

---

## [Logging, landlessness and fires in the Brazilian Amazon](#)

A recent publication on the effects of forest fires in the Brazilian Amazon shows that selective logging followed by the use of the logged area for agriculture and cattle raising is resulting in much more than just forest degradation.

In the paper titled 'Investigating Positive Feedbacks in the Fire Dynamic of Closed Canopy Tropical Forests', Mark Cochrane, Dan Nepstad, and their colleagues at the Woods Hole Research Center, IPAM, and IMAZON show that after a portion of forest burns once, it becomes more susceptible to burning again, being the second fire more intense and destructive. Selective logging as usually practised in the Amazon dries out forests by opening the canopy and creates a lot of flammable debris. Nearby farmers, ranchers and other agents can provide one potential source of ignition to start subsequent fires. The final stage of the process is the complete destruction of the forest. According to the researchers, large parts of the Brazilian Amazon that appear on the satellites as 'deforested' may not have been willfully cleared by anyone, but forests that were once burned for the first time and then became more vulnerable to subsequent fires until there was nothing left.

The authors, whose research was mostly conducted with data from the eastern Amazon region (1,800 mm rainfall a year), warn that "left unchecked the current fire regime will result in an inexorable transition of the entire affected area to either scrub or grassland." It has been estimated that Para and Mato Grosso states alone already have thirty million hectares of forest that could be lost through this process.

Although the above research adequately explains the entire deforestation process, it needs to be complemented with the fact that logging activities and the occupation of the Amazon by colonization are not casual events, but the result of policies promoted by the Brazilian governments since the 1950's. The government opens up the forest by building a network of roads deep into the Amazon. Loggers are granted concessions within the forests, and are usually followed by poor farmers, frequently through government-sponsored colonization schemes. Land concentration outside the Amazon forces poor peasants into the forest, where they become direct agents of deforestation. However, the underlying cause is the unfair land tenure system in Brazil, where a small percentage of landowners own a large percentage of the available agricultural land, and where indigenous peoples' ownership of the forest is still basically unrecognized.

Halting deforestation therefore implies addressing -among others- that particular underlying cause by changing the current unfair land tenure pattern, both within and outside the forest. In that context, the huge mobilization of the increasingly strong "Movimento dos Sem Terra" (Landless Peasants Movement), which is arriving these days to Brasilia to protest against the government's economic and social policy and to claim for solutions can be seen as a sign of hope. If their demands are met, then conditions will have been created to begin to halt the prevailing destruction, because unless solutions to address the problem of the landless are achieved, the Amazon will continue to be colonized and destroyed.

Sources: David Kaimowitz D.KAIMOWITZ@CGIAR.ORG 16/9/99; Sergio Oceransky e-mail:

