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Instruments and Resources for Sustainable Development Acceleration of Agribusiness in Ukraine

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► **Abstract.** Agribusiness in Ukraine takes one of the most important places in the national economy, but not all subjects conduct it sustainably, because of the lack of resources to finance such transformations. Therefore, it is necessary to investigate the instruments of resource attracting for Sustainable Development Acceleration of Agribusiness in Ukraine. The aim of the article is to determine the current state of basic tools which are used to obtain resources for accelerating the sustainable development of agribusiness in Ukraine, namely agriculture insurance, green bonds and impact investment. The article uses a situational analysis, a monographic method, tabular and graphical methods, scientific generalization to analyze the experience of the use of agriculture insurance, green bonds and impact investment as tools to accelerate the sustainable development of agribusiness. The information sources for this research were the reports of the International Finance Corporation, the sustainability reports of the European Bank for Reconstruction and Development and the reports of the United Nations Development Program in Ukraine. The study of the practice of using agriculture insurance, green bonds and impact investment as tools to accelerate the sustainable development of agribusiness in Ukraine made it possible to determine the embryonic level of their use. This is indicated by the modeling of the development of the agriculture insurance in Ukraine, which showed that this type of insurance is formal and does not perform a real protective function. As for projects, the resources of which are attracted through green bonds and impact investment programs, they are fragmentary and need to be more systemic. This work is one of the first which looks into the practice of applying tools to accelerate the sustainable development of agribusiness in Ukraine, in the context of three dimensions and achieving sustainable development goals. For the further development of both agriculture insurance and green bonds, it is necessary to stimulate the emission of such debt securities by insurance companies and to develop not only insurance of primary agricultural products, but also processed ones, exporting of which brings more foreign exchange earnings to Ukraine. This study aims to highlight current practices in the application of tools to accelerate the sustainable development of agribusiness in Ukraine, including agriculture insurance, green bonds and impact investment, which represent the basis for their promotion and prevalence in the scientific community and among agribusiness professionals

► **Keywords:** agriculture insurance, green bonds, impact-investment, sustainability, Sustainable Development Goals, agricultural, food security

► Introduction

Ensuring the sustainable development of agribusiness is directly implemented within the framework of Sustainable Development Goal 2 "Eradication of hunger, ensuring food security and improving nutrition, promoting sound agriculture". However, any goal of sustainable development from the economic, social or environmental dimension can be implemented in the field of agribusiness. For example, Goal 3 "Good Health and Well-Being", Goal 4

"Quality Education" correspond to the social dimension of sustainable agribusiness development in the context of providing affordable and quality medical and educational services to the rural population, which is mostly engaged in agribusiness. Regarding the ecological dimension of sustainable agribusiness development, the goals such as 6 "Clean water and good sanitation", 15 "Protection and restoration of terrestrial ecosystems" are aimed at wastewater

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treatment and prevention of water pollution, restoration of degraded lands and soils, including lands affected by desertification, drought and floods. Regarding the economic dimension of sustainable agribusiness development, the following Goals 8 “Decent Work and Economic Growth”, 9 “Industry, Innovation and Infrastructure”, 12 “Responsible Consumption and Production” are aimed at creating jobs in rural areas, developing road and transport infrastructure in rural areas, reducing plowing of agricultural lands and their contamination with chemical fertilizers, observing crop rotations to prevent depletion of agricultural lands, etc. In order to achieve any goal, it is necessary to attract resources. Various tools are used for this: loans and debt securities, which are not always available due to terms and price for agribusiness entities. That is why at the initiative of international financial organizations in the late 2000s, the first green bonds appeared to finance green projects aimed at mitigating and adapting to the effects of climate change, in particular due to greenhouse gases, as well as preventing environmental pollution. In general, any type of economic activity can potentially lead to adverse environmental, social effects or some other unpredictable negative consequences. Thus, it is necessary to pay attention to investment, the main motive of which in terms of the traditional approach is to make a profit. However, in today’s reality, new approaches that focus not only on financial performance, but also on ensuring positive social and environmental effects are emerging. Such investments are classified as impact investments.

Insurance is a unique tool used to finance the recovery of the situation in case of various types of risks that cause insured events. Thereby, due to the variety of insurance services, insurance is a tool to achieve sustainable development of agribusiness in the context of all dimensions. However, this tool is also not completely affordable for the price and compliance of insurance products with the needs of agribusiness entities in Ukraine.

