

Analysis of Raw Material Inventory Control for Rengginang using *Economic Order Quantity (EOQ)* Method at UD Tiga Bintang in Situbondo Regency
(Paramita Andini, S.ST., M.ST. as Guidance Lecturer)

Catharina Santa Disiulina Novelina Sitanggang
Agroindustry Management Study Program
Majoring in Agribusiness Management

ABSTRACT

UD Tiga Bintang has not implemented a raw material inventory control system with proper calculations, so it is not running optimally. The company controls raw material inventory based on sales experience of rengginang products in the previous year. Demand for rengginang products fluctuates, making it difficult for the company to calculate the optimal glutinous rice requirements in one purchase. This research aims to analyze and identify the optimal amount of glutinous rice raw material inventory, analyze and identify when to place a reorder (ROP), and analyze and identify the total amount of glutinous rice raw material inventory costs that must be incurred by UD Tiga Bintang. This type of research is descriptive research with quantitative methods. The results of the analysis using the EOQ method in 2022 show that the optimal order quantity is 1,146 kg in one order with a purchase frequency of 17 times a year, with an order period of 16 days. In 2023, the optimal order quantity is 1,274 kg in one order with a purchase frequency of 23 times within a year, with an order period of 11 days. Reorders will be made when the raw materials available in the warehouse in 2022 reach 178 kg and in 2023 reach 558 kg. The total cost of glutinous rice raw material supplies that must be spent in 2022 is IDR 1,719,011 and in 2023 is IDR 2,292,596.

Keywords : *Inventory Control, EOQ, Raw Material, ROP, Rengginang*