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Visibility Analysis as A Tool in Visual Impact Analysis Procedures for Environmental Impact Assessment in Agricultural Landscapes*

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Abstract

Landscape Impact Assessment (LIA) is an integral element of the Environmental Impact Assessment (EIA) process. In comparison with other environmental issues, the Visual Impact Assessment (VIA) can become one of the most contentious points in the entire investment process. This is of particular importance for agricultural landscapes which have been under particular investment pressure in recent years. The paper presents a number of variants of the investment visibility analysis made for the EIA for various types of investments in the agricultural landscape. Similar GIS tools were used in the analyses, while the analysis parameters, input data and the applied field models varied depending on the nature of the investment. The purpose of the work is to present the impact of methodological assumptions and input data on the analysis results and to discuss the reliability of the results and the proper selection of the methodology of procedures for the analysed investments. Nonetheless, they enable a precise definition of the research area ("viewshed" delineation) for procedures determining the impact on landscape harmony, impact on cultural heritage or aesthetic and perceptual analyses from the field of landscape architecture methods.

Keywords: Landscape impact assessment, visual impact assessment, visibility analysis, Pomerania

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