Without reference to a specific activity, i.e., more generally, when considering ways to transition to a green economy and sustainable development, scientists suggest using FinTech [1]. FinTech is an industry that uses technology to provide financial services that can bring closer and expand access to financial resources to achieve goals, including sustainable development ones. One of the important financial services for the smooth operation of agribusiness is agriculture insurance [2], which can also be carried out on the basis of FinTech. This is noted by R. Hinson, R. Lensink, A. Mueller, who consider the transformation of agribusiness in developing countries in the context of achieving interconnected SDG groups through the integration of FinTech with other technologies, including green technologies. The authors emphasize that “FinTech can help increase the adoption of available index insurance by integrating innovations in the data infrastructure to improve the correlation of index insurance payouts

with actual damage” [3]. This is a logical recommendation, as the main obstacle to the mass use of index agriculture insurance is the risk of the base, i.e., when the farm has an insured event, but the average data for the area does not show a serious decline, so the farm does not receive insurance compensation. Innovative tools for long-term financing of sustainable development projects, in particular in the field of agribusiness, but without FinTech elements, include green bonds. The first green bonds were issued by international financial institutions, including the European Investment Bank in 2007, the World Bank (WB) in 2008, and the European Bank for Reconstruction and Development (EBRD) in 2010. However, today “green bonds have become a popular financial instrument to be used by various development banks, state and municipal entities, as well as private companies for issuing capital for green investments in order to... accelerate the global transformation towards resource-efficient and low-carbon sustainable economies” [4]. This financial instrument is issued in accordance with the Green Bond Principles (GBP), which have been revised several times, and according to their latest version, green bonds are understood as “any type of bond instrument where the proceeds or an equivalent amount will be exclusively applied to finance or re-finance, in part or in full, new and/or existing eligible Green Projects and which are aligned with the four core components of the GBP” [5].

A tool such as impact investment is also associated with the project approach to attract resources for the sustainable development of agribusiness. The American non-profit organization Global Impact Investing Network (GIIN) defines impact investments as investments that are made to achieve positive, measurable social and environmental impact together with financial returns [6]. The Rockefeller Brothers Fund (RBF) aims to allocate 20% of its portfolio to impact investments, as impact investments have a significant and measurable impact on the Foundation’s mission to promote social change for a fairer, more sustainable and peaceful world [7]. At the same time, the Fund characterizes impact investments as investments that bring a market level of income. T. Bush, R. Bauer and M. Orlitzky define impact investments as investments that include environmental, social, and managerial aspects in investment decisions [8]. J. Simon and J. Barmeler note that impact investments are focused on sectors that have a significant positive impact on the recipients’ quality of life [9]. However, unlike non-governmental organizations that provide development assistance, impact investments are for-profit and do not largely depend on external subsidies to support their activities. Impact investors operate on the plane of two opposing goals, applying market-based, profitable models that provide both social benefit and positive financial return. In economic theory and practice, approaches to the interpretation of the essence of impact investment are not fundamentally different. Emphasizing their social and environmental orientation, it is

important to note that these are still different areas of market investment, which are aimed at obtaining the appropriate financial result.

The purpose of the article is to find out the real situation as for instruments that are vital in the context of resources attracting for accelerating the sustainable development of agribusiness in Ukraine, namely agricultural insurance, green bonds and impact investment.

For achieving this goal, the next tasks are necessary to perform:

- describe documents of SDGs implementation in Ukraine;
- create the model of the development of the agriculture insurance in Ukraine, as an instrument of financing losses;
- determine the level of using green bonds of the EBRD for financing green projects in Agribusiness of Ukraine;
- find out the state of prevalence of the impact investment for achieving sustainable development of agribusiness.

