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## The role of local communities in the restoration of agricultural infrastructure after destruction

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**Abstract.** The research aimed to evaluate the efficacy of financial, organisational, and managerial strategies for the rehabilitation of agricultural infrastructure in Ukraine from 2022 to 2024. The analysis examined the socio-economic prerequisites for the agricultural sector's development before the onset of conflicts, along with their effects on the devastation of production facilities, land resources, and the logistics infrastructure. The study determined that the hostilities destroyed 4,800 agricultural

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infrastructure facilities, damaged 3.2 million hectares of land, destroyed 12,500 km of roads, and reduced employment in the agricultural sector by 15%. By the end of 2024, the company managed to restore 2,750 facilities (57%), return 1.8 million hectares of land to cultivation and repair 7,300 km of roads. The financing gap in 2022 was more than USD 3.8 billion, rendering it impossible to modernise production facilities in a timely manner. Private investment, which dropped to USD 600 million in 2022, began to grow only in 2023-2024, reaching 950 million USD. In the same period, crowdfunding totalled more than USD 33 million, of which the largest share was used to modernise irrigation systems (USD 9.1 million in 2024). At the same time, the cooperative sector rehabilitated 65 farms in 2024, providing more than USD 21 million in economic contribution. Volunteer initiatives have also shown growth, supporting small farmers and the restoration of critical infrastructure. Demographic shifts from rural regions, particularly the exodus of approximately 120,000 individuals in 2022, have substantially diminished the agricultural sector's workforce capacity. The findings demonstrated that comprehensive reconstruction of agricultural infrastructure necessitates the acquisition of supplementary financial capital, optimal utilisation of public-private partnership frameworks, and implementation of initiatives to facilitate workforce repatriation. This investigation provides a foundational structure for enhancing investment strategies within the agricultural domain and optimising collaborative efforts among local communities, governmental entities, and international funding organisations

**Keywords:** agriculture; investment projects; financial support; cooperative initiatives; international assistance; recovery processes; communities

## INTRODUCTION

The research's significance was established by the considerable devastation of agricultural infrastructure due to wars, which disrupted production processes, diminished crop acreage, decreased employment levels, and restricted market access. In such circumstances, the definition of the role of local communities in the recovery process remained relevant due to the mobilisation of resources, coordination of recovery efforts and maintenance of socio-economic stability in rural areas. The study covered the issues of involving local communities in the process of restoring agricultural infrastructure, mechanisms of their interaction with government agencies, international partners, and the private sector, as well as the effectiveness of the initiatives implemented. The main challenges were a lack of financial resources, a shortage of qualified personnel, the destruction of transport infrastructure, and the need to introduce modern technologies into production processes. The analysis of these aspects identified the key factors that influenced the pace of recovery and outlined the prospects for stabilising the agricultural sector through the intensification of local initiatives and improved financing mechanisms.

The theoretical framework of the study was based on the concepts of decentralisation of governance, mechanisms of local self-government development and theories of sustainable agricultural development. The approaches used were those related to the role of communities in the processes of economic recovery, structural changes in the agricultural sector and the impact of military conflicts on agricultural production. The financing of reconstruction processes, including public-private partnership mechanisms, attracting international assistance and the role of cooperative associations in the restoration of agricultural production

were emphasised. The analysis of scientific sources demonstrated that the issue of restoring agricultural infrastructure after the destruction was addressed from various aspects, including state support, international financing, involvement of local communities, innovative approaches to agricultural development, and the role of the cooperative movement. O.A. Samoshkina (2024) highlighted state programmes to compensate for the losses of agricultural producers, which contributed to the modernisation of the agricultural sector, but the effectiveness of these measures in the context of unstable funding remained insufficiently covered. Similarly, the study by T. Gagalyuk (2024) analysed international grant programmes but did not consider the long-term economic effects of these initiatives and their sustainability in the post-crisis period.

O. Kravchenko *et al.* (2023) considered international institutional support but did not analyse the impact of regional economic conditions on the effectiveness of such programmes. I. Zapatrina (2022) studied the mechanism of public-private partnerships but did not provide a detailed assessment of the legal aspects and risks associated with attracting private capital to restore agricultural infrastructure. The analysis by L. Bovsh *et al.* (2024) addressed the cross-sectoral adaptation of farms but did not incorporate the structural challenges associated with labour outflows and migration processes. T. Zaiats *et al.* (2024) emphasised the role of non-governmental organisations in strengthening the adaptive capacity of territorial communities but did not cover the issue of integrating such organisations into state programmes to support the agricultural sector. M. Kohut (2024) analysed the relationship between foreign direct investment and national economic competitiveness; however, the study neglects to

address the distinctive characteristics of the investment environment within the agricultural sector and fails to account for the associated potential risks. The study by D. Riznyk (2023) analysed the investment strategy of post-war reconstruction but did not consider in detail the mechanisms for attracting financing for small and medium-sized farms.

V. Bobyl and D. Rezhko (2024) confirmed the importance of local government cooperation with central authorities in the recovery of the agricultural sector but did not address the issue of the efficiency of resource allocation at the regional level. The study by M. Kropyvko and M. Kropyvko (2022) substantiated the need to introduce modern agricultural technologies but did not provide a comprehensive assessment of the financial costs of such measures. I. Solodovnykova (2024) covered the mechanisms of agricultural insurance but did not consider the impact of security risks on the effectiveness of insurance programmes. Despite the wide range of issues analysed, there were still key aspects that required further study. Initially, an absence of a thorough examination of the enduring socio-economic repercussions of agricultural infrastructure restoration, encompassing the effects of rebuilding production facilities and transportation networks on employment, income, and demographic trends in the impacted regions, was observed. Research on the mechanisms for integrating local communities into the implementation of state and international support programmes, which affected the efficiency of financial resources and coordination between levels of government, was insufficient. There were also gaps in the study of the role of volunteer initiatives, crowdfunding, and the cooperative movement in agricultural recovery.

To achieve this goal, the main areas of participation of local communities in the restoration of agricultural infrastructure, including organisational aspects and decision-making mechanisms at the regional level, were investigated. The economic impact of community participation in the restoration of the agricultural sector was assessed, in particular through the involvement of international support programmes, private investment and public funding. The effectiveness of the applied coordination mechanisms between local communities, government agencies and international partners to optimise the recovery process was analysed.

## **MATERIALS AND METHODS**

The timeframe encompassed 2020-2024, detailing the evolution of the agricultural sector before the full-scale invasion, the dynamics of its reconstruction during the war, evaluating the efficacy of the financial and organisational resources employed, and identifying the principal challenges encountered in the reconstruction process. Data from the State Statistics Service of Ukraine (n.d.), the Ministry of Agrarian Policy and Food of Ukraine (n.d.), the Ministry of

Finance of Ukraine (n.d.), as well as reports by the World Bank Group (2022), the United Nations Development Programme (UNDP) (2024), the Food and Agriculture Organisation of the United Nations (FAO) (2023), the United States Agency for International Development (USAID) (n.d.), and the European Bank for Reconstruction and Development (EBRD) (n.d.) were used to collect information. The financial and economic indicators were assessed, reflecting the scale of destruction, the pace of reconstruction of infrastructure facilities, the level of investment attraction, and changes in the structure of employment in the agricultural sector.

