The myth of GHG emissions reductions from “Sustainable Forest Management”

A recent report by Greenpeace (“Why logging will not save the climate: the fallacy of GHG emissions reductions from so-called ‘Sustainable Forest Management’ (SFM) or Reduced Impact Logging (RIL) of natural forests”) evaluates greenhouse gases (GHG) emissions from the various forms of industrial logging.

The report highlights the value of primary (ancient or old growth) intact forest not only for its high biodiversity but also because they are the most resilient to climate change and contain the biggest carbon stock. However, consideration of options for the inclusion of Reduced Emissions from Deforestation and Degradation (REDD) often gives reference to the potential of ‘sustainable management of forests’ as a way of achieving emissions reductions. The forest industry and some governments with vested interests in the logging sector, as well as several international organisations, are pushing a narrow interpretation and reframing of this under the broader term of ‘Sustainable Forest Management’ (SFM).

Selective logging affects 28% of tropical forests worldwide. In Papua New Guinea (PNG), between 2.9 and 4.1 million hectares of primary forest had already been selectively logged by 2002, and around half of PNG’s forest (16.3 million hectares) is in concessions and under threat of becoming degraded as a result of logging. In Indonesia, 42 million hectares of forest are in concessions. Across Central Africa, nearly 40 million hectares of primary forest are allocated to industrial logging concessions.

Typical stand damages in conventional logging in many developing countries range from 10% to 70% of the residual trees, depending on logging intensity along with logging technique. Site damage, such as soil disturbance and compaction, or erosion will also release greenhouse gases from other carbon pools. Several studies in Southeast Asia looking at harvested timber, unutilised tree parts (roots, branches, etc) and trees, lianas and other vegetation damaged or destroyed, found that the direct impact of selective logging results in an approximate 50% reduction in biomass carbon. Taking into account road-building and infrastructure, as well as fragmentation and edge effects, carbon stock losses are even greater. Roads in particular are viewed as ‘the seeds of tropical forest destruction’. Furthermore, if the indirect impacts of logging are considered, such as edge effects increasing drought sensitivity and the likelihood of being burnt, or improved access increasing the risk of degradation or conversion, then the climate impacts of selective logging would be considerably greater. In the Amazon, remote sensing found that selective logging doubled the area of forest degraded by human activities.

Degradation of primary forest through logging, whether it be conventional or SFM, limits the ability of these forests to absorb anthropogenic CO2, whilst increasing their vulnerability to climate change. SFM is a forest degradation activity and -in particular in comparison with forest conservation, restoration or protection- it cannot claim that it results in emission reductions.

It doesn’t seem efficient or effective to give considerable financial or carbon incentives to logging

companies who are production and profit driven to attempt managing forests ‘sustainably’, and whether these companies can be trusted to deliver real emission reductions. Many of these companies are embroiled in scandals related to illegalities, corruption and destructive practices.

REDD-incentivised SFM may in fact end up being a subsidy for the expansion of logging into primary forests and intact forest landscapes.

In addition, net rather than gross accounting rules for deforestation rates that allow for SFM (emissions from logging less removals by regrowth) may increase incentives to expansion of logging into primary forests. Given that under the current UN definition, a forest is only required to have a 10% canopy, many models of so-called SFM would likely allow considerable degradation of the forest without impacting on forest cover and deforestation rates.

Thus, one of the conclusions of the report is that “No REDD funds should be used to support or subsidise industrial logging of forests, whether it is claimed to be so called SFM or not.”

(1) Extracted from Greenpeace report: “Why logging will not save the climate: the fallacy of GHG emissions reductions from so-called ‘Sustainable Forest Management’ (SFM) or Reduced Impact Logging (RIL) of natural forests”, Rosoman, G., Cotter, J., & Marahrens, M, September 2009,http://www.greenpeace.org/raw/content/international/press/reports/why-logging-will-not-save-the.pdf