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## APPLICATION OF GIS TECHNOLOGY AT DESIGNING ADAPTIVE-LANDSCAPE SYSTEMS OF AGRICULTURE (FOR EXAMPLE, ALMATY REGION KARASAI DISTRICT)

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## **ABSTRACT**

This paper presents a method based on geographic information system (GIS) at designing adaptive-landscape system of agriculture (ALSA) in a large-scale mapping of agricultural landscapes. Adaptive-landscape system of agriculture created using terrain model (which integrate human activities). The main results of maps that allow the analysis and understanding of the impact of human activity on the landscape. In the articlewe are considering principles of compiling Facies maps and maps of Stows in the adaptive landscape system of agriculture (ALSA) Almaty region Karasai using GIS technology. At present, the pressing question of a fundamental change in the process of agronomic solutions through the introduction of environmentally sustainable farming systems with extensive use of the capabilities of modern methods and technologies, including geographical information systems and computer technologies. The system is held in Kazakhstan as a territorial analysis of the classification categories of landscapes and large-scale charting of areas of elementary landscapes using GIS technology for design of adaptive-landscape system of agriculture. In this case study, practical application of GIS technology is considered relevant.

**Keywords**: GIS technology, adaptive-landscape system of agriculture, large-scale mapping, landscape.