL SECTOR DEVELOPMENT IN CONDITIONS OF ECONOMIC AND ENVIRONMENTAL FLUCTUATIONS

Oleksandra Karintseva, Dr.Sc., Prof., Oleksandra Kubatko, PhD., Ass. Prof.,

Vlad Piven, student,

Sumy State University, Ukraine

The enterprises of the agro-industrial complex traditionally play an important role in the economy of Ukraine. Soil and climatic conditions, natural resource potential and labor resources do allow to create effective internationally competitive agriculture sector. The world experience shows that the agribusiness sector is always attractive for investment, because there is always a steady demand for agricultural products, which does not tend to decrease. Agriculture can be a source of growth for the national economy. According to World Bank estimates based on a comparison of a number of countries, GDP growth driven by agricultural growth is at least twice as effective at reducing poverty as GDP growth from other industries. The main problems of the industry are:

low competitiveness of products and their non-compliance with international quality and safety standards;

low level of investment and growing dependence on public funding;

low economic efficiency of agricultural production compared to other countries, the use of outdated technologies;

dominance in the structure of exports of products with a low level of processing;

reducing soil fertility and increasing their erosion.

The projected increase in precipitation fluctuations and climat and economic fluctuations do predict longer periods of drought, and will therefore increase the need for irrigation and the development of appropriate adaptation measures [1-2]. Given the unsatisfactory technical condition and low level of operation of reclamation networks in the agro-industrial complex of Ukraine.

According to environmentalists, climate fluctuations will affect crops. Among the results of recent efforts of breeders to improve crops that help farmers cope with the changing weather, we can name: drought-resistant rice for Africa, flood-resistant rice, drought-tolerant beans, etc. The development of adapted plant varieties is relevant, so investing in various breeding programs should be one of the

promising areas. Another important aspect is investment in integrated disease control and pest spread.

Reducing the vulnerability of agricultural systems to climate change also requires a shift in land use, which includes measures to preserve agriculture, which are based on minimal soil disturbance (reduction of cultivation, or no cultivation at all), in combination with organic farming, organic matter (return of plant residues to the soil) and various crop rotations, microdosing.

Since the 90s of the twentieth century, many countries around the world are forming markets for organic products, the volume of which is growing rapidly today, due to: increasing environmental disasters, conflicts over food at the state level, increasing consumer awareness of their own future and the future of their children, the environment. In agriculture, the implementation of the principles of sustainable development is also becoming especially important[6,7,9,10,11,12,14,16,17,18,20]. Based on the principles of sustainable development, Ukraine's agriculture should provide a steady increase in agricultural production to ensure food security and expand the export potential of the industry, should provide the population with affordable high-quality food, be profitable,

Thus, the priority measures for the revival of the agricultural sector should be to improve the financing and lending of the agro-industrial complex and to identify promising areas of investment in conditions of economic and environmental fluctuations[3,4,5,8,13,15,19]. Among the strategic areas of investment in agriculture are: the development of breeding programs for adapted plants, pest and disease control of plants and livestock, organic agriculture.

References

1. Kubatko O. V. Duality of Fluctuations in Economic Systems Development. *Механізм регулювання економіки*. 2013. № 2. C. 18–23.
2. Kubatko O. V. Pimonenko T. V. DCFTA implementation in condition of macroeconomic fluctuations in Ukraine. *Механізм регулювання економіки*. 2015. № 4. C. 108–117.
3. Derev'yanko Yu.M., Lukash O.A., Litsman M.A., Svitlychna A.O. The State and Trends of Enterprises Efficiency on the Basis of Modern Indicators. *Механізм регулювання економіки*. 2020. 1. C. 106-115. DOI: <https://doi.org/10.21272/mer.2020.87.09>.
<https://essuir.sumdu.edu.ua/handle/123456789/80687>
4. Hrytsenko Pavlo, Voronenko Viacheslav, Kovalenko Yevhen, Kurman Tetiana and Omelianenko Vitalii. Assessment of the development of innovation activities in the regions: Case of Ukraine. *Problems and Perspectives in Management*. 2021. 19(4). C. 77-88. DOI: 10.21511/ppm.19(4).2021.07.
<https://essuir.sumdu.edu.ua/handle/123456789/85729> (Scopus)

