Vietnam’s total natural forest is 10.34 million ha; in which 4.15 million ha is production forest and State Forest Enterprises (SFE) manage about 26% of this forest for timber production. Conventional loggings are carried out by SFEs or associated with logging contractors. After logging, many forest areas have been degraded, un-commercial future crops are left for next cutting cycle. Intensive logging happened between 1976 to 1980 with 1.62 million m³/year. From 2005 up to date, logging quota are set down to 0.2 million m³/year. The objectives of the study is to assess the implement of the conventional and partially mechanized logging operations in natural forest of Vietnam to the standards of Reduce Impact Logging (RIL) method. Also, some proposals will be given to improve the logging operations forwards more sustainability in Vietnam.

The study examines conventional logging techniques with machines applied in the SFEs. Four SFEs which manage natural forests are investigated, namely Song Kon, Dak To, So Pa, and Ha Nung. Case studies approach was applied.

A list of core elements in pre-harvesting, harvesting and post-harvesting activities of conventional logging in these case studies is evaluated and compared with Reduced Impact Logging (RIL) standards. Moreover, key informant interview, group discussion and observation are complemented to have better understanding and evaluation.

The results indicate that conventional logging practice in the SFEs accounts for 61.5% compared to RIL practice. In four case studies, Dak To shows the best demonstration of logging practice which reached 77.4% of RIL standard as the result of RIL introduced in this case by 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 reveals that the conventional logging has some problems such as insufficient and unspecific mitigations of negative impacts; in-proper attention on exclusion areas; no development of proper logging evaluation of harvesting operations and its impacts; lack of well-trained workers; improper health and safety consideration; use of inappropriate machineries, improper attention on harvesting monitoring; low rate of tops and branches utilization; and sketchy implementation of post-harvesting activities.

For improvement of natural forest management towards sustainability, it shows urgent needs to have a RIL code of practice for timber harvesting for the country that specifies and puts into mandatory regulations to national wide operations, higher level of mechanization with more suitable machines and equipment should be considered for responsible forestry and sustainable forest management of Vietnam.