► Materials and Methods

Regarding the terminological apparatus in the context of distinguishing between instruments and resources, the research was guided by the fact that for obtaining any resources (financial or non-financial) it is necessary to use certain tools, including impact investment, risk-based instruments (insurance), debt instruments (loans, bonds), etc. In this article, the focus was concentrated on the period of adopting and achieving the Sustainable Development Goals (SDGs) on the example of agribusiness. Regarding

data sampling, information was used since the adoption of the SDG for an analysis of the sustainable development achievement of agribusiness in Ukraine, except agricultural insurance development modeling, where available data from 2005 to 2018 was used. Due to the fact that different types of insurance do not provide data sampling by type of activity, the analysis of the use of this tool in agribusiness used data from the International Finance Corporation only on agriculture insurance as a tool to ensure the food security and economic dimension of sustainable development of agribusiness. Among the debt instruments, only the green bonds of the EBRD were analyzed as a tool for financing long-term green projects to ensure the environmental dimension of sustainable development of agribusiness with a certain economic effect. And impact investment is dedicated to the social and environmental dimensions of sustainable development of agribusiness with a certain economic effect on the basis of the United Nations (the UN) Development Program in Ukraine.

► Results and Discussion

The implementation of the concept of sustainable development in the world has gone through several stages: from the concept development to the Millennium Development Goals [10] and from the Millennium Development Goals to 17 SDGs [11]. Ukraine has joined the achievement of the SDGs, adapting them to the current situation regarding the dimensions of sustainable development – economic, environmental and social, as indicated in a number of documents (Table 1).

Table 1. Features of SDGs implementation in Ukraine

Stage	Characteristic
2017	National Report “Sustainable Development Goals: Ukraine” (identified 86 objectives and 172 national development indicators, set target values for 2030 (and intermediate values for 2020 and 2025)
2018	Regional Reports “Sustainable Development Goals: Volyn”, “Sustainable Development Goals: Dnipro-2030”
2019	Nationwide Monitoring “Sustainable Development Goals: Ukraine 2019”, Monitoring Report on Assessing the Progress of SDG 8 “Decent Work and Economic Growth” in Ukraine and National Thematic Report “Sustainable Development Goals for Children of Ukraine”
2019, February	Law of Ukraine No. 2697-VIII “On Basic Principles (Strategy) of the State Environmental Policy of Ukraine for the Period up to 2030”
2019, August	Order of the Cabinet of Ministers of Ukraine No. 686-o “Issues of Data Collection for Monitoring the Implementation of Sustainable Development Goals”
2019, September	Decree of the President of Ukraine No. 722/2019 “On the Sustainable Development Goals of Ukraine until 2030”

Sources: [12-14]

However, in order to achieve any goal, it is necessary to use available tools to obtain adequate resources for the implementation of the SDGs, in particular in the field of agribusiness. Among such instruments, agriculture insurance, green bonds and impact investments are considered in more detail.

Agriculture insurance

Agriculture insurance in Ukraine is not developed. There are a number of reasons for this: imperfect insurance legislation, lack of quality insurance products for agribusiness entities, problematic financial condition of agribusiness entities, etc. And even the

introduction in 2005-2008 of partial compensation for insurance payments made by agricultural producers did not radically change the situation. In view of this, the Law of Ukraine "On Peculiarities of Insurance of Agricultural Products with State Support" was adopted in 2012, declaring state support in the form of partial compensation of insurance payments for insurance of agricultural products [15], but in

fact such support was not significant. The modeling of the development of the agriculture insurance in Ukraine showed that this type of insurance is formal, as insurance premiums has the trend to increasing, but insurance payments has the opposite trend, whereas the agribusiness is quite risky and the average level of payments in developed countries is over 60% (Fig. 1).

