Inventory Control Analysis of Arabica Coffee Raw Materials Using theEconomic Order Quantity (EOQ) Method at Rumah Kopi Banjar Sengon Jember

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ABSTRACT

This study is a quantitative descriptive research with the aim of analyzing the comparison of the inventory control system of Arabica coffee raw materials using the company's conventional method and the Economic Order Quantity (EOQ) method. The company implements raw material management by purchasing raw materials in warehouses that are close to running out or running low. The company does not have safety stock and reorder points so that it can result in shortages or shortages of raw materials. The method used in this study is the Economic Order Quantity (EOQ) method with analysis techniques, namely optimal raw material purchase (EOQ), order frequency, safety stock, reorder point and total inventory cost (TIC). The data used is the production data of the Banjar Sengon Coffee House in 2024. The results of the study show that in 2024 Rumah Kopi Banjar Sengon will purchase 960 Kg of raw materials with an order quantity of 20 Kg and 48 orders in a year and a total inventory cost incurred of Rp.4,060,000 Meanwhile, if using the (EOQ) method, an order quantity of 98.74 Kg was obtained with 9.72 orders for a year. The safety inventory that must be available is 32.96 Kg by reordering when the raw materials are at 36.63 Kg. The total amount of inventory costs incurred using the method (EOQ) is Rp. 1,579,873 This shows that the calculation with the (EOQ) method is more efficient, which can save inventory costs of Rp. 2,480,127.

Keywords: Arabica Coffee, Inventory Control, (EOQ), Banjar Sengon Coffee House.