

**ANALISIS OF INVENTORY CONTROL OF RAW MATERIAL TAPIOCA
FLOUR USING THE ECONOMIC ORDER QUANTITY (EOQ) METHOD
AT UD PUTRA MANDIRI CAP KERUPUK MATAHARI
JEMBER REGENCY**

Supervised by Ariesia Ayuning, G.S.Pi.,MP

Nanda Dianita Pratiwi

Study Program of Agroindustry Management

Department of Agribusiness Management

ABSTRACT

UD Putra Mandiri Cap Kerupuk Matahari is an agro-industrial business engaged in the production of tempeh crackers and is located in Krajan Sembungan, Mlokorejo Village, Puger District, Jember Regency. This study aims to analyze the method applied by the company with the Economic Order Quantity (EOQ) method. This study uses a descriptive quantitative approach with analysis techniques that include determining the optimal order quantity, order frequency, safety stock, reorder point, and total inventory costs. The data used are inventory and production data of tapioca flour during 2025. The results of the study show that the company purchased 332,000 kg of tapioca flour with an order frequency of 68 times and a total inventory cost of Rp. 9,173,200. Based on calculations using the EOQ method, the optimal order quantity is 8,169 kg per order with an order frequency of 41 times a year. The required safety stock is 4,905 kg, and the reorder point occurs when inventory reaches 5,972 kg. The total inventory cost generated using the EOQ method is Rp 8,168,966. Thus, the EOQ method is more efficient than the method used by the company because it can reduce inventory costs by Rp 1,004,234, or approximately 10.95%.

Keywords: *Inventory Control, EOQ, Tapioca Flour, Crackers, UD Putra Mandiri*