

EFFICIENCY ANALYSIS OF PRODUCTION FACTORS  
ON SAWMILL INDUSTRY  
( Case Study at PT Inhutani I, Bekasi)

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ABSTRACT

As the one of wood processing industries, PT Inhutani I assumed having technical and economical inefficiency caused by the main production factors use. This study aimed to find out those inefficiency. To define the level of processing product efficiency, this analysis use **Cobb-Douglas** production function.

Analysis for five years monthly data (1997 until 2001) give the result that is  $Y = 1,068 X_1^{0,99} X_2^{0,116} X_3^{-0,113} X_4^{-0,107} X_5^{0,057}$ . It can be explained in this following sentences : 1) PT Inhutani I Bekasi worked in condition decreasing return to scale. 2) Technical labour factor ( $X_2$ ) is in technically and economically efficient condition. 3) Raw material ( $X_1$ ) and sparepart ( $X_5$ ) are in technically efficient condition but they are not economically efficient. 4) Non technical labour ( $X_3$ ) and electricity ( $X_4$ ) are not in technically and economically efficient condition.

To raised the technically and economically efficiency level, company suggested to do these follows: 1) Reduced raw material intake until 29% from each month intake. 2) Optimalized non technical labour working time that is only 45% from the recent working time. 3) Reduced 18% of electricity expenditure, and 4) Reduced 28% of sparepart expenditure.

Key words : PT Inhutani I Bekasi, technical efficient, economical efficient.

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