## ABSTRACT

Perum BULOG Sub Divisi Regional Bandung is a company that do activity in distribute raskin (beras miskin) to the area in Bandung. The distribution in Perum BULOG Sub Divisi Regional Bandung get the source of raskin from four warehouses in Bandung to 105 distribution points which is located in all area in Bandung.

The research is done to evaluate the performance of the existed distribution system. The decision variable in this research is the alocated of raskin from warehouses to distribution points. The performance is measured by comparing the existed distribution system with the suggested distribution system. The suggested distribution system was made by using trasportation model. The thing that will be compared is distribution cost in existed distribution system and suggested distribution system.

Transportation model is a model that is used to solve system transportation problems. There are three parameters that is used in transportation model, the parameters are demand, supply and cost. There is a lot of approximation methods that is used to solve transportation model. In this research, we implements Vogel approximation to solve transportation model. To help the counting of Vogel approximation method, we use WinQSB as the tool in solving the model.

The result of the research is that the distribution cost of suggested distribution system is cheaper then the distribution cost of existed distribution system. The amount of existed distribution system's cost is Rp.1,443,345,475 and the amount of suggested distribution system's cost is Rp.1,398,013,415. So, Perum BULOG could save about Rp. 45,332,060 in distribution cost by implementing suggested distribution system. The percentage of saving the cost is about 3.14% from the distribution cost of existed distribution system.

Key Words : Transportation Model, Distribution System, Linear Programming