Reducing Emissions from Deforestation in Developing Countries

UNFCCC Vienna Climate Change Talks

Vienna, Austria
29 August 2007

www.RainforestCoalition.org

Coalition for Rainforest Nations

Key Messages

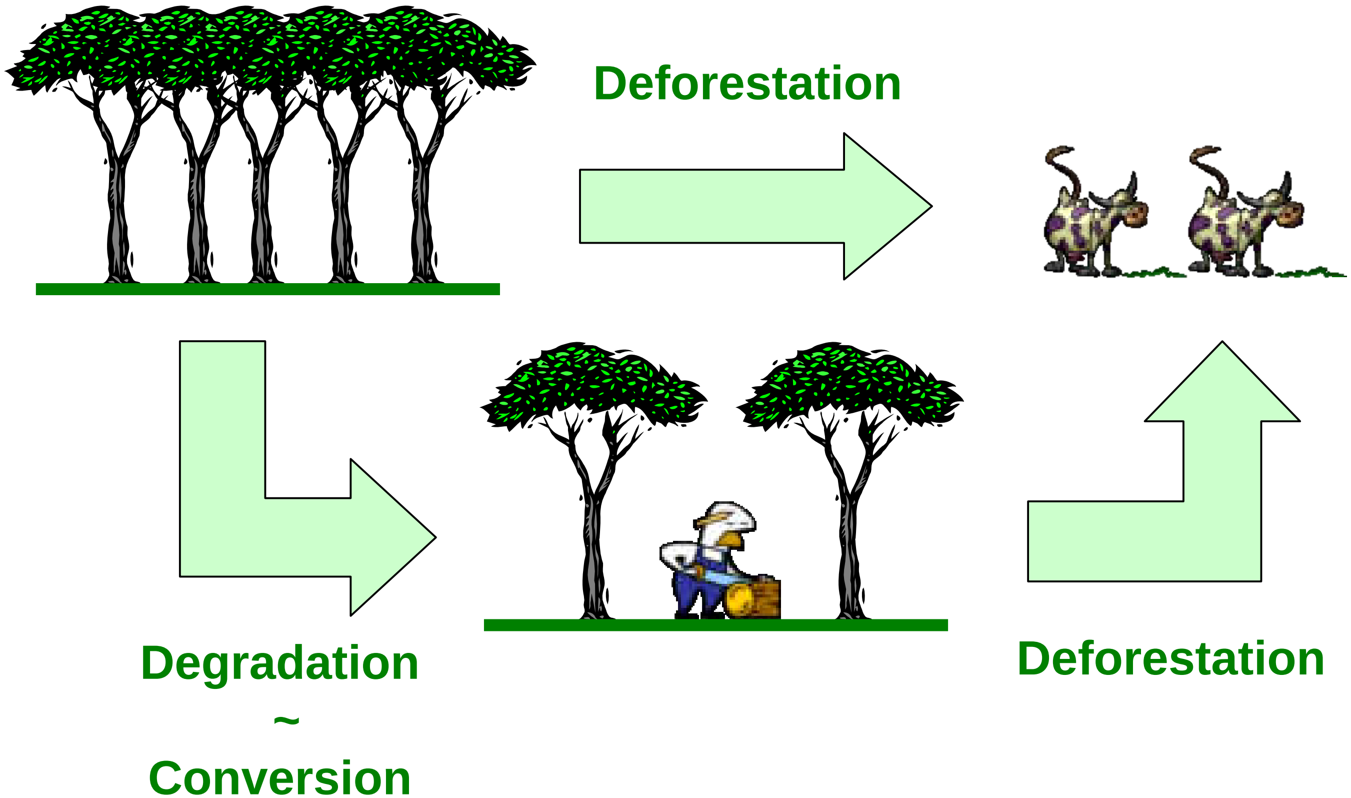
- **Deforestation:** Reducing emissions from deforestation is possible and urgently needed.
- **Sustainable Development:** Catalyze gains toward climate stability, poverty reduction, biodiversity conservation, and rural development.
- **Positive Incentives:** Leading drivers are identifiable. In most cases, **higher carbon 'incentives' will drive greater emissions** reductions from deforestation.
- **Methodologies:** IPCC methodologies are approved and already in use. Minor refinements for DC's.
- **Funding Available (20/20):** 20% of problem: 20% of solution. 20% of 'carbon' market resources would provide revenues at necessary scale: $5 - $25 billion / year.

