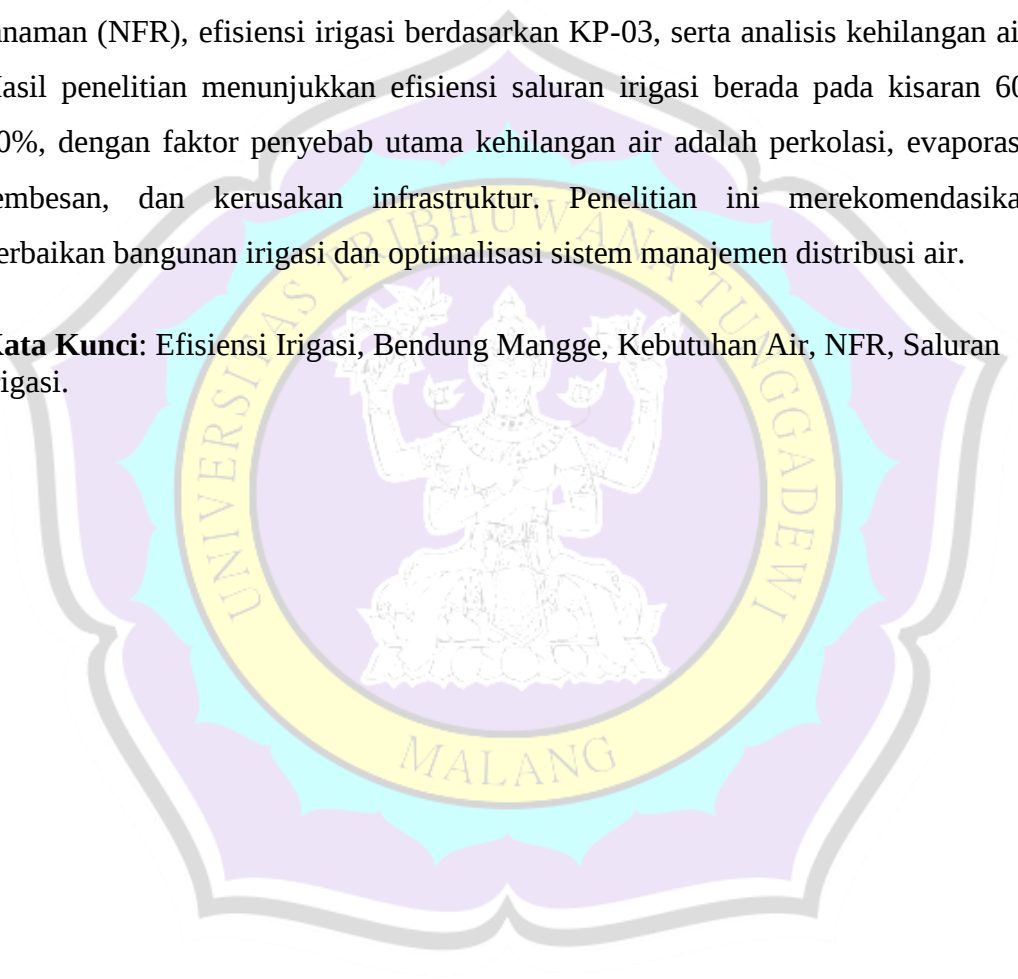


ABSTRAK

Penelitian ini bertujuan untuk mengevaluasi efisiensi pemberian air pada jaringan irigasi Bendung Mangge di Kecamatan Sukorejo, Kabupaten Ponorogo. Jaringan irigasi di wilayah tersebut menghadapi permasalahan dalam distribusi air akibat kondisi saluran dan bangunan yang tidak optimal. Metode yang digunakan mencakup pengumpulan data primer dan sekunder, perhitungan kebutuhan air tanaman (NFR), efisiensi irigasi berdasarkan KP-03, serta analisis kehilangan air. Hasil penelitian menunjukkan efisiensi saluran irigasi berada pada kisaran 60-70%, dengan faktor penyebab utama kehilangan air adalah perkolasi, evaporasi, rembesan, dan kerusakan infrastruktur. Penelitian ini merekomendasikan perbaikan bangunan irigasi dan optimalisasi sistem manajemen distribusi air.

Kata Kunci: Efisiensi Irigasi, Bendung Mangge, Kebutuhan Air, NFR, Saluran Irigasi.



ABSTRACT

This study aims to evaluate the efficiency of water distribution in the irrigation network of the Mangge Weir, located in Sukorejo District, Ponorogo Regency. The irrigation system in this area faces challenges in water distribution due to suboptimal conditions of the canals and supporting structures. The methodology involves the collection of both primary and secondary data, calculation of crop water requirements (NFR), irrigation efficiency based on KP-03 standards, and analysis of water losses. The results indicate that the irrigation network operates at an efficiency level of 60–70%. Major causes of inefficiency include percolation, evaporation, seepage, and infrastructure damage. The study recommends rehabilitating the irrigation infrastructure and optimizing the water distribution management system.

Keywords: Irrigation Efficiency, Mangge Weir, Water Demand, NFR, Irrigation Canal.