The analysis also covered the role of local communities in the reconstruction process, including their involvement in coordinating recovery efforts, raising additional financial resources, and introducing new organisational mechanisms. An assessment of the effectiveness of crowdfunding initiatives, the cooperative movement and volunteer programmes as methods of agricultural production support was conducted. The information was systematised through a comparative analysis of available sources, which identified patterns in financing, organisational management models and the impact of government and international programmes on the reconstruction of agricultural infrastructure. Statistical analysis methods were used to assess the extent of the destruction and the effectiveness of reconstruction measures. The dynamics of the destruction and restoration of agricultural facilities, investment activity, changes in employment, and the volume of international financial assistance were analysed. The systematisation of statistical indicators identified the key factors that influenced the pace of reconstruction and the effectiveness of financing recovery measures.

A comparative study was employed to evaluate the efficacy of rebuilding financing mechanisms, encompassing public-private partnerships, international grant programs, private investment, and volunteer activities. An analysis of the experience of countries such as Bosnia and Herzegovina, Colombia, Iraq, Rwanda and Afghanistan, which have undergone similar processes of rebuilding the agricultural sector after crises, identified the most effective practices in managing recovery measures. The content analysis method was used to study reports of international organisations, research results, statistical surveys and analytical materials related to the post-crisis recovery of the agricultural sector (World Bank Group, 2022; Food and Agriculture..., 2023; United Nations Development Programme, 2024). An analysis of the positions of international experts, the findings of research centres, and publications in professional sources has identified key challenges that affect the effectiveness of agricultural policy in the context of hostilities, as well as generalised practices used in other countries to restore agricultural infrastructure (United States Agency for International Development, n.d.; European Bank for Reconstruction and Development, n.d.).

The results were interpreted through a thorough examination of quantitative and qualitative indicators that illustrated the dynamics of agricultural infrastructure repair and the involvement of local populations in this process. The sample included communities from the most affected regions of Ukraine (Kharkiv, Donetsk, Luhansk, Zaporizhzhia, Kherson and Mykolaiv oblasts), as well as areas that served as transit or hosts for internally displaced persons (in particular, Vinnytsia, Lviv, Ivano-Frankivsk, Ternopil, and Kyiv oblasts). The main selection criteria were: agricultural specialisation of the community's economy, the extent of damage to agricultural infrastructure, the level of involvement in post-crisis financing programmes, activity in partnership with state and international institutions, and the dynamics of internal migration. This approach was used to compile a representative assessment of reconstruction management models, identify regional differences in financial mobilisation, and determine the degree of community involvement in the process of agricultural production recovery.

## RESULTS

The comprehensive Russian invasion of Ukraine has precipitated a profound crisis across all economic sectors, notably the agricultural sector, which has historically been pivotal in the composition of national production and exports. Large-scale destruction of infrastructure, reduced production volumes, logistical constraints and financial risks have led to a significant decline in economic activity in agriculture. Disruptions in supply chains, destruction of production facilities, and a significant outflow of people from the affected regions have hampered the sector's recovery. At the same time, the agricultural sector continued to be a priority area for government policy and international assistance, as

its stable functioning was critical to ensuring national food security and maintaining macroeconomic stability. According to the survey, Ukrainian respondents demonstrated the highest level of community and societal resilience among the countries affected by the conflict, which is an important factor in restoring not only social but also economic stability (Berxolli *et al.*, 2023; Kimhi *et al.*, 2024).

Despite significant suffering and adversity, hope and positive coping mechanisms, such as a sense of well-being, have emerged as crucial factors in fostering resilience within the agricultural sector, thus contributing to the stability of production processes and food security in the nation. There are examples of countries that lost a significant part of their agricultural production potential as a result of armed conflicts or large-scale internal crises but managed to restore the sector within a few years using adaptive management models, international assistance, and the development of local institutions. These examples are of practical importance for Ukraine in the context of finding effective mechanisms for post-crisis recovery of the agricultural sector. To systematise key practices, the experience of five countries from different regions of the world that have implemented programmes for the reconstruction of agricultural infrastructure in the post-conflict period was analysed: Iraq, Afghanistan, Colombia, Bosnia and Herzegovina, and Rwanda. In each case, different models of coordination, resource mobilisation and institution building were applied, which identified the most effective approaches to stabilising the agricultural sector. Data for Ukraine is also included for comparative purposes. Table 1 summarises the extent of the damage, sources of funding, coordination mechanisms and level of recovery achieved.

**Table 1.** Comparative indicators of agricultural sector recovery in selected countries after the crisis

Country	The period of crisis	Share of destroyed agricultural facilities (%)	Amount of investment in recovery (billion USD)	Key sources of funding	Key institutional arrangements	Recovery rate after 3 years (%)
Iraq	2003-2006	60	3.7	World Bank Group, USAID	Ministries + international partners	52
Afghanistan	2002-2005	45	2.8	FAO, UNDP, international non-governmental organisations (NGOs)	Provincial councils and technical assistance	41
Colombia	2016-2019	35	1.9	World Bank Group, EU, private sector	National Recovery Agency	64
Bosnia and Herzegovina	1995-1998	70	2.3	United Nations (UN), EBRD, public funds	Recovery Coordination Council	58

Table 1. Continued

Country	The period of crisis	Share of destroyed agricultural facilities (%)	Amount of investment in recovery (billion USD)	Key sources of funding	Key institutional arrangements	Recovery rate after 3 years (%)
Rwanda	1994-1997	80	1.5	FAO, USAID, voluntary donations	Rural cooperatives + municipalities	49
Ukraine	2022-2024	57	4.6	The state budget, FAO grants, crowdfunding	Local communities + public-private partnerships	57

**Note:** for Ukraine, the values are indicated as of the conclusion of 2024, acknowledging that the crisis persists and the restoration of agricultural infrastructure post-conflict remains unfinished; the recovery level is fluid and may fluctuate based on the evolution of the security landscape, the accessibility of financial resources, and the efficacy of the execution of pertinent programs

**Source:** World Bank Group (2022), United Nations Development Programme (2024), Food and Agriculture Organisation of the United Nations (2023), United States Agency for International Development (n.d.), European Bank for Reconstruction and Development (n.d.)

The analysis of Table 1 demonstrated that Colombia and Bosnia and Herzegovina achieved the greatest results, with the percentage of rehabilitated facilities exceeding 58%. A unifying factor in these countries was the presence of specialised institutions that coordinated the reconstruction process, with clear responsibilities for planning, implementing and monitoring agricultural programmes. The models of combining external assistance with domestic investment were also effective, reducing dependence on donor funding. In the cases of Iraq and Rwanda, the effectiveness of the reconstruction processes was limited by overdependence on international aid, fragmented governance and low institutional capacity of local authorities. In Rwanda, attempts to mobilise local cooperatives failed due to a lack of resources and personnel. At the same time, Iraq, despite the high level of funding, failed to ensure sufficient transparency in the use of funds, which affected the pace of reconstruction.

