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REKAYASA DAN UJI COBA ALAT KABEL LAYANG Expo-2000 GENERASI-3 DALAM PENGELUARAN KAYU PADA LERENG CURAM

(Engineering and Trial Test of Skyline Cable of Expo-2000 Generation-3 on Extracting Logs at the Steep Terrain)

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ABSTRACT

The engineering and trial testing on the skyline system tool of third Generation Expo-2000 powered by 13-HP engine was conducted to look into its performance for exstracting wood logs from the forest at steep terrain. This undertaking took place at Forestry District Resort of Tanggeng, Forestry District of Cianjur, the State-Owned Forest Enterprise Unit III, Cibatu Village, West Java. Results revealed that working productivity was 1.72 m^3 of wood/hour, with the entire cots of tool ownership and wood extraction at Rp 138,587.39/hour or being equal to Rp 80,346.45/m^3.

Keywords: Prototipe Expo-2000 Generation-3, skyline system, exstract logs, steep area, productivity, operation cost

ABSTRAK

Rekayasa dan uji coba rekayasa alat pengeluaran kayu sistem kabel layang prototipe Expo-2000 Generasi-3 dilakukan pada areal curam di Cibatu, BKPH Tanggeng, KPH Cianjur, Perum Perhutani Unit III Jawa Barat. Penelitian ini bertujuan menguji kinerja alat tersebut untuk mengeluarkan kayu, khususnya dari aspek produktivitas kerja dan biaya. Hasil uji coba menunjukkan bahwa produktivitas alat prototipe Expo-2000 Generasi-3 adalah sebesar 1,72 m^3/jam dengan biayao perasi Rp 138.587,39/jam atau Rp 80.346,45/m^3.

Kata kunci: Prototipe Expo-2000 Generation-3, kabel layang, pengeluaran kayu, topografi