**Detection and Analysis of Land-Use/Land-Cover Changes in Nay Pyi Taw, Myanmar Using Satellite Remote Sensing Images**

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**ABSTRACT**

Nay Pyi Taw has experienced significant Land-use and land-cover changes since its becoming the capital city of Myanmar in 2005. The city was once a greenfield site in the shrub land and new developments have been underway since 2005. Detecting land-use/land-cover (LULC) changes in the city and its vicinity and understanding the impact of such changes are of vital importance for future planning of the city. In this study, multispectral satellite remote sensing images of the survey area acquired over the period from 2003 to 2014 were used for the detection and analysis of LULC changes in Nay Pyi Taw. Several change detection methods such as image differencing, post-classification (with landuse classes such as paddy fields, upland fields, forest land, water bodies, urban settlements, village residential and bare land), and multivariate change-vector methods were applied in this study. From the results of change detection, we analyzed the trend of LULC changes in different regions within the study area. The impacts of such LULC changes were also evaluated.

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