Ukrainian experience has demonstrated a relatively high recovery rate of 57% due to a combination of decentralised governance, grant mobilisation and the development of the cooperative sector. The most effective methods were crowdfunding, public-private partnerships, and community involvement in decision-making. Ukrainian practice has confirmed the effectiveness of mixed models that ensure adaptation to war conditions and a gradual transition to strategic development, considering international standards for the restoration of agricultural infrastructure. Local communities played a crucial role in the restoration of agricultural infrastructure following the catastrophe, overseeing land resources, assisting farms, and assuring the consistent operation of agricultural

output. The strengthened powers of local governments as a result of decentralisation contributed to more effective coordination of the recovery process, adapting local development strategies to economic conditions and attracting additional funding from government and international sources.

Restoration of agricultural infrastructure required significant financial and technical resources, which were partially covered by government programmes and international assistance. In this process, local communities provided for the reconstruction of elevators, storage facilities, irrigation systems and livestock farms, which restored production activities (Klyuchnik *et al.*, 2020). Interaction between the communities and agricultural enterprises identified priority areas for reconstruction according to the degree of damage and availability of material and technical resources. The rehabilitation of transportation and logistics infrastructure proved essential for ensuring the agricultural sector's operational stability. This reconstruction facilitated the efficient movement of agricultural inputs and outputs, thereby maintaining the sector's productivity and economic viability. The destruction of bridges, roads and railway junctions hampered the transport of agricultural products, resulting in higher logistics costs and reduced access to markets. Local communities have taken steps to repair roads, organise alternative transport routes and coordinate transport between agricultural producers and logistics operators. Table 2 provides statistics describing the extent of the damage and progress in restoring agricultural infrastructure during 2022-2024, including the number of restored agricultural infrastructure, transport routes, and changes in employment in the agricultural sector.



**Table 2.** Consequences of hostilities: Statistical indicators of the destruction and restoration of agricultural infrastructure (2022-2024)

Analysis factor	Statistical indicator (units of measurement)
Number of destroyed agricultural infrastructure facilities	4.800
Number of restored agricultural infrastructure facilities	2.750
Total area of damaged agricultural land (thousand ha)	3.200
Restored area of agricultural land (thousand ha)	1.800
Length of destroyed roads (km)	12.500
Rehabilitated road infrastructure (km)	7.300
Change in the level of employment in the agricultural sector (%)	-15%

**Source:** State Statistics Service of Ukraine (n.d.), Ministry of Agrarian Policy and Food of Ukraine (n.d.), Ministry of Finance of Ukraine (n.d.)

Table 2 demonstrates the extent of damage to agricultural infrastructure and its impact on agriculture. More than 4,800 agricultural infrastructure facilities were destroyed, of which only 2,750 had been restored by the end of 2024. Despite the attraction of government and international funding, the reconstruction process remained challenging due to a significant shortage of resources and high financial costs. In addition to the production infrastructure, agricultural land was severely damaged. The total area of the affected land was 3.2 million hectares, of which only 1.8 million hectares were returned to agricultural use. This demonstrated the need to continue soil restoration measures, modernise agricultural technologies and introduce innovative farming methods. The destruction of more than 12,500 km of roads significantly hampered logistics operations and agricultural exports. The rehabilitation of 7,300 km of roads partially improved transport connectivity, but further measures were needed to ensure stable logistics between agricultural regions and processing plants.

The consequences of the destruction also affected employment in the agricultural sector. During the analysed period, employment fell by 15%, which was due not only to the destruction of production facilities but also to the outflow of skilled labour. This necessitated the development of employment incentive programmes, vocational training, and the involvement of young professionals in agricultural production. The armed conflict's detrimental consequences extended beyond diminished production capabilities, imposing substantial damage on infrastructure networks, particularly within the contested regions of Kharkiv, Donetsk, Luhansk, Kyiv, Mykolaiv, and Zaporizhzhia, where economic assessments indicate infrastructural devastation amounting to hundreds of billions of dollars in monetary losses. According to the study, the assessment of infrastructure damage based on real data showed the extent of the destruction and highlighted the need to develop effective reconstruction strategies, both during the war and after it ended (Dunayev *et al.*, 2024).

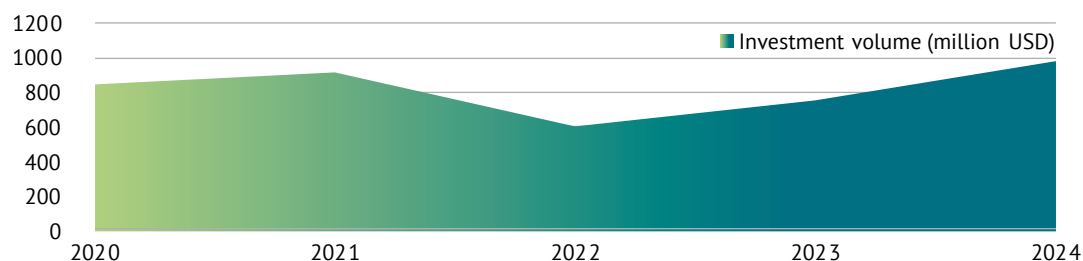
In addition to physical reconstruction, measures were taken to support social and economic initiatives

that helped stabilise employment in rural areas. A significant number of agricultural workers lost employment due to the damage to production infrastructure, which led to lower incomes and forced migration. In response to these challenges, non-governmental organisations and local authorities implemented programmes to create temporary jobs in construction, logistics and agricultural processing, which partially offset the unemployment rate in the affected regions. The collaboration between local communities and foreign organisations, including FAO, USAID, and EBRD, was a crucial element in the rehabilitation of Ukraine's agricultural sector. However, as noted in the study, cities are key to the reconstruction process, not only in the post-conflict phase (Szpak *et al.*, 2023). Support through bilateral channels, such as the twin city system and international and national networks of cities, has helped to attract additional resources for the reconstruction of not only the agricultural sector but also other important infrastructure elements. The implementation of these initiatives enhanced reconstruction efficacy by facilitating agricultural modernisation and technological innovation adoption. They provided crucial support for the transformation of farming practices, enabling the integration of advanced methodologies that improved productive capacity during the rebuilding phase.

