

ANALISIS MULTIKRITERIA UNTUK PENILAIAN KESESUAIAN KAWASAN REHABILITASI HUTAN DAN LAHAN DI WILAYAH KERJA BPDASHL WAMPU SEI ULAR PROVINSI SUMATERA UTARA

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INTISARI

Keberhasilan Rehabilitasi Hutan dan lahan membutuhkan perencanaan yang tepat dan komprehensif. Salah satu faktor yang mendukung keberhasilan RHL adalah kesesuaian kawasan yang akan direhabilitasi dengan kapasitas dan kepentingan pengelolaannya. Penelitian ini bertujuan untuk menilai kriteria dan indikator yang akan berpengaruh terhadap pemilihan Kawasan RHL, serta menilai kawasan yang cocok sebagai lokasi kegiatan RHL di DAS Wampu Sei Ular.

Wilayah penelitian meliputi enam blok RHL yang telah ditentukan oleh BPDASHL Wampu Sei Ular. Metode penelitian menggunakan analisis multikriteria *TOPSIS*. Data primer diperoleh dari kegiatan pengukuran dan penaksiran di lapangan serta wawancara, untuk mendapatkan gambaran kondisi tegakan, kondisi lahan, dan kelembagaan masyarakat. Sementara itu, data sekunder yang digunakan berupa peta rupa bumi Indonesia, citra satelit Spot resolusi 1,5 meter, peta morfometri, peta blok RHL, Digital Elevation Model (DEM), dan literatur tentang RHL untuk merancang kriteria dan indikator.

Berdasarkan hasil penelitian, ditetapkan 4 kriteria dan 8 indikator, yaitu kriteria kondisi biofisik dengan indikator kesesuaian jenis tanaman dan kelerengan, kriteria ekologi dengan indikator keanekaragaman jenis dan tutupan lahan, kriteria sosial dengan indikator potensi konflik dan pengetahuan masyarakat terhadap hutan lindung, serta kriteria ekonomi dengan indikator potensi pasar dan kemudahan pemasaran. Dari penilaian kawasan dengan metode *TOPSIS*, diperoleh tiga kawasan yang cocok untuk dilakukan kegiatan rehabilitasi hutan dan lahan. Ketidakkcocokan pada tiga kawasan lain disebabkan oleh indikator penutupan lahan serta kelerengan yang tidak mendukung untuk dilakukan kegiatan RHL.

Kata kunci: rehabilitasi hutan dan lahan, analisis multikriteria, daerah aliran sungai, *TOPSIS*

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MULTI-CRITERIA ANALYSIS FOR ASSESSMENT OF AREA SUITABILITY FOR FOREST AND LAND REHABILITATION IN WATERSHED OF WAMPU SEI ULAR, NORTH SUMATRA

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ABSTRACT

Successful rehabilitation of forests and land requires proper and comprehensive planning. One of the factors that support the success of forest and land rehabilitation (FLR) is the suitability of the area to be rehabilitated with its capacity and management interests. This study aims to assess the criterias and indicators that will affect the selection of RHL Areas, as well as assess suitable areas for FLR activities in Wampu Sei Ular Watersheds.

The research areas includes six FLR blocks that have been determined by Watershed and Protection Forest Management Agency Wampu Sei Ular. The research method uses TOPSIS multi-criteria analysis. Primary data were obtained from field measurements and assessments as well as interviews, to get an overview of stand conditions, land conditions, and community institutions. Meanwhile, secondary data used map of Indonesia's terrain, Spot satellite imagery with a resolution of 1.5 meters, morphometry maps, FLR block maps, Digital Elevation Model (DEM), and FLR literatures for designing criterias and indicators.

This research determined 4 criterias and 8 indicators: biophysical criteria with suitability of species and land slope as indicators, ecological criteria with species diversity and land coverage as indicators, social criteria with potential conflict and community knowledge of protected forests as indicators, and economic criteria with market potential and ease of marketing as indicators. Assessment by using TOPSIS method show that there are three blocks of area are ready to be used for FLR activities. The incompatibility in the other three areas are caused by indicators of land coverage and slope that do not support FLR activities.

Keywords: forest and land rehabilitation, multicriteria analysis, watershed, TOPSIS

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