

## **The Effects Of Reduced Impact Logging (Ril) On Forest Regeneration In Ulu Baram, Sarawak, Malaysia**

### **ABSTRACT**

There has been an increasing interest in reduced impact logging (RIL) practice, particularly in tropical forests. Studies have shown that RIL promotes enhanced regeneration, allowing for earlier re-entry and more sustainable forest harvest of higher-quality commercial wood. The objective of this study was to assess regeneration of potential tree species in the logging corridors under reduced impact RIL in Block 13, Sela'an-LiDau Forest Management Unit (FMU), Ulu Baram, Sarawak, Malaysia. The study assessed commercial species regeneration potential in the form of number of species and composition, effect of different felling intensities and effect of slope condition on regeneration. The sampling method was modified based on the Section 3: Treatment Design in "Silviculture Treatment of Logged-over Forest in the FOMISS Sampling Pilot Area (FSPA)" report, focusing only along harvesting corridors. Regenerations of a 1.5 meter height to 10 cm diameter at breast height (dbh) were selected for evaluation. Results indicated that commercial species, mainly from dipterocarps families, regenerated well. A moderate number of felling intensities (2 trees per section) promoted a better number of regenerations. The results related to the light availability for regenerations after felling. Different number of regenerations according to the different sloping conditions were obvious, where steeper slopes have smaller number of regenerations. RIL provides an alternative way to determine regeneration condition and its effect were presented from a case study in Sela'an-Linau FMU at Ulu Baram, Sarawak, Malaysia.

**Keyword:** reduced impact logging, forest regeneration, logging damage, timber harvesting system