Deforestation Drivers

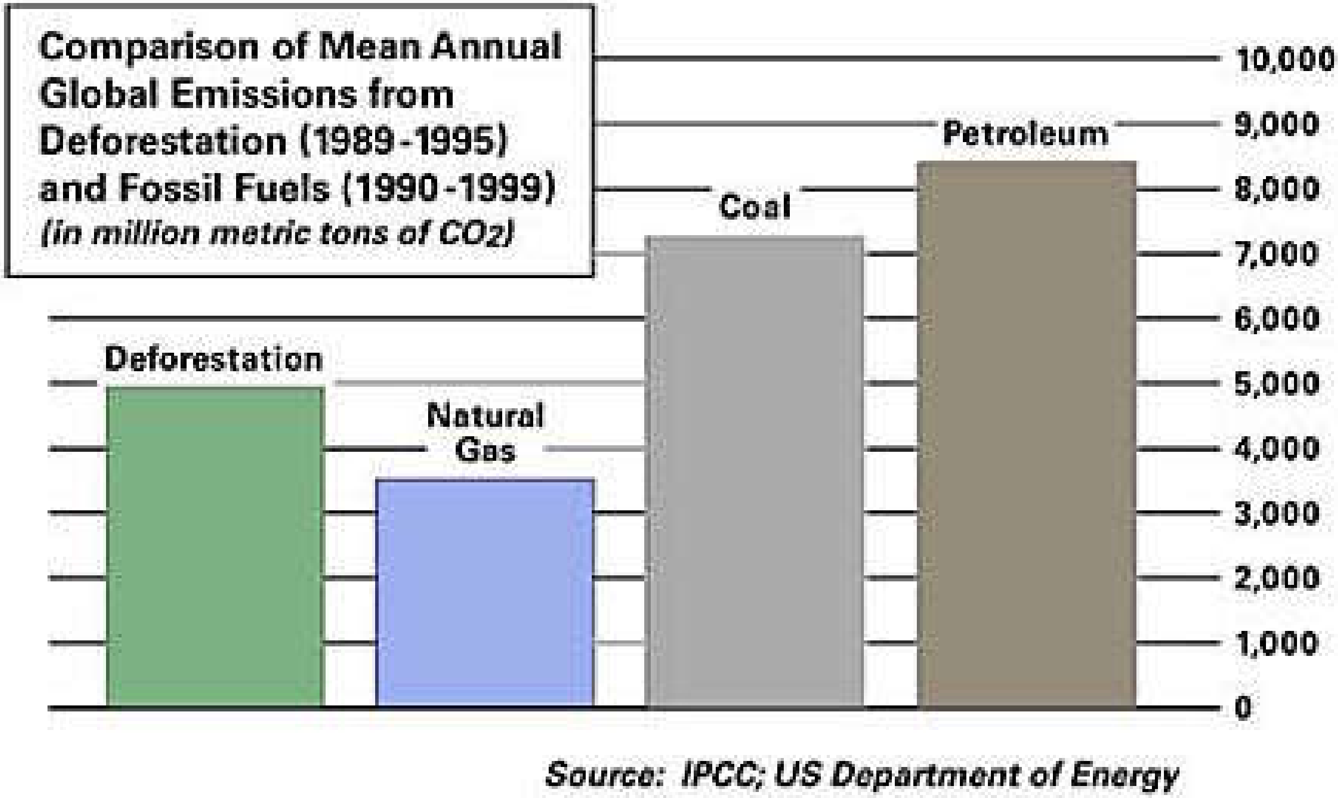
- **Foods:** Soya, Coffee, Cocoa, Sugar, Gardens, Ranching, etc.
- **Logging:** Low value exports, unsustainable practices.
- **Energy:** Fuel-wood in rural areas.
- **Development:** Roads, Mining, Power-Lines, etc.
- **Population:** Growth drives above.

