

**ANALYSIS OF SUPPLY CONTROL OF SOYBEAN RAW MATERIALS  
IN UD MAHMUD PUTRA USING THE *ECONOMIC ORDER QUANTITY*  
(EOQ) METHOD IN SIDODADI PAITON DISTRICT  
PROBOLINGGO REGENCY**  
Dr. Ir. R. Abdoel Djamali, M.Si

**Faiqotus Zainiah**

Agroindustry Management Study Program  
Agribusiness Management Department

**ABSTRACT**

UD Mahmud Putra is one of the businesses engaged in agro-industry that produces white tofu located in Kaliayar 2 Hamlet, Sidodadi Village, Paiton District, Probolinggo Regency. This business produces white tofu from soybeans. This study aims to determine the optimal amount of soybean raw material inventory that should be carried out by UD Mahmud Putra. This type of research is quantitative descriptive research. The method used is Economic Order Quantity (EOQ), using 5 analysis techniques, namely optimal raw material purchase analysis (EOQ), ordering frequency, safety stock, reorder point (ROP) and total inventory cost (total cost). Based on the results of the analysis using the EOQ method, the economical amount of soybean raw material orders at UD Mahmud Putra in 2023 is 33,407 kg of soybeans with a purchase frequency of 18 times a year with a safety stock of 3,107 kg of soybeans. Reordering raw materials if the remaining 4,807 kg of soybeans with the total cost of inventory spent when using the EOQ method is Rp. 36,023.468. Optimal and efficient inventory control of soybean raw materials to be applied if using EOQ can save around Rp. 78,060,552.

Keywords: Inventory Control, Soybeans, Economic Order Quantity (EOQ)