ANALYSIS OF SUPPLY CONTROL OF SOYBEAN RAW MATERIALS USING THE ECONOMIC ORDER QUANTITY (EOQ) METHOD ON UMKM JARNO TAHU IN BANYUWANGI DISTRICT

Pieter Farandi Hogantara

Agroindustry Management Study Program Agribusiness Management Departement

ABSTRACT

UMKM Jarno Tahu is a business engaged in agro-industry that utilizes soybeans as the main raw material for making tofu located in Jatimulyo Hamlet RT 05/RW 02, Glagahagung Village, Purwoharjo District, Banyuwangi Regency. this venture produces two types of tofu, namely raw tofu and fried tofu. This research aims to determine the optimal amount of soybean raw material inventory that should be done by UMKM Jarno Tahu. The method used is the EOQ method (Economic Order Quantity), by using 5 analytical techniques namely analysis of optimal raw material purchases (EOQ), order frequency, safety stock, reorder point(ROP), and total cost of inventory (TC). Data used for the research sample, namely the data at UMKM Jarno Tahu in 2022. Based on the results of the analysis using the EOQ method, the number of purchases/orders of raw materials used the optimal amount is 1403 kg of soybeans with a purchase frequency of 32 times in one year with a safety stock of 118 kg of soybeans. Reorder raw materials if the remaining 248 Kg of soybeans with a total inventory cost spent using the EOQ method is Rp 2,006,723. Optimal and efficient control of soybean raw material inventory to apply if using EOQ can save around Rp 4,521,827.

Key words: Inventory Control, Raw Materials, EOQ (Economic Order Quantity)