

ABSTRAK

Jaringan irigasi merupakan infrastruktur penting dalam mendukung penyediaan air bagi sektor pertanian. Penurunan kondisi fisik jaringan irigasi akibat kerusakan bangunan dan saluran dapat mengurangi efektivitas distribusi air sehingga diperlukan evaluasi kinerja sebagai dasar penentuan prioritas rehabilitasi. Penelitian ini bertujuan untuk mengidentifikasi kondisi aset jaringan irigasi, menentukan nilai Indeks Kinerja Sistem Irigasi (IKSI) menggunakan metode Evaluasi Kinerja dan Pengelolaan Sistem Irigasi (EPAKSI), menetapkan prioritas rehabilitasi, serta menghitung Rencana Anggaran Biaya (RAB) rehabilitasi pada Daerah Irigasi Arah III Patrang, Kelurahan Jumerto, Kecamatan Patrang, Kabupaten Jember. Metode penelitian dilakukan melalui survei lapangan, inventarisasi aset, pengumpulan data primer dan sekunder, kemudian dilakukan evaluasi berdasarkan Permen PUPR Nomor 23/PRT/M/2015 menggunakan aplikasi ePAKSI. Hasil penelitian menunjukkan bahwa kondisi bangunan utama memperoleh nilai 67,15% (kategori sedang), saluran pembawa 50,60% (kategori jelek), dan bangunan pada saluran pembawa 56,44% (kategori sedang). Nilai IKSI Daerah Irigasi Arah III Patrang sebesar 73,31% termasuk kategori baik, namun indikator prasarana fisik memperoleh nilai terendah sebesar 54,62% sehingga menjadi prioritas utama rehabilitasi, sedangkan produktivitas tanam memperoleh nilai tertinggi sebesar 99,72%. Berdasarkan hasil evaluasi tersebut disusun rencana rehabilitasi bangunan utama dan saluran pembawa dengan total kebutuhan anggaran sebesar Rp3.092.502.598,47. Hasil penelitian ini diharapkan dapat menjadi dasar dalam penyusunan program pemeliharaan dan rehabilitasi jaringan irigasi secara efektif dan berkelanjutan guna meningkatkan kinerja pelayanan irigasi.

Kata kunci: evaluasi kinerja, jaringan irigasi, EPAKSI, Indeks Kinerja Sistem Irigasi, rehabilitasi, Rencana Anggaran Biaya.

ABSTRACT

Irrigation networks are essential water resource infrastructures that support agricultural productivity by ensuring an adequate and reliable water supply. Deterioration of irrigation structures and canals may reduce the effectiveness of water distribution, making performance evaluation necessary as a basis for determining rehabilitation priorities. This study aims to identify the condition of irrigation assets, evaluate the Irrigation System Performance Index (ISPI) using the Irrigation System Performance Evaluation and Management (EPAKSI) method, determine rehabilitation priorities, and estimate the Rehabilitation Cost Budget (RAB) for the Arah III Patrang Irrigation Area, Jumerto Village, Patrang District, Jember Regency. The research employed field surveys, asset inventory, and primary and secondary data collection. Performance evaluation was conducted in accordance with the Indonesian Ministry of Public Works and Housing Regulation No. 23/PRT/M/2015 using the ePAKSI application. The results indicate that the main irrigation structure achieved a performance score of 67.15% (fair condition), the conveyance canal scored 50.60% (poor condition), and the associated irrigation structures scored 56.44% (fair condition). The overall Irrigation System Performance Index (ISPI) was 73.31%, classified as good, indicating that the irrigation system generally performs well and requires periodic maintenance. However, the physical infrastructure indicator recorded the lowest score (54.62%), making it the highest priority for rehabilitation, while the cropping productivity indicator achieved the highest score (99.72%). Based on these findings, a rehabilitation plan covering the main structure and conveyance canal was prepared with an estimated total rehabilitation cost of IDR 3,247,125,000. The findings are expected to provide a reference for planning effective and sustainable maintenance and rehabilitation programs to improve irrigation system performance.

Keywords: irrigation network, irrigation system performance evaluation, EPAKSI, Irrigation System Performance Index (ISPI), rehabilitation, rehabilitation cost budget.