



Using Space in support of Reduced Emissions from Deforestation and Forest Degradation (REDD)

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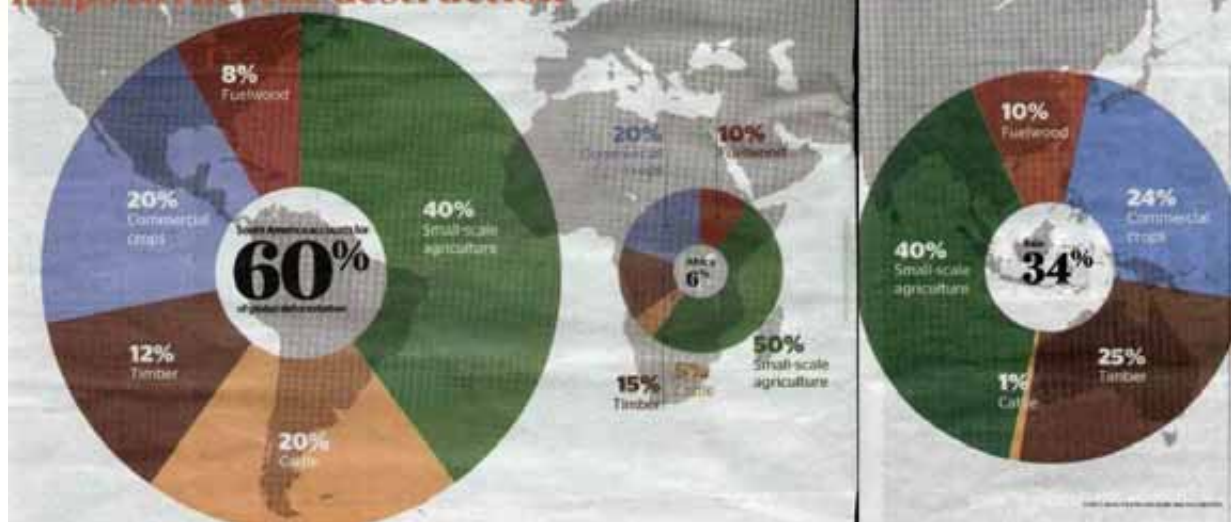


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Attenborough
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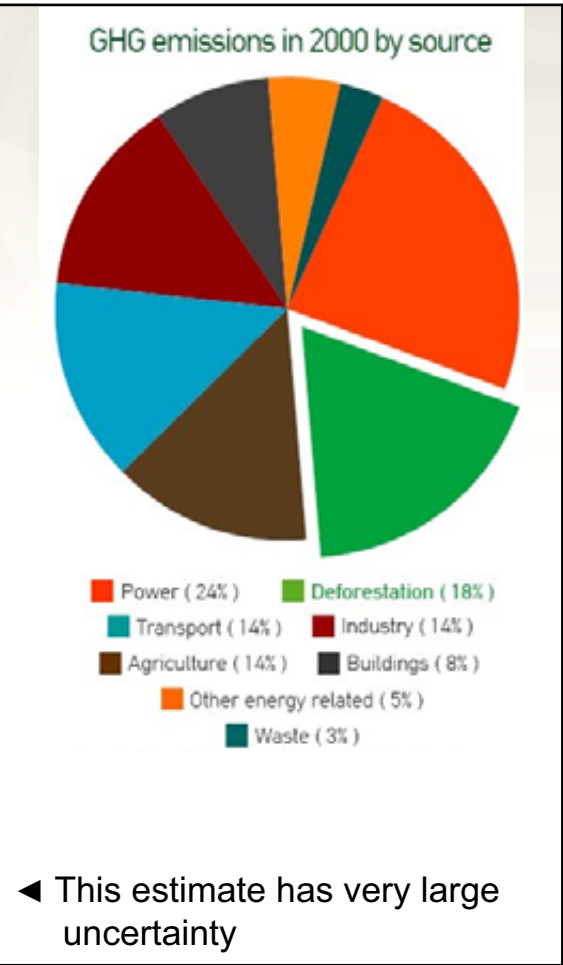
Save the rainforest Save the planet

Foreword by
The Prince of Wales

Deforestation occurs because it is economically rational Our consumption helps to fuel the destruction

