ABSTRACT

Perum Bulog Sub Divre Wilayah 1 Bandung is the government company that moved in rice distribution, specially for Beras Miskin (Raskin). In reality, Perum Bulog have not procurement planning and scheduling yet so that causing the inventory pile up in the warehouse. Given these problems, then conducted research with the transportation models and the method of Distribution Requirements Planning (DRP) in hope to be distributing the rice from suppliers to warehouses in an optimal distribution.

DRP is the method to handle the procurement of supplies in a multi-echelon distribution network so that success in fulfilling the customer demand will be optimal and distribution cost can be reduced to a minimum. Transportation models is model of goods shipping allocated (1 kind of good) from amount of suppliers to amount of customers that will give the lowest shipping cost.

In this research, data needed are Bill of Distribution, demand data during year 2001 to 2011, inventory data at the end of periode, distribution cost informations, lead time and safety stock data. First, DRP applied in calculating each distribution area, then continue the step with classifying partners of warehouse based on Transportation Model method calculated. Second was DRP applied in calculating warehouse, with the distribution total cost as its result and compared with actual distribution total cost. Third was DRP applied in calculating the classified partners in each warehouse. However, forecasting of demand data of year 2012 and 2013 was done first in order to know the recommended planning and scheduling at year 2012 and 2013.

The research result showed the transportation model used to assign the supplier is Vogel's Approximation Methode. The distribution cost savings after doing the planning and scheduling with DRP is 43,77%.

Keywords : DRP, Distribution, Perum Bulog, Transportation Models, VAM.