Perverse Incentives!

Land Use Change



Emission Sources



IPCC: Emissions from deforestation approx. 20% of total GHG's

Emission Sources

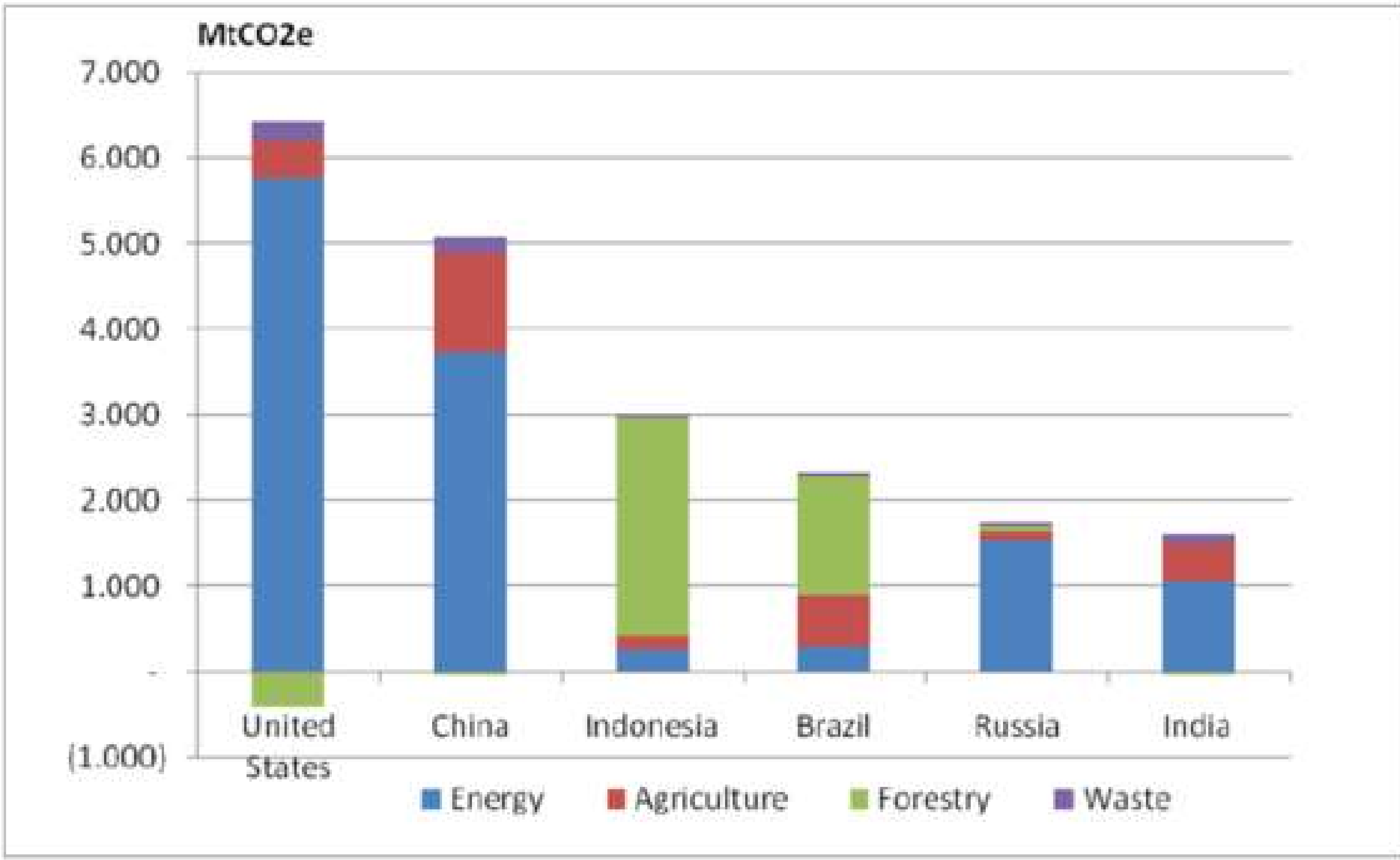


FIGURE 1. THE COMPARISON OF GHG EMISSION

The Kyoto Dilemma

- **KP Exclusion:** Kyoto excludes developing nations that reduce deforestation emissions. Kyoto **unfairly discriminates against these nations** in the world carbon markets. How can we ignore 20% of GHG?

