## Inventory Control Analysis of Aceh Gayo Arabica Coffee Beans Raw Material with Economic Order Quantity (EOQ) Method at PT Cak Wang Macro Indonesia

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## ABSTRACT

PT Cak Wang Macro Indonesia is a coffee bean roasting company in Jember Regency. The problem faced by the company is excess raw materials for Aceh Gayo Arabica coffee beans, which increases inventory costs. This research is a quantitative descriptive study which aims to analyze the comparison between the raw material inventory control system for Aceh Gayo Arabica coffee beans in 2023 using conventional methods and the Economic Order Quantity (EOQ) method. The method used is Economic Order Quantity (EOQ) with 5 analysis techniques, namely optimal raw material ordering (EOO), ordering frequency, safety stock, re-order point and total inventory costs (TIC). The data used is inventory data and raw material production data for Aceh Gayo Arabica coffee beans in January-December 2023. The research results show that in 2023, PT Cak Wang Macro Indonesia ordered 960 kg of raw materials with an order frequency of 24 times, and the total inventory costs incurred amounted to Rp3.788.496. Meanwhile, if you use the EOQ method, the optimal raw material order quantity is 145 kg with 6 orders in one year. The safety stock that must be provided or reserved is 3 kg and a reorder will be made when the stock reaches 9 kg. The total inventory costs incurred using the EOQ method are Rp1.568.107. This shows that calculations using the EOQ method are more efficient and can save total inventory costs of Rp2.220.389..

*Keywords*: Raw Material, Coffee Beans, Inventory Control, EOQ, PT Cak Wang Macro Indonesia