

INCLUSIVE INVESTMENT IN THE SUSTAINABLE DEVELOPMENT OF THE AGRICULTURAL SECTOR AND RURAL AREAS OF UKRAINE

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ABSTRACT

This scientific study is devoted to solving the tasks of overcoming these negative trends at the expense of substantiating the mechanism of inclusive investment. The article examines the essence and role of the inclusive investment mechanism in agricultural business. Based on the system of fundamental indicators, an assessment of the current level of sustainable development of the agricultural sector of Ukraine was carried out. The main trends accompanying the agrarian sector's transition to sustainable development principles have been identified. The main directions of investment in the rural business of Ukraine have been revealed. An analysis of the sources, volumes, and dynamics of agricultural investment in solving the problems of sustainable development of agribusiness and rural areas was carried out. A prospective assessment of the amount of inclusive investment resources in the agricultural sector and the rural regions is given. The main problematic aspects related to the process of inclusive investment in Ukrainian agrarian business are characterized. The critical organizational and economic principles of forming a sustainable business model for developing an agricultural industry based on inclusive investment are substantiated. The conducted studies confirmed the presence of transformational changes in the economy of the agricultural sector of Ukraine in the direction of achieving the goals and objectives of sustainable development. The research results formed the basis for substantiating practical proposals and recommendations for improving the process of attracting inclusive investments in agricultural business and the development of rural areas.

Keywords: *investments, agrarian business, inclusive gaps, economic and social development, performance*

1. INTRODUCTION

The agricultural sector of Ukraine is vital for the national economy and determines the strategic vector of its further development. Under the conditions of the military conflict in the country, agriculture remains practically the only branch of the economy that continues to provide steady inflows of currency from exports, replenishment of the country's budget at the expense of tax fees, and creation of additional value. The role of the agricultural sector of Ukraine in ensuring the food security of its population and achieving the global goals of sustainable development through the supply of agricultural raw materials to the world food market is essential. The prospects of Ukraine's further integration into the European socio-economic community, gaining competitive advantages in the world food market, and improving the quality of life of the country's population are closely related to ensuring the sustainable development of agriculture and rural areas. The transition to sustainable development requires a change in strategic priorities, paradigms, and values that form the plane of criteria and conditions for the effectiveness of agribusiness functioning.

FAO identifies several critical conditions for ensuring the sustainable development of agriculture in the context of solving global human problems: 1) the ability to promote the development of ecosystems and ensure rational management of natural and biological resources; 2) meeting the needs of current and future generations by achieving a balance of business profitability, social-ecological and economic interests of all members of society; 3) the presence of a management system that will contribute to solving all these tasks (FAO, 2021).

Kociszewski (2018) considers the sustainable development of agriculture as a combination of the concepts of SARD, MRD, multifunctional agriculture, and sustainable development.

Farmers understand the content of sustainable development from a wide range of perspectives. Scientists have identified about 19 prerequisites for ensuring the sustainable development of agriculture. However, all of them can be systematized into components of an ecological, social, and economic nature, the impact of social responsibility and inclusiveness of agricultural business and the corresponding methods of their management (Lauretta et al., 2018).

Luo et al. (2016) consider the sustainability of agriculture through the efficient use of resources and management capabilities to ensure the sustainable production of material goods that are sufficient and affordable for the entire population. Resource conservation and agroecological methods of agricultural production are also the basis of achieving a state of sustainability of the farm output in the approaches of other scientists (Zhang et al., 2021). We share this systematic approach of the authors and agree that sustainable agriculture should ensure the inclusive development of rural areas.

A significant number of scientists who studied the problem of increasing the level of sustainability of agricultural production paid particular attention to the ecological component (Ngo et al., 2021; Sarkar et al., 2021). Moreover, further studies have shown that economic and social components are more significant in achieving the goals of sustainable development of agribusiness since they can ensure the receipt of necessary investments and the use of management methods that are necessary for the sustainable development of agriculture (Linlin et al., 2022).

Scientists are researching the forms and methods of sustainable development to solve the inclusive tasks of the development of rural areas: ensuring equal and fair access of the population to clean natural resources, opportunities to obtain affordable socio-economic benefits, gender equality and social protection, personal development, preservation of the family and youth (Dal Moro et al., 2022), equal employment opportunities for the population and overcoming social exclusion (Guirado et al., 2017). The critical aspect of ensuring the sustainable development of agribusiness is providing producers with equal and fair opportunities for integration and capital markets and the sale of agricultural products (Collazos et al., 2020).

Among the main reasons that lead to different levels of sustainable development in rural areas are: other trends in economic growth, incomes of rural families, economic inequality, lack of equal and fair access of agricultural producers and residents of rural areas to investments (Calicioglu et al., 2019).

Achieving the goals of sustainable agriculture in Ukraine requires solving the tasks of implementing reliable methods of agricultural management and agribusiness into practice, increasing the share of energy and resource-saving production technologies, activating the development of circular processes, and overcoming existing inclusive gaps between the level of growth of the population of cities and rural areas. Today, ecological, socio-economic, and gender-cultural inclusiveness are the critical tasks of the transformational transition to a model of sustainable development of agribusiness and rural areas. Solving these tasks requires increasing the flow of socially responsible inclusive investments in the country's agriculture. Assets form the prerequisites for ensuring multifunctional inclusion, justice, and equality, creating the basis for achieving the goals of sustainable development of the industry and the country's economy.

