

ABSTRACT

Title : THE EFFICIENCY OF PRODUCTION'S FACTOR FOR PRODUCTION
PLANNING OF FARMERS IN MAEPOUNG SUBDISTRICT, DOISAKET
DISTRICT, CHIANGMAI PROVINCE, 1996/1997 CROP YEAR

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One of the major economic development problems of Thailand is poverty among farm families. Farmers' incomes are generally very low.

The objective of this study was to analyze farm plans to increase the farmers' net incomes by allocating limited production resources in such a way to gain the greatest efficiency so as to maximize the farmers' net incomes.

Linear programming was used as a tool for the analysis and the data were obtained from the field survey conducted in Maepoung subdistrict, Doisaket district, Chiangmai province. Three models were used: 1) small farm i.e. farmers having an area of less than 5 rai ; 2) medium-sized farm i.e. farmers having an area of 5-10 rai ; and 3) large farm i.e. farmers having an area of more than 10 rai.

The results of the production planning analysis mainly showed that the farmers' net incomes in all models were higher than those in the actual production plans.

In the small-farm model, the suitable production plan was to grow sticky rice on an area of 7.3 rai in the first production season, garlic on 3.03 rai in the second season and Chinese kale on 5.64 rai in the third season, leading to the farmers' net income of 27,719.8 baht, which resulted in an increase of 7,497.18 baht or 27.05 percent.

In the medium-sized farm model, the suitable production plan was to grow sticky rice on an area of 3.97 rai and rice on 6.99 rai in the first production season, garlic on 3.23 rai in the second season and yard-long beans on 5.64 rai in the third season, leading to the farmers' net income of 52,927.46 baht which resulted in an increase of 22,776.75 baht or 43.03 percent.

In the large-farm model, the suitable production plan was to grow sticky rice on an area of 4.11 rai and rice on 10.19 rai in the first production season, garlic on 4.47 rai in the second season and yard-long beans on 6.04 rai in the third season, leading to the farmers' net income of 77,973.98 baht, which resulted in an increase of 4,150 baht or 5.33 percent.

This study showed that there is a potential to increase the farmers' net income through an improved farm plan under existing resource limitations and other conditions confronting the farmers.