

CHANGES IN LAND-USE AND THE RIVER NETWORK OF THE GRABEN DYJSKO-SVRATECKÝ ÚVAL (CZECH REPUBLIC) IN THE LAST 242 YEARS

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Received: 25th September 2008, **Accepted:** 26st December 2008

ABSTRACT

Landscape-ecological parameters characterizing the landscape's structure, its function and changes over time (dynamics and development) play an important role as the indicators of sustainable development. Rapid changes in landscape patterns actually expressed by changes in land use are characteristic features of the contemporary cultural landscape. Both geography and landscape ecology have elaborated their own methodological approaches for monitoring of changes in landscape structure. The authors used historical topographical maps from the period 1764 to 2006 to monitor and study changes in land use and in the river network of the Graben Dyjsko-svratecký úval in the eastern part of the Czech Republic. Digital processing of maps in GIS milieu enabled high-quality quantitative assessment of changes that have occurred in cultural landscapes over 242 years. The quantitative study of land use changes by the Human society provides information on the intensity of landscape dynamics and development through the ages. The historical topographic maps are very useful as a source of information for such landscape-ecological studies.