2. LITERATURE REVIEW

The impact of investments on the possibility of achieving sustainable development goals is the subject of active scientific discussions by many scientists and international organizations. The United Nations 2020a report emphasized the need to stimulate investment in all sectors relevant to implementing the Sustainable Development Goals, while agriculture was singled out as a priority

area (Sustainable Development Goals 2,13,14,15) (UNCTAD, 2020). The quality of life of 42% of the world's population depends on agriculture, which requires sustainable land use, which is impossible without ensuring social and environmental investments in the development of rural areas (Aznar-Sánchez et al., 2019). Over the past decade, investment in facilities related to clean energy, clean technologies, sustainable agricultural production, and food security has increased significantly. Among the priority financial investment instruments the authors call "green" and social bonds promising (Zhan et al., 2021). A key motivation for US agribusiness investors is to participate in creating sustainable value chains (Van Zanten et al., 2018). Grzelak (2022) proved that economic sustainability positively affects the ratio of assets and income of EU farmers. The increase in support results from the increased volume of investments due to the growth of environmental and social functions in agriculture.

Velten et al. (2015) substantiated four main principles of inclusive investment in sustainable development:

1. Ensuring a balance between private and public investments.
2. Attractiveness in the ratio of risk and profitability of investments.
3. The balance between liberalization and regulation of the investment process.
4. The need for the scale of inclusive investment to cover all sustainable development goals.

Havemann et al. (2020) also identify the importance of agriculture in achieving global sustainable development goals. The authors see the possibility of increasing the volume of inclusive investment flows in the sustainable development of the agricultural sector and rural areas in the creation of new investment structures, which should be formed based on mixed financing with state support (subsidies, preferential fiscal policy, guarantees for private investors). As financial instruments of the investment process, the authors see primarily grants, securities, soft loans, and investors' capital). Such inclusive investments in sustainable development may cause significant costs without a guaranteed financial return. However, the long-term beneficial effect of such assets will manifest itself over time in increasing sustainability and achieving sustainable development goals. Responsible investments are also considered the primary driver of sustainable development of agriculture and rural areas of Ukraine and the Czech Republic (Plastun et al., 2021).

Mastilo et al. (2017) investigated the impact of inclusive investment on ensuring sustainable value creation management processes. Zhan et al. (2020) suggest further developing investment models of SDG zones to develop inclusive investment processes for sustainable development goals. Integration of sustainable production and consumption, preservation of biodiversity, and creation of socio-ecological sectors of justice and sustainability are also key areas of inclusive investment in agriculture (Imasiku et al., 2020, Guerrero-Pineda et al., 2022). The priority strategic direction of inclusive investments in agriculture is the further development of the "green" economy (Soderholm et al., 2020; Ahman et al., 2017).

3. AIM OF THE RESEARCH

The purpose of the article is an economic assessment of the current state and impact of investment on the effectiveness (profitability) of the economic activity of agricultural enterprises and the justification of promising drivers for the activation of the attraction of inclusive investments in the industry.

4. METHODS

The materials for the article were data obtained based on generalizations of domestic and foreign scientific literature on sustainable development issues. The information base of the study was supplemented by data from the State Statistics Service of Ukraine, the Ministry of Agrarian Policy and Food of Ukraine, forecast indicators of the development of agriculture of the country's leading scientific institutions (NNC IAE of Ukraine).

When studying the subject, a set of general scientific and specific economic research methods was used, the basis of which was a systematic dialectical approach to the knowledge of socio-economic phenomena and processes. Based on the monographic method of research and the method of abstract systematization and specification, a review of scientific literature was conducted, and a plane of

the authors' vision of the realities of existing inclusive gaps in the agriculture of Ukraine was formed. Also, with this method's help, the current state of investment support in the industry was studied. The method of synthesis, induction, and deduction, as well as the scientific-abstract systematization of the results of scientific research, became the methodological basis for substantiating the authors' approach to distinguishing the characteristic features of inclusive investments in agriculture. With the help of the concretization method, indicators were selected from the set of indicators of sustainable development, which form the basic idea of the current state of sustainable development of the agricultural sphere and rural areas. Based on the index method of economic and statistical calculations, the indicators of the sustainable development of the agricultural economy of Ukraine were calculated. The comparison method supplemented the research results in identifying trends and changes in these indicators. The methods of the system approach, abstract systematization, and logical structuring were used in the justification of the inclusive drivers of sustainable development of agriculture and rural areas of Ukraine. Analytical observation and comparison methods were the basis of the description of the professional discussion in the part of the discussion of the obtained results and the degree of influence of inclusive investments on the results of the activities of rural business structures.

Part of the material for the article was obtained by method of collecting and analyzing the annual financial statements of medium and small agricultural companies of Ukraine (excluding extensive agrarian holdings of Ukraine). Internal management reporting of farming enterprises, which does not have an official status and is not regulated by current legislation, was added to the financial reporting. Based on the received materials, economic and statistical data on agricultural enterprises' investments, the availability of land, and the financial results of their activities were collected. The basis of the statistical sample was 93 medium- and small-sized agricultural companies in Ukraine's Odesa, Vinnytsia, and Mykolaiv regions. Based on the application of the economic and statistical method, an assessment of the impact of investment size on the final performance indicators of the economic activity of agricultural companies was carried out. A two-factor mathematical model of multiple linear regression was used as a specific methodological technique of the economic-statistical method, which showed a high-reliability level of 64%. The multiple linear regression equation model had two main factors:

$$Y_i = b_0 + b_1 x_{1j} + b_1 x_{2j} \quad (1)$$

where

Y_i – the amount of net profit per 1 agricultural enterprise, a thousand UAH;

$b_1 x_{1j}$ – the number of capital investments per 1 agricultural enterprise, a thousand UAH;

$b_1 x_{2j}$ – the number of foreign investments per 1 hectare of arable land, a thousand UAH.

