## Analisis Pengendalian Persediaan Bahan Baku Kedelai Dengan Metode Economic Order Quantity (EOQ) pada Usaha Kecil Tempe Sukilan di Kabupaten Banyuwangi

(Naning Retnowati S.T.P., M.P. as chief counselor)

**Inggil Dzulva Pawana** 

Agroindustry Management Study Program Departement of Agribusiness Management

## ABSTRACT

The Sukilan Tempe Small Business is a business operating in the agro-industry sector that uses soybeans as the main raw material for making tempeh, located in Sumberjati Hamlet RT 01/RW 02, Grajagan Village, Purwoharjo District, Banyuwangi Regency. This business produces one type of tofu, namely tempeh, which is divided into 2 variants, namely small packaging and large packaging with prices of 1,000 and 2,000. This research aims to determine the optimal amount of soybean raw material inventory that should be carried out by the Sukilan Tempe Small Enterprise. The method used is the EOQ (Economic Order Quantity) method, using 5 analysis techniques, namely analysis of optimal raw material purchases (EOQ), order frequency, safety stock, reorder point (ROP), and total inventory costs (TC). The data used for the research sample is data from the Sukilan Tempe Small Business in 2024. Based on the results of analysis using the EOQ method, the optimal number of purchases/orders for raw materials is 1,612 kg of soybeans with a purchasing frequency of 26 times in one year with a security stock of 172 kg of soybeans. Reorder raw materials if 289 kg of soybeans remain with the total inventory cost used using the EOQ method is IDR 1,692,462.58. Optimal and efficient inventory control of soybean raw materials implemented using EOQ can save around IDR 3.166.050.

Keywords: Soybeans, Tempe, Inventory Control, Raw Materials, EOQ (Economic Order Quantity).