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Human Resource Management of Enterprises of Agrarian Business in the Conditions of Martial Law

Abstract

The article examines the peculiarities of human resource management of agricultural enterprises under martial law. The main challenges faced by managers in organising labour processes during the crisis period are identified, and ways to adapt personnel policy to emergency conditions are proposed. The necessity of a strategic approach to human resources management to ensure the sustainability and efficiency of agricultural business is substantiated. *Analysis of recent research and publications.* The subject of human resource management in crises and emergencies was considered in the works of such domestic and foreign scholars as O. Amosha, I. Petrunya, M. Becker, J. Storey, D. Ulrich. Their research covers the issues of adaptive management, strategic HR management, and motivational mechanisms in times of instability. However, most of these studies do not take into account the specifics of the agricultural sector in the context of military conflict, which creates a scientific gap. *Identification of previously unresolved parts of the overall problem.* Despite the existing developments, insufficient attention has been paid to the practical aspects of human resource management in agricultural enterprises during martial law. The impact of the war on employee motivation, productivity, security aspects of labour relations, and long-term planning of human resources has not been fully explored. These issues need to be studied separately in order to form an effective model of human resource management in crisis conditions, such as martial law.

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Keywords

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1 Introduction

The agricultural sector of Ukraine's economy has always played a key role in ensuring food security and economic stability of the country. However, since the outbreak of a full-scale war in 2022, agricultural businesses have faced unprecedented challenges. In particular, the issue of effective human resource management has taken on new significance, as the war has led to the mobilisation of workers, especially men, internal displacement, reduced motivation, disruption of logistics and threats to the physical safety of employees.

**2 HR Challenges in Wartime
Agricultural Business**

In the context of martial law, Ukrainian agricultural businesses have faced a number of serious challenges in the field of human resource management. One of the key factors that complicated the work of HR departments was the massive mobilisation of employees, especially among men, who traditionally make up a significant part of the staff in agricultural production. At the same time, internal population movements have created an additional need for new employees to adapt on the

ground, often without proper training or experience. In addition, there is a decline in employee motivation due to a constant sense of insecurity, uncertainty about the future, and psychological burnout. These aspects affect not only labour productivity, but also the level of teamwork, discipline and innovation in work. A significant role in the management of human resources of agricultural business enterprises under martial law is played by the use of the most effective non-financial incentives for employees in this period (Table 1).

TABLE 1 The main tools of non-financial motivation under martial law

Tool	Implementation Level (%)
Flexible work schedule	60
Psychological support	65
Communication transparency	58
Provision of housing	38
Support for employees' families	40

Source: authors' elaboration

A general analysis of the labour market situation in the agricultural sector shows that agricultural enterprises are facing a set of difficulties that include both internal problems of organisational functioning and external risks. Among the most significant:

- Mobilisation of workers, which has led to a shortage of staff, especially of qualified specialists.
- Internal displacement of the population, which creates personnel imbalances in certain regions.
- Psychological fatigue and staff burnout.
- Threats to physical safety in the workplace.
- Logistics disruptions that affect workflows and schedules.

These factors significantly complicate both operational and strategic management of human capital. In order to systematise them, as well as to systematise the key problems and search for possible solutions, Table 2 was compiled.

The data in Table 2 demonstrates the complex nature of the challenges faced by agricultural enterprises and suggests areas of response that can

be adapted depending on the size, specialisation and regional specificity of the enterprise.

3 Migration and Labor Market Transformation

It should also be noted that the labour market in the agricultural sector of Ukraine is undergoing significant changes due to migration, demographic losses and other economic factors. These processes have led to a reduction in the size of the labour force, with its total number in Ukraine decreasing significantly from 2021 to 2023, down by 25-30%, which is also due to the occupation of the territories. In 2023, the shortage of staff was more often experienced by enterprises in those types of activities where men have historically prevailed. Businesses in these types of activities were more likely to associate the shortage of employees with mobilisation and rated it as having the highest negative impact on their operations. According to the comments of enterprises, the biggest problems are related to the mobilisation of highly skilled narrow specialists and the considerable time required to train replacement workers, as well as the increased tendency of men to engage in informal employment (Centre of Economic Strategy).

