

***Analysis of Raw Material Inventory Control in Cassava Chip
Production at Gazal Makmur SME Using the Economic Order
Quantity (EOQ) Method in Probolinggo Regency***
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ABSTRACT

This study aims to analyze the implementation of cassava raw material inventory at IKM Gazal Makmur, analyze the application of the Economic Order Quantity (EOQ) method, and compare inventory costs between the company's system and the EOQ method. The study was conducted at IKM Gazal Makmur, Probolinggo Regency, using a quantitative descriptive method. Data were collected through observation, interviews, and documentation, then analyzed using the EOQ method, Safety Stock (SS), Reorder Point (ROP), Total Inventory Cost (TIC), and the POM-QM application for Windows. The results of the study indicate that inventory control is still carried out conventionally based on the experience of business owners, with an ordering frequency of 357 times in 2024 and 359 times in 2025. The EOQ calculation produces an optimal ordering quantity of 3,315 kg with a frequency of 14 times in 2024 and 3,574 kg with a frequency of 15 times in 2025. The Safety Stock value is 262 kg and 353 kg, respectively, while the Reorder Point is 394 kg and 506 kg. The company's total inventory cost is Rp6,350,400 in 2024 and Rp6,472,480 in 2025, while the EOQ method produces costs of Rp464,142 and Rp500,355. The EOQ method is proven to be more efficient and can be used as a reference in improving inventory control while still considering storage limitations and the characteristics of perishable cassava..

Keywords: Control Analysis, Inventory Control, Raw Materials, Cassava, EOQ