OPTIMAL MANAGEMENT APPROACHES FOR KEY FACTORS IN SUSTAINABLE AGRICULTURE

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Abstract

The importance of sustainable agricultural development has started to be acknowledged in Romania as well, following the identification of various pollution sources and the restrictions affecting industrial and agricultural pollution, from both economic and ecological perspectives. Sustainable development signifies the necessity of raising awareness about environmental protection and educating the population, and this aspect is mirrored in the evolution of communal policies in recent years. These policies have transitioned from an approach based on constraints and sanctions to a higher level of flexibility, grounded in incentives. The purpose of this paper is to provide recommendations for enhancing the existing policy by evaluating economic incentives aimed at encouraging farmers to adopt sustainable farming systems. These systems should support a viable, sustainable agriculture capable of employing the latest technologies, leading to profitability, efficiency, and economic and organizational consolidation. In recent times, Romania has come to appreciate the critical role that sustainable agricultural practices play in safeguarding both the environment and the economy. The acknowledgment of various pollution sources, encompassing both industrial and agricultural sectors, has prompted a reevaluation of traditional practices in favor of more environmentally conscious approaches. Sustainable agriculture is essential to meet the world's growing food demand while mitigating environmental challenges. To achieve this balance, efficient management of key factors in agriculture is imperative. This paper explores optimal management approaches for several critical factors in sustainable agriculture, including soil health, water resources, biodiversity, and pest control. The integration of innovative techniques, precision agriculture, and policy support is vital for achieving sustainability goals.

Key words: sustainable, development, environmental economics, indicators, strategy