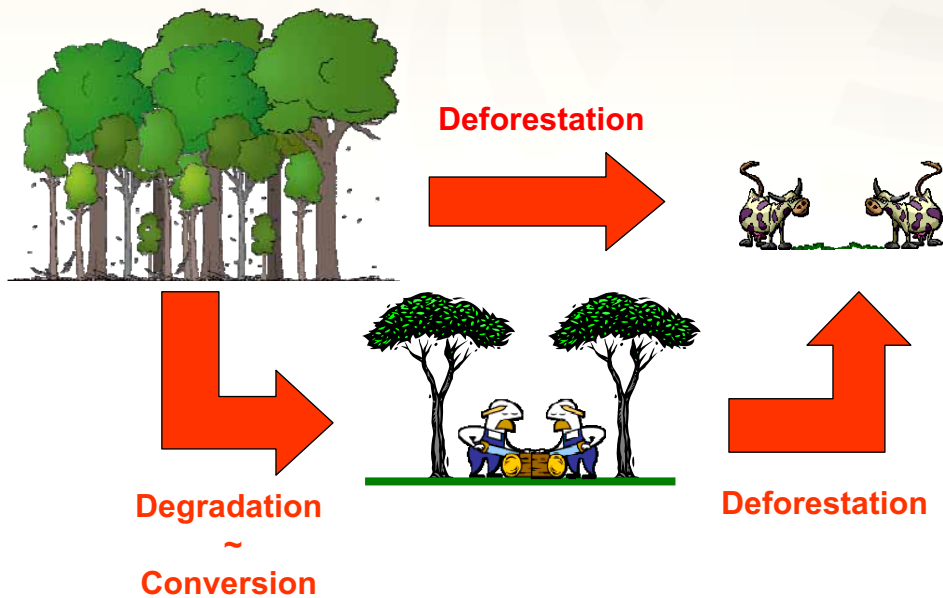


Center for Global Development



REDD expected process definition

To account for **gross carbon emission reductions** and non-CO2 emission reductions only in **existing forest areas** on a **national** basis.



Calculating deforestation emissions

Basic method to estimate emissions from deforestation:

$$C_{\text{emitted}} = 0.5 \times \text{deforested area} \times \text{“average” biomass}$$

(UN Framework Convention on Climate Change;
Good Practice Guide 2003)



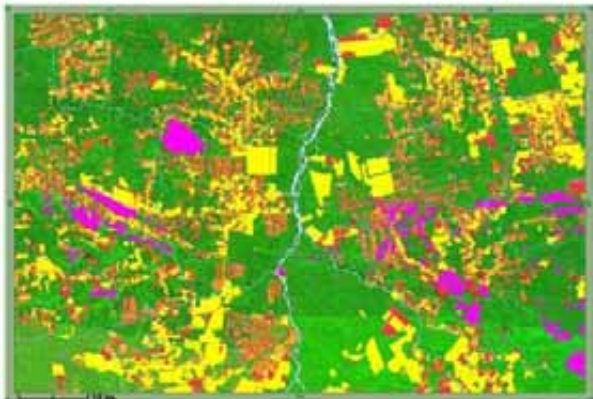
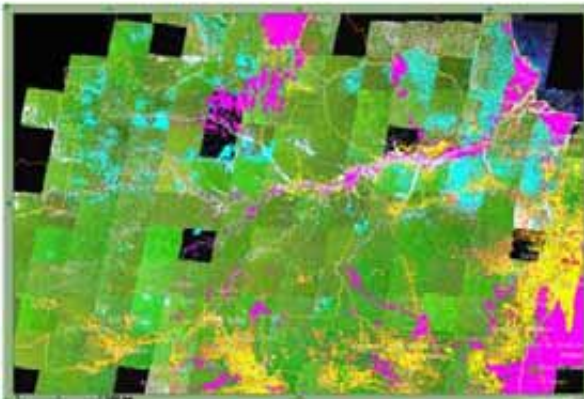
PRODES – Brazilian deforestation

Box 3.3: Example of result of the PRODES project:

Landsat satellite mosaic of year 2006 with deforestation during period 2000-2006

Brazilian Amazon window

Zoom on Mato Grosso (around Jurunea)

