

ABSTRAK

Analisis Daya Dukung Lingkungan Berdasarkan Kesesuaian Lahan pada Permukiman di Kawasan Danau Sipin

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Permasalahan permukiman menjadi perhatian sejak lama karena permasalahan tersebut beriringan dengan perkembangan sosial, ekonomi dan pertumbuhan wilayah. Kebutuhan lahan di Kota Jambi belum mencukupi sehingga sebagian masyarakat memanfaatkan sempadan sungai untuk membangun permukiman. Disepanjang anak sungai Batanghari yang beroutlet di Danau Sipin yaitu Sub DAS Sipin dan Sub DAS Kambang, sudah dipadati oleh permukiman. Pemanfaatan tersebut merupakan salah satu bentuk ketidaksesuaian penggunaan lahan. Perubahan penggunaan lahan yang tidak sesuai dengan fungsi akan memberikan tekanan terhadap ekosistem yang ada. Penelitian ini bertujuan menentukan kelas kesesuaian lahan dan daya dukung permukiman di daerah penelitian, menganalisis daya dukung air dan dampak penggunaan lahan terhadap nilai koefisien proteksi dan menganalisis ketersediaan Ruang Terbuka Hijau (RTH) di daerah penelitian. Metode analisis menggunakan metode skoring, spasial dan kuantitatif. Kelas kesesuaian lahan daerah penelitian didapat kelas sangat sesuai (S1) (9,9%), sesuai (S2) (70%), sesuai marginal (S3) (9,9%), dan tidak sesuai (N) (10,2%). Berdasarkan kesesuaian lahan tersebut didapat daya dukung permukiman sebesar 22,98 dimana nilai *Carrying Capacity of Settlements* (CCS) >1 yang berarti daerah penelitian masih mendukung untuk permukiman. Daya dukung air di daerah penelitian adalah 0,20 yang berarti status daya dukung airnya telah terlampaui atau defisit. Dampak alih fungsi lahan dilihat dari nilai indeks proteksi sebesar 0,31 yang berarti masuk kedalam klasifikasi tinggi dan implikasi pengembangan masuk kawasan resapan air dikendalikan secara ketat. RTH daerah penelitian belum memenuhi kebutuhan luasan RTH 30%, dimana, kebutuhan RTH yaitu 234,68 ha namun RTH yang tersedia hanya 183,02 ha. Daerah penelitian masih memiliki kekurangan RTH seluas 51,65 ha.

Kata Kunci: Daya Dukung Air, Daya Dukung Permukiman, Kesesuaian Lahan, RTH

ABSTRACT

Analysis of Environmental Carrying Capacity Based on Land Suitability in Settlements in the Sipin Lake Area

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Settlement problems have long been a concern, as it is closely linked to social, economic and regional growth developments. The demand for land in Jambi City is not sufficient, leading some residents to build settlements along the river boundaries. Along the tributaries of the Batanghari River which outlets at Lake Sipin, namely the Sipin Sub-DAS and Kambang Sub-DAS, it has been densely populated by settlements. This utilization is one form of land use incompatibility. Changes in land use that are not in accordance with their function will put pressure on the existing ecosystem. This study aims to determine the land suitability class and settlement carrying capacity in the research area, analyze water carrying capacity and the impact of land use on the protection coefficient value and analyze the availability of Green Open Space (GOS) in the research area. The analysis method uses scoring, spatial and quantitative methods. The land suitability class of the research area is obtained as very suitable (S1) (9.9%), suitable (S2) (70%), marginally suitable (S3) (9.9%), and not suitable (N) (10.2%). Based on the suitability of the land, the settlement carrying capacity is 22.98 where the Carrying Capacity of Settlements (CCS) value is >1 , which means that the research area still supports settlements. The water carrying capacity in the research area is 0.20, indicating that the water carrying capacity status has been exceeded or is in deficit. The impact of land conversion is seen from the protection index value of 0.31, which means that it is classified as high and the implications of development into water catchment areas are strictly controlled. The green open space in the research area has not met the 30% green open space area requirement, where the green open space requirement is 234.68 ha but the available green open space is only 183.02 ha. The research area still has a green open space shortage of 51.65 ha.

Keywords: *Water Carrying Capacity, Settlement Carrying Capacity, Land Suitability, Green Open Space*