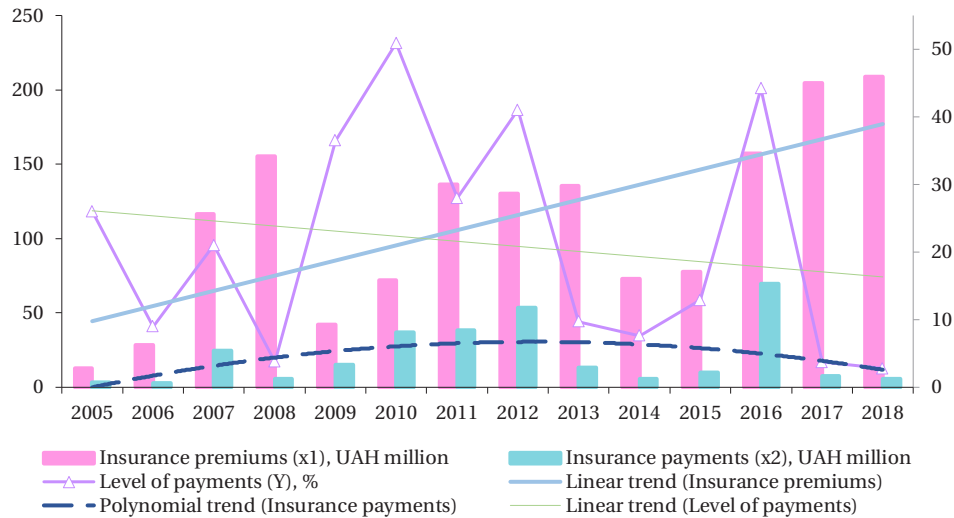


Figure 1. The modeling of the development of the agriculture insurance in Ukraine

Source: built on the basis [16]

Note: * Data for 2005-2008 are presented for calendar years based on the information from the Ministry of Agrarian Policy of Ukraine on the implementation of the program to reduce the cost of insurance premiums, and since 2009 – for underwriting years based on surveys of insurance companies within the projects of the International Finance Corporation

In accordance to the correlation-regression model for the forecasting of the agricultural insurance development in Ukraine the multiple regression equation was obtained: $Y = 0.2097 + 0.00708X_1 - 0.0013X_2$. The obtained model is significant due to the coefficient of determination and Fisher's test. In the studied

situation 83.92% of the total variability of level of payments (Y) is explained by the change of both factors (insurance premiums, X1 and insurance payments, X2). The parameters of the model are also statistically significant (Table 2).

Table 2. Statistical significance of the model of the development of the agriculture insurance in Ukraine

	Multiple R	R Square	Adjusted R Square	Standard Error	Observations				
Regression Statistics	0.9160565	0.83915941	0.809915669	0.072493579	14				
ANOVA	df	SS	MS	F	Significance F				
Regression	2	0.30160642	0.15080321	28,69534872	4,31694E-05				
Residual	11	0.057808509	0.005255319						
Total	13	0.359414929							
	Coefficients	Standard Error	t Stat	P-value	Lower 95%	Upper 95%	Lower 95%	Upper 95%	
Intercept	0.2097028	0.042828333	4,896356052	0.000474363	0.115438242	0.30396729	0.11543824	0.303967293	
X1	0.0070803	0.000983797	7,196926254	1,75948E-05	0.004914994	0.00924564	0.00491499	0.009245641	
X2	-0.001304	0.000334717	-3,89581607	0.002494478	-0.002040702	-0.00056728	-0.00204070	-0.000567288	

Source: calculations of the authors

As long as that the potential of agriculture insurance as a tool to ensure the food security and economic dimension of sustainable development of agribusiness is not implemented in Ukraine completely, in July 2021 the following amendments were made to the above Law:

- insurers can be agricultural producers, regardless of their organizational and legal form;
- insurers do not need to become members of the agriculture insurance pool, which is currently undergoing liquidation, but they need to have a license to insure agricultural products and meet the requirements of the Law of Ukraine “On Insurance” and additional requirements established by regulations of the National Bank of Ukraine;
- the provisions on the organization of catastrophic agricultural risks coverage were abolished;
- state support for insurance of agricultural products is to provide agricultural producers from the state budget with funds in the form of compensation not up to 50 but up to 60% of the cost of insurance

payment (insurance premium) accrued under insurance contracts.

These changes have a positive impact on the legal field of agriculture insurance with state support in Ukraine, but it may be necessary to stimulate not only insurance of primary agricultural products, but also processed ones, exporting of which brings more foreign exchange earnings to Ukraine.

Green bonds

In 2020, the share of EBRD-financed projects in Ukraine increased from 3% in 2016 to 6.2 in 2020, while as for the World Bank, this figure for the same period did not exceed 3% [17]. In addition, since 2015, the EBRD has introduced the Green Economy Transition (GET) approach “that comprises three “pillars”: climate mitigation, climate adaptation and other environmental benefits” [18], which means that the projects financed by green bonds should be in line with this strategy of transition to a green economy (Table 3).

