

## **Reduced Impact Logging (RIL) and Forest Certification**

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## Reduced Impact Logging (RIL) and Forest Certification

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### *Abstract*

*RIL implementation in tropical forests, including in Indonesia, has been limited. Concerns over its economic consequences appear to be the explanation of forest companies' reluctance to adopt RIL. The emergence of forest certification to some extent raised optimism on the adoption of RIL, since the program is supposed to offer some incentives for engaged companies. Apparently, most of certification bodies prescribe RIL as one of their criteria and indicators before licensing particular forest companies as managing their forests in a sustainable way. While economic incentives of adopting certification, consequently of implementing RIL, are still unclear, considerable costs are required to adopt the program as the current forest practices in most companies are very poor. More importantly, as a market-based instrument, forest certification has not yet been unable to put pressure on forest companies because markets for non-certified products still widely exist. Therefore, it appears that forest certification also has limitation in promoting on-the-ground implementation of RIL.*

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*Key words: RIL, criteria and indicators, forest certification*

### **Introduction**

Reduced Impact Logging (RIL) has been tested throughout the tropics as a response to growing domestic and global awareness of damage caused by logging operations. Research and trials on RIL indicate that the system or techniques has shown promising results. It can significantly minimize damage to forests, primarily to residual stands and forest soils (Hendrison, 1990; Bertault and Sist, 1997; Supriyatno and Becker, 1997; Winkler, 1997; Elias, 1998; Holmes *et al.*, 2000; Blate *et al.*, 2001; Boltz *et al.*, 2003). In addition, RIL is argued would be, contrary to common views, less costly or more profitable than conventional logging (Holmes *et al.*, 2000; Boltz *et al.*, 2003). Thus, RIL is now promoted to be widely adopted by tropical forest companies.

However, RIL implementation in tropical forests has only occurred sporadically (Pulkki *et al.*, 2001). It is indicated that several impediments to the widespread use of the technologies in the tropics, including in Indonesia, exist (Putz *et al.*, 2000; Dykstra, 2001; Hinrichs and Ruslim, 2001). Notwithstanding various

regulation and guidelines prescribed by the government to foster RIL implementation, most forest companies remain reluctant to adopt RIL (Hinrichs and Ruslim, 2001). It appears that forest managers are unconvinced about incentives of adopting RIL, and to a large extent still perceive that RIL is more expensive than their current logging practices (see Nugraha, 2002).

### **RIL as a criterion for forest certification**

The emergence of forest certification to some extent boosts optimism on the adoption of RIL. As global consciousness over environmental issues has increased considerably over the past few years, forest companies are thought would seek ways, one of which is forest certification, to improve the enterprises' images. Certification is a process by which a certification program gives written assurance that forest management processes or forest products comply with agreed standards (Ghazali and Simula, 1994; Upton and Bass, 1995). While most certification bodies clearly require forest companies, principally those managing natural forests, to improve their forest harvesting practices (for instance see FSC, 2003), then interested companies are believed would adopt RIL to be eligible for certification. Some analysts (for instance Elias, 2002) believe that forest certification would facilitate the adoption of RIL by Indonesian forest companies.

However, it seems that forest managers still need to examine what would be the consequences of forest certification to their companies, principally the extent certification would influence companies' financial performance. Since keeping production costs as low as possible remains a principle of most enterprises, adding environmental standards to production system is likely to increase production costs, and thus companies are likely to avoid the standards unless they are obliged to comply or there is some incentives for them to do so (Janicke and Jacob, 2004). Certification is supposed to offer improved market access and a price premium for CFPs for companies engaged (Upton and Bass, 1995). Unfortunately, such incentives are unconvincingly revealed, although particular segments of timber consumers express their interests in buying certified products (Ozanne dan Vlosky, 1997; Ozanne dan Smith, 1998; Forsyth *et al.*, 1999; Jensen *et al.*, 2003; Ozanne and Vlosky, 2003). It is true that being labeled, forest products would be able to penetrate

to environmentally-sensitive markets as the products have a comparative advantage *vis a vis* non-certified ones. But, there are still limited timber markets which distinguish whether or not timber products are certified, principally only European and North American markets (UN/ECE, 2004). Therefore, the extent to which certification would facilitate RIL implementation would also be very limited.

## **Conclusion**

Forest certification could possibly be encouraging better forest practices including the adoption of RIL. The experience of two Indonesian FSC-certified forest companies (PT. Diamond Raya Timber and PT. Erna Juliawati) reveals that the implementation of RIL could become a huge asset of companies aiming for certification. However, such a circumstance might only occur when forest companies have commitment to keep their business in a long run. Many of Indonesian forest companies, unfortunately, do not exhibit such characteristics. They are often described as “one-cycle” forestry businesses; they “mine” the timber and then switch their business, or move to forests in other regions when no more timber is available in the forests they are currently working (see Dauvergne, 1997). As a consequence, there would be no real impact for them of not engaging in forest certification, unless there is a mechanism to punish their subsequent business activities. While market institutions through the voluntary approach of forest certification have limitation to facilitate on-the-ground implementation of RIL, the governmental approaches seem still appropriate. The reward and punishment mechanisms could be adopted to encourage forest companies to adopt RIL. The government should give incentives to companies which show a strong commitment and take into account RIL in their practices. Conversely, companies which do not comply with mechanisms should experience significant consequences for not adopting RIL.

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