

ABSTRAK

Nur Ichsan (105951101221) Analisis Kesesuaian Lahan Agroforestri Kopi Berdasarkan Tutupan Lahan di HKm Mega Buana Kabupaten Barru. Dibimbing oleh **Hikmah** dan **Rahmat Ariandi**.

Penelitian ini bertujuan untuk menganalisis kesesuaian lahan agroforestri kopi robusta berdasarkan tutupan lahan di kawasan Hutan Kemasyarakatan (HKm) Mega Buana, Desa Paccekke, Kecamatan Soppeng Riaja, Kabupaten Barru. Penelitian dilaksanakan pada bulan Juli sampai Agustus 2025. Penelitian ini menggunakan metode analisis SIG (sistem informasi geospasial). Hasil penelitian menunjukkan bahwa HKm Mega Buana memiliki tiga jenis tutupan lahan utama yaitu hutan lahan kering sekunder, pertanian lahan kering, dan pertanian lahan kering campur. Kesesuaian lahan didominasi oleh kelas S2 (cukup sesuai) dan S3 (sesuai marginal), dengan curah hujan termasuk kategori S1 (sangat sesuai) sebesar 2.600–2.800 mm/tahun. Faktor pembatas utama adalah ketinggian lahan di bawah optimal (150–450 mdpl) dan kelerengan curam (>25%) yang meningkatkan risiko erosi. Jenis tanah yang mendominasi adalah Inceptisols dengan kesuburan sedang, sehingga memerlukan peningkatan bahan organik. Intervensi yang direkomendasikan meliputi penggunaan varietas kopi robusta adaptif pada ketinggian rendah, penerapan sistem agroforestri multistrata dengan tanaman penayang, teknik konservasi tanah seperti terasering dan vegetative strips, serta penambahan bahan organik melalui pupuk kandang atau kompos. Dengan pengelolaan yang tepat, potensi pengembangan kopi robusta di HKm Mega Buana tetap tinggi meskipun tidak ditemukan lahan dengan kelas S1 murni.

Kata kunci: *Agroforestri, HKm Mega Buana, kopi robusta, kesesuaian lahan, SIG.*

ABSTRAC

Nur Ichsan (105951101221). Land Suitability Analysis of Coffee Agroforestry Based on Land Cover in HKm Mega Buana, Barru Regency. Supervised by **Hikmah** and **Rahmat Ariandi**.

This study aims to analyze the land suitability of robusta coffee agroforestry based on land cover in the Community Forest (HKm) Mega Buana, Paccekke Village, Soppeng Riaja Subdistrict, Barru Regency. The research was conducted from July to August 2025 using Geographic Information System (GIS) analysis methods. The results showed that HKm Mega Buana has three main types of land cover: secondary dryland forest, dryland agriculture, and mixed dryland agriculture. Land suitability is dominated by class S2 (moderately suitable) and S3 (marginally suitable), while rainfall falls into class S1 (highly suitable) with an annual range of 2,600–2,800 mm. The main limiting factors are suboptimal elevation (150–450 meters above sea level) and steep slopes (>25%) that increase the risk of erosion. The dominant soil type is Inceptisols with moderate fertility, thus requiring an increase in organic matter. Recommended interventions include the use of adaptive robusta coffee varieties at lower elevations, the application of multistrata agroforestry systems with shade trees, soil conservation techniques such as terracing and vegetative strips, and the addition of organic matter through manure or compost. With proper management, the potential for robusta coffee development in HKm Mega Buana remains high, even though no land was found in a pure S1 class.

Keywords: *Agroforestry, GIS, HKm Mega Buana, Land suitability, robusta coffee*