5. Hrytsenko, P. V., Kovalenko, Y. V., Voronenko, V. I., Smakouz, A. M., Stepanenko, Y. S. Analysis of the Definition of “Change” as an Economic Category. *Механізм регулювання економіки*. 2021. 1. C. 92-98. DOI: 10.21272/mer.2021.91.07. <https://essuir.sumdu.edu.ua/handle/123456789/84025>
6. Kubatko O. V., Yaryomenko D. O., Kharchenko M.O., Almashaqbeh Ismail Y. A. Economic and environmental aspects of Smart Grid technologies implementation in Ukraine. *Механізм регулювання економіки*. 2020. 1. C. 28-37. DOI: doi.org/10.21272/mer.2020.87.01. <https://essuir.sumdu.edu.ua/handle/123456789/80469>
7. Kubatko O.V., Ignatchenko V.M., Shaparenko S.V., Starodub I.A., Yaryomenko D.O. Economic optimization of resource use based on smart grid. *Механізм регулювання економіки*. 2020. 2. C. 37-46. DOI: doi.org/10.21272/mer.2020.87.03. <https://essuir.sumdu.edu.ua/handle/123456789/82241>
8. Lukash O.A., Derev`yanko Yu.M., Kozlov D.V., Mukorez A.I. Regional Economic Development in The Context of the COVID-19 Pandemic and the Economic Crisis. *Механізм регулювання економіки*. 2021. 1. C. 99-107. DOI: https://doi.org/10.21272/mer.2021.91.08. <https://essuir.sumdu.edu.ua/handle/123456789/84026>
9. Matsenko, O., Kovalev, Y., Tkachenko, O. & Chorna, Y. Complex Solution of Ecological and Economic Problems of Traffic Jams. *Mechanism of Economic Regulation*. 2020. 4. C. 6–15. DOI: https://doi.org/10.21272/mer.2019.86.02. <https://essuir.sumdu.edu.ua/handle/123456789/77238>
10. Matsenko, O., Tereshchenko, V., Piven, V., Panchenko, A. & Perekhod, E. Socio-environmental and Economic Problems of Solar Panels Recycling. *Mechanism of Economic Regulation*. 2020. 1. C. 48–55. DOI: https://doi.org/10.21272/mer.2020.87.03. <https://essuir.sumdu.edu.ua/handle/123456789/80473>
11. Melnyk L. Hr, Shaulska L. V., Matsenko O. I., Piven V. S., Konoplov V. V. Modern Trends in the Production of Renewable Energy: the Cost Benefit Approach. *Механізм регулювання економіки*. 2021. 1. C. 6-17. DOI: 10.21272/mer.2021.91.01. <https://essuir.sumdu.edu.ua/handle/123456789/83761>
12. Melnyk L., Derykolenko O., Matsenko O., Mazin Y., Piven V. Modern Trends in the Development of Renewable Energy: the Experience of the EU and Leading Countries of the World. *Mechanism of Economic Regulation*. 2020. 3. C. 117-133. DOI: https://doi.org/10.21272/mer.2020.89.09. <https://essuir.sumdu.edu.ua/handle/123456789/81810>
13. Melnyk L., Matsenko O., Piven V., Kyrylenko M., Derykolenko O. Formation of Human Capital in the Digital Economy. *Mechanism of economic*

regulation. 2020. 4. C. 19-35. DOI: <https://doi.org/10.21272/mer.2020.90.02>.
<https://essuir.sumdu.edu.ua/handle/123456789/83750>

14. Nesterenko V., Dolhosheieva O., Kirilieva A., Voronenko V., Hrytsenko P. «Green» vector of the economic development of the country. *Механізм регулювання економіки.* 2021. 3. C. 82-90. DOI: 10.21272/mer.2021.93.07.
<https://essuir.sumdu.edu.ua/handle/123456789/87533>

15. Pavlenko D. S., Kubatko O. V., Ziabina Y. A. Economic, Social and Technological Factors of Startup's Success. *Механізм регулювання економіки.* 2020. 1. C. 64-74. DOI: <https://doi.org/10.21272/mer.2020.87.05>.
<https://essuir.sumdu.edu.ua/handle/123456789/80477>

16. Sotnyk I. M., Matsenko O. M., Popov V. S., Martymianov A. S. Ensuring the economic competitiveness of small green energy projects. *Mechanism of Economic Regulation.* 2021. 1. C. 28-40. DOI: <https://doi.org/10.21272/mer.2021.91.03>.

<https://essuir.sumdu.edu.ua/handle/123456789/84021>

17. Sotnyk I., Sotnyk M., Olondar A., Pidopryhora N., Maslii M. Managing the energy-efficient development of the university: restraints and ways to overcome them. *Mechanism of Economic Regulation.* 2020. 3. C. 68-86. DOI: <https://doi.org/10.21272/mer.2020.89.06>.

<https://essuir.sumdu.edu.ua/handle/123456789/81758>

18. Tambovceva T., Melnyk L., Dehtyarova I. , Nikolaev S. Circular Economy: Tenden-cies and Development Per-spectives. *Mechanism of Economic Regulation.* 2021. 2. C. 33-42. DOI: <https://doi.org/10.21272/mer.2021.92.04>.
<https://essuir.sumdu.edu.ua/handle/123456789/85156>

19. Yaremenko A., Chortok Yu., Goncharenko O., Chama Theodore KETUAMA Peculiarities of formation of the region's logistics infrastructure on the basis of Eco-innovations within the framework of stakeholders' partnership in the Enterprise-Region. *Механізм регулювання економіки.* 2021. 4. C. 9-13.
<https://essuir.sumdu.edu.ua/handle/123456789/87514>

20. Yevdokymov Andriy V., Dron Viktoria V., Yevdokymova Alona V., Karintseva Oleksandra I., Kharchenko Mykola O. Designing the information educational environment of the studying course for the educational process management using cloud services. *Механізм регулювання економіки.* 2020. 3. C. 87-96. DOI: doi.org/10.21272/mer.2020.89.06.
<https://essuir.sumdu.edu.ua/handle/123456789/81759>