Analysis of Soybean (Glycine max L.) Raw Material Inventory Control Using the Economic Order Quantity (EOQ) Method at UD Tofu Business. Sari Agung in Mojokerto Regency

Prof. Dr. Ir. Bagus P. Yudhia K, MP *as a chief concelor*

Risci Yulis Nur Frasisca
Study Program of Agroindustry Management
Majoring of Agribusiness Management

ABSTRACT

The purpose of this quantitative research is to compare the soybean raw material inventory management system between the methods used by UD. Sari Agung with the EOQ (Economic Order Quantity) method. The company is experiencing difficulties because the supply of raw materials is still based on assumptions or estimates which cause considerable inventory costs. In addition, the company does not prepare safety stock and reorder points, increasing the risk of running out or lack of stock. The implementation of research with the EOQ (Economic Order Quantity) approach uses 5 analysis techniques, including EOQ, safety stock, order frequency, total inventory cost (TIC), and reorder point. The data source comes from UD production records. Sari Agung in 2022. The results showed that the optimal amount of orders obtained from the EOQ approach was 20,086 kg with purchases made 33 times per year and soybean raw materials were ordered again when 4,529 Kg remained in the warehouse. The total inventory cost incurred by the company amounted to Rp. 7,727,267,661.

Keywords: Soybeans, Inventory Control, Economic Order Quantity (EOQ), UD. Sari Agung.