

**ANALYSIS TO DETERMINE FINANCIAL ROTATION of PINE FOREST
USING METHOD OF LAND EXPECTATION VALUE**

Case Study in KPH Pekalongan Timur PT Perhutani (Persero) Unit I Central Java

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ABSTRACT

Many problems happen to manage Pine forest like forest security, forest burning, land expropriation and nature disaster, so analysis to determine rotation becomes more dynamic.

This research used object of *Pinus merkusii* and purposed to find out financial rotation in business of Pine forest. Analysis was performed to bonita 3. Curve estimate production of timber and resin used model of the fold linier regression which involved variable of age, wide of land, amount of trees, and HOK. gives *determination coeficient* value 95% and 90,2% each. The analysis of technical efficient to find out rational production region which gives result: 1) timber at age 25 years, 2) resin at age 11 years, and 3) both of them at age 12 years. Meanwhile, the used method to find out the financial rotation was the LEV model (Land Expectation Value). The LEV value could be calculated by using several alternative rotations tested in this research started from rotation of 15, 20, 25, 30, 35, 40, 45 and 50 with interest rate of 8%, 9% and 10%.

The highest LEV value of pine financial rotation was 20 years rotation with the results: 1) Rp. 5.224.773,65/ha on 8% interest rate, 2) Rp. 3.443.049,30/ha on 9% interest rate and 3) Rp. 2.076.038,36/ha on 10% interest rate. According to financial report 2001, KPH got profit Rp. 206.600,51/ha with 30 years rotation. In the rotation of 20 years, the KPH Pekalongan Timur could be said gaining a maximal profit according to criteria of LEV investment.

Key words: land expectation value, financial rotation

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