The effectiveness of local communities in rehabilitating agricultural infrastructure is not limited to organisational capacity and coordination with government agencies and the private sector. An important aspect is also the involvement of academic institutions in this process, which was emphasised by I. Sikorska and T. Gerasymchuk (2023). The joint efforts of universities and communities can significantly strengthen resilience and sustainable development in times of war and the process of reconstruction. The use of intellectual resources, research capacities and community engagement initiatives by universities can address multifaceted issues, from infrastructure restoration to social cohesion. Such cooperation between educational institutions, government, non-governmental organisations and local communities creates opportunities

for integrated and sustainable solutions that are essential for the recovery of the agricultural sector and food security in Ukraine. Private investment was one of the key financial instruments of recovery. Businesses channelled capital into reconstructing processing

plants, expanding logistics capacities, and developing market infrastructure. Figure 1 demonstrates the changes in the volume of investments and the main areas of financing supported by private investors during this period.



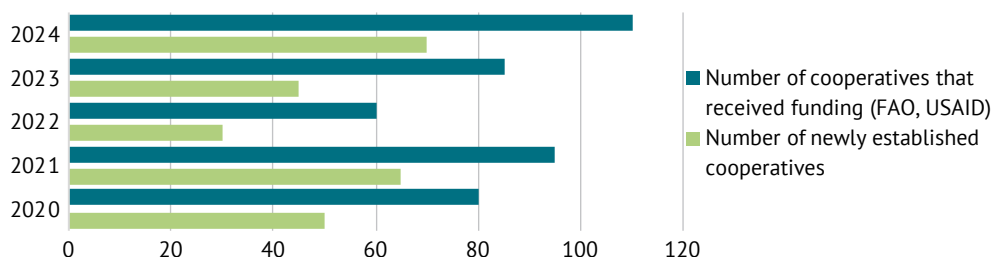
**Figure 1.** Dynamics of private sector investment in agricultural infrastructure

**Source:** State Statistics Service of Ukraine (n.d.), Ministry of Agrarian Policy and Food of Ukraine (n.d.), Ministry of Finance of Ukraine (n.d.)

The data presented in Figure 1 demonstrated the dynamics of private investment in agricultural infrastructure in 2020-2024, reflecting both general economic trends and the effects of hostilities on the agricultural sector. During 2020-2021, investment experienced consistent growth, propelled by the upgrading of livestock farms, the installation of lifts, and the advancement of logistics hubs. However, in 2022, the volume of investments dropped significantly to USD 600 million, driven by infrastructure damage, reduced solvency of agricultural producers and general economic instability. In 2023, the agricultural sector commenced a gradual recovery phase characterised by heightened private capital inflows. Investments primarily targeted the acquisition of agricultural machinery, rehabilitation of transport infrastructure, and modernisation of processing facilities. These strategic allocations facilitated the effective restoration of

agricultural production capabilities and contributed to the stabilisation of agricultural markets. The influx of private capital catalysed the sector's revitalisation, establishing foundational elements for sustainable growth following the preceding period of constraint.

The cooperative movement was significant in the recovery of the agricultural sector, especially in times of economic instability. International support programmes, including funding from the FAO and USAID, enabled some cooperatives to expand their activities, modernise their technical base and improve the efficiency of production processes. The dynamics of cooperative creation and financing fluctuated depending on the socio-economic situation, the level of international support, and the availability of financial resources. Figure 2 demonstrates the number of newly established cooperatives, as well as those that received funding from international grants.



**Figure 2.** Number of cooperatives established and supported through international programmes

**Source:** Food and Agriculture Organisation (2023), United States Agency for International Development (n.d.)

Figure 2 demonstrates the growing role of the cooperative movement, especially in the periods following the crisis. In 2020-2021, there was an increase in the number of newly established cooperatives and an increase in international funding, which contributed to their development. However, in 2022, due to widespread infrastructure damage and economic instability,

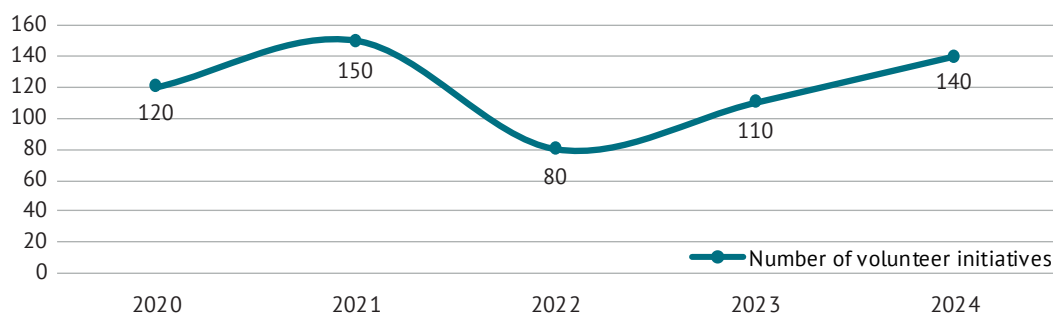
the pace of cooperative creation slowed significantly – only 30 new organisations were registered, compared to 65 in 2021. Commencing in 2023, the cooperative movement initiated a progressive recovery, marked by a rise in the establishment of new organisations and an augmentation of international financial assistance. This reflected an improvement in the overall economic

situation, which was partly driven by increased assistance from international donors. According to a study by C. Schmidt (2024), donor interests largely influenced the amount and nature of assistance provided, with wealthier countries and those with ties to Russia being more inclined to support Ukraine.

The management of financial resources by local communities was accompanied by several challenges, including limited access to credit programmes, complex bureaucratic procedures and the need for transparent allocation of funds. Despite these difficulties, a combination of public, international and private funding provided the necessary resources to restore agricultural infrastructure, which helped stabilise the economic situation in rural areas. Rebuilding agricultural infrastructure required not only government support and international assistance but also the active participation of local communities. Communities have initiated numerous recovery programmes, raising funds through volunteer movements, crowdfunding

campaigns, cooperative mechanisms and partnership projects. Their collaborative endeavours rehabilitated a substantial expanse of agricultural land, modernised supply lines, and enhanced conditions for the continued advancement of the agricultural industry.

Volunteer initiatives were central in the restoration of agricultural infrastructure, especially in the regions that suffered significant damage. The active participation of non-governmental organisations, agricultural producers and international partners contributed to the implementation of measures aimed at providing farmers with the necessary resources, demining and clearing agricultural land, repairing agricultural facilities and restoring critical irrigation systems. The dynamics of volunteer initiatives fluctuated depending on the scale of the destruction, the availability of financial resources and the level of support from the government and international organisations. Figure 3 demonstrates the number of volunteer initiatives in 2020-2024 and the main areas of their activities.



**Figure 3.** Number of volunteer initiatives aimed at restoring the agricultural sector

**Source:** State Statistics Service of Ukraine (n.d.), Ministry of Agrarian Policy and Food of Ukraine (n.d.), Ministry of Finance of Ukraine (n.d.)