5. RESULTS

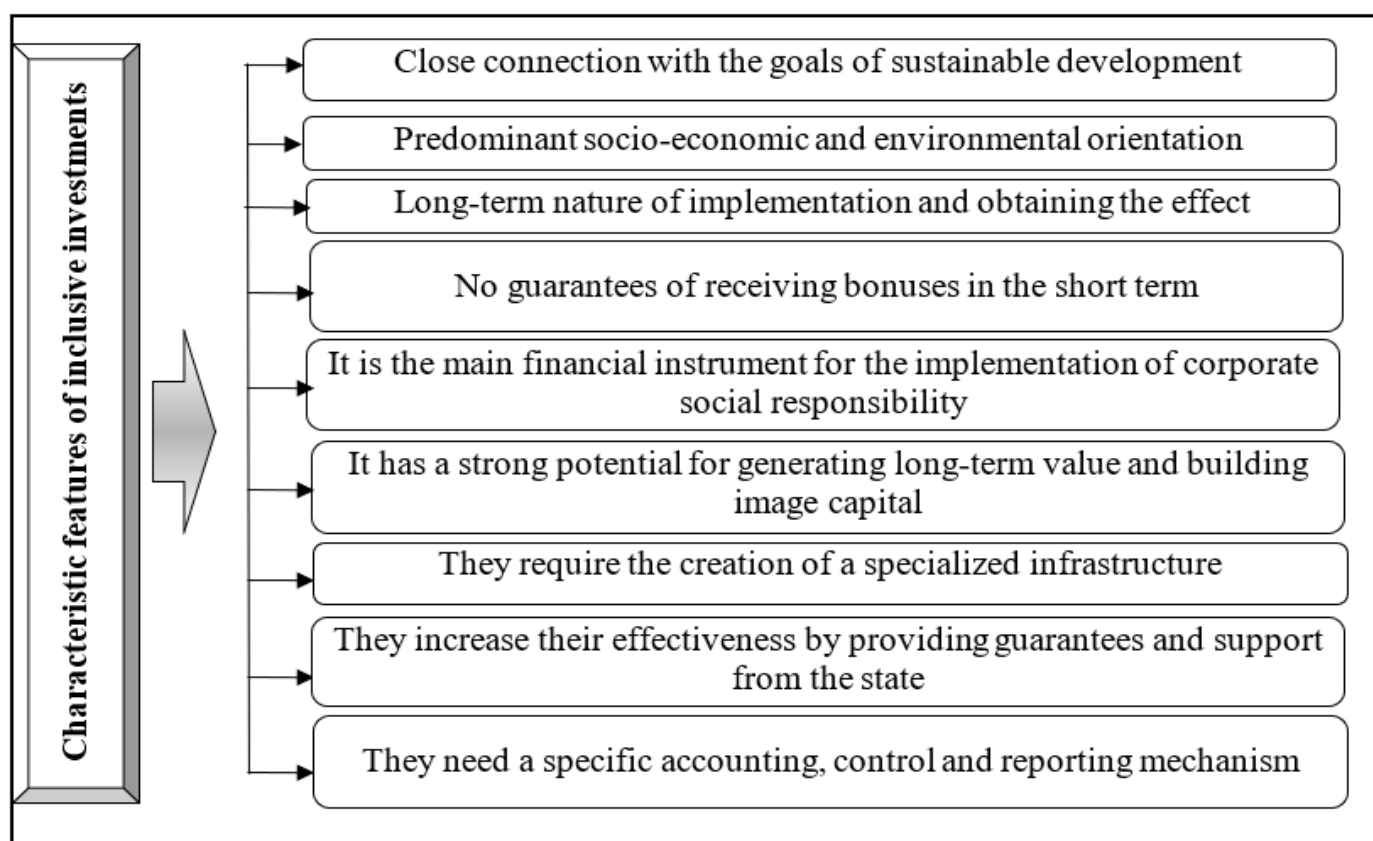
Agriculture is a traditional type of economic activity in Ukraine, which ensures stable functioning even under the conditions of the existing military conflict in Ukraine. A significant part of the total resources of the country's economy is concentrated in the agricultural sector, and agricultural business has remained one of the most profitable types of business for many years. Moreover, it is precisely in agriculture and the boundaries of rural areas of Ukraine that the most significant inclusive gaps of both socio-economic, political, and environmental origin are observed. The conducted research made it possible to determine the critical problems of the existing inclusive holes: high indicators of the Gini index (0.72), which indicates a significant imbalance and unevenness in the distribution of income within the agricultural sector; high concentration of profits of extensive farm holdings (10% of farming companies accumulate more than 60% of the total income of the industry) and limited access of medium and small agricultural structures to resource, capital, and sales markets; a high level of inequality in income opportunities among households (more than half of Ukrainian households receive income from agricultural activities of less than 500 euros), only half of the homes in rural areas have access to convenient public transport, only 13% of the rural population has a higher education). The amount of wages in agriculture traditionally remains one of the

riskiest types of economic activity in Ukraine (12,287 UAH), which is 30% less than the average for the economy. The negative trends of deterioration are determined by the rural population's access to medical services and the improvement of professional skills; about a third of households in rural areas do not have access to the Internet, which significantly reduces the potential of access to participation in the socio-cultural and political life of the country. In general, the average income level of households in rural areas is 25% lower than the urban population and, in the pre-war period, was 424 dollars per month.

