

## STUDY PRESTASI KERJA DAN BEAYA PENEBAANGAN PADA TEKNIK PEMANENAN KONVENSIONAL DAN TEKNIK *REDUCED IMPACT LOGGING* (RIL)

Oleh :  
Edy Sasangka<sup>1</sup>  
Haryanto<sup>2</sup>

### INTISARI

Sistem pengelolaan hutan di luar Jawa dilakukan dengan sistem silvikultur Tebang Pilih Tanam Indonesia (TPTI), dimana kegiatan penebangan merupakan salah satu tahapan dalam kegiatan TPTI. Penebangan mempunyai tujuan untuk memperoleh manfaat ekonomi dari suatu tegakan hutan. Tujuan penelitian ini adalah untuk mengetahui elemen - elemen kerja penebangan, struktur organisasi, prestasi kerja dan biaya penebangan pada teknik pemanenan konvensional dan teknik *reduced impact logging* (RIL).

Penelitian ini dilakukan di areal HPH PT. Sarmiento Parakantja Timber, Kalimantan Tengah. Secara umum kondisi lokasi penelitian berada pada kelerengan sekitar 18<sup>0</sup>, tegakan hutannya didominasi oleh jenis *Dipterocarpaceae* seperti meranti merah (*Shorea leprosula*), meranti kuning, meranti putih (*Shorea polyandra*), benuas, dan keruing (*Dipterocarpus*). Untuk mengetahui elemen - elemen kerja penebangan dilakukan identifikasi melalui pengamatan langsung terhadap jalannya pekerjaan di lapangan. Metode yang digunakan untuk menghitung prestasi kerja adalah metode *time study* dengan *repetitive timing method*, yaitu pencatatan konsumsi waktu dilakukan pada masing - masing elemen kerja. Sedangkan untuk menghitung biaya penebangan digunakan metode biaya usaha mesin.

Hasil penelitian menunjukkan bahwa jenis elemen kerja penebangan pada teknik konvensional dan teknik *reduced impact logging* (RIL) terdiri atas persiapan alat, menuju pohon, persiapan tebangan, membuat takik rebah dan takik balas, memotong ujung dan pangkal batang, mengisi BBM dan oli, menajamkan alat serta istirahat. Prestasi kerja penebangan pada teknik konvensional sekitar 17,319 m<sup>3</sup>/jam dengan biaya sebesar Rp 3780,52/m<sup>3</sup> dan prestasi kerja penebangan dengan teknik RIL sekitar 18,045 m<sup>3</sup>/jam dengan biaya sebesar Rp 3952,85/m<sup>3</sup>.

Kata kunci : Tebang Pilih Tanam Indonesia (TPTI), Teknik Konvensional, Teknik *Reduced Impact Logging* (RIL), Prestasi Kerja, Biaya.

1. Mahasiswa Fakultas Kehutanan Universitas Gadjah Mada NIM : 04074/KT
2. Pembimbing Skripsi dan Staff Pengajar Fakultas Kehutanan Universitas Gadjah Mada

## STUDY OF PRODUCTIVITY AND FELLING COST OF CONVENTIONAL HARVESTING TECHNIQUE AND REDUCED IMPACT LOGGING (RIL) TECHNIQUE

By :  
Edy Sasangka<sup>1</sup>  
Haryanto<sup>2</sup>

### Abstract

The forest harvesting system outside the java island is carried out using the selective cutting and planting system of indonesia (TPTI), felling is one of the stage in TPTI activity. The purpose of felling is to obtain an economic benefit from the forest stand. The goal of this research is to gain knowlegde of the elements of felling work, organization structure, work productivity and felling cost on both the implementation of conventional harvesting technique and the *reduced impact logging* (RIL) technique.

The research was done in the forest concession area of PT. Sarmiento Parakantja Timber, central kalimantan. In general the location condition is of 18<sup>0</sup> in slope angel. The forest stand dominated by the *dipterocarpaceae* species, such as meranti merah (*Shorea leprosula*), meranti kuning, meranti putih (*Shorea polyandra*), benuas, dan keruing (*Dipterocarpus sp*). To identify the elements of work of felling the identification process is done by direct observation of the work process in the field. The method used to calculate work productivity is the *time study* method using the *repetitive timing method*, that is done by recording the time consumed on each element of work, while the calculation of felling cost is done by using the machine rate method.

The research results show that the felling work elements of the conventional harvesting technique and the *reduced impact logging* (RIL) technique, consist of : tool preparations, approach towards selected tree, felling preparations, making the notchcut and the backcut, cutting the bottom and topping, filling of gas and oil, tool sharpening and break session. Work productivity of felling in conventional harvesting technique is 17,319 m<sup>3</sup>/hour with the cost of Rp 3780,52/m<sup>3</sup> and the reduced impanct logging (RIL) technique is 18,045 m<sup>3</sup>/hour with the cost of Rp 3952,85/m<sup>3</sup>

Keyword : Selective Cutting and Planting System of Indonesia (TPTI),  
Conventional Harvesting Technique, Reduced Impact Logging  
Technique, Work Productivity, Cost

- 
1. Student, Faculty of Forestry, Gadjah Mada University. NIM : 04074/KT
  2. Research Guidance and Lecturing Staff, Faculty of Forestry, Gadjah Mada University