Table 3. EBRD’s investments in green economy projects in 2016-2020

Year	Agribusiness, bln €	Total, bln €	Agribusiness, %	Number of projects
2016	n/a	2.942	n/a	187
2017	n/a	4.054	n/a	186
2018	n/a	3.344	n/a	187
2019	0.138	4.618	3	260
2020	n/a	3.192	31%*	197

Source: compiled based on the EBRD Sustainability Report (2016-2020) [19]

Note: * Industry, commerce and agribusiness

According to Table 3, the transition to the GET approach in 2019 alone indicated the volume of financing of agribusiness projects at the level of € 0.138 bln, which is 3% of the total financing of the transition of countries (where the EBRD operates) to the green economy. The total share of project funding for industry, commerce, and agribusiness under the GET approach for 2016-2020 was 22%. Detailed data on funding by sector and country are not provided in the EBRD’s sustainability reports, but according to the EBRD Sustainability Reports, there are some characteristics of individual agribusiness projects in Ukraine during the period under review. The EBRD has financed a variety of projects in the field of agribusiness in Ukraine, both to improve crop and livestock production processes, and to establish the processing of industrial waste into bio-fuels and promote more environmentally friendly transportation of products.

For the further development of both agriculture insurance and green bonds, it would be necessary to stimulate the emission of such debt securities by insurance companies to promote the sustainable development of agribusiness in Ukraine.

Impact investment

In economic theory and practice, approaches to the

interpretation of the essence of impact investment are not fundamentally different. Emphasizing their social and environmental orientation, it is possible to note that these are still different areas of market investment, which are aimed at obtaining the appropriate financial result.

In fact, impact investment is a new paradigm of economic development. The results of the impact investment include the achievement of sustainable development indicators, including 17 United Nations Sustainable Development Goals.

Despite the fact that impact investment is a relatively new phenomenon, this paradigm is becoming an important trend in today’s economy. Until recently, environmental and social programs and projects were financed mainly through government allocations and charitable foundations, but now impact investment is growing at a high rate. According to GIIN, the impact investment market is estimated at US \$175 billion, and the growth rate is 29% per year. In the long run, the positive dynamics of impact investments is expected to continue.

Impact investments are aimed at mitigating the effects of environmental degradation and solving social problems. These include investments in sustainable agriculture, renewable energy sources, nature and environmental protection, small and

medium-sized business financing, and the development of education and health.

The practice of impact investment involves effective investment in enterprises that produce social or environmental goods and services. The fundamental difference between impact investments is that these investments have environmental and social goals along with financial ones.

Based on the general investment philosophy and motivation, impact investments combine different aspects of investment activity. From an economic point of view, impact investments involve making a profit based on long-term production and investment strategies. The environmental component of

impact investments focuses on improving resource efficiency or recycling and reusing materials and substances. At the same time, profit must be consistent with the development of human, social and cultural capital.

The United Nations Development Program (UNDP) in Ukraine provides for the implementation of impact investment projects aimed at achieving the Sustainable Development Goals. Impact investment projects in agribusiness involve finding accelerators to ensure the sustainable development of agriculture and rural communities, contribute to the preservation of ecosystems and the expansion of the green economy (Table 4).

Table 4. Impact investment projects in UN Development Programs in Ukraine

Project name	Support for green recovery in Ukraine	Strengthening business associations of small and medium-sized enterprises (Phase 1)	Strengthening business associations of micro, small and medium-sized enterprises (Phase 2)
Project goals	Accelerating structural transformations, providing important incentives for the transition to a green economy and a more sustainable financial system – support for implementing new business models, creating new green jobs, improving social integration of citizens	Accelerating the development of small and medium enterprises in Ukraine by strengthening the potential of professional business associations	Spreading positive results of the first phase of the project and ensuring their sustainability by expanding partner organizations to 27 business associations of various types from all over Ukraine, strengthening their customer orientation and ability to productive public-private dialogue to improve regulatory framework and general business environment for micro, small and medium enterprises
Expected results, achievements	Improving the legal framework at the national level to stimulate the transformation of economic and financial relations. Reducing the cost of transactions in the green finance market. Improving climate risk assessment and management in the corporate sector	Improving local capacity by promoting and supporting the development of entrepreneurship and small and medium-sized businesses in the Chernobyl-affected areas by transferring best practices and world experience in using smart tools for business development	Expanding the representation of business associations throughout Ukraine, which will positively affect their ability to attract new members, promote constructive cooperation with government agencies, which will improve the sector of micro, small and medium enterprises and increase their competitiveness due to the benefits of membership in business associations. Inclusive development of micro, small and medium-sized enterprises in terms of ensuring gender equality and promoting the green economy
Project implementation period	November 2020 – May 2022	October 2014 – September 2018	November 2019 – October 2023
Sustainable development goals	Goal 13. Combating climate change; Goal 15. Conservation of terrestrial ecosystems; Goal 17. Partnership for sustainable development	Goal 1. Overcoming poverty; Goal 8. Decent work and economic growth	Goal 8. Decent work and economic growth
Funding amount	US \$ 0.87 mln. The project budget is US \$ 13.33 mln.	The project budget is US \$ 1.6 mln. United Nations Development Program (UNDP) is US \$ 0.1 mln. The Government of Poland is US \$ 0.1 mln. SECO State Secretariat for Economic Affairs is US \$ 1.4 mln.	US \$ 1.3 mln.
Project donor	United Nations Development Program (UNDP) Government of France	United Nations Development Program (UNDP) Government of Poland SECO State Secretariat for Economic Affairs	United Nations Development Program (UNDP) State SECO Secretariat for Economic Affairs

