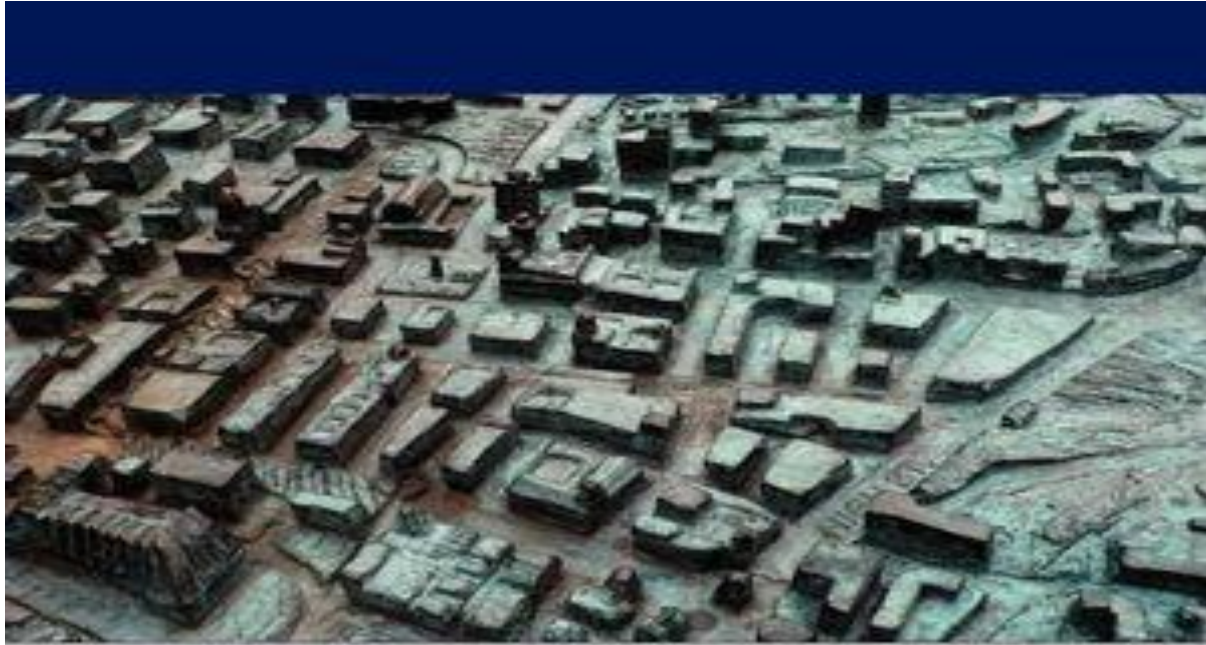


**Urban Spatial Structure Analysis, An Alternative Approach**  
using Remote Sensing & GIS: A Case Study in Battaramulla, Sri  
Lanka



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**Urban Spatial Structure  
Analysis**

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## **Overview**

Uncontrolled rapid urban growth due to built-up area expansion over the last few decades has created critical problems to urban planners. Therefore, it is worth to identify spatial distribution pattern of built-up area in a town. Remote Sensing (RS) and Geographical Information System (GIS) provide a great potential for urban data collection & spatial analysis and not much academic literature exists on how to best utilize these technologies for urban studies. Traditional approaches to data collection and analysis no longer adequate to provide updated information for urban planners. This book, therefore, introduces alternative techniques for data collection, updating, detection of built-up area change and unauthorised constructions, identifying urban spatial distribution pattern considering built-up area density. New GIS spatial analysis techniques such as weighted mean centre and spatial autocorrelation tools introduced. These analysis techniques should help to shed light on the field of urban planning, and should be especially useful to students and professionals in urban planning or anyone else who may be considering utilizing RS and GIS for urban spatial structure analysis.