

ABSTRACT

KPBS Pangalengan is one of the biggest Koperasi Peternak Susu in Indonesia which located in Bandung. This cooperation have 7000 members of breeder. One of KPBS activity is distribute fodder livestock for breeder, which called Ransum Concentrate (RC). Therefore, KPBS need to make efficient distribution policy with limited vehicle and minimum cost. KPBS only have 7 Truk Fuso dan 2 Colt Diesel with 30 places of Tempat Pelayanan Kelompok (TPK).

This distribution problems can be categorized as Vehicle Routing Problem (VRP). In this research, the solution methods is used is Savings Algorithm. The basic savings concept expresses the cost savings obtained by joining two TPK into one route. Input that is needed are distances between TPK and each TPK demands. Result from the distances data processing is getting combination TPK savings value . The savings value of TPK combination are used for joining two TPK or more in one distribution route. This combination considers each TPK demands so it will not over capacity of the vehicle.

The researcher doing two ways of data processing. The first way is designing the distribution system without rise the vehicle capacity, and the second ways is dsigning the distribution system with rise the vehicle capacity. Based on data processing used Savings Algorithm, without rise the capacity, the result are 1-4 pairs combination of TPK. The used of vehicle can be safe until 58 trips with savings distance is 4711.132 km and saving costs as much as Rp 104.257.362,00. The result of the second ways is the researcher can make 6 – 8 pairs combination of TPK in one distribution route. The used of vehicle can be safe until 711 trips with savings distance is 8744.65 km and saving costs as much as Rp 215.286.000,00

Keywords : Savings Algorithm, TPK, distribution