

## ABSTRAK

Penentuan kelayakan penerima Bantuan Langsung Tunai Dana Desa (BLT-DD) merupakan salah satu proses penting dalam penyaluran bantuan sosial agar tepat sasaran. Namun, proses penentuan kelayakan di Kantor Desa Sungai Rebo masih dilakukan secara manual sehingga memerlukan waktu yang relatif lama, berpotensi menimbulkan kesalahan dalam pengolahan data, serta kurang objektif dalam pengambilan keputusan. Penelitian ini bertujuan untuk merancang dan membangun Sistem Informasi Penentuan Kelayakan Penerima Bantuan Langsung Tunai Dana Desa (BLT-DD) berbasis website dengan menerapkan metode Fuzzy Logic dan pendekatan Weighted Scoring. Metode Fuzzy Logic digunakan untuk mengubah nilai setiap kriteria menjadi nilai keanggotaan Fuzzy, sedangkan Weighted Scoring digunakan untuk menghitung nilai akhir berdasarkan bobot masing-masing kriteria, yaitu penghasilan, pekerjaan, umur, dan status perkawinan. Pengembangan sistem dilakukan menggunakan metode Waterfall yang meliputi tahapan analisis, perancangan sistem, implementasi, dan pengujian. Sistem dibangun menggunakan framework Laravel dengan basis data MySQL. Pengujian sistem dilakukan menggunakan metode Black Box Testing yang menunjukkan bahwa seluruh fitur sistem telah berfungsi sesuai dengan kebutuhan. Hasil penelitian menunjukkan bahwa sistem mampu membantu aparat desa dalam mengelola data calon penerima BLT-DD, mempercepat proses penentuan kelayakan penerima bantuan, serta menghasilkan keputusan yang lebih objektif, transparan, dan tepat sasaran.

**Kata Kunci:** Sistem Informasi, BLT-DD, Fuzzy Logic, Weighted Scoring, Penentuan Kelayakan.

## ABSTRACT

Determining the eligibility of Village Fund Direct Cash Assistance (BLT-DD) recipients is an essential process to ensure that social assistance is distributed accurately to eligible beneficiaries. However, the eligibility determination process at the Sungai Rebo Village Office is still carried out manually, making it time-consuming, prone to data processing errors, and less objective in decision-making. This study aims to design and develop a web-based **Information System for Determining the Eligibility of Village Fund Direct Cash Assistance (BLT-DD) Recipients** by implementing the **Fuzzy Logic** method with a **Weighted Scoring** approach. The Fuzzy Logic method is used to transform each criterion into Fuzzy membership values, while the Weighted Scoring approach calculates the final eligibility score based on the assigned weights of each criterion, including income, occupation, age, and marital status. The system was developed using the **Waterfall** software development method, consisting of the analysis, system design, implementation, and testing phases. The application was developed using the Laravel framework with MySQL as the database management system. System testing was conducted using the **Black Box Testing** method, and the results indicate that all system functionalities operate according to the specified requirements. The developed system assists village officials in managing prospective recipient data, accelerates the eligibility assessment process, and supports more objective, transparent, and accurate decision-making in determining BLT-DD recipients.

**Keywords:** Information System, BLT-DD, Fuzzy Logic, Weighted Scoring, Eligibility Determination.