

FORMULATION OF A FRAMEWORK TO COMBAT THE URBAN SPRAWL IN THE CITY OF THIRUVANANTHAPURAM

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ABSTRACT

Urbanization 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 urbanization result in urban sprawl. Urban sprawl is known to be an outcome of improper planning, inadequate policies and lack of good governance due to various reasons. The phenomenon of urban sprawl is potentially observed as a threat for achieving sustainable urbanisation. Hence, it is very essential to manage this. Planning for predicted future growth is critical for avoiding the negative effects of urban growth at the local and regional levels. Thiruvananthapuram being capital city of Kerala, is a city of economic success, challenges and opportunities. The study 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), remote sensing techniques and Shannon's Entropy method. The study intends to examine the possibility of an increasing entropy value for the city that signifies urban sprawl. The technique and results used in the study are extremely valuable in analysing land use changes and anticipating development trends in order to construct a future scenario, which can then be used to build regional and municipal planning and management strategies.

KEYWORDS: Urbanization, Urban sprawl, Geographical Information System(GIS), Shannon's Entropy method