However, the impact of mobilisation on the labour market after the full-scale invasion was much smaller than that of migration. Thus, according to NBU estimates, the labour force aged 18-70 in 2023 decreased by more than a quarter compared to 2021. Almost half of this reduction was due to external migrants leaving the labour force. As of April 2024, there were 2.1 million internally displaced persons of working age in Ukraine, of whom only 800,000 were officially employed. It is expected that by 2026, the labour force may increase to 16.0-16.4 million people due to the return of refugees, but this is still less than the pre-war level of 17.3 million people. Currently, the shortage of personnel in the Ukrainian labour market is estimated at 30%, which indicates serious challenges for the economy (Yermolenko). Thus, labour migration has had a significant impact on the staffing situation, and companies are facing

TABLE 2 Key challenges and directions of adaptation of personnel management of agricultural enterprises in the wartime period

Challenges	Implications for the company	Possible solutions
Personnel mobilization	Loss of qualified staff	Development of a backup staffing plan, retraining employees
Internal displacement	Shortage of local workers	Involvement of internally displaced persons (IDPs), simplification of adaptation processes
Decreased motivation	Reduced productivity, staff turnover	Psychological support, non-financial incentives, flexible schedules
Security threats	Work disruptions, asset losses	Implementation of security measures, staff training for crisis situations
Logistical difficulties	Delays in resource supply, production complications	Task redistribution, digitization of processes

Source: authors' elaboration

a shortage of qualified personnel, so they are forced to look for new ways to attract young professionals, for example, through internships and partnerships with agricultural universities.

Human resource management in agricultural enterprises has special conditions for implementation, especially under martial law. Recruitment, selection and hiring is constrained by the low mobility of workers in rural areas and limited external sources of recruitment, exacerbated by instability due to hostilities and labour outflows. Evaluation of staff is challenging due to the seasonality of work and external factors that affect employee performance. The absence of systematic training programmes at many companies complicates staff development, and martial law adds to the difficulties by forcing the use of distance learning. Employee adaptation is often quick due to familiarity with the team, but in a time of war, constant changes in the workforce may require more active management intervention. Personnel development is mostly focused on qualified specialists, but martial law limits career prospects, increasing the need for horizontal movements between activities to keep employees motivated. In this environment, agricultural businesses must quickly adapt to new realities while maintaining flexibility and optimising resources to ensure stable operations. The recovery of the labour market remains an important task for the country's economy.

4 Adaptive HR Model and Management Strategy

Human resource management in the agricultural business during martial law requires a strategic approach based on an in-depth analysis of internal and external factors. Conducting a SWOT analysis will help to formulate effective management decisions and strategies aimed at strengthening human resources (Table 3).

The conducted SWOT-analysis of human resource management in the agrarian business under martial law allowed to identify the key internal and external factors that affect the effectiveness of the personnel policy of enterprises. The analysis has shown that, despite the existing threats and weaknesses, enterprises have a number of strengths and external opportunities that can be strategically used to preserve and develop their labour potential.

The existing threats – including the destruction of infrastructure, danger to employees, and further migration of personnel – can be neutralised through the effective use of strengths: patriotic motivation of staff, flexibility in labour organisation, and the gradual return of skilled workers. This makes it possible to quickly adapt work processes, ensure staff rotation in dangerous regions, and maintain the morale of employees even in critical situations. As for the weaknesses, such as staff shortages, burnout and limited access to training, they can be

TABLE 3 SWOT analysis human resource management in agricultural business during the war

	Opportunities: <ol style="list-style-type: none"> 1. Creation of internal training programmes 2. Automation of processes and implementation of agrotechnologies 3. Employment of internally displaced persons (IDPs) 4. Retraining of personnel. Access to international grants and funding 	Threats: <ol style="list-style-type: none"> 1. Intensification of hostilities and destruction of infrastructure 2. Further labour migration abroad 3. Financial instability of enterprises 4. Danger to employees due to shelling and mining
Strengths: <ol style="list-style-type: none"> 1. Staff flexibility and adaptability to change 2. High level of patriotic motivation 3. Gradual return of some staff from abroad and willingness to work 	Strengths and Opportunities <ol style="list-style-type: none"> 1. Use staff flexibility to quickly adapt to new agricultural technologies and automation processes. 2. Use the high patriotic motivation of employees to actively engage in internal training and retraining programmes. 3. Facilitate the integration of returned staff into new functional roles through available international grants and support projects 	Strengths and Threats <ol style="list-style-type: none"> 1. Use of flexible work scheduling to reduce the impact on production in the event of shelling or infrastructure damage. 2. Motivated staff can be involved in security measures (evacuation of equipment, rapid response). 3. Actively use the return of staff to fill vacancies arising from mobilisation or emigration.
Weaknesses: <ol style="list-style-type: none"> 1. Lack of qualified personnel due to mobilisation and emigration 2. Emotional and psychological exhaustion of staff 3. Lack of access to quality training 4. Unequal distribution of the labour force in the regions 	Weaknesses and Opportunities <ol style="list-style-type: none"> 1. Creating short-term courses and online programmes can compensate for the lack of access to quality education. 2. Retraining and training of IDPs can partially address the shortage of personnel. 3. Automate processes to reduce dependence on physical staff in the most vulnerable regions. 	Weaknesses and Threats <ol style="list-style-type: none"> 1. Develop mobile HR teams to monitor the emotional state of employees and respond quickly to crisis situations. 2. In case of intensification of hostilities, create backup personnel plans based on safer regions. 3. Create a centralised database of internal resources and a mobile personnel reserve to quickly fill critical positions.