The dynamics of volunteer initiatives demonstrated the remarkable agility of civil society organisations in addressing challenges precipitated by the crisis. During the initial phase, there was a notable proliferation of such activities; however, this momentum subsequently diminished as organisations confronted multiple constraints including restricted financial resource accessibility, heightened security vulnerabilities, and logistical complexities that impeded operational efficacy. However, as the situation gradually stabilised and additional international support was provided, volunteer activity intensified, demonstrating its important role in the agricultural sector's recovery. The change in the focus of volunteer initiatives responded to the needs of the agricultural sector at different stages of recovery. Initially, the focus was on supporting small farmers to restore basic production processes. Later, as coordination between communities, government agencies, and international partners improved, resources were channelled to larger projects of strategic importance for the restoration of agricultural infrastructure. This demonstrated a gradual increase in the organisational capacity of

volunteer movements and their integration into long-term agricultural development programmes.

The significance of supplementary financial resources for the advancement of the agricultural industry, via crowdfunding, is paramount amid economic concerns (Khalatur *et al.*, 2024). Crowdfunding can be used to raise funds directly from the population, private businesses, and international donors, which provides a flexible financial mechanism and facilitates a quick response to critical needs of the agricultural sector. This is especially relevant for the reconstruction of production facilities, modernisation of technologies and support for small farms. The dynamics of raising financial resources through crowdfunding platforms demonstrate changes in the priorities for allocating funds and the adaptation of communities to new economic and social conditions, which is an important element for the restoration of agricultural infrastructure and ensuring the sustainable development. Table 3 shows the total amount of funding received by communities through crowdfunding campaigns, as well as the main areas of its use in 2020-2024.



Table 3. Total amount of crowdfunding raised by communities to rebuild infrastructure

Year	Crowdfunding volume (million USD)	Primary areas of crowdfunding
2020	5.2	Repair and restoration of agricultural buildings
2021	7.8	Procurement of agricultural machinery
2022	4.5	Farm support
2023	6.9	Construction of warehouses
2024	9.1	Modernisation of irrigation systems

**Source:** State Statistics Service of Ukraine (n.d.), Ministry of Agrarian Policy and Food of Ukraine (n.d.), Ministry of Finance of Ukraine (n.d.)

The economic landscape and communal engagement levels exerted substantial influence on crowdfunding dynamics. Fluctuations in broader financial conditions corresponded with shifts in crowdfunding effectiveness, while the degree of social cohesion within communities similarly affected funding outcomes. Changes in the amount of funds raised indicated a periodic decline in the activity of crowdfunding initiatives, which could be caused by economic difficulties, reduced donor solvency, or competition for financial resources from other sectors. Despite these factors, public initiatives remained an important mechanism for mobilising finance to support the agricultural sector. The structure of the use of the funds raised varied according to the actual needs of the communities and the availability of other sources of funding. In the initial stages, crowdfunding campaigns focused on solving urgent problems, such as the basic reconstruction of agricultural facilities. The significance of initiatives focused on long-term infrastructure development and the

implementation of contemporary technologies increased. This indicated a shift in strategic methodologies for the distribution of financial resources, which aligned with the adaptation of the agricultural sector to post-war recovery conditions.

The revival of the cooperative movement was significant in the development of the local economy, providing agricultural producers with access to financial resources, new technologies and markets. Thanks to government support and international programmes aimed at stimulating cooperation, a significant number of agricultural associations were able to resume their activities and expand their production. Cooperatives contributed to increasing the competitiveness of farms, optimising production costs and strengthening the resilience of the agricultural sector to crisis. Table 4 demonstrates the number of re-established cooperatives in 2020-2024, their economic contribution, and the main areas of activity supported by the state and international organisations.

Table 4. Number of restored cooperative farms in Ukraine

Year	Number of restored cooperatives	Estimated economic contribution (million USD)
2020	40	12.5
2021	55	17.8
2022	35	11.3
2023	50	16.2
2024	65	21.5

**Source:** Ministry of Agrarian Policy and Food of Ukraine (n.d.), Food and Agriculture Organisation (2023), European Bank for Reconstruction and Development (n.d.)

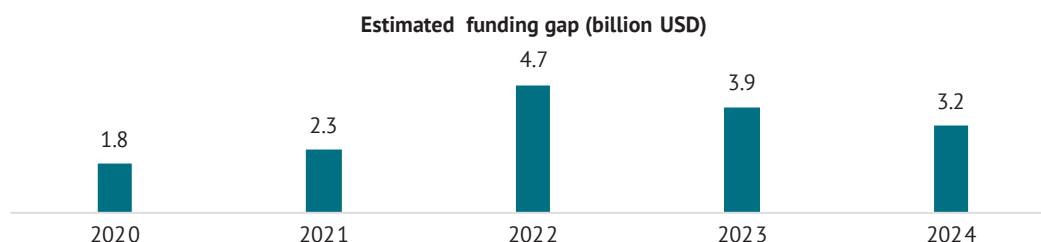
In addition to resuming traditional activities, cooperatives actively implemented new development strategies. A primary strategy involved consolidating producers to collectively acquire equipment and resources, thereby diminishing production costs and enhancing capital efficiency. Initiatives in organic farming were particularly developed, correlating with the trend towards greening agricultural production and the introduction of higher product quality standards. The significant contribution of the cooperative sector to the local economy confirmed its important role in building a sustainable agricultural system. Cooperative associations provided small and medium-sized agricultural producers with access to financial resources,

the latest technologies and more favourable business conditions. This contributed to increased farm profitability and the overall development of regional economies, which in turn strengthened the resilience of the agricultural sector to crises.

The process of restoring agricultural infrastructure was accompanied by significant financial difficulties, which complicated the implementation of restoration projects. As noted by V. Jakupec (2024), the financial assistance provided by the Western Alliance is an important aspect of this process, but it still does not meet all the Ukrainian needs. The author emphasises that although international assistance is being provided, the lack of sufficient funding, exhaustion of previous

resources and shortages of funds remain significant obstacles to recovery. In addition, international economic confidence in Ukraine, which was one of the most economically vulnerable and corrupt countries in Europe before the war, makes it difficult to attract the necessary financial resources for reconstruction. Therefore, international support and cooperation remain essential for effective infrastructure reconstruction. The financial deficit remained one of the key factors hindering the agricultural recovery process. Despite government support and international investment, the amount of

funds needed far exceeded the available resources. The lack of funding affected the pace of reconstruction of production facilities, renewal of agricultural machinery, and modernisation of logistics systems. The assessment of the financing gap determined the scale of the problem and outlined the main factors that impeded the effective recovery of the industry. Figure 4 illustrates the fluctuations in the financing deficit from 2020 to 2024, together with the primary economic causes that contributed to the deficiency of financial resources (Ministry of Finance of Ukraine, Kyiv School of Economics (KSE)).



**Figure 4.** Changes in the financing gap in 2020-2024

**Source:** Ministry of Agrarian Policy and Food of Ukraine (n.d.), World Bank Group (2022)

The dynamics of the fiscal deficit exhibited notable volatility, reflecting the influence of endogenous and exogenous variables. During periods of crisis aggravation, the gap between financing needs and available resources grew, driven by a reduction in government support, economic instability, and increased spending on infrastructure reconstruction. Although international financial assistance partially compensated for the shortfall in resources, private investment remained limited due to high risks in agricultural production. The change in the nature of the financial deficit denoted a shift from the immediate restoration of agricultural infrastructure to addressing more complex challenges related to the long-term development of agricultural production. The main problems included not only the restoration of damaged production facilities, but also the need to modernise them,

adapt the agricultural sector to climate change, and introduce modern technologies that would increase productivity and resource efficiency.

