

**Abstract: IV Workshop Advances in Energy Studies: “Ecology - Energy in Latin America”, State University of Campinas, June 15<sup>th</sup> to 19<sup>th</sup>, 2004.**

## THE SUSTAINABLE USE OF TROPICAL FORESTS

Philip M. Fearnside

Use of tropical forests in Amazonia has been characterized by a long history of failures in terms of sustainability. Sustainability is different from financial profitability and is also not necessarily synonymous with minimal environmental impact. Cattle pasture is by far the most widespread land use in deforested areas in Brazilian Amazonia. The poor record of sustaining pasture productivity has not impeded the spread of ranching, which is driven by various alternative motives in addition to beef sales (notwithstanding the recent arrival of the “hamburger connection” that has given beef sharply increased importance). Small-scale commercial farming (as envisioned for settlement areas on the Transamazon Highway and in Rondônia) has also proved ephemeral, as have monocultures of cacao, rubber and oil palm. Questions persist regarding large-scale high-input agriculture (such as soybeans), timber management and silvicultural plantations. Extractive reserves for non-timber forest products are potentially sustainable, but require linking to the environmental benefits of the forest if they are to resist conversion to logging and agriculture. This author has proposed a development strategy in the region based on tapping the environmental services of Amazonian forest, including maintenance of biodiversity, water cycling and carbon balance. This could provide a sustainable alternative to the current destructive land-use patterns, in addition to other benefits. Progress towards obtaining monetary flows has so far been greatest for the forest’s role in mitigating global warming.