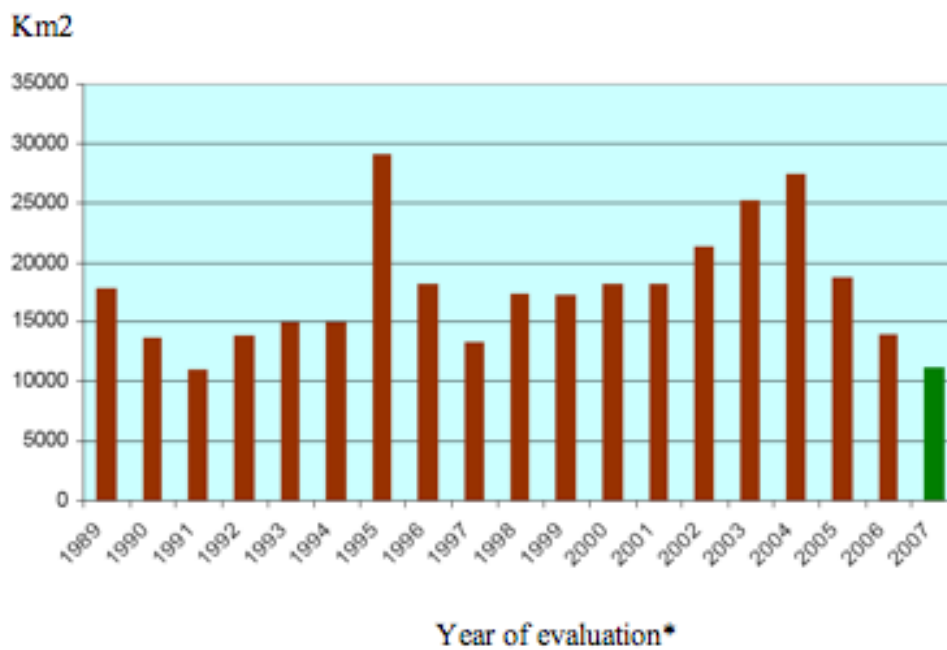


Forested areas appear in green, non-forest areas appear in violet, old deforestation (1997- 2000) in yellow and recent deforestation (from 2001) in orange-red.

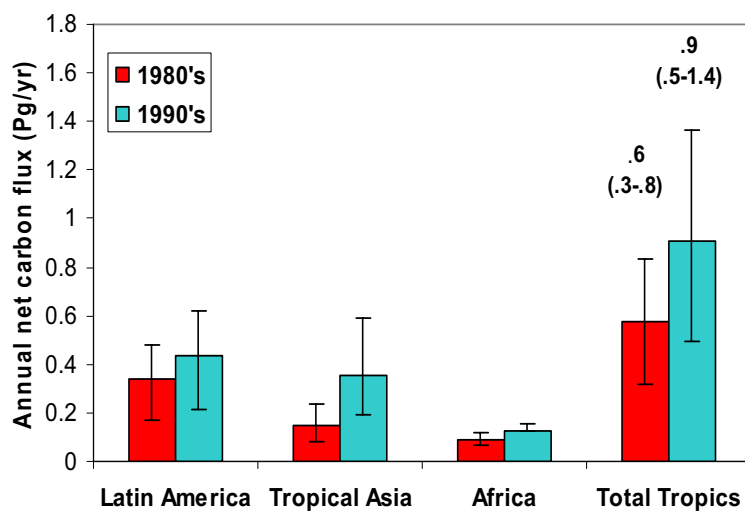


Rates of deforestation in Amazonia

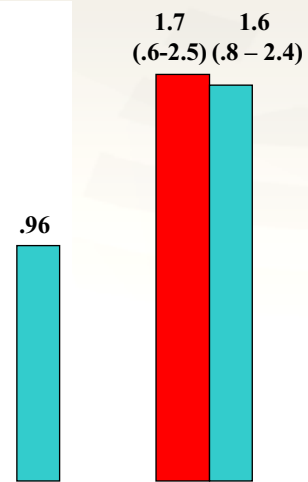
Figure 1. Annual rate of deforestation in the Brazilian Legal Amazon*



Estimated Carbon Flux from Tropical Deforestation and Regrowth for 1980s and 90s



(DeFries, et al., 2002)



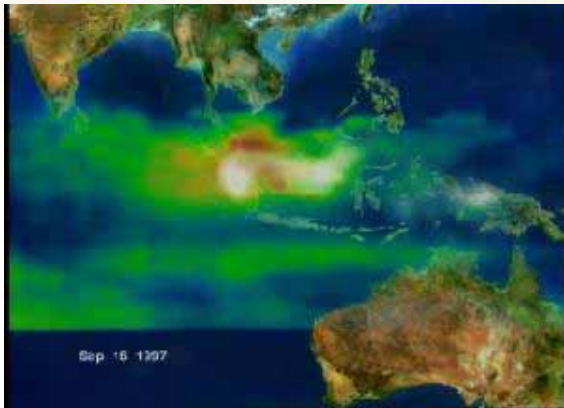
(Achar et al., 2002)

IPCC estimates based on national statistics

Estimates based on satellite observations indicate substantially lower fluxes than those based on national statistics



Tropical peatland fires in Borneo



Haze from Indonesian peat fires blankets SE Asia.

0.81 – 0.95 billion tonnes of carbon were emitted from peatland fires during 1997/98.



16th August 2005: “Smoky haze chokes Southeast Asia Again hundreds of fires burn deep into the underlying peat, spreading smoke across the region”

