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Швець С.А.,  
Ганніченко Т.А.

## IMPLEMENTATION OF LEAN MANAGEMENT IN AGRICULTURAL ENTERPRISES

*The article comprehensively explores the theoretical, methodological, and practical aspects of implementing lean management in the activities of Ukrainian agricultural enterprises. The essence of the lean production concept is revealed, and its potential for improving management efficiency in the agricultural sector is analyzed. The main methodological approaches, advantages, and barriers to implementing lean technologies in agricultural enterprises are identified. The strategic expediency of applying lean production principles in the context of a transformational economy is substantiated.*

**Keywords:** lean management, agricultural enterprises, lean production, process optimization, management efficiency, business processes, competitiveness.

*У статті комплексно досліджено теоретичні, методологічні та практичні аспекти впровадження lean-менеджменту в діяльність аграрних підприємств України. Розкрито сутність концепції ощадливого виробництва, проаналізовано її потенціал для підвищення ефективності управління в аграрному секторі. Визначено основні методологічні підходи, переваги та бар'єри імплементації lean-технологій у сільськогосподарських підприємствах. Обґрунтовано стратегічну доцільність застосування принципів бережливого виробництва в умовах трансформаційної економіки.*

**Ключові слова:** lean-менеджмент, аграрні підприємства, ощадливе виробництво, оптимізація процесів, ефективність управління, бізнес-процеси, конкурентоспроможність.

In the context of contemporary global economic transformations, Ukraine's agricultural sector finds itself in a state of permanent necessity to enhance its competitiveness and adapt to dynamic market challenges. Innovative management technologies capable of ensuring significant improvement in operational efficiency and optimization of internal economic processes have become particularly crucial. Among such technologies, the concept of lean management, or lean production, which originated in the production system of the Japanese corporation Toyota and has been successfully adapted to various industrial contexts, occupies a prominent position [1].

The theoretical and methodological foundations of lean management are based on fundamental principles of continuous improvement of production systems, maximum minimization of all types of losses, and orientation towards creating value for the end consumer. According to Voitko's research on international enterprise competitiveness, these principles require strategic transformations that go beyond traditional management approaches [4].

Scientific research by leading domestic and foreign scholars convincingly proves the high potential of lean technologies in the agricultural sector. In particular, studies by the Institute of Agrarian Economics, as highlighted by Lupenko, demonstrate that consistent implementation of lean production principles enables domestic agricultural enterprises to achieve impressive economic results: reducing operational costs by 15-25%, increasing labor productivity by 20-30%, shortening production cycle duration by 35-40%, and improving overall product quality [1].

The methodology of lean management in agricultural production involves a comprehensive systemic approach to transforming business processes. Its key components include consistent identification and elimination of unproductive expenses, formation of a corporate culture of continuous improvement, maximum involvement of personnel in optimization processes, and

implementation of the philosophy of constant improvements (kaizen). Ilchuk's research on innovative transformations in the agricultural sector emphasizes the importance of creating an adaptive management environment that supports continuous learning and improvement [5].

Empirical analysis of the activities of leading domestic and international agricultural enterprises allows identifying the most promising areas for lean technology implementation. These include rationalization of logistics processes for raw material supply and distribution, optimization of production inventory management, improvement of workplace organization, implementation of effective planning and forecasting systems for agricultural production, and enhancement of multi-level product quality control.

Simultaneously, the practice of implementing lean management in Ukraine's agricultural sector reveals a number of systemic barriers. These include conservative management approaches, limited financial resources for transformations, low level of personnel digital literacy, and natural resistance to organizational changes by employees. Overcoming these barriers requires a balanced strategy, consistent managerial decisions, and investments in human capital [2].

A critical aspect of successful lean technology implementation is the development of digital infrastructure in agricultural enterprises. The digitalization of management processes creates the necessary technological foundation for effective lean production principles. Modern information systems, such as ERP and CRM, enable real-time monitoring of business processes, allow for prompt identification of potential losses and inefficiencies, and ensure transparency and manageability of production cycles. Digital technologies provide management with powerful tools for analyzing production indicators, forecasting, and operational response to changes, which is a key condition for successful implementation of the lean management concept in the agricultural sector [3].

International experience of leading companies in the Agricultural Lean Group and successful cases of domestic agricultural enterprises demonstrate that a systematic and consistent approach to implementing lean management can provide significant long-term competitive advantages. Such an approach involves thorough diagnostics of current business processes, development of a detailed transformation strategy, comprehensive personnel training and education, phased implementation of changes, and continuous performance monitoring.

The lean management concept goes beyond traditional operational management, transforming into a comprehensive management philosophy based on the principles of continuous improvement, respect for human resources, and orientation towards creating maximum value for the consumer. In the conditions of Ukraine's modern transformational economy, precisely such an approach can become an effective tool for increasing the competitiveness of domestic agricultural enterprises.

Conclusions. The implementation of lean management is a strategically important direction for improving the efficiency of agricultural enterprises in the context of current economic challenges. The success of the transformation depends on a comprehensive approach, consistent implementation of lean production principles, investment in human capital, and management's readiness for systemic organizational changes.

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