

ABSTRACT

Heavy equipment acquisition for land clearing and road infrastructure in the concession area of an Industrial Plantation Forest company is usually done by leasing. The lease system selection without considering other alternatives makes the company does not know the profit or loss of the heavy equipment lease system from the economic side. This research conducts a comparison of economic feasibility analysis between heavy equipment lease system and investment. The analysis methods used in this research are Net Present Worth (NPW), Rate of Return (RoR), and Benefit Cost Ratio (B/C). The result indicates that the heavy equipment investment is more profitable compared to heavy equipment lease system. Net Present Worth analysis shows that each district requires an additional operational cost of more than 17% if the heavy equipment is acquired through leasing system. The amount of Benefit Cost Ratio of investment system is above 10 with the Rate of Return of both alternatives is more than 40%. The Rate of Return shows that the investment of heavy equipment is feasible to be implemented, because it is higher than bank interest rate of 9,75%. The recommendation to each Industrial Plantation Forest companies before determining on heavy equipment acquirement alternatives is to conduct an economic feasibility analysis considering the time period of heavy equipment utilization.

Keywords: heavy equipment, land clearing, road infrastructure, investment, lease