

Abstract

This master's thesis focuses on land use and land cover changes in relation to the Iron Curtain and its fall. The area of concern was delimited with a buffer zone of 15 km from the Iron Curtain (both sides). The space was created according to the administrative structure consistent with the year 1989. Different processes in the economy of the countries involved has had an undoubtedly significant influence on land cover and land use structure and its changes. Agronomic politics in European democratic states was more market oriented and that was mirrored in land use structures. On the other hand, soil in countries under soviet influence was cultivated on infertile grounds, which was untenable after 1990.

The fall of the Warsaw Treaty stood for radical changes in the society of states that were directly influenced by the Soviet Union. Based on this fact we can presume more intensive land cover changes on the side of the former East in comparison with the Western countries. This expectation was confirmed using CORINE Land Cover dataset. The former East has undergone changes nearly five times more in comparison with the opposite side of the Iron Curtain boundary between 1990 and 2000. Essential variance was also remarkable amidst individual zones separated by administrative boundaries. The most stable land cover structure was found in Austrian territories. On the contrary the highest intensity of land cover changes between 1990 and 2000 are recorded in the Czech borderland.

Regarding concrete processes of changes, absolutely the highest share of changes in the eastern side of the border represented a decrease of arable land. On the other hand, on the western side of the border the changes were dispersed in more partial processes.

Obviously the predominant factor influencing land use and land cover are natural characteristics, which is the relationship between elevation above sea-level and land cover that was analyzed. The analysis uncovered a significant influence of altitude on the arable land afforestation in the former East. Population density in the borderland has significant influence on the observed process of land cover changes in relation to the Iron Curtain, which was also proven using modified GIS datasets.

Nature preservation as a result of legislative regulations means different potentialities for land use. The difference of the land cover pattern and its changes in between comparing the results for the prior West and East was therefore an item of this analysis.

Key Words: Land Use, Land Cover, Iron Curtain, Borderland, CORINE