

ABSTRACT

Public Companies (PERUM) BULOG of Regional Subdivision 1 Bandung is one of companies owned by the country that is responsible for distributing subsidized rice to those people with a low income by which this program was manifested through Rice for Prosperous People (RASTRA) program or was mostly called as RASKIN, this program is governed by Presidential Instruction (Inpres) Number 3 Year 2012. The process of distribution in Bandung City is facilitated by BULOG warehouse which was located in Gedebage, Bandung City. The process of rice distribution in Bandung City done by Perum BULOG of Regional Division 1 Bandung have got some troubles recently in terms of routing. There are 151 distribution spots (village/ urban communities), spread all over Bandung City, where there were a group of people that have the rights to get subsidized rice. The large number of targeted distribution spots have become the problem that should be taken care of immediately as known that Perum BULOG have not got a certain routing design until now for rice distribution process. Thus, this problem carried out in this study was about Vehicle Routing Problem, or mostly called as problem of routing decision. The process of problem solving VRP in this study was solved by using Nearest Neighbor method. This method begins with the first route of the vehicle, this method will include the nearest consumer one by one who haven't been visited in the routing and then search for the nearest distribution spot from the first spot which was visited beforehand, after that repeated all over gain the same process until all of the distribution spots were served, of course by paying attention to vehicle capacity and one horizon of distribution time limit. After calculating process, the results showed that there were 115 vehicle routes which included 151 distribution spots (village/urban communities) all over Bandung City. Where each of it had different travelled time and service time. These 115 vehicle routes consist of 69 routes with the ruck capacity as much as 10 ton and 46 route with the truck capacity as much as 8 ton. If so far Perum BULOG of Regional Division 1 Bandung only used vehicle with 10 ton in capacity, it is then suggested from this study that they can actually use the combination of both potions which was compatible with the routing design, constructed in this study, with the use of 3 vehicles with 10 ton in capacity and 2 vehicles with 8 ton in capacity.

Keywords: Vehicle Routing Problem, Nearest Neighbour Method, Distribution, Public Companies (Perum) BULOG Bandung