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**ECONOMIC SUSTAINABILITY OF VEGETABLE PRODUCTION SYSTEMS IN  
 NORTH-WEST ROMANIA: EVIDENCE FROM A COMMERCIAL FARM IN  
 BIHOR COUNTY**

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**Abstract:** Vegetable production represents a strategic component of regional agro-food systems, particularly in peri-urban areas where proximity to markets creates opportunities for enhanced value capture. In North-West Romania, and especially in Bihor County, commercial vegetable farms are increasingly required to balance production efficiency with market integration to remain economically sustainable. This study investigates the economic sustainability and value chain performance of a representative commercial vegetable farm located in the Husasău de Tinca area. The novelty of this study lies in the integrated assessment of economic performance and value chain organization within a peri-urban Romanian context, highlighting the role of short distribution channels in improving farm-level outcomes. The findings suggest that sustainable vegetable production systems depend on the optimization of both production efficiency and market integration strategies. This research provides relevant insights for farmers, policymakers, and stakeholders involved in strengthening local agro-food systems and enhancing regional economic resilience

• **Introduction**

Vegetable production represents one of the most dynamic sectors of the agro-food economy, contributing significantly to food security, regional economic development, and the sustainability of rural communities. In recent years, increasing attention has been directed toward the economic sustainability of vegetable farms, especially in peri-urban areas where proximity to consumer markets creates important competitive advantages for producers. In Romania, the development of vegetable farms is closely connected to market integration, production efficiency, and the capacity to adapt to economic and environmental changes.

• **Material and method**

The research employs a case study methodology, combining primary farm-level data with secondary statistical sources (Eurostat, INS), and integrates economic performance analysis with value chain assessment. Key indicators include production costs, revenues, profit margins, and profitability rate, complemented by an evaluation of value distribution along the supply chain.

• **Results and discussions**

The results demonstrate that the farm achieves a competitive level of economic performance, primarily due to the adoption of intensive production practices and diversified marketing strategies, including direct sales and local market distribution. The proximity to the urban market of Oradea significantly enhances price flexibility and reduces transaction costs, allowing the farm to capture a higher share of the final product value. However, the analysis also reveals structural vulnerabilities related to input cost volatility and labor constraints, which may affect long-term sustainability.

• **Conclusions**

The present study demonstrates that vegetable production systems integrated into short food supply chains can achieve significant economic and competitive advantages within regional agro-food economies. The case study conducted in Bihor County confirms that peri-urban vegetable farms benefit from favorable conditions for sustainable development due to their proximity to urban markets, diversified commercialization opportunities, and increasing consumer demand for locally produced food products,

