Assessing Hutan Simpan Ampang using GIS-based Potential Surface Analysis approach

ABSTRACT

This paper aims to determine potential spaces for sustainable future development at Hutan Simpan Ampang, Ulu Klang, Malaysia. The site is highly valuable due to strategic location and high availability of spaces. However, due to several landslide incidents happened in Ulu Klang over the past decades, the site isn categorised as a landslide-prone area. Therefore, Potential Surface Analysis (PSA) is conducted to determine the potential areas within the site that are safe and suitable for future development. All the factors were processed in Geographic Information System (GIS) through the overlay mapping technique, combining spatial and attribute data to obtain the suitability map. The result found that the majority coverage of the site is not suitable for any future development. There are only a few coverage areas that are suitable for small scale development. However, a combination of the very high suitability area and the high suitability area expanded the opportunity for sustainable future development.

Keyword: Potential Surface Analysis; Suitability mapping; Hutan Simpan Ampang; Highland Tower; Environmental disaster