The destruction of the agricultural infrastructure had not only economic but also significant social consequences, leading to an outflow of rural population from the affected regions. The loss of jobs in the agricultural sector, the destruction of housing infrastructure and limited access to basic services forced some people to migrate to other regions in search of more stable living conditions. In some regions, this process has reached critical proportions, significantly changed the demographic situation and complicated the further recovery of agricultural production. Table 5 demonstrated the dynamics of migration processes due to the destruction of agricultural infrastructure, as well as the main factors that influenced the movement of the rural population.

**Table 5.** The number of rural residents who left the regions due to the destruction of agricultural infrastructure

Year	Population that left the regions (thousand people)	The main reasons for migration
2020	25	Job losses in the agricultural sector
2021	40	Deteriorating agricultural conditions
2022	120	Destruction of residential and industrial infrastructure
2023	95	Limited access to financial resources
2024	80	Lack of social infrastructure and medical services

**Note:** the data covers the most affected regions of Ukraine, including Kharkiv, Donetsk, Luhansk, Zaporizhzhia, Kherson and Mykolaiv, where the fighting and destruction of agricultural infrastructure have caused a massive outflow of rural population. The highest level of migration was recorded in 2022, when a significant part of the population moved to safer regions, in particular Vinnytsia, Lviv, Ivano-Frankivsk and Ternopil regions. The main reasons for leaving were the destruction of production facilities, reduced employment in the agricultural sector, limited access to financial resources and a lack of social infrastructure

**Source:** State Statistics Service of Ukraine (n.d.), World Bank Group (2022), United States Agency for International Development (n.d.)

The data demonstrated a change in internal migration trends, which depended on the extent of damage to agricultural infrastructure and the level of government support for the affected regions. During periods of crisis exacerbation, a large part of the rural population was forced to leave their homes because they could not continue their agricultural activities. At the same time, migration processes were not uniform: the largest outflows occurred during periods of active hostilities, after which there was a gradual slowdown in the rate of departure. The decline in the rural population created additional challenges for regional development. The loss of labour resources had a negative impact on the pace of agricultural infrastructure recovery, as the return of IDPs depended on the speed of reconstruction of housing and production facilities, access to social services, and employment opportunities in the agricultural sector. This underscores the necessity for a holistic strategy to assist rural regions, encompassing measures to promote population repatriation and secure sustainable prospects for agricultural economic development. In this context, M. González-Leonardo *et al.* (2024) highlighted the importance of considering potential refugee settlement areas, as migration and

displacement can significantly affect local populations and resources. In particular, the study shows that in Ukraine there is a high concentration of refugees in urban areas with previous diasporas, which can put additional pressure on infrastructure and the labour market in host regions, including rural areas where partial refugee settlements are taking place. These aspects are relevant in the proper allocation of resources and humanitarian assistance.

The recovery of the agricultural sector after the large-scale destruction required significant investments in technical and human resources. A lack of modern equipment, a shortage of skilled labour and the need to modernise production facilities hampered the recovery process. Providing the industry with adequate resources was crucial to the recovery of agricultural production, increasing its productivity and competitiveness. An assessment of the needs for technical equipment and the involvement of specialists helped to identify key priorities for recovery measures aimed at stabilising the agricultural sector. Table 6 demonstrated the change in the needs for financing technical support and labour in 2020-2024, as well as the main areas of recovery in the industry.

**Table 6.** Assessment of technical and human resource needs for sector recovery

Year	Need for technical support (billion USD)	Demand for qualified personnel (thousand people)	Key areas of restoration
2020	1.2	20	Procurement of agricultural machinery
2021	1.5	25	Repair and construction of irrigation systems
2022	3.8	50	Restoring the infrastructure of agricultural enterprises
2023	3.2	45	Education and training of specialists in the field of agricultural technology
2024	2.9	40	The mechanisation of small farms

**Source:** State Statistics Service of Ukraine (n.d.), Ministry of Finance of Ukraine (n.d.), World Bank Group (2022)

The data demonstrated an increased need for technical support and skilled personnel during the period of active destruction of agricultural infrastructure. The fiscal exigencies reached their apex in 2022, during which time a substantial proportion of manufacturing infrastructure sustained damage or destruction, necessitating immediate capital allocation for equipment restoration and agricultural machinery replacement. This period represented an unprecedented convergence of infrastructural deterioration and consequent financial strain, as organisations were compelled to divert significant resources toward rehabilitating their operational capabilities. In the same period, the need for skilled personnel increased, which was a consequence of mass migration and a shortage of specialists in agricultural production.

The gradual decline in financial needs in 2023-2024 reflected the stabilisation of the situation and the effectiveness of investment attraction measures. At the same time, recovery priorities have changed: while the initial focus was on technical re-equipment and infrastructure rebuilding, in subsequent years, significant

attention was paid to the development of agricultural education, retraining, and the introduction of modern agricultural technologies. According to M. Nehrey and R. Finger (2024), the Ukrainian government has implemented several measures, such as deregulation, lower input prices, and improved logistics, which have contributed to the adaptation of the sector to the new conditions and accelerated its recovery. However, as demonstrated by A.M. Countryman *et al.* (2024), the economic impact of the war, including disruptions in agricultural exports, has had a significant impact on the global market, which has complicated economic stability and food supplies worldwide. Given these global challenges, it was necessary to introduce a comprehensive approach to the recovery of the agricultural sector, combining not only logistical support but also the training of qualified personnel to ensure the sustainable development of agricultural production.

The results of the study demonstrated that the Russian full-scale invasion of Ukraine caused a deep crisis in the agricultural sector, which manifested itself

in large-scale destruction of infrastructure, disruption of production processes and reduced access to markets. Significant destruction of the transport network and logistics centres became the main barriers to ensuring the stability of the food chain. The agricultural land situation, which had suffered significant damage as a result of the hostilities, mining and soil degradation, required special attention. Restoring agricultural production became a critical task for the state and international partners, as it directly affected the food security of not only Ukraine but also other countries that depend on Ukrainian exports (Zakharchenko *et al.*, 2020). The rebuilding of agricultural infrastructure occurred in an environment of limited financial resources and a shortage of skilled labour, which made it difficult to quickly restore production capacity. Despite the active involvement of international donors and government support, the recovery remained uneven, as the security situation and investment risks constrained active private capital. The cooperative movement, volunteer initiatives, and local communities played a key role in mobilising resources to meet the basic needs of the agricultural sector. At the same time, the recovery process required not only financing but also technological upgrades and adaptation to new economic realities, which required long-term strategic approaches.

