



Tropentag, September 17-19, 2013, Stuttgart-Hohenheim  
“Agricultural development within the rural-urban continuum”

## Conventional Logging in Natural Forests of Vietnam: Issues and Ways Forward

DUC LE<sup>1</sup>, NAM THANH VU<sup>2</sup>, TUONG VAN TRAN<sup>3</sup>

<sup>1</sup>*Technische Universität Dresden, Inst. of International Forestry and Forest Products, Tropical Forestry, Germany*

<sup>2</sup>*Ministry of Agriculture and Rural Development, Vietnam Administration of Forestry, Vietnam*

<sup>3</sup>*University of Freiburg, Inst. of Forest Utilisation and Work Science, Germany*

### Abstract

Vietnam's total natural forest covers 10.34 million ha, of which 4.15 million ha are production forest, and State Forest Enterprises (SFE) manage about 26% of this forest for timber production. Conventional loggings are carried out by SFE or logging contractors. After logging, many forest areas have been degraded, non-commercial crops trees are left in the forest. Intensive logging happened in the period from 1976 to 1980 with 1.62 million m<sup>3</sup> year<sup>-1</sup>. From 2005 up to date, logging quota are set down to 0.2 million m<sup>3</sup> year<sup>-1</sup>. The study examined conventional logging techniques with machines applied by the SFE. Four SFE which manage natural forests were investigated, namely So Pai, Ha Nung, Dak To, Song Kon State Forestry Companies. A list of core elements in pre-harvesting, harvesting and post-harvesting activities was evaluated and compared with Reduced Impact Logging (RIL) standard. Moreover, key informant interview, group discussion and observation were complemented to have better understanding and evaluation. The results indicate that conventional logging practices by the SFE accounts for 61.5% compared to RIL practice. Dak To showed the best demonstration of logging practice which reached 77.4% of RIL standard as the result of RIL introduced in this case by a GIZ project. Compared to pre-harvesting and harvesting, post-harvesting activities appear to less satisfy the standard of RIL with only 53.9%. The study also revealed that the conventional logging has some problems such as insufficient and unspecific mitigations of negative impacts; improper attention to exclusion areas; no development of proper harvesting evaluation of logging operations and its impacts; lack of well-trained workers; improper health and safety consideration; utilisation of out-of-date machineries; improper attention to harvesting monitoring; low rate of tops and branches salvage; and sketchy implementation of post-harvesting activities. For improvement of natural forest management towards sustainability, there is an urgent need to have a RIL code of practice for timber harvesting for the country that specifies and puts into mandatory regulations to nationwide performance. Moreover, higher level of mechanisation with suitable machines and equipment should also be considered.

**Keywords:** Conventional logging, natural forest, RIL, Vietnam