

***Analysis of Tapioca Flour Raw Material Inventory in the Production of Cap Ayam Jago Crackers Using the Economic Order Quantity (EOQ) Method at UD Raihan Jaya Jember Regency***

Supervised by Andi M. Ismail, S.ST., M.Si

**Aries Dahlia Frebio Andin**

*Agroindustry Management Study Program  
Agribusiness Management Department*

**ABSTRACT**

*UD Raihan Jaya is a trading business that produces raw crackers located in Gumuk Bago hamlet, Nogosari Village, Rambipuji District, Jember Regency. The crackers produced by UD Raihan Jaya are branded as "Cap Ayam Jago" crackers, with their main raw material being tapioca flour. This study aims to analyze the inventory of tapioca flour raw material in the production process of "Cap Ayam Jago" crackers at UD Raihan Jaya, Jember Regency, using the Economic Order Quantity (EOQ) method. The problems faced by UD Raihan Jaya include ordering delays and raw material shortages that can disrupt production. The EOQ method is used to determine the optimal order quantity, ordering frequency, reorder point, safety stock, and total inventory cost. This research is a quantitative descriptive study with data collection through interviews, observations, questionnaires, documentation, and literature review. The results show that the application of the EOQ method yields an optimal order quantity of 4,742 kg with an ordering frequency of 27 times a year. The safety stock is 3,275 kg and the reorder point is 3,795 kg. The EOQ method is proven to provide cost efficiency compared to the conventional method used by the company, with a more economical total inventory cost. By implementing the EOQ method, UD Raihan Jaya can increase efficiency in raw material inventory management, minimize the risk of raw material delays, and reduce annual inventory costs.*

**Keywords:** *Inventory Analysis, EOQ, Tapioca Flour, Crackers, UD Raihan Jaya.*