

Urban Sprawl Analysis in the City of Thiruvananthapuram and a Framework Formulation to Combat it

Authors : Sandeep J. Kumar

Abstract : Urbanisation is considered as the primary driver of land use and land cover change that has direct link to population and economic growth. In India, as well as in other developing countries, cities are urbanizing at an alarming rate. This unprecedented and uncontrolled urbanisation can result in urban sprawl. Due to a number of factors, urban sprawl is recognised to be a result of poor planning, inadequate policies, and poor governance. Urban sprawl may be seen as posing a threat to the development of sustainable cities. Hence, it is very essential to manage this. Planning for predicted future growth is critical to avoid the negative effects of urban growth at the local and regional levels. Thiruvananthapuram being the capital city of Kerala is a city of economic success, challenges, and opportunities. Urbanization trends in the city have paved way for Urban Sprawl. This thesis aims to formulate a framework to combat the emerging urban sprawl in the city of Thiruvananthapuram. For that, the first step was to quantify trends of urban growth in Thiruvananthapuram city using Geographical Information System(GIS) and remote sensing techniques. The technique and results obtained in the study are extremely valuable in analysing the land use changes. Secondly, these change in the trends were analysed through some of the critical factors that helped the study to understand the underlying issues of the existing city structure that has resulted in urban sprawl. Anticipating development trends can modify the current order. This can be productively resolved using regional and municipal planning and management strategies. Hence efficient strategies to curb the sprawl in Thiruvananthapuram city have been formulated in this study that can be considered as recommendations for future planning.

Keywords : urbanisation, urban sprawl, geographical information system(GIS), thiruvananthapuram

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