The alterations in job dynamics and migration trends resulting from the war significantly influenced the subsequent evolution of the agricultural industry. The loss of labour resources and the outflow of skilled professionals created additional challenges for the sector's recovery, as the return of the population directly depended on the pace of rebuilding housing and social infrastructure. In the context of post-war recovery, a comprehensive approach to agricultural production became crucial, which included not only the physical restoration of damaged facilities but also the promotion of innovation, the creation of new jobs and the integration of the agricultural sector into global economic processes.

## DISCUSSION

A critical analysis of the results showed that despite significant efforts to restore the agricultural sector, the amount of financial resources and investments attracted was not sufficient to ensure comprehensive modernisation. Statistics on the restoration of infrastructure and land show that although almost 57% of infrastructure losses were compensated by the end of 2024, the pace of recovery remained uneven. In some regions, there remained a high concentration of damage, requiring the identification of priority areas for financing and the implementation of governance changes, including improving mechanisms for attracting international assistance and developing effective strategies for attracting private capital. The findings of this analysis can be used for further research and development of targeted

measures to strengthen the economic resilience of the agricultural sector.

The study also demonstrated that in 2022, the financing gap in the agricultural sector exceeded USD 3.8 billion, which significantly limited the ability to modernise production facilities, as high risk and lack of sufficient private capital made it difficult to implement recovery measures. This deficit hindered the integration of new technologies and the restoration of damaged infrastructure, which had a particularly negative impact on production efficiency in the agricultural sector. L. Lipper *et al.* (2021) highlighted the importance of blended finance, which includes both public and private investment, as well as support from multilateral development banks. This approach ensured access to affordable investment mechanisms, facilitating both private capital and international funds. This ensures the necessary adaptation of agricultural systems to climate change, which is important for sustainable development. A comparison of the study's results with international statistics indicated that the utilisation of blended finance significantly enhanced the sustainability of agricultural production. The availability of an adequate level of resources and adaptive measures has become a key factor in ensuring the successful transformation of the industry, particularly in the face of a changing climate and an unstable economic situation (Zuo *et al.*, 2024).

Other results are consistent with the findings of A. Elechi (2021), confirmed the significant constraints on public resources and the urgent need to attract private capital for the recovery of the agricultural sector, which was complicated by imperfect financial infrastructure and high investment risks. The study of the role of public-private partnerships (PPPs) demonstrated that this mechanism can significantly improve the resilience of the economy during the recovery period, as well as accelerate the implementation of large infrastructure projects, which is important for the stability. A comparison of research results has confirmed that the use of PPPs not only helps to compensate for the shortage of public funding but also helps to attract additional investments needed for infrastructure reconstruction. As a result of this process, the effectiveness of management and regulatory instruments is increasing, ensuring transparency of financial transactions and facilitating access to resources.

According to M. Malik *et al.* (2023), the creation of favourable legal and financial mechanisms, such as tax incentives and grant programmes, is necessary to ensure stable food production in times of crisis. A comparison of the results with other regions shows that support for entrepreneurship, including through tax optimisation and state aid, has fostered agribusiness initiatives at the regional level, helping to preserve local production and support employment in rural areas. Successful examples of similar mechanisms in other countries confirm the effectiveness of such measures

in supporting the agricultural sector in times of economic and political instability, ensuring not only the restoration of production capacity but also the long-term sustainability of the sector in the post-war period. The problem of ensuring reliable supply chains in the context of military conflicts is critical for the agricultural sector, as noted by T.G. Bas (2025). The destabilisation of logistics channels increases the risk of food insecurity, which in turn can lead to a food crisis both domestically and abroad if export supplies are disrupted. To stabilise the sector, it is necessary to apply balanced approaches that combine global and local supply mechanisms. The creation of efficient logistics networks tailored to regional specifics will reduce dependence on monopolistic supply chains and ensure a more flexible and adaptive system that can respond quickly to changing conditions (Cherniavskiy, 2025). Comparisons with other countries that have faced similar challenges during military conflicts or global crises confirm the importance of developing local supply chains to ensure food security at the national level.

According to O. Shpykuliak *et al.* (2024), small agricultural entrepreneurship is key to maintaining food security and preserving jobs in rural areas. Statistics show that small farms have demonstrated high adaptability even in the face of limited access to financial resources, which confirms their ability to survive and continue production despite economic difficulties. This underscores the importance of small business development for the stabilisation of the agricultural sector, as these farms are the backbone of the rural economy and can adapt quickly to changing conditions. Small-scale agricultural enterprises serve a dual function of enhancing local food security while simultaneously generating employment opportunities – a critical factor for maintaining social cohesion in conflict-affected regions (Berdar *et al.*, 2024). The cultivation of agricultural entrepreneurship at the small-scale level potentially constitutes a foundation for an economic framework characterised by resilience, capable of withstanding systemic shocks and facilitating sustainable agricultural development throughout the post-conflict reconstruction phase.

The active participation of local communities in the rehabilitation of agricultural infrastructure has also proved to be important, as noted by F. Treffers (2023). The introduction of participatory planning methods, in which local communities are actively involved in setting recovery priorities, ensures a more efficient allocation of limited resources and targeting of the most important projects for local conditions. This approach contributes not only to the rational use of finances but also to the transparency of management processes. In addition, participatory planning methods contribute to strengthening social cohesion, as they involve the broad involvement of non-government organisations, farmers and local businesses. This ensures sustainable development, as communities are empowered to set

in-house recovery priorities, which contributes to a more efficient and rapid recovery of agricultural infrastructure adapted to local needs and realities.

The increased economic instability and the negative impact on natural capital emphasise the need to develop comprehensive approaches to economic recovery, as outlined by O. Hrynevych *et al.* (2024). A comparison of data on the destruction and reduction of production potential confirmed the importance of the agricultural sector as a driving force for the country's economy. At the same time, the crisis in the agricultural sector underscores the need to integrate social and environmental policies into the recovery strategy, which will ensure simultaneously addressing the issues of economic stabilisation and environmental conservation. Implementation of such strategies, which incorporate both economic and environmental aspects, is critical to ensure sustainable development and increase resilience to future crises. Only a comprehensive approach that integrates economic, social and environmental interests can ensure effective rehabilitation of agricultural infrastructure and maintain social stability in rural areas (Poltorak *et al.*, 2024).

E. Sheludko and M. Zavgorodnia (2022) identified the need to strengthen knowledge-intensive industries, which is crucial for the recovery of the agricultural sector and ensuring its technological development. Comparative analysis with other sectors revealed that revitalising industrial potential fosters job creation and stabilises agricultural output by facilitating technical advancements and enhancing production capabilities. The development of knowledge-intensive industries, such as agro-technologies, increases productivity and resource efficiency in the agricultural sector, which is a prerequisite for adapting to modern challenges, including climate change (Dankevych *et al.*, 2024). Restoring industrial capacity, including through investments in modern technologies and infrastructure, should be one of the key areas of recovery, as it not only stimulates economic development but also ensures the long-term stability of agricultural production, which is essential for food security. The importance of developing detailed local recovery programmes was also confirmed by M. Savytskyi *et al.* (2024), emphasising the need for close coordination with local authorities to effectively restore rural areas and ensure their resilience to future crises. Only through effective cooperation with local communities can not only rapid recovery be achieved but also strengthen social and economic stability in rural areas. Coordination with local authorities ensures a more precise and responsive response to the needs of specific areas, ensuring resilience to possible future economic or environmental challenges (Zibtsev *et al.*, 2024). Such local programmes should incorporate all aspects of recovery, from infrastructure projects to social and economic initiatives, which increases the effectiveness of agricultural recovery.