Source: formed on the basis of the United Nations Development Program in Ukraine (2021) [20]

These projects create real opportunities for businesses and communities to solve certain social and environmental problems, which at the same time bring financial benefits. Here are some examples of UNDP projects that reflect the experience of impact investment in agribusiness in Ukraine.

As part of the Project “Community-Based Local Development”, funded by the European Union and the United Nations Development Program in Ukraine, 33 residents of Putyla and neighboring villages of Chernivetska region established the Agricultural Cooperative “Dary Hutsulshchyny” to harvest, process and store wild mushrooms and berries. With the assistance of the UNDP project to start its ecological agribusiness, the cooperative purchased a freezer, dryer, mushroom slicer, scales, containers for collecting and storing mushrooms and berries, and a freezer for storing them. UNDP has allocated US \$ 25,000 for this. Another US \$ 5,000 was allocated by the community. The first harvest of mushrooms was sold online. Subsequently, orders began to arrive from various cities. During the season the company processes up to 20 tons of mushrooms. Mushrooms are sold through a network of supermarkets and also exported to Israel, Poland, the United States and Moldova. In addition to mushrooms and berries, the production of Carpathian herbal teas has been established.

The United Nations Development Program in Ukraine is actively cooperating with public and private organizations in finding effective tools and incentives for the transition to an environmentally oriented economy and the implementation of world best practices in national agriculture.

As part of the Project “Support for Green Recovery in Ukraine”, UNDP signed a memorandum with “Arnica” Agro-Industrial Group to develop a solution and related software to improve corporate climate risk management and access to green finance in the future.

“Arnica” Agro-Industrial Group was founded in 2000 as an agricultural company with traditional technology of growing crops. The main specialization was soybean cultivation and seed production. In 2004, the company built the first soybean processing plant in Ukraine. Since 2012, the “Arnica” Group has been implementing sustainable management systems and moving into the organic business. Today, it is the second largest organic company in Europe with a certified land bank of 14,979 hectares, which provides almost 53% of all organic soybean exports from Ukraine to the EU and is the largest producer and exporter of organic corn from Ukraine.

According to the memorandum, the parties will cooperate in developing the necessary methodology for assessing non-financial risks (environmental, social and managerial) (ESM) for use in organic agriculture. According to the chosen methodology, the ESM-system will be implemented on the basis of the “Arnica” Agro-Industrial Group. It is also planned to develop a program for ESM risk management based on carbon emissions data and other non-financial data. At the same time, the memorandum provides for cooperation in the organization of an independent

audit of the selected for the implementation ESM system by leading experts in the field. Creating and expanding environmentally friendly practices based on the positive experience of the “Arnica” Agro-Industrial Group will allow attracting as many companies as possible to an ethical and sustainable way of conducting agribusiness.

► Conclusions

The current state of basic tools which are used to obtain resources for accelerating the sustainable development of agribusiness in Ukraine was determined. Among such instruments, agriculture insurance and new instruments such as green bonds and impact investments were considered.