It is possible to overcome inclusive gaps with investments in developing agriculture and rural areas. Considering Ukraine's significantly limited budgetary and financial potential, we believe that socially responsible agricultural businesses should shoulder the investment burden to a large extent. The main motives of inclusive investments in the development of agricultural production and rural areas on the part of the agrarian business should be the achievement of strategic competitive advantages based on the principles of sustainable development of agribusiness and the countryside.

The study of the essence and meaningful parameters of inclusive investments made it possible to determine their key characteristics (Fig. 1).

Figure 1. Characteristic features of inclusive investments



Source: created by the authors

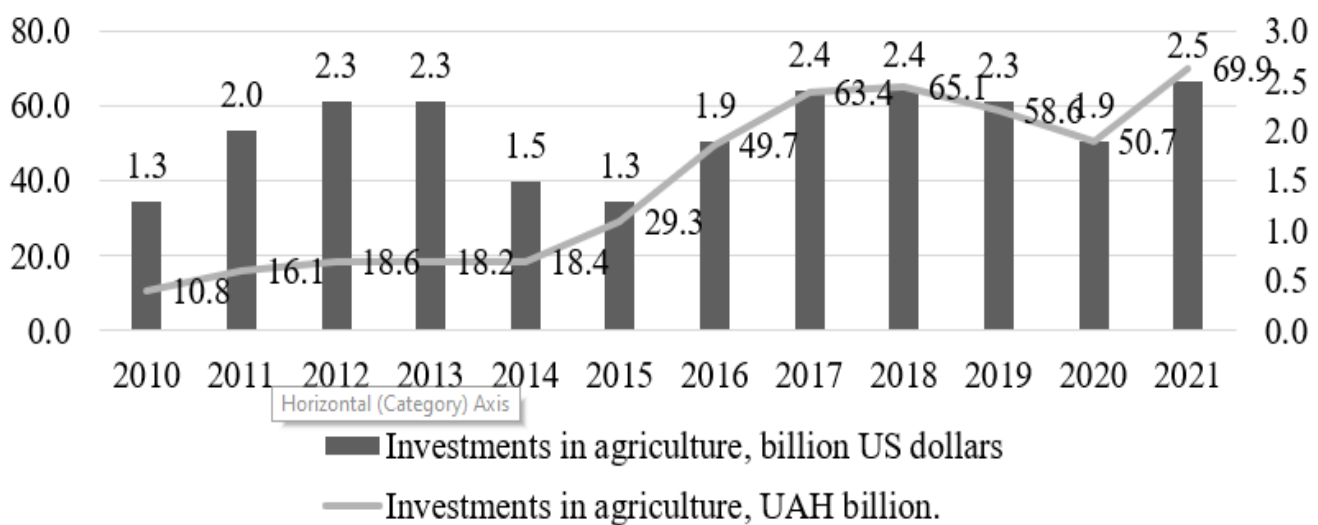
In practice, inclusive investments in agriculture and the development of rural areas are manifested in the following forms:

1. Expansion of access opportunities for farmers to resource and capital markets, creation of sustainable product chains, and equal opportunities for integration, partnership, and cooperation for agricultural companies regardless of their scale and size.
2. Variety of investment strategies, projects, and investment products.
3. Creation of a transparent mechanism for attracting and using investment resources.
4. Formation and effective functioning of a specialized infrastructure of inclusive investment on the basis of digitization and broad access by all participants in business relations.

5. Achievement of sustainable development goals by investing in environmental and socio-economic projects for the development of agriculture and rural areas.
6. Reduction of inclusive gaps and improvement of the quality of life of the rural population.

Investment support for agribusiness and rural areas is characterized by complex trends in the field of instability of investment processes and a decrease in the level of investment attractiveness of agriculture; inadequate specialized infrastructure, limited financial and investment potential of domestic donors, in particular, state donors; the factors of political and macroeconomic instability, the pandemic, and the uncertainty of the mechanism for completing the land reform also added to the negative impact. In the structure of sources of financing of assets of agricultural business entities, own capital prevails with a share of 49-54%. The specific weight of long-term obligations, which are a source of capital investment and expanded reproduction of agricultural production, has been 4-9% over the past few years. Thus, own funds remain the main source of financing economic activity for agribusiness. Despite the presence of problematic aspects, the volume of investment flows into the agricultural sector of Ukraine increased annually and reached 2.5 in 2021 (Fig. 2).

Figure 2. Volume of investments in agriculture of Ukraine



Source: compiled by the authors based on the data of the State Statistics Service of Ukraine

The mathematical model built based on economic and statistical indicators of the activity of agrarian companies is as follows:

$$Y_i = 622,8 + 1,47x_{ij} + 21,44x_{ij} \quad (2)$$

The conclusions of the conducted research were formulated using the methods of abstract specification, generalization, structural-genetic analysis, and synthesis of the obtained results. The graphical visualization method presented part of the results of the conducted study, authors' developments, and recommendations.

