# SISTEM PENDUKUNG KEPUTUSAN DALAM MENENTUKAN PENERIMA BANTUAN SOSIAL DENGAN PROGRAM KELUARGA HARAPAN DI DESA BANJARASEM, KECAMATAN SERIRIT, KABUPATEN BULELENG MENGGUNAKAN METODE MOORA

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## ABSTRAK

Penentuan penerima bantuan sosial Program Keluarga Harapan (PKH) di Desa Banjarasem, Kecamatan Seririt, Kabupaten Buleleng, masih mengandalkan musyawarah desa tanpa dukungan analisis yang terstruktur. Kondisi sosial ekonomi calon penerima yang relatif serupa membuat proses ini rentan terhadap penilaian subjektif dan ketidaktepatan sasaran. Penelitian ini bertujuan merancang dan mengimplementasikan Sistem Pendukung Keputusan (SPK) berbasis web yang merekomendasikan perangkingan calon penerima PKH dengan metode Multi-Objective Optimization by Ratio Analysis (MOORA). Pendekatan yang digunakan adalah kuantitatif dan research and development (R&D) dengan pengembangan sistem Agile Development. Data dikumpulkan melalui wawancara dan observasi, dengan sepuluh kriteria berdasarkan instrumen pendataan SDGs Desa, yaitu luas rumah, status kepemilikan rumah, penghasilan, aset yang dimiliki, jenis dinding, jenis lantai, sumber air, kondisi ibu hamil atau menyusui, tegangan listrik, dan jumlah tanggungan. Sistem dibangun dengan PHP, CodeIgniter 4, dan MySQL, kemudian diterapkan pada data 79 warga calon penerima. Hasil pengujian menunjukkan keberhasilan Black Box Testing sebesar 100% pada 16 skenario dan User Acceptance Testing sebesar 100%. Pengujian System Usability Scale terhadap tujuh responden menghasilkan skor rata-rata 76,43 (kategori Good). Analisis sensitivitas dengan perubahan bobot kriteria sebesar 50% menghasilkan koefisien korelasi Spearman 0,982-0,999, yang menunjukkan perangkingan stabil. Sistem ini dapat menjadi alat bantu rekomendasi bagi perangkat desa dalam mendukung musyawarah penetapan penerima PKH yang lebih objektif, transparan, dan tepat sasaran.

**Kata kunci:** Sistem Pendukung Keputusan, MOORA, Program Keluarga Harapan, Bantuan Sosial, Agile Development

# DECISION SUPPORT SYSTEM FOR DETERMINING SOCIAL ASSISTANCE RECIPIENTS OF THE FAMILY HOPE PROGRAM IN BANJARASEM VILLAGE, SERIRIT DISTRICT, BULELENG REGENCY USING THE MOORA METHOD

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## *ABSTRACT*

The determination of Family Hope Program (Program Keluarga Harapan, PKH) social assistance recipients in Banjarasem Village, Seririt District, Buleleng Regency, still relies on village deliberation without a structured analytical system. Because prospective recipients have relatively similar socioeconomic conditions, the process is prone to subjective judgment and targeting errors. This study aims to design and implement a web-based Decision Support System (DSS) that recommends a ranking of prospective PKH recipients using the Multi-Objective Optimization by Ratio Analysis (MOORA) method. A quantitative and research and development (R&D) approach was used, with the Agile Development method. Data were collected through interviews and observation, using ten criteria based on the Village SDGs data collection instrument: house area, home ownership status, income, owned assets, wall type, floor type, water source, pregnant or breastfeeding mother status, electrical voltage, and number of dependents. The system was built with PHP, CodeIgniter 4, and MySQL, and applied to data from 79 prospective recipients. Black Box Testing achieved a 100% success rate across 16 scenarios, as did User Acceptance Testing. System Usability Scale testing with seven respondents yielded an average score of 76.43 (Good category). Sensitivity analysis with 50% changes in criteria weights produced Spearman correlation coefficients of 0.982 to 0.999, indicating a stable ranking. The system can serve as a recommendation tool for village officials, supporting deliberation to determine PKH recipients in a more objective, transparent, and well-targeted manner.

**Keywords:** Decision Support System, MOORA, Family Hope Program, Social Assistance, Agile Development