Source: authors' elaboration

minimised by external opportunities. In particular, the implementation of internal training programmes, automation of agricultural processes, staff retraining and active involvement of internally displaced persons will help fill staffing gaps and increase the company's resilience. Particular attention should be paid to overcoming the crisis combination of weaknesses and threats. This requires the development of comprehensive security strategies, backup personnel planning, and the creation of psychological support systems for staff.

Summing up the analysis, it can be noted that an effective combination of internal resources and opportunities of the external environment allows agricultural enterprises not only to adapt to the war conditions, but also to strengthen the basis for post-war recovery and growth. In response to the challenges of wartime, agricultural enterprises in Ukraine need new approaches to human resource management based on adaptability, flexibility and sustainability. Therefore, it is advisable to develop and implement a model of adaptive HR management. The proposed model of adaptive HR management should include the introduction of an integrated HR response system that ensures the stable functioning of the enterprise in conditions of high uncertainty (Table 4).

The developed model of adaptive HR management of an agricultural enterprise under martial law is a comprehensive system of strategic HR management that combines flexibility, social orientation and an innovative approach to resource optimisation. Its key goal is to stabilise the enterprise's human resource potential in the face of increased risk and resource constraints. The model can significantly reduce the company's economic costs in several areas:

Flexible labour organisation (rotation, remote work, seasonal staffing) reduces the need to maintain excess staff and the cost of jobs in hazardous regions.

Crisis training and internal mentoring reduces the cost of third-party educational services and allows for quick retraining of staff to meet current production needs.

The integration of IDPs not only fulfils a social function but also allows the company to replenish its labour pool without high recruitment costs.

Automation and digitalisation of HR processes minimises administrative costs, increases productivity and reduces the need for a large management team.

Another important economic advantage of the model is the reduction of costs associated with staff turnover, loss of qualified employees and the effects of psychological burnout, which has a positive impact on the stability of production processes. Thus, the proposed model not only adapts the HR system to the conditions of war, but also acts as an economic regulator, ensuring the efficient use of human resources, reducing current costs and forming the basis for the post-war recovery and development of the agricultural business.

5 Conclusions

The study has confirmed that under martial law, agricultural enterprises face unprecedented human resource challenges, including staff shortages, psychological exhaustion, imbalances in regional labour markets, logistical constraints and danger to employees' lives. To effectively respond to these challenges, it is necessary to transform traditional approaches to human resource management (Verkhovna Rada of Ukraine) based on the principles of adaptability, flexibility and innovation. The proposed model of adaptive HR management is a strategic tool that allows agricultural enterprises not only to stabilise the personnel situation in the short term, but also to create the basis for long-term development. Its implementation helps to reduce economic costs by optimising the employment structure, introducing digital technologies, retraining staff and attracting IDPs. Of particular value is the model's focus on social responsibility, internal communication and psychological support for employees. Therefore, an effective combination of internal resources and external opportunities allows for the personnel stability, economic efficiency and social cohesion of agricultural enterprises even in times of crisis, and forms the basis for their successful recovery in the post-war period.

TABLE 4 Model of adaptive HR management of an agricultural enterprise under martial law

Model Elements	Description
HR potential diagnostics	Analysis of staff composition, responsibilities, and psycho-emotional state to identify risks.
Flexible work organization	Introduction of shift schedules, remote or hybrid work depending on threats.
Crisis training and development	Short-term programs, online learning, mentoring, and occupational safety training.
Psychosocial support for staff	Providing psychological assistance, motivation, mental health support, and communication.
Integration of internally displaced persons	Employment of IDPs, adaptation, and creation of conditions for their full integration into the team.
Innovation and automation	Implementation of agrotechnologies, digital management systems, and reducing dependence on manual labor.
External support and partnerships	Cooperation with government agencies and donors, attracting resources to support HR initiatives.

Source: authors' elaboration

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