In the pre-war period, the average amount of investments per agricultural enterprise in Ukraine per year (excluding extensive agricultural holdings) was about UAH 1,250 million (USD 45,000). In terms of types of economic activity, the amount of investment in agriculture is significantly lower than in other sectors of the economy of Ukraine. The amount of investments in industrial enterprises on average per year is about 5,000 million UAH (178,000 USD), the financial sphere – 1,762,000 UAH (63,000 USD), and enterprises in the transport sector – 2,499,000 UAH (89,200 USD). (State Statistics Service of Ukraine, 2023). Furthermore, over the past ten years, the agricultural business has been the most profitable among all types of economic activity. It maintains stable activity indicators even during the country's martial law, as the farm business's profitability level is 18%.

To assess the level of impact of investments on the sustainable development of enterprises in the agricultural sector of Ukraine, data from the annual financial statements and internal management reports of 93 medium- and small-sized agricultural companies (Shustov Agro LLC, Kirov LLC, Kumary LLC, AF Mayaki LLC, PJSC "Agrofirma "Kolos", SVC "Rodyna" and other agricultural enter-

prises of the Odesa region, LLC “Peremoga” of the Vinnytsia region and others) were analyzed. Giant agricultural holdings were excluded from the selection due to their strong investment potential and high level of inclusive investment activity. The research results showed a relationship between the size of investments and the profitability of agricultural companies with a degree of statistical influence of 64% ($R^2 = 0.64$).

The value of R^2 with a depth of 64% shows that the degree of the actual influence of the size of investment investments on the profitability of agribusiness is average.

Regression components b_1 and b_2 - account for the independent contribution of two main factors to the result of the economic-mathematical model (average size of net profit per enterprise). According to the obtained modeling results, it was found that the influence of the first independent factor b_1 (the amount of capital investment per agricultural enterprise). The value of this coefficient shows that if the amount of capital investment for one agricultural enterprise increases by 1 thousand UAH, the net profit per enterprise will increase by 1.47 thousand UAH. The independent factor b_2 - the size of foreign investments per 1 hectare of arable land - showed a more significant influence on the profitability of agricultural companies. According to the obtained results, with an increase in foreign investments of 1 thousand UAH per hectare of arable land, the net profit of agricultural companies increases by 21.4 thousand UAH. Thus, the assessment of the influence of two independent factors - the amount of capital investment per farm enterprise and the amount of foreign investment per hectare of arable land show that the increase of net investment flows, the object of investment, is more promising, economically profitable and profitable for agricultural companies which are formed by agricultural land. This influence is explained by the fact that capital investments are mainly related to increasing non-current assets (updating agricultural machinery, purchasing agricultural machines, equipment, etc.). Such investments are a material capital part of investments and can bring economic benefits. However, economic benefits and the overall effect of capital investments are formed in the medium and long term and require an appropriate time to be reflected in the financial results of economic activity (the amount of net profit).

The second factor of the economic-mathematical model (b_2 - the amount of investment in 1 ha of arable land) additionally includes current assets. Current assets are quickly transformed into finished products, providing agricultural companies with short-term financial results. In this regard, in the developed economic-mathematical model, factor b_2 was more effective and promising for ensuring the profitability of the agricultural business.

The indicator of the constant b_0 shows the amount of profit an agricultural enterprise can get if both factor characteristics (b_1 , b_2) are zero. According to the results of the model, in the absence of investments and capital investments, agricultural enterprises can remain profitable. However, the amount of profit will be 4.2 times less than if investment investments were made (according to actual calculations of the amount of net profit per agricultural enterprise).

The obtained results confirm the economic feasibility of increasing investments in the agricultural production of Ukraine but also indicate that capital investments and investments are not the only determining factors for ensuring profitable economic activity.

The obtained data confirmed the hypothesis that inclusive investment in agriculture is determined by the long-term deferred effect and does not always provide bonuses for investors in the short term. In addition, the agricultural sector has specific signs of business activity, which are manifested in a long period of asset turnover, prolonged operational and financial cycles, and increased risk of economic activity. The obtained results explain the motives of investors who refuse to invest in agriculture and the development of rural areas in anticipation of urgent short-term benefits, which ensure the investment of funds in non-agricultural types of economic activity.

Conducted studies have shown that the share of capital investments in agribusiness in the structure of economic activities of Ukraine has been relatively constant in recent years and does not exceed 10-11%. Agriculture is not the leader in rating the most investment-attractive types of economic activity. However, it remains a higher priority for investors than the food processing industry. The volume of investment flows in the agricultural sector is characterized by a positive trend of growth,

which at the end of 2021 was 2.5 billion dollars. Moreover, the critical areas of investment flows differ significantly from the priorities of the European investment policy. The construction (reconstruction) of livestock farms and complexes occupies the largest share in the structure of agricultural investment projects of the national economy: in the field of pig breeding – 10.4%, cattle breeding – 21.6%, poultry – 6.3%; priority among plant-growing industries is given to investments in the processing and storage of grain, technical and vegetable crops – 18.9%, about 2% is occupied by investments in the creation of alternative energy sources. In the industry's investment portfolio structure, the maximum share comprises projects whose value does not exceed UAH 10 million – 49.3% (State Statistics Service of Ukraine, 2023). Such investments can create opportunities for improving indicators of sustainable development of agricultural production. However, they are indispensable for ensuring the goals of sustainable development of rural areas and its population (Table 1).

