ABSTRACT

Soybeans are a widely used raw material in Indonesia for various processed needs ranging from tempeh, tofu, soy milk, taucho, and oil. The Bungong Mane Women Farmers Group (KWT) produces three types of chips, namely original tempeh chips, sweet tempeh chips, and spicy tempeh chips. This study aims to analyze the optimal number of product combinations based on constraints on raw materials and compare the profits obtained by KWT Bungong Mane from factual conditions to optimal conditions for original tempeh chips, sweet tempeh chips, and spicy tempeh chips products. The method used in this research is Linear Programming. The results of the analysis showed that the profit obtained by KWT Bungong Mane under actual conditions amounted to Rp. 178.738 and under optimal conditions amounted to Rp. 189.892 in one production. The level of production combination of KWT Bungong Mane in actual conditions is 1 Kg of original tempeh chips, 1.5 Kg of sweet tempeh chips, and 2 Kg of spicy tempeh chips, while in optimal conditions it is 0 Kg of original tempeh chips, 5 Kg of sweet tempeh chips, and 0 Kg of spicy tempeh chips. Excess or passive resources in optimal conditions are dragon cap tapioca flour, yeast, garlic, salt, sugar, cayenne pepper, cooking oil, and LPG gas.

Keywords: Optimalization, Profit, Tempeh chips