

Analisis Ketersediaan Air dan Kerentanan Kekeringan Kawasan Transmigrasi Tubbi Taramanu

(Analysis of Water Availability and Drought Vulnerability in the Tubbi Taramanu Transmigration Area)

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ABSTRAK

Penelitian ini menganalisis ketersediaan air dan tingkat kerentanan kekeringan di Kawasan Transmigrasi Tubbi Taramanu sebagai dasar perencanaan pengelolaan sumber daya lahan dan air. Pemanfaatan citra satelit Landsat digunakan untuk memetakan potensi air permukaan, kelembaban tanah, serta kondisi vegetasi melalui indeks NDWI, LSWI, dan VCI. Hasilnya menunjukkan bahwa sebagian besar wilayah memiliki ketersediaan air sedang hingga tinggi, namun tetap menghadapi risiko kekeringan musiman pada area berdrainase cepat dan minim akses air. Variabilitas topografi, pola pemanfaatan lahan, serta perubahan iklim turut mempengaruhi tingkat kerentanan. Temuan ini menjadi dasar penyusunan strategi adaptasi dan konservasi lahan.

Kata kunci: agroforestry, analisis spasial, hidrologi, ketahanan lingkungan, vegetation condition index

ABSTRACT

This research evaluates the Tubbi Taramanu Transmigration Area through infrastructure, social, economic, ecological, and institutional analyses. Data collection was conducted through surveys, in-depth interviews, focus group discussions (FGDs), field observations, and spatial mapping. The study results indicate inequalities in basic services, low agricultural productivity, weak village institutions, and under-optimized potential for superior commodities. SWOT and thematic analyses were used to formulate strategic recommendations based on local potential. These strategic recommendations include strengthening basic service/institutional governance and improving human resource training, developing strategic superior commodities, improving infrastructure access, and short- to medium-term interventions to support the development of a sustainable and competitive transmigration area.

Keywords: agroforestry, environmental resilience, hydrology, spatial analysis, vegetation condition indeks