

Deforestation 'not so important for climate change'

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Climate negotiations were dealt a bombshell at the weekend when ecologists reported that carbon emissions from the destruction of tropical forests are probably only half previous estimates.

If we are emitting less carbon dioxide from deforestation that's got to be good news, surely. The trouble is the findings seriously question the only success so far of the UN negotiations on curbing climate change [under way in Cancun, Mexico](#). If cutting down trees emits far less CO₂ than we thought, where's the incentive to stop chopping?

This is a dismaying thought when negotiators feel they are close to a deal on compensating tropical countries for curbing deforestation.

Four years ago, the UN's Intergovernmental panel on Climate Change estimated that deforestation was responsible for up to 20 per cent of CO₂ emissions. A more recent study by [Richard Houghton](#) of Woods Hole Research Center in Falmouth, Massachusetts, revised that down to 15 per cent for the period 2000 to 2005. Both estimates relied on national declarations of forest loss made to the UN, coupled with simple estimates to convert that loss into carbon emissions.

But now ecologists at [Winrock International](#), a respected US consultancy based in Arlington, Virginia, whose work was funded by the World Bank and the Norwegian government, says a more detailed analysis puts the figure for 2000 to 2005 at around 8 per cent, with a possible range between 5 and 12 per cent. Nancy Harris of Winrock said in Cancun that the estimate was "the lowest reported to date".

The analysis, which has yet to be formally published, used more than 3 million data points from a laser-radar satellite measurement technique known as lidar and 4000 carbon inventories from forest plots on the ground. Harris said it did not include forest regrowth after deforested land had been abandoned by farmers, which could reduce the figure further.

Brazil cuts

The statistics only cover the period to 2005, when a fault in the Landsat satellite restricted new data on forest cover. More recent figures could be even lower, since some countries such as Brazil are believed to have dramatically reduced their rates of deforestation.

But Harris estimates that up to 2005, Brazil's emissions, at 1.6 million tonnes of CO₂ a year, were four times that of the next nation, Indonesia – a much bigger difference than other studies have found. The third biggest source of deforestation emissions, she says, is Malaysia (mostly from its provinces on the island of Borneo), followed by Argentina, Burma and the Democratic Republic of the Congo (DRC).

Some forest scientists *New Scientist* spoke to questioned the idea that deforestation is not so

important to climate change. They said that while the figures may accurately reflect deforestation by farmers, they may underestimate the carbon emissions from logging and the conversion of natural forests to plantations such as palm oil.

Under UN definitions palm oil can count as forest. The scientists believe this may be why Winrock's estimate of emissions in southeast Asia is so low.

Nonetheless, if the new figures accurately reflect the amount of carbon being emitted from changes in land use, then they do indeed threaten to undermine one of the few success stories in the climate negotiations – the talks on [REDD](#), for Reduced Emissions from Deforestation and Forest degradation.