

**ANALYSIS OF RAW MATERIAL INVENTORY EFFICIENCY OF
BARABER CRACKERS USING THE ECONOMIC ORDER QUANTITY
(EOQ) METHOD AT UD KACUNG JAYA, JEMBER REGENCY**

Dr. Dewi Kurniawati, S.Sos., M.Si (*Supervisor*)

Muhammad Raafi Al-Afghani

Study Program Agroindustry Management

Departement of Agribusiness Management

ABSTRACT

UD Kacung Jaya is one of the cracker business located on Jalan Raung, Dusun Kalenceng, Ajung District, Jember Regency. This research aims to analyze the inventory control of flour raw materials at UD Kacung Jaya using the conventional company methods and the economic order quantity method (EOQ), and to compare the two methods. This research employs a qualitative methodology, complemented by descriptive statistical analysis to characterize the observed phenomena. the eoq method is applied using five analysis techniques, namely determining the optimal order quantity, ordering frequency, securing inventory, reorder points, and total inventory cost. The data analyzed include inventory data and production of floor raw materials in 2024. The results of this research shows that UD Kacung Jaya has purchased 51.250 kg of flour with an ordering frequency of 41 times, resulting in a total inventory of cost Rp. 4.813.314. On the other hand, the use of the EOQ method produces an optimal order quantity of 2,619 kg per order, with an order frequency of 17 times in one year, a safety stock of 296 kg, and a reorder point when stock reaches 421 kg. The total inventory cost with the EOQ method is recorded at Rp. 1,833,364. By using the EOQ method, UD Kacung Jaya can save a total inventory cost of Rp. 2,980,000, or around 61.91%. This shows that the EOQ method is more efficient than the company's conventional method.

Keywords: *Inventory Control, Flour, Crackers, EOQ, UD Kacung Jaya*