Agriculture insurance is seen as a tool to achieve the economic dimension of sustainable development of agribusiness, as it provides an opportunity to resume operations to the level that existed before the insured event. Due to the significant limitations of agribusiness entities in their own resources, agriculture insurance is often saved on, because the modeling of the development of the agriculture insurance in Ukraine showed that such type of insurance was formal and did not perform a real protective function. Although Ukraine is actively improving the legislation on the introduction of partial compensation for insurance payments (up to 60%) in agricultural production, it would be necessary to stimulate not only insurance of primary agricultural products, but also processed ones, exporting of which brings more foreign exchange earnings to Ukraine.

Green bonds, first issued by international financial organizations, began to be used in the late 2000s to stimulate the environmental dimension of sustainable agribusiness development. Agribusiness in Ukraine is involved in attracting resources for the transition to green management principles, as indicated by the practice of financing green projects in agribusiness in Ukraine by the European Bank for Reconstruction and Development. At the same time, in order to make the use of this tool more active, it is necessary to stimulate the emission of green bonds by domestic financial institutions, in particular insurance companies.

Impact investment is a socially oriented type of investment that involves solving environmental and social problems and making a profit. The effectiveness of impact investment is determined by the private and public effect. The results of impact investments provide for the achievement of sustainable development goals. Impact investments are aimed at mitigating the effects of environmental degradation and solving social problems.

The purpose of the implementation of impact investment projects under the UN Development Program in Ukraine is to achieve the Sustainable Development Goals. In the agricultural business, these projects create conditions for sustainable development of agriculture and rural communities; contribute to the preservation of ecosystems and the expansion of the green economy. Creating appropriate

conditions and stimulating impact investments in Ukraine will allow attracting private capital to solve environmental and social problems. This will help build a socially oriented model of Ukraine's economic development.

The prospect for further research is the formation of a systematic approach at the state level for a more active combination of traditional and innovative instruments for sustainable development acceleration of agribusiness in Ukraine.

► References

- [1] Ignatyuk, A., Liubkina, O., Murovana, T., & Magomedova, A. (2020). FinTech as an innovation challenge: From big data to sustainable development. *E3S Web of Conferences*, 166, article number 13027. doi: 10.1051/e3sconf/202016613027.
- [2] Naidenko, O. (2019). Justification of tax regulation tools to support the poor. *Economics of Development*, 18(3), 45-57. doi: 10.21511/ed.18(3).2019.05.
- [3] Nikolaychuk, T. (2021). Innovative forms of experience services in business activities. *Scientific Bulletin of Mukachevo State University. Series "Economics"*, 8(3), 46-59. doi: 10.52566/msu-econ.8(3).2021.46-59.
- [4] Moid, S. (2017). Green Bonds: Country Experiences, Challenges and Opportunities. *Rajagiri Management Journal*, 12(1).
- [5] The green bond principles. (2021). Retrieved from <https://www.icmagroup.org/sustainable-finance/the-principles-guidelines-and-handbooks/green-bond-principles-gbp/>.
- [6] What you need to know about impact investing. (n.d.). Retrieved from <https://thegiin.org/impact-investing/need-to-know/#what-is-impact-investing>.
- [7] Impact investments. (2021). Retrieved from <https://www.rbf.org/mission-aligned-investing/impact-investments>.
- [8] Orlitzky, M., Bauer, R., & Busch, T. (2016). Sustainable development and financial markets: Old paths and new avenues. *Business and Society*, 55(3). doi: 10.1177/0007650315570701.
- [9] Simon, J., & Barmeler, J. (2010). *More than money: Impact investing for development*. Retrieved from <https://www.cgdev.org/publication/more-money-impact-investing-development>.
- [10] The United Nations. (2000). *United Nations Millennium Declaration*. Retrieved from <https://www.ohchr.org/EN/ProfessionalInterest/Pages/Millennium.aspx>.
- [11] The United Nations. (2015). *Transforming our world: The 2030 agenda for sustainable development*. Retrieved from <https://sustainabledevelopment.un.org/post2015/transformingourworld/publication>.
- [12] The Secretariat of the Cabinet of Ministers of Ukraine. (2019). *Sustainable development goals and Ukraine*. Retrieved from <https://www.kmu.gov.ua/en/cili-stalogo-rozvitku-ta-ukrayina-eu>.
- [13] Law of Ukraine No. 2697-VIII "On the Basic Principles (Strategy) of the State Environmental Policy of Ukraine for the period up to 2030". (2019, February). Retrieved from <https://zakon.rada.gov.ua/laws/show/2697-19#Text>.
- [14] The Ministry of Economy of Ukraine (2020). *Sustainable Development Goals: Ukraine. Voluntary national review*. Retrieved from <https://me.gov.ua/Documents/Download?id=4819b04d-99d6-47d3-a0db-fd4a4215f13d>.
- [15] Law of Ukraine No. 4391-VI "On Peculiarities of Insurance of Agricultural Products with State Support". (2012, February). Retrieved from <https://zakon.rada.gov.ua/laws/show/4391-17#Text>.
- [16] Herasymenko, N. (2021). Agricultural insurance – the potential for sustainable development of agricultural companies: The current state and prospects for development in Ukraine APD/APB/08/2021. Retrieved from https://www.apd-ukraine.de/images/2021/APD_Berichte_2021/08_Agrarversicherung/Bericht_APD_Agrarversicherung_UKR.pdf.
- [17] Versal, N.I., & Sholoiko, A.S. (2022). Green bonds of supranational financial institutions: On the road to sustainable development. *Investment Management and Financial Innovations*, 19(1). doi: 10.21511/imfi.19(1).2022.07.
- [18] Implementing the EBRD green economy transition. (2018). Retrieved from <https://www.ebrd.com/documents/climate-finance/green-economy-transition-handbook.pdf?blobnocache=true>.
- [19] Sustainability Report (Rep.). (2006-2010, 2016-2020). Retrieved from <https://www.ebrd.com/news/publications.html>.
- [20] The United Nations Development Program in Ukraine. (2021). Retrieved from <https://www.ua.undp.org/content/ukraine/uk/home/projects/>.

