## ABSTRACT

PT ABC is a distributor of pesticide products and agricultural support tools. This study aims to design a distribution route for pesticide products at PT ABC using OR-Tools software to minimize travel distance and transportation costs. PT ABC faces issues in distributing products to 62 customer points using 8 CDD vehicles, each with a capacity of 5 tons, where the distribution routes are currently determined based solely on regional areas without considering distance and capacity optimization. By using the Capacitated Vehicle Routing Problem (CVRP) model implemented through OR-Tools software, this study successfully proposed a more efficient distribution route. As a result, the average travel distance was reduced by 47%, and fuel costs decreased by 53%, thereby reducing the overall distribution costs for the company.

Keywords - Distribution, Pesticide Products, Routes, Software OR tools