

***Optimization of Preserved Fish Benefits with The Application of Linear Programming in CV Genderang Mercusuar Bahari Nguling District, Pasuruan Regency***

Ariesia Ayuning Gemaputri, S.Pi., M.P. as a Supervisor and  
Dr. Tanti Kustiari, S.Sos, M.Si as a Discussant

**Robbiarini Uswatun Hasanah**  
Study Program of Agroindustry Management  
Departement of Agribusiness Management

***ABSTRACT***

*This study aims to maximize the profits obtained by knowing the most optimal number of products by applying Linear Programming the simplex method assisted by POM Software for Windows V4. In the application of this method, appropriate data is needed as the objective function and the constraint function (limitation). The amount of profit earned by the company is used as the objective function, while the raw material for fish, the amount of added salt, processing time, production costs and the number of requests are used as a function of constraints (limitations). The total production of pindang fish in actual conditions was 1,909 pieces tongkol pindang ( $X_1$ ) and 1,488 pieces tuna pindang ( $X_2$ ) with a profit of Rp7,240,165.- Based on the results of the analysis with the Linear Programming simplex method, the optimal number of pindang fish production was obtained, namely producing 1,974.26 pieces of tongkol pindang everyday and still producing the same amount of tuna pindang as 1,488 pieces everyday so that the profit obtained was Rp7,431,312.- The total profit from each pindang fish product before optimization is Rp. 7,240,165,- so that there is a total difference in profit from before and after optimization of Rp. 191,147.-*

***Key words:*** *Optimization, Preserved Fish, Linear Programming, Simplex Method, POM Software for Windows V4*