

**PERBANDINGAN METODE AHP-TOPSIS DAN COPRAS  
DALAM SISTEM PENDUKUNG KEPUTUSAN PENERIMA  
BANTUAN LANGSUNG TUNAI BERBASIS WEBSITE (STUDY  
CASE : DESA CAGAK AGUNG, CERME, GRESIK)**

Nama Mahasiswa : Irmawati Puji Astutik  
NIM : 3011810023  
Pembimbing : Taufiqotul Bariyah, S.Kom., M.IM.

**ABSTRAK**

Pemilihan calon penerima dana bantuan langsung tunai (BLT) di Desa Cagak Agung dilakukan secara manual sehingga memerlukan waktu yang cukup lama dan rawan terjadinya kesalahan dalam perhitungan. Sistem Pendukung Keputusan (SPK) diajukan untuk mengatasi permasalahan ini. Pada penelitian ini dilakukan perbandingan metode *Analytical Hierarchy Process (AHP) – Technique for order Preference by Similarity to Ideal Solution (TOPSIS)* dan *Complex Proportional Assessment (COPRAS)* dalam menentukan calon penerima dan BLT. Hasil perbandingan ranking metode AHP-TOPSIS dengan perhitungan *existing* diperoleh hasil persamaan 114 data dari 130 data dan hasil perbandingan ranking metode COPRAS dengan perhitungan *existing* diperoleh hasil persamaan 112 dari 130 data. Nilai rata-rata yang didapatkan untuk metode AHP-TOPSIS adalah 0,34 dan jarak metode AHP-TOPSIS dengan perhitungan *existing* yaitu 0,11, sedangkan untuk metode COPRAS didapatkan nilai rata-rata 0,55 dan jarak nilai antara metode COPRAS dengan perhitungan *existing* yaitu 0,17. Nilai jarak tersebut didapatkan dengan menggunakan metode *euclidean distance*. Sehingga dapat disimpulkan bahwa metode AHP-TOPSIS lebih optimal jika dibandingkan dengan metode COPRAS.

**Kata Kunci:** AHP, BLT, COPRAS, Sistem Pendukung Keputusan, TOPSIS

**COMPARISON OF AHP-TOPSIS AND COPRAS METHODS IN  
DECISION SUPPORT SYSTEM OF DIRECT CASH RECIPIENT  
BASED ON WEBSITE (STUDY CASE : DESA CAGAK AGUNG,  
CERME, GRESIK)**

*Student Name* : Irmawati Puji Astutik  
*Student ID Number* : 3011810023  
*Supervisor* : Taufiqotul Bariyah, S.Kom., M.IM.

**ABSTRACT**

*The selection of prospective recipients of direct cash assistance (BLT) in Cagak Agung Village is done manually so it takes a long time and is prone to errors in calculations. A Decision Support System (DSS) was proposed to address this problem. In this study, a comparison of the Analytical Hierarchy Process (AHP) – Technique for order Preference by Similarity to Ideal Solution (TOPSIS) and Complex Proportional Assessment (COPRAS) methods in determining prospective recipients and BLT was carried out. The results of the comparison of the ranking of the AHP-TOPSIS method with the existing calculations obtained the results of 114 data equations from 130 data and the results of the comparison of the COPRAS method rankings with the existing calculations obtained the results of 112 equations from 130 data. The average value obtained for the AHP-TOPSIS method is 0.34 and the distance between the AHP-TOPSIS method with existing calculations is 0.11, while for the COPRAS method the average value is 0.55 and the distance value between the COPRAS method and existing calculations ie 0.17. The distance value is obtained by using the Euclidean distance method. So it can be concluded that the AHP-TOPSIS method is more optimal when compared to the COPRAS method.*

**Keywords:** AHP, BLT, COPRAS, Decision Support System, TOPSIS