



1. Integrated environmental planning and climate change

Climate change is one of the most serious global challenges of our time. The development of strategic and conceptual frameworks for spatial environmental planning, covering the adaptation of land use systems and the enhancement of the potential of terrestrial ecosystems as effective carbon sinks, is an important factor in mitigating the negative effects of these changes.

Ukraine faces a number of complex environmental and socio-economic challenges: a sustained increase in average annual temperatures, changes in precipitation patterns, and frequent extreme weather events (heavy rains, droughts) are already having a significant impact on the condition of agricultural land and wetland ecosystems. As a result of military action, land use priorities are increasingly shifting towards economic expediency and increased yields, which may lead to environmental aspects being relegated to secondary importance in the post-war recovery of the agricultural sector.

In this context, the development of climate-adapted land use models based on integration with agricultural sciences becomes relevant. Studying this area involves mastering modern scientific methods of analysis, assessment, and implementation of spatial approaches to land use adapted to climate challenges, taking into account the potential of ecosystems as natural carbon sinks. Interdisciplinary interaction between specialists in the field of environmental and spatial planning, sectoral management, and nature conservation planning of wetlands of international importance opens up new opportunities for the formation of sustainable land use systems in the future.