

Application of Spatial Calculating Analysis Model for Land Use Conversion in Colombo Urban Fringe

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Abstract:

Globally, the level of urbanization is rapidly increasing and metropolitan areas are growing fast, creating extensive land use changes and urban spatial expansion. In 2011, a total of 3.6 billion people were urban dwellers, accounting for 52% of the world population (UNDP, 2012). Simultaneously, it is important to access spaces to accommodate this growth. Ultimate results of that is urban fringe area gradually converting to provide access for this pressure demand. Hence it is important to study the conversion of land into urban uses as well as land use changing pattern, direction, and changing intensity. Specific reasons for land use conversion and also implication of land use conversion are very important to any party who is interested in this scenario. Land use changing information is more important to take the best decision when preparing land use management plans. In any situation, land use changes are very difficult to critically identify because of its complicated and dynamic nature. Therefore, Town planners, Real estate developers and all interested parties need to be aware of land use changes and its nature. Due to lack of advanced analytical tools for land use management, identification of land use changing pattern was a difficult task. Therefore it is required to use an accurate model to determine the land use pattern and its future trend. Present GIS analysis provides a more powerful platform for land based analysis. In this analysis it expects to use Spatial Calculating Analysis Model for land use analysis integrating GIS.