USING THE SPATIAL ANALYSIS METHODS TO EVALUATE THE LAND USE CHANGE IN CONG RIVER BASIN OF THAI NGUYEN PROVINCE

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Summary

Land use change (LUC) is defined as the transition of a land use type into another to meet the needs of socio-economic development of respective countries and localities. In order to have a quick assessment of the land use change in a particular period, this study employed the spatial analysis tools of GIS to promptly analyze the land area changed over the time, establish the land use change maps, and quickly indicate the exact locations of the changed land area. This method solves the problem of general statistical computation of the land area changed that is not able to be displayed on the map. This study has been conducted in Cong river basin of Thai Nguyen province; the results showed that, the changes in land use in Cong river basin occurred noticeably in terms of land use types, in which agricultural land tends to decrease while none-agricultural land has always shown an upward trend from 2005 to 2015 and in the period 2015-2020 as forecasted. Moreover, the study results also reveal the impacts of land use change to socio-economic and environmental situations of the basin. This valuable outcome will be an important reference for the land administration sector in terms of land area statistic and verification, land use planning and other related-sectors.

Keywords: Land Use Change, Spatial Analysis, GIS, Cong river basin.