



Forests and Climate Change

Emissions from LUC 1.6 GtC per year (6 Gt CO₂), but large variability and uncertainty in estimate

Fossil emissions 7.2 GtC (26 Gt CO₂)

c. 20% of CO₂ emissions

Trends in Global Forest Cover

Region	Net annual change 1980-1990 (ha/year)	Net annual change 1990-2000 (ha/year)	Net annual change 2000-2005 (ha/year)	Forest cover change (net) 1980-2005 (ha)
Africa	-2,828,000	-4,375,000	-4,040,000	-92,230,000
Asia	-872,000	-792,000	+1,003,000	-11,625,000
Europe	+242,000	+877,000	+661,000	+14,495,000
North and Central America	-1,191,000	-328,000	-333,000	-16,855,000
Oceania	-131,000	-448,000	-356,000	-7,570,000
South America	-5,173,000	-3,802,000	-4,251,000	-111,005,000
World	-9,953,000	-8,868,000	-7,317,000	-224,790,000

Overall Trends

Total Global Forest Area	3,952,026,000ha
Natural forest loss in last 25 years	375,000,000ha
Net forest loss in last 25 years	224,790,000ha
Global plantation area	150,000,000ha
Percentage loss in last 25 years	5.4%
Percentage loss in African and South America	12%

Forest Cover in Asia-Pacific Region

Net gain 2000-2005 3 million ha

Sum of total reported
National forest losses 18.5 million ha

The Importance of Forest Quality

Undisturbed forest	300 tCO ₂ e/ha
Logged forest (high density)	250 tCO ₂ /ha
Logged forest (low density)	150 tCO ₂ /ha
Plantation areas	50 tCO ₂ /ha

Data: ICRAFT 2007 study for Indonesia
Forest Climate Alliance (IFCA)

Conclusions

Paucity of accurate forest data a serious limitation

Trends fairly clear – grim with some beacons of hope

The importance of forest quality and forest degradation