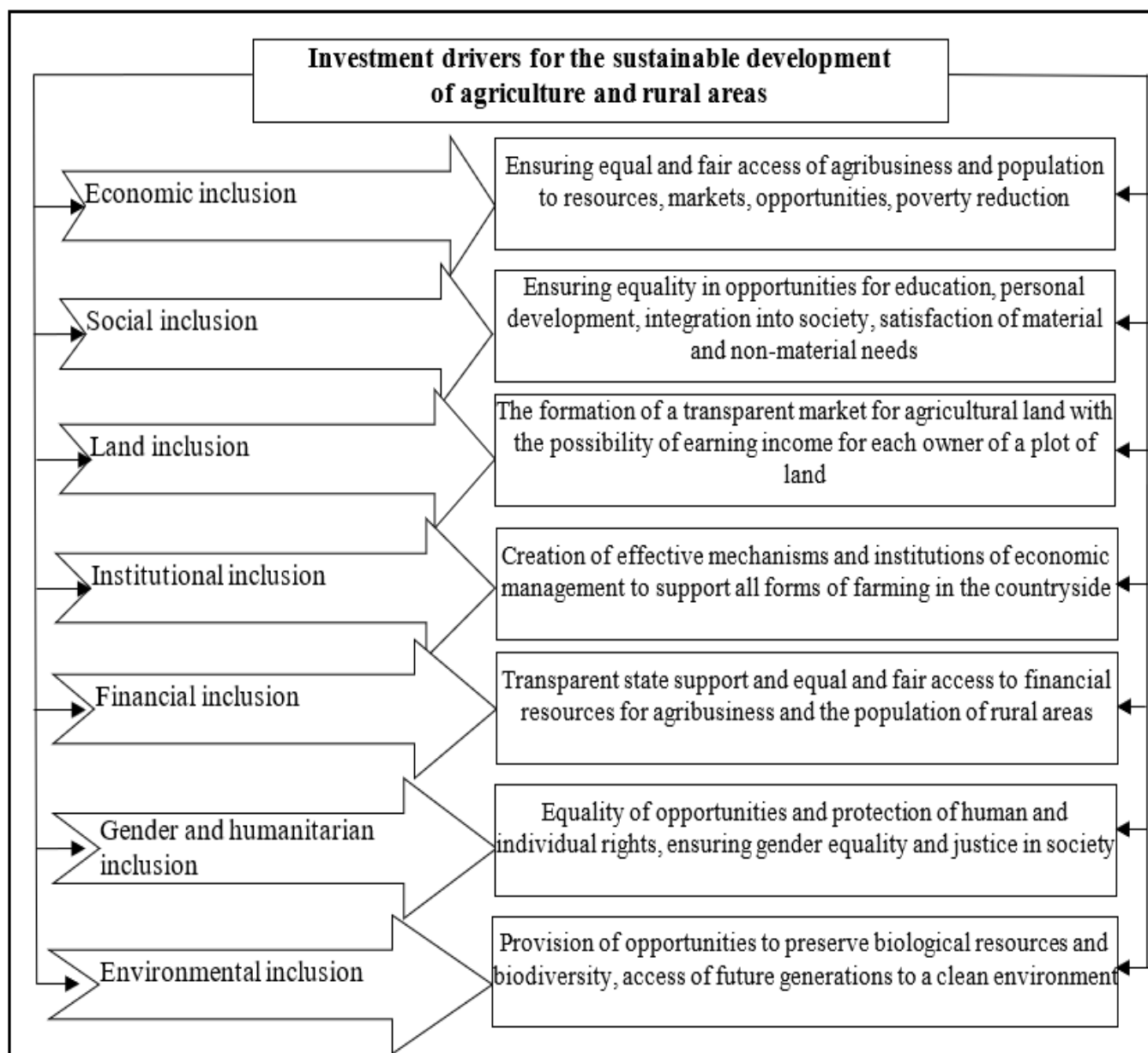
Table 1. Indicators of sustainable development of agriculture in Ukraine