- **Market Access:** Tropical rainforest nations deserve to be treated equally. If we reduce deforestation, fair compensation for reductions. **A ton is a ton is a ton.**

Forests:
Critical role in Long Term Solution

Rainforest Coalition

Cross Regional Partnership
(30+ Nations)

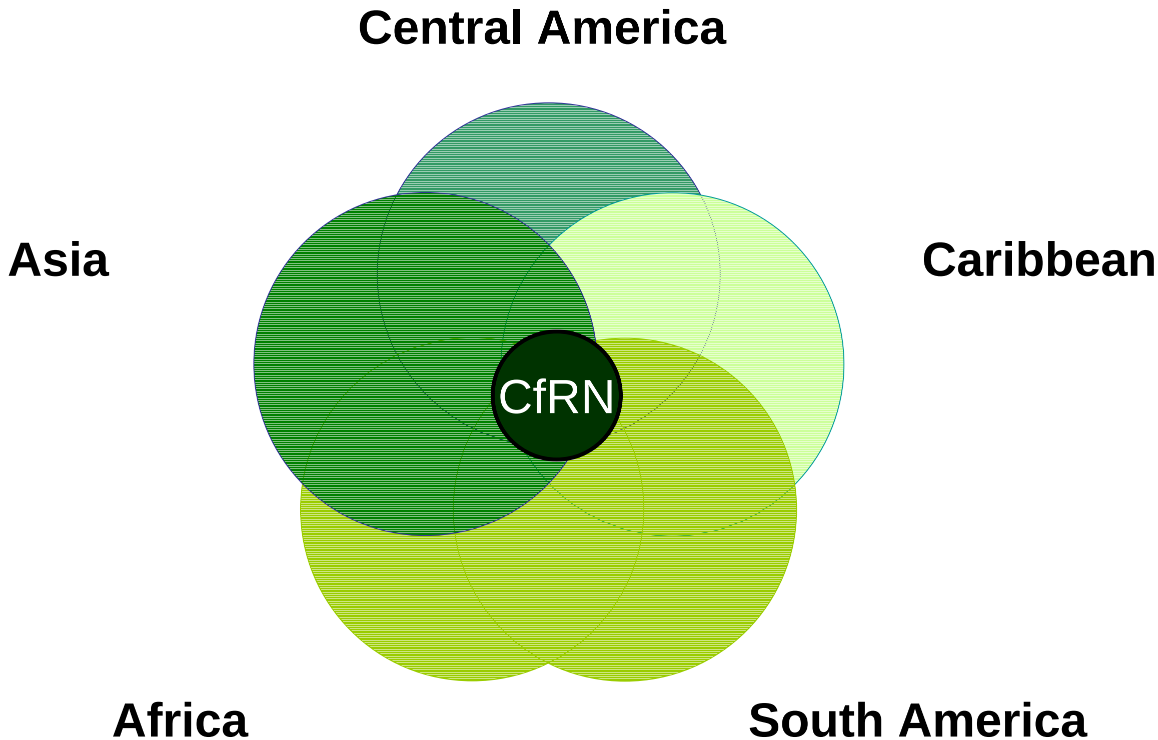
- Africa
- South Asia
- Caribbean
- Central America
- Oceania
- South America

MillenniumProject

UNFCCC

World Trade Organization

Rainforest Coalition



Policy Development & Consensus

Operate within G77 & China

Conditions

- DEEPER cuts within rich nations
- Real Benefits – climate and development
- Voluntary Initiatives
- State Sovereignty & Approaches
- Differentiated Responsibilities
- Flexible Basket of Positive Incentives
- Equitable & Fair

