

# Shorea Leprosula: Most Commercial Trees to Improve Forest Productivity in Low Land Tropical Forest

Wahyudi

Department of Forestry, University of Palangka Raya, Palangka Raya, Central Kalimantan, Indonesia, [wahyudi@for.upr.ac.id](mailto:wahyudi@for.upr.ac.id)

---

## Abstract

Deforestation rate in Indonesia was 1,8 million ha per year. One of causes it was low productivity of production natural forest: just 0,25 m<sup>3</sup> ha<sup>-1</sup> year<sup>-1</sup> only (compared with teak plantation forest productivity in Jawa island: 8-10 m<sup>3</sup> ha<sup>-1</sup> year<sup>-1</sup>). Natural regeneration and forest plantation were constrained by stand competition and limited of light in the forest floor. Efforts to improve production natural forest productivity was applying the Selective Cutting and Strip Planting (SCSP) system. This system has been had optimum open area (strip) which suitable to maximum growth of Dipterocarp species, especially Shorea spp as most commercial trees in the natural tropical forest. This research aimed to analyze and created modeling of growth and yield of Shorea leprosula plantation in the SCSP system. The research was conducted on research plots of SCSP in logged over – production natural forest of PT Gunung Meranti forest concession, Central Kalimantan Province, Indonesia. Analysis of data used growth modelling for even-aged forest. The result showed that mean annual increment of Shorea leprosula plantation at 2, 11 and 16 year old were 1,06 cm year<sup>-1</sup>; 1,22 cm year<sup>-1</sup> and 1,31 cm year<sup>-1</sup> in diameters, respectively. Based on even-aged forest modelling, the first cycles of Shorea leprosula plantations was 32 year in the 125,14 m<sup>3</sup> ha<sup>-1</sup> of logs (40 cm up of diameters), thereby Shorea leprosula plantations in the SCSP system could improve the natural forest productivity until 262,72 time. The SCSP system with planted Shorea leprosula is very applicable to apply in the logged over-production natural forest to improve forest productivity.

**Keywords:** Selective cutting and strip planting system, Shorea leprosula, growth and yield, productivity.

**Suggested Citation:** Wahyudi (2018), Shorea Leprosula: Most Commercial Trees to Improve Forest Productivity in Low Land Tropical Forest, Journal of Business Management and Economic Research, Vol.2, Issue.1, pp.9-14

---



**Journal of Business Management and Economic Research**  
Vol.2, Issue.1, 2018  
pp.9-14

Doi: