Analysis of Soybean Raw Material Inventory Control Using the EOQ (Economic Order Quantity) Method in Tofu Barokah Business in Banyuwangi Regency

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ABSTRACT

Barokah Tofu Business is one of the agroindustry businesses located in Banyuwangi Regency. The Barokah Tofu Business carries out a tofu production process with a capacity of 100 kg per day with the purchase of 36,750 kg of raw materials for one year. This study aims to (1) Analyze the control of soybean raw material inventory in the Barokah Tofu Business. (2) Analyzing the control of soybean raw material inventory in the Barokah Tofu Business. (3) Analyze the results of the comparison of inventory costs between the soybean raw material inventory system and the raw material inventory system using the EOQ method in Tahu Barokah. This research is a type of quantitative descriptive research. The analysis method used is Economic order Quantity (EOO), Safety Stock (SS), Reorder Point (ROP), and Total Inventory Cost (TIC) using the POM-QM for Windows software tool. This research resulted in an optimal total soybean purchase using the EOO method in 2024 of 1,414.33 kg per order with a purchase frequency of 26 times a year; safety supplies of 253.02 kg; The order was re-ordered when the soybean raw material remained at 357.42 kg. The total cost of inventory produced is IDR 11,173,172. The application of the EOQ method in controlling the inventory of soybean raw materials saves the frequency of orders by 23 times and saves inventory costs of Rp 2,324,328.

Keywords: Inventory Control, Raw Material, Soybean, EOQ