

ABSTRAK

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Judul : Perbandingan *Maximum Supply with Minimum Cost* dan *Minimum Transportation Cost Method* untuk Mendapatkan Solusi Optimal Masalah Transportasi

Penelitian ini membahas tentang sebuah masalah transportasi dengan dua buah kasus dimana kasus pertama adalah data kasus seimbang dan data kedua adalah data kasus tidak seimbang yang diselesaikan dengan metode transportasi *Maximum Supply with Minimum Cost* dan *Minimum Transportation Cost Method* untuk mencari hasil solusi layak awal. Selanjutnya dilakukan uji optimal dengan menggunakan *Stepping Stone Method* untuk mencari hasil solusi optimal. Berdasarkan hasil penelitian ini diketahui bahwa kedua kasus menghasilkan nilai solusi *optimal* yang sama. Pada kasus data seimbang diperoleh hasil sebesar Rp 419.120 dan pada kasus data tidak seimbang diperoleh hasil sebesar 82.200 Kg/L, namun *Maximum Supply with Minimum Cost* lebih efisien dibandingkan dengan metode *Minimum Transportation Cost Method*. Hal ini terjadi karena perbedaan pengalokasian layak awal serta langkah yang lebih sedikit.

Kata Kunci : Masalah Transportasi, *Maximum Supply with minimum cost Method*, *Minimum Transportation Cost Method*, *Stepping Stone Method*

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ABSTRACT

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Title : Comparison Maximum Supply with Minimum Cost Method with Minimum Transportation Cost Method to find optimal solution for the transportation problem

This research discusses a transportation problem with the two cases where the first case is data case balanced and the second case is data case unbalanced that they were settled by two methods, the first is transportation of Maximum Supply with Minimum Cost Method and the second is Minimum Transportation Cost Method to find a initial feasible solution and then they were tested secondly by Stepping Stone Method to find a optimal of value. Based on the results of this research was noted that the two cases produce the same optimal of value. In data case balanced obtained of value Rp 419.120 and data case unbalanced obtained of value 82.200 Kg/L. But Maximum Supply with Minimum Cost Method is more efficient compared with Minimum Transportation Cost Method. Because of differences in the initial feasible allocation and fewer steps.

Keywords : Transportation Problem, *Maximum Supply with minimum cost Method*, *Minimum Transportation Cost Method*, *Stepping Stone Method*