Інструменти та ресурси для прискорення сталого розвитку агробізнесу в Україні

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► **Анотація.** Агробізнес в Україні займає одне з найважливіших місць у національній економіці, але не всі суб'єкти ведуть його стабільно через брак ресурсів для фінансування таких перетворень. Тому необхідно дослідити інструменти залучення ресурсів для прискорення сталого розвитку агробізнесу в Україні. Метою статті є визначення сучасного стану основних інструментів, які використовуються для отримання ресурсів для прискорення сталого розвитку агробізнесу в Україні, а саме страхування сільського господарства, зелених облігацій та вплив інвестицій. У статті за допомогою ситуаційного аналізу, монографічного методу, табличного та графічного методів, наукового узагальнення проаналізовано досвід використання страхування сільського господарства, зелених облігацій та вплив інвестування як інструментів прискорення сталого розвитку агробізнесу. Джерелами інформації для цього дослідження були звіти Міжнародної фінансової корпорації, звіти про сталий розвиток Європейського банку реконструкції та розвитку та звіти Програми розвитку ООН в Україні. Дослідження практики використання страхування сільського господарства, зелених облігацій та вплив інвестицій як інструментів прискорення сталого розвитку агробізнесу в Україні дозволило визначити зародковий рівень їх використання. Про це свідчить моделювання розвитку сільськогосподарського страхування в Україні, яке показало, що цей вид страхування є формальним і не виконує реальної захисної функції. Що стосується проектів, ресурси яких залучаються через зелені облігації та програми вплив інвестицій, то вони є фрагментарними і потребують більшої системності. Ця робота є однією з перших, яка розглядає практику застосування інструментів для прискорення сталого розвитку агробізнесу в Україні в контексті трьох вимірів та досягнення цілей сталого розвитку. Для подальшого розвитку як страхування сільського господарства, так і зелених облігацій необхідно стимулювати емісію таких боргових паперів страховими компаніями та розвивати страхування не лише первинної сільськогосподарської продукції, а й переробленої, експорт якої приносить більше валютних надходжень на Україну. Це дослідження має на меті висвітлити поточні практики застосування інструментів для прискорення сталого розвитку агробізнесу в Україні, зокрема страхування сільського господарства, зелених облігацій та вплив інвестування, які є основою для їх популяризації та поширеності в науковому середовищі та серед професіоналів агробізнесу

► **Ключові слова:** страхування сільського господарства, зелені облігації, вплив інвестування, стійкість, Цілі сталого розвитку, сільське господарство, продовольча безпека