Indicators	2000	2010	2015	2018	2020	2021
<i>Ecological component</i>						
The percentage of ploughing. land, %	77.8	78.1	78.4	79.1	79.5	79.6
The amount of applied mineral fertilizers per 1 ha, kg	60	84	98	134	152	154
Area treated with pesticides, %	28.5	37.7	42.6	89.5	91.4	92.0
Share of the area on which organic products were produced, %	78.0	30.0	19.0	9.0	7.0	7.1
Preservation of biodiversity, thousands of cattle	9423.7	4494.4	3750.3	3332.9	2874.0	2644.0
Emissions of carbon dioxide from the industry, thousand tons	512.0	718.1	1110.4	1174.0	1187.5	1461.8
Share of industry in CO ₂ emissions, %	0.3	0.4	0.8	0.9	1.1	1.3
Share of used water for production needs in rural areas, %	23.6	26.4	20.3	24.5	21.8	22.4
<i>Economic component</i>						
Share of industry GDP, %	8.4	8.2	11.9	10.2	9.3	10.1
Gross value added of the industry, billion US dollars.	5.4	10.4	10.9	13.3	14.4	20.7
Share in total added value in the economy, %	16.3	8.3	14.2	11.9	10.8	12.4
Trade openness, %	8.5	14.3	31.8	33.0	38.3	40.7
Annual amount of capital investments, million US dollars	297.2	1458.8	1380.7	2430.3	1879.8	1754.5
including for the 1st enterprise, thousand US dollars	14.0	25.8	30.4	49.4	39.5	44.6
Yield of grain crops, tons/ha	18.3	27.6	43.8	52.2	46.4	59.3
<i>Social component</i>						
Salary of workers in the industry per month, hryvnias.	114.0	1472	3309	7557	9734	12287
including in % to the average for the economy	49.5	63.9	74.8	80.8	84.0	70.4
The share of persons employed in rural areas production, %	18.6	19.3	17.5	18.0	17.1	17.2
Relative level of rural poverty (by expenditure), %	-	24.1	27.9	31.6	43.8	44.1

Source: calculated by the authors based on the data of the State Statistics Service of Ukraine

The analysis results showed threatening trends in the deterioration of land resources (an ecological component of sustainable development of agriculture in Ukraine) and traditional acute problems of a low quality of life of the population of rural areas (a social part of sustainable development). All this emphasizes the need to increase the flows of inclusive investment in agriculture and rural areas of the country to overcome existing disparities and achieve sustainable development goals. The authors propose the critical drivers of inclusive investments in sustainable development, as it is shown in Fig. 3.

Figure 3. Inclusive drivers of sustainable development of agriculture and rural areas of Ukraine



Source: created by the authors

The study of the current state of investment provision of the agricultural sector and rural areas of Ukraine made it possible to substantiate the critical priorities for the further development of inclusive investment processes: 1) optimization of the capital structure of agrarian business entities in the ratio of borrowed and own capital as 2:1; 2) ensuring equal access of agricultural producers to investment resources, regardless of the size and scope of the business, at a level not less than 200-250 dollars based on 1 ha of cultivated area; 3) increasing the level of transparency and availability of financial and credit infrastructure to cover the needs of farms by at least 65%; 4) increasing the degree of inclusiveness of capital markets, material and technical, and labor resources for small and medium-sized agricultural farms at a level not lower than 100%; 5) creation of inclusive supply chains and creation of additional value in the agricultural and industrial sector for all agricultural producers. According to the calculations of leading Ukrainian scientists, to achieve the inclusive goals of ensuring sustainable development, it is necessary to invest about 97 billion UAH (2.5 billion USD) in the agriculture of Ukraine in the period until 2030 (Malik et al. 2022).

The promising instruments of inclusive investment in the agriculture of Ukraine are:

- 1) food futures. Increasing the availability of futures: one of the most popular financial instruments in global practice, in Ukraine, is ensured by the operation of specialized investment funds

such as WisdomTreeWheat (investment in grain product), Teucrium Cjrn Fund (investment in grain product – corn), WisdomTreeSugar (investment in grain product);

2) use of the services of the corporate investment fund, the First Ukrainian Agrarian Fund, whose action is aimed at facilitating the access of Ukrainian farmers to capital markets and investment resources, as well as providing a wide range of consulting and advisory services in investment activities.

3) corporate bonds. In Ukraine, there is a state-guaranteed mechanism for attracting investment funds by purchasing securities; state debt receipts perform the role of such securities. These are securities issued in dollars, which have the whole level of profitability for investors (6-7%). Today, such a tool is actively used by extensive agricultural holdings.

Land plots are one of the most priority areas of inclusive investment in the agriculture of Ukraine. From July 1, 2022, the agricultural land market began to operate in Ukraine (Law of Ukraine “On Circulation of Agricultural Lands”). Increasing the transparency of investments and preserving the agricultural land fund’s natural and biological potential is the country’s main task for sustainable development. Agricultural land is the most attractive object of investment in the farm business. Today, the cost of 1 hectare of Ukrainian land is much lower than in EU countries – 33 thousand UAH. (about 1000 USD) for 1 ha of land. According to Eurostat, the average cost of 1 hectare of agricultural land in Poland is 11,000 euros, in the Czech Republic – 9,000 euros, and in Romania – 7,000 euros. The average rent for 1 hectare of land in Ukraine is 3.5 thousand UAH (about 100 dollars) (Ministry of Agrarian Policy and Food of Ukraine). From 2024, legal entities will have the right to purchase agricultural land in Ukraine. This forms the prerequisite for attracting significant investment flows to the agricultural sector. Therefore, we believe the only requirement for attracting investments should be their inclusive nature, a high level of responsibility of landowners, and the willingness to invest in inclusive socio-economic and environmental projects. The promising tool for increasing agricultural investments’ inclusiveness and social responsibility should be non-financial reporting, which will reflect the state, directions, and funding volumes of projects aimed at overcoming inclusive gaps within the country’s rural areas.

