


# Chapter 3

## Research on the Influence of Ecological Sustainability of the Territory on Rational Land Use in Agricultural Enterprises in the Context of Food Security

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## **ABSTRACT**

*In the realm of agricultural research, this study delves into the ecological state of agricultural land use, shedding light on significant trends in the transformation of land relations. The article meticulously evaluates the ecological state of land by considering the degree of anthropogenic load. Through rigorous analysis, it establishes the coefficient of ecological stability of the territory, providing valuable insights into the intensity of land use. The research also formulates diverse scenarios depicting the functioning of contemporary agroecosystems within agricultural land use. Furthermore, the study identifies pivotal pathways for a successful transition toward an adaptive farming system, crucial for the establishment of efficient agricultural land use. This research area specifically focuses on investigating the impact of ecological sustainability of the territory on rational land use within agricultural enterprises, emphasizing its paramount importance in the broader context of ensuring food security.*

## **BACKGROUND**

In view of the changes in the mechanism of development of the country's agrarian policy brought about by the land reform in Ukraine, the conditions and forms of agricultural land use are fundamentally changing. These changes are further strengthened within the framework of administrative and territorial reform. They especially concern the use of agricultural lands of territorial communities. As a result of the implementation of the land reform in Ukraine, there have already been significant changes in the development of rural areas, not for the better. In many cases, these changes hinder the development of the village and territorial community. At any stage of the development of society, the state must constantly ensure the rational use of land, and primarily agricultural land (Bohira, 2021; Dorosh, 2015; Kovalenko et al., 2022).

Despite all the variety of methods for assessing the sustainability of agrolandscapes, examples of practical application and recommendations for applying their results, the lack of a single concept for arranging agrolandscapes does not allow to eliminate the shortcomings of these methods and to reasonably apply their results. The use of simplified approaches to the assessment of the component structure of agrolandscapes can lead to false conclusions regarding the optimal directions of

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