A GIS-based planning support system to control urban sprawl

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Abstract

Increasing population of the mega cities is creating a huge burden on the scarce land resources, as a result agricultural areas are being engulfed by large scale housing projects. Lahore, Pakistan is included in the list of 35 biggest cities of the world, it has been expanding in all the possible directions available. This decentralization has a lot of associated evils including the jeopardizing of green fields, burden on fossil fuels and related infrastructure. Land managers/planners are seeking access to dynamic ways of investigation to manage the transportation related negativities of the resultant urban sprawl. The situation gets even worse in case of developing countries where the database is very weak forming a hurdle in the preparation of policy framework based on informed decisions. This paper presents a decision support system which uses the capabilities of GIS spatial statistics to visualize transportation problems of those residing in this leapfrog development.

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