

Tanin Somsiri 2007: The Financial Analysis of the Investment in *Alstonia scholaris* (L.) R.Br. Reforestation at Trat Agroforestry Research Station, Trat Province.

Master of Science (Forestry), Major Field: Forest Management, Department of Forest Management. Thesis Advisor: Associate Professor Wuthipol Hoamuangkaew, Ph.D.  
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The financial analysis of the investment in *Alstonia scholaris* (L.) R.Br. Reforestation at Trat Agroforestry Research Station, Trat Province. The 3 sampled plots with spacing and sizes of 1x1, 2x2 and 4x4 m; and 30x30, 40x40 and 40x40 m. respectively were laid out for the study. The operation of the project was started from 1988 to 2005. The 3 financial analytical methods namely Net Present Value: NPV, Benefit – Cost Ratio: B/ C and Internal Rate of Return: IRR were employed for the study. The *Alstonia scholaris* will reach the merchantable size at 5 years old, thus the logging activity, could be carried out in the year 2002 or in 2003, 2004 and 2005 when the tree ages were 5, 6, 7 and 8 years. The information about annual reforestation cost, and production in term of weight per rai were gathered. In addition the 4 timber price level; 1,000, 1,200, 1,400 and 1,600 Baht/ton; and the 4 discount rates: 6, 8, 10 and 12 percent were given for the analysis.

Results of the study indicated that the spacing 2x2 m. is the optimal spacing for *Alstonia scholaris* reforestation, this provided the return in term of  $NPV > 0$ ,  $B/C > 1$  at every age class and discount rate when the timber prices were 1,400 Baht/ ton and 1,600 Baht/ ton. At the highest given discount rate of 12 percent and the timber price was 1,400 and 1,600 Baht/ ton the maximized value of NPV, B/ C and IRR were 302.02 and 803.94 Baht/ rai, 1.09 and 1.25; and 14.53 and 18.81 percent respectively, when the tree aged 7 years. Hence the *Alstonia scholaris* plantation should be operated by using the spacing of 2x2 m. and it's optimal rotation was 7 years.

Tanin Somsiri

Student's signature

Wuthipol Hoamuangkaew

Thesis Advisor's signature

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