



Orangutan (*Pongo pygmaeus*) habitat suitability mapping based on remote sensing imagery in forest area, Hulu Sungai Utara Regency, South Kalimantan Province, Indonesia

Abdi Fithria^{*1, 2}, Syam'ani^{1, 2}, Arfa Agustina Rezekiah¹, Adi Rahmadi^{1, 2}

¹Department of Forest Science, Forestry Faculty, Lambung Mangkurat University, South Kalimantan, Indonesia

²Spatial Data Infrastructure Development Center (PPIDS), Lambung Mangkurat University, South Kalimantan, Indonesia

Article published on June 30, 2019

Key words: Orangutan (*Pongo pygmaeus*), Habitat suitability mapping, Remote sensing, South Kalimantan

Abstract

This study aims to map and analyze the habitat suitability of orangutan species based on remote sensing image technology, in the forest area of Hulu Sungai Utara Regency, South Kalimantan Province, Indonesia. The total area suitable for orangutan habitat in the forest area of Hulu Sungai Utara Regency is 4,950 hectares. Based on the results of the field survey and analysis of Citra Sentinel-2, the location of suitable habitat for orangutans is visually located within peat swamp forests or peat swamp shrub and bushes. The use of the thresholding method for quantitative parameters of habitat, from the results of this study, can be seen to be quite efficient in mapping areas suitable for orangutan habitat. However, to improve the accuracy of the mapping, in the future it is necessary to consider conducting a prior statistical analysis before thresholding. For example data normality test, data homogeneity test, and data correlation test.

*Corresponding Author: Abdi Fithria ✉ mksfabdi@ulm.ac.id