In recent years, Ukrainian agricultural holdings have been actively participating in the best global practice of socially responsible inclusive investments characterized by solid investment potential. Such companies’ investment areas are environmental protection programs, personnel development, construction of social infrastructure facilities in rural areas, education, science, and charity. Inclusive investments, by their nature, have limited potential for direct economic efficiency and only sometimes ensure business benefits in the short term. Moreover, a distinctive feature of inclusive investments is their ability to contribute to building up agricultural companies’ image capital and obtain long-term bonuses for society and competitive advantages for businesses. Significant difficulties for the agricultural sector of Ukraine at the current stage are the involvement of medium and small rural business companies in the practice of inclusive investment. The lack of financial resources remains the problem of activating the process of inclusive acquisition of small and medium-sized agricultural companies. Financial inclusion should become the basis for ensuring the sustainable development of agriculture and rural areas of Ukraine. Today, specialized digital service platforms, created as a tool to support the global strategy of inclusive, sustainable agriculture, are becoming a priority for increasing the level of access of agricultural business entities to the sources and necessary volumes of investment and credit capital. The specialized Digital crowd-drafting platforms SAI, AcreTrader, Farmtogether, FarmFolio, and Steward credit platforms, which are created based on managing a single system of chains in agriculture and unite donors and recipients of investment and credit resources from around the world, have proven themselves well. The action of investment platforms is implemented within the framework of inclusive development business models, which provide all its participants with equal access to financial resources. Investment platforms allow investors to reduce risk, use practical insurance tools, and provide advisory and consulting assistance to agribusiness in implementing investment projects. The potential of attracting additional investment resources through the digitalization of the financial capital market is the most powerful and one of the most promising today.

The military conflict, which has been going on in Ukraine for the second year, has significantly impacted the country's investment ratings and the ability of agriculture to attract investment resources. The crisis in the geopolitical sphere is supplemented by a set of factors of instability and risk to the business environment, which is the reason for the reduction of the investment potential of the country's agricultural sector. Nevertheless, the negative consequences of the military conflict increase the urgency and need for inclusive investments, which will be necessary to restore the natural and biological potential, and social infrastructure, ensure equal opportunities for the development of the rural population, and improve the quality of life. According to the estimates of scientists at the National Institute of Agrarian Economics, the total need for investments at the first stage of the recovery of the agricultural sector in the post-war period will amount to 72 billion UAH (about 1.9 billion US dollars) (Malik et al. 2022).

6. DISCUSSION

The research results leave specific debatable points concerning the size and impact of the volumes of inclusive investments on the performance of agricultural business structures. The authors will analyze the management reporting of Ukraine's small and medium-sized agricultural companies, excluding extensive agrarian holdings. The substantial investment potential and the number of financial resources of large farming companies, and the active practice of inclusive investments in their practical activities require further scientific research to clarify the nature and timing of the impact of investments in sustainable agriculture on the final financial result. The time of receiving economic and non-economic benefits for agricultural businesses from implementing inclusive investments also requires further research to understand better the motives and incentives of investing in sustainable development. According to the authors, such studies should be differentiated according to the scale and size of agricultural businesses.

7. CONCLUSIONS

The conducted studies showed that increasing investment volumes is necessary to eliminate existing inclusive gaps in agriculture and rural areas of Ukraine and ensure their development based on sustainability. Inclusive investments have significant differences from traditional investments, the main of which are:

- Socio-ecological orientation
- Close connection with the goals of sustainable development of rural business
- Strong potential for generating long-term values and image capital

At the same time, studies have proven that a characteristic feature of inclusive investments is also the lack of guarantees of receiving benefits in the short term and their strategic orientation. Aggregate assets have a more significant impact on the final financial result of agricultural enterprises (the amount of net profit) than capital investments, as part of them. This explains the desire of farming investors to invest in the formation of current assets, which provides more opportunities for accelerating the rate of capital turnover and returning investments in the form of profit in the short term. As a result of the time-delayed economic effect, the aggregate share of capital investments in Ukrainian agribusiness in recent years is at most 11%. At the same time, the dynamics of investing in the agricultural sector and rural areas of Ukraine showed that agrarian business is an attractive field for investors from the point of view of business profitability. The volume of investment in the industry is growing annually, and in 2021 amounted to 2.5 billion dollars. The most attractive and promising for investors in the Ukrainian agricultural sector are the poultry industry, processing and storage of grain, technical and vegetable crops, and the creation of alternative energy sources.

At the same time, agriculture is significantly inferior to other industries in the rating of investment attractiveness for domestic investors. One of the reasons is the perennial problems of the development of rural areas, which require significant amounts of investment in the social and environmental sphere, which can be afforded mainly by extensive agricultural holdings at this stage. Inclusive investments are closely related to the ability of farming companies to increase the level of business sustainability. According to indicators of sustainable development, the results show that Ukrainian agriculture has significant problems in terms of all three components of sustainable development: economic, social, and environmental. The most threatening trends are

defined as:

- The state of land use in Ukraine.
- Preservation of biodiversity.
- Social inclusion gaps in the income and poverty level of the rural population compared to the urban population.

As the calculations showed, the main problems of the sustainable development of rural areas of Ukraine remain a high level of plowing of agricultural land, high rates of loss of biodiversity, and poverty of the rural population. The article substantiated the critical drivers of investment, which groups classified according to the vision of inclusion: economic, social, land inclusion, institutional, financial, gender-cultural, and environmental inclusion to solve the issue of attracting inclusive agricultural investments. According to Ukrainian experts, the country's farm sector and rural areas have the potential for high recovery rates in the post-war period. However, ensuring such a recovery at the expense of attracting investment funds for about 72 billion dollars is possible.

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