

ABSTRAK

Pengelolaan sumber daya air yang efektif sangat penting untuk mendukung pertanian dan ketahanan pangan di Indonesia, salah satunya melalui sistem irigasi. Keberhasilan sistem irigasi dapat diukur dengan Indeks Kinerja Sistem Irigasi (IKSI), yang mencakup variabel seperti prasarana fisik, produktivitas tanam, sarana penunjang, organisasi, dokumentasi, dan kelembagaan. Penelitian ini menganalisis peningkatan jaringan irigasi di Daerah Irigasi Leuwikuya untuk meningkatkan IKSI dan memberikan rekomendasi pengelolaan sistem irigasi di Jawa Barat.

Metode penelitian kuantitatif digunakan dengan data lapangan dan data dari kantor Dinas Sumber Daya Air Provinsi Jawa Barat. Hasil penelitian menunjukkan bahwa sebelum peningkatan prasarana fisik, nilai IKSI Daerah Irigasi Leuwikuya adalah 56,56, yang mencerminkan kinerja kurang optimal. Setelah peningkatan, IKSI naik menjadi 57,94, menunjukkan perbaikan pada prasarana fisik dan kelembagaan P3A. Meskipun ada perbaikan, masih ada ruang untuk peningkatan, seperti rehabilitasi prasarana rusak, pengadaan sarana penunjang, dan peningkatan kualitas PPA serta POB. Selain itu, penguatan P3A berbadan hukum dan peran aktif mereka dalam pengelolaan irigasi juga penting untuk meningkatkan kinerja sistem irigasi di daerah irigasi Leuwikuya.

(Kata kunci: Indeks Kinerja Sistem Irigasi (IKSI), Daerah Irigasi Leuwikuya, Peningkatan jaringan irigasi)

ABSTRACT

Effective water resource management is crucial to support agriculture and food security in Indonesia, one of which is through irrigation systems. The success of irrigation systems can be measured by the Irrigation System Performance Index (IKSI), which includes variables such as physical infrastructure, crop productivity, supporting facilities, organization, documentation, and institutions. This research analyzes the efficiency of improving the irrigation network in the Leuwikuya Irrigation Area to enhance IKSI and provide recommendations for irrigation system management in West Java.

The quantitative research method was used with field data and data from the West Java Provincial Water Resources Office. The results of the study show that before the improvement of physical infrastructure, the IKSI value of the Leuwikuya Irrigation Area was 56.56, which reflects less than optimal performance. After the increase, the IKSI rose to 57.94, indicating an improvement in the physical and institutional infrastructure of P3A. Although there are improvements, there is still room for improvement, such as the rehabilitation of damaged infrastructure, the procurement of supporting facilities, and the improvement of the quality of PPA and POB. In addition, the strengthening of legal entity P3A and their active role in irrigation management is also important to improve the performance of irrigation systems in the Leuwikuya irrigation area.

(Keywords: Irrigation System Performance Index (IKSI), Leuwikuya Irrigation, improving the irrigation network)