

ABSTRACT

PISWANTO, Allocative Efficiency of Oil Palm Farming in Tadu Raya District, Nagan Raya Regency. Supervised by SURYADI and RITA ARIANI.

Allocative efficiency in oil palm farming is an effort to increase farmers' income. This study aims to analyze the factors that influence oil palm production and to assess the level of allocative efficiency in oil palm farming in Tadu Raya Subdistrict, Nagan Raya Regency. The sampling technique used in this study was simple random sampling, applying the Slovin formula. The total number of oil palm farmer respondents was 99. The research methods used included descriptive analysis, Cobb-Douglas production function analysis, and allocative efficiency analysis.

The results of the study showed that the production inputs for oil palm included land area, number of plants, NPK fertilizer, KCL fertilizer, SP-36 fertilizer, insecticides, herbicides, and labor. For plantations aged 5–12 years, the significant factors affecting production were the number of plants, SP-36 fertilizer, and labor, while land area, NPK fertilizer, KCL fertilizer, insecticides, and herbicides had no significant effect. For plantations aged 13–20 years, the significant factors were KCL fertilizer and herbicides, whereas land area, number of plants, NPK fertilizer, SP-36 fertilizer, insecticides, and labor were not significant. For plantations aged 21–25 years, only SP-36 fertilizer had a significant effect, while land area, number of plants, NPK fertilizer, KCL fertilizer, insecticides, herbicides, and labor did not.

The allocative efficiency analysis showed that the use of land area, number of plants, KCL fertilizer, herbicides, and labor was not yet allocatively efficient. Meanwhile, NPK fertilizer, SP-36 fertilizer, and insecticides were found to be allocatively inefficient.

Keywords: Allocative Efficiency, Production Function, Oil Palm