The analysis of the survey results showed that despite significant efforts to restore the agricultural sector, financial resources and investments were insufficient for comprehensive modernisation. The uneven pace of recovery, high concentration of damage in certain regions, and limited public resources point to the need to attract private capital and improve financing mechanisms. The high level of risks and the unstable economic situation make it difficult to attract private investment, and it is, therefore, important to improve regulatory mechanisms to ensure transparency and reduce risks for investors. The development of small farms, the active participation of local communities in the recovery, and the use of public-private partnerships have proven to be important factors in stabilising the agricultural sector. This approach not only helps to increase access to financial resources but also stimulates social activity, ensuring the sustainable development of the regions. Comparison with international studies has confirmed the universality of approaches aimed at innovation, coordination and adaptation to new economic realities, which is essential for the successful recovery of the agricultural sector in the post-conflict period.

### CONCLUSIONS

The study assessed the impact of the Russian full-scale invasion on the Ukrainian agricultural sector, highlighting the role of local communities in the recovery process. The research novelty is determined by a comprehensive analysis of the mechanisms of financing the reconstruction of agricultural infrastructure, changes in investment dynamics, the role of the cooperative movement, the impact of migration processes and the prospects for modernising agricultural production. The use of data from government agencies, international organisations and the private sector determined the effectiveness of reconstruction measures and identified the main factors that determined the resilience to crisis phenomena. The analysis of the damage to agricultural infrastructure showed a significant reduction in production capacity and transport capabilities, which made it difficult for the agricultural sector to function. It was found that 2,750 of the 4,800 destroyed agricultural infrastructure facilities were restored, and 1.8 million hectares of damaged agricultural land were restored. The main challenges remained rising logistical costs, limited access to markets and a 15% reduction in employment in the agricultural sector. The survey results confirmed that local communities were key in the recovery process by coordinating repairs, allocating financial resources and attracting international assistance.

An analysis of the dynamics of financing showed significant fluctuations in the structure of investments. In 2022, private investment declined to USD

600 million, driven by rising security risks and economic instability. Starting in 2023, there was a gradual recovery in investment in infrastructure and production facilities. It was found that the international programmes of FAO and USAID contributed to the expansion of agricultural cooperatives and provided them with financial support. A comparative analysis of the experience of Iraq, Afghanistan, Colombia, Bosnia and Herzegovina, and Rwanda showed the effectiveness of mixed models of financing and institutional coordination that can be adapted in the Ukrainian context to accelerate the recovery. Analysis of migration processes demonstrated that the destruction of agricultural infrastructure has led to a significant outflow of the rural population, especially in 2022, when the number of displaced persons from rural areas reached 120,000. This has complicated the process of restoring agricultural production and necessitated the development of programmes for professional retraining, employment promotion, and the return of workers to the sector. The study's findings proposed multiple measures to expedite the revival of the agricultural sector. It is advisable to expand state and international programmes to support local communities in restoring agricultural infrastructure, which involves creating financial incentives to attract private investors. The development of public-private partnerships could help accelerate the reconstruction of logistics networks, modernise processing enterprises, and increase the competitiveness. In addition, there is a need to expand programmes to improve skills and return labour to the affected regions through professional retraining, tax incentives and loan programmes for small and medium-sized farms.

Further research is warranted to evaluate the longitudinal socio-economic implications of agricultural infrastructure restoration, with particular emphasis on the influence of technological innovation on sectoral productivity metrics. An additional avenue of scholarly inquiry concerns the efficacy analysis of cooperative organisational frameworks in post-conflict economic rehabilitation, which may yield valuable insights regarding optimal developmental strategies for small and medium agricultural enterprises. Moreover, a comparative examination of international precedents in agricultural reconstruction during periods of systemic disruption is recommended, as the subsequent adaptation of evidence-based methodologies to the Ukrainian context could potentially enhance the sector's capacity to withstand future perturbations.

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### CONFLICT OF INTEREST

None.

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## Роль місцевих громад у відновленні аграрної інфраструктури після руйнувань

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**Анотація.** Дослідження мало на меті оцінити ефективність фінансових, організаційних та управлінських механізмів відновлення аграрної інфраструктури в Україні у період 2022-2024 років. Аналіз охопив соціально-економічні передумови розвитку аграрного сектору до активної фази бойових дій, а також їхній вплив на руйнування виробничих потужностей, земельних ресурсів і логістичної системи. Було встановлено, що внаслідок бойових дій зруйновано 4,800 об'єктів аграрної інфраструктури, пошкоджено 3,2 млн га угідь, зруйновано 12,500 км автошляхів, а рівень зайнятості в аграрному секторі скоротився на 15 %. До кінця 2024 року вдалося відновити 2,750 об'єктів (57 %), повернути до обробітку 1,8 млн га земель та відремонтувати 7,300 км доріг. Обсяг дефіциту фінансування у 2022 році становив понад 3,8 млрд доларів США, що унеможливило своєчасну модернізацію виробничих потужностей. Приватні інвестиції, які знизилися у 2022 році до 600 млн доларів, почали зростати лише у 2023-2024 роках, досягнувши 950 млн доларів. У цей самий період краудфандингове фінансування становило понад 33 млн доларів, з яких найбільша частка спрямовувалася на модернізацію систем зрошення (9,1 млн доларів у 2024 році). Водночас кооперативний сектор відновив 65 господарств у 2024 році, забезпечивши понад 21 млн доларів економічного внеску. Волонтерські ініціативи також продемонстрували зростання, підтримуючи дрібні фермерські господарства та відновлення критичної інфраструктури. Попри це, міграція понад 120 тис. осіб із сільських регіонів, особливо у 2022 році, суттєво зменшила трудовий потенціал аграрного сектору. Отримані результати підтвердили, що для повноцінної реконструкції аграрної інфраструктури необхідно залучити додаткові фінансові ресурси, ефективно використовувати механізми державно-приватного партнерства та стимулювати повернення трудових ресурсів. Практичне значення роботи полягає у формуванні основи для вдосконалення інвестиційної політики в аграрному секторі та підвищення ефективності координації між місцевими громадами, державними інституціями та міжнародними донорами

**Ключові слова:** сільське господарство; інвестиційні проекти; фінансова підтримка; кооперативні ініціативи; міжнародна допомога; процеси відновлення; громади