

Analysis inventory control of wheat flour raw materials with the Economic Order Quantity (EOQ) method at UD Fajar Jaya in Probolinggo
Ratih Puspitorini Yekti A., S.E., M.M as a supervisor

Luluk Tendean Marquie Retno Sumanti
Agroindustry Management Study Program
Agribusiness Management Department

ABSTRACT

This study aims to analyze the optimal amount of wheat flour raw material supply, safety stock, reorder time (Reorder Point) and analyze the total cost of wheat flour raw material supplies. The analytical methods used in this study are EOQ (Economic Order Quantity), ROP (Reorder Point), Safety Stock, and TIC (Total Inventory Cost). The results of the analysis using the EOQ method, the optimal flour raw material that UD Fajar can do is 181kg with a purchase frequency of 48 times a year, so UD Fajar Jaya can purchase flour raw materials every 8 days in 2020. Total inventory cost in 2020 based on EOQ calculations is Rp 173.447,31 while the total cost of inventory in 2021 is Rp 176.193,93 with an optimal raw material that must be order by UD Fajar Jaya is 294kg with a purchase frequency of 48 times in one year. The safety stock in 2020 is 83.75kg and 86.16kg in 2021. UD Fajar Jaya must reorder when the supply of raw materials in the company amounts to 107,75kg in 2020 and 111.13kg in 2021.

Keyword: Economic Order Quantity (EOQ), Supply, Raw Material, Wheat Flour