ANALISIS NILAI KENYAMANAN RUANG TERBUKA HIJAU BERBASIS PENGINDERAAN JAUH DI KOTA YOGYAKARTA

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ABSTRACT

The city of Yogyakarta is one of the cities in Indonesia with a rapid rate of development and population growth. In order to improve the comfort of the city, the government builds green open space (RTH). The existence of green open space can help in reducing urban temperatures. The increasing temperature in urban areas results in a decrease in the level of comfort. RTH by considering a high leaf area index (LAI) with the aim of increasing comfort has not been widely developed. LAI is closely related to the amount of energy exchange between vegetation and the atmosphere.

This study aims to analyze and evaluate green open space in the city of Yogyakarta based on the leaf area index (LAI) using remote sensing methods. Measurement of LAI directly in the field takes a relatively long time and is expensive, so utilizing remote sensing is expected to provide a more effective and efficient solution. Remote sensing data used is Landsat 8 OLI imagery for analysis of vegetation index and land surface temperature. The results of the model are presented in the form of a map, so that the spatial pattern of LAI in each green open space in the city of Yogyakarta can be known. The comfort level is calculated using the temperature humidity index (THI) which will be statistically correlated with the LAI value. The results of this study can be used by decision makers in urban planning and urban energy policy.

Kata Kunci: *green open spaces, yogyakarta city, NDVI*