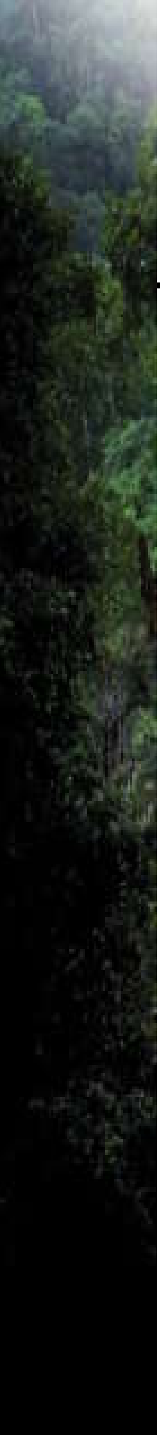
Forest Cover Change

TABLE 2.5
Ten countries with largest annual net loss in forest area 2000–2005

Country	Annual change *(1 000 ha/yr)*
Brazil	-3 103
Indonesia	-1 871
Sudan	-589
Myanmar	-466
Zambia	-445
United Republic of Tanzania	-412
Nigeria	-410
Democratic Republic of the Congo	-319
Zimbabwe	-313
Venezuela (Bolivarian Republic of)	-288
Total	-8 216

TABLE 2.6
Ten countries with largest annual net gain in forest area 2000–2005

Country	Annual change *(1 000 ha/yr)*
China	4 058
Spain	296
Viet Nam	241
United States	159
Italy	106
Chile	57
Cuba	56
Bulgaria	50
France	41
Portugal	40
Total	5 104



Forest Cover Change

TABLE 2.7
Comparison of forest area estimates in FRA 2005 and FRA 2000

Region	FRA 2005 estimates			FRA 2000 estimates		
	Forest area *(1 000 ha)*		Annual change *(1 000 ha/yr)*	Forest area *(1 000 ha)*		Annual change *(1 000 ha/yr)*
	1990	2000	1990–2000	1990	2000	1990–2000
Africa	699 361	655 613	-4 375	702 502	649 866	-5 262
Asia	574 487	566 562	-792	551 448	547 793	-364
Europe	989 320	998 091	877	1 030 475	1 039 251	881
North and Central America	710 790	707 514	-328	555 002	549 304	-570
Oceania	212 514	208 034	-448	201 271	197 623	-365
South America	890 818	852 796	-3 802	922 731	885 618	-3 711
World	**4 077 291**	**3 988 610**	**-8 868**	**3 963 429**	**3 869 455**	**-9 391**

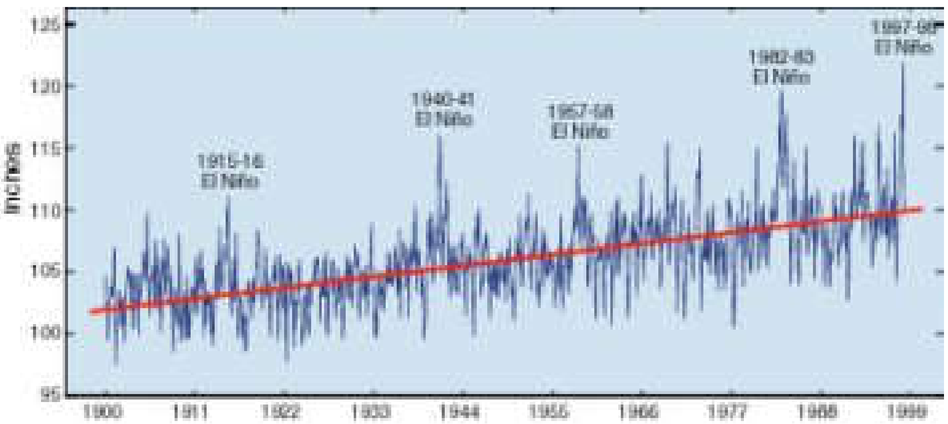
Global Impacts

One billion acres of tropical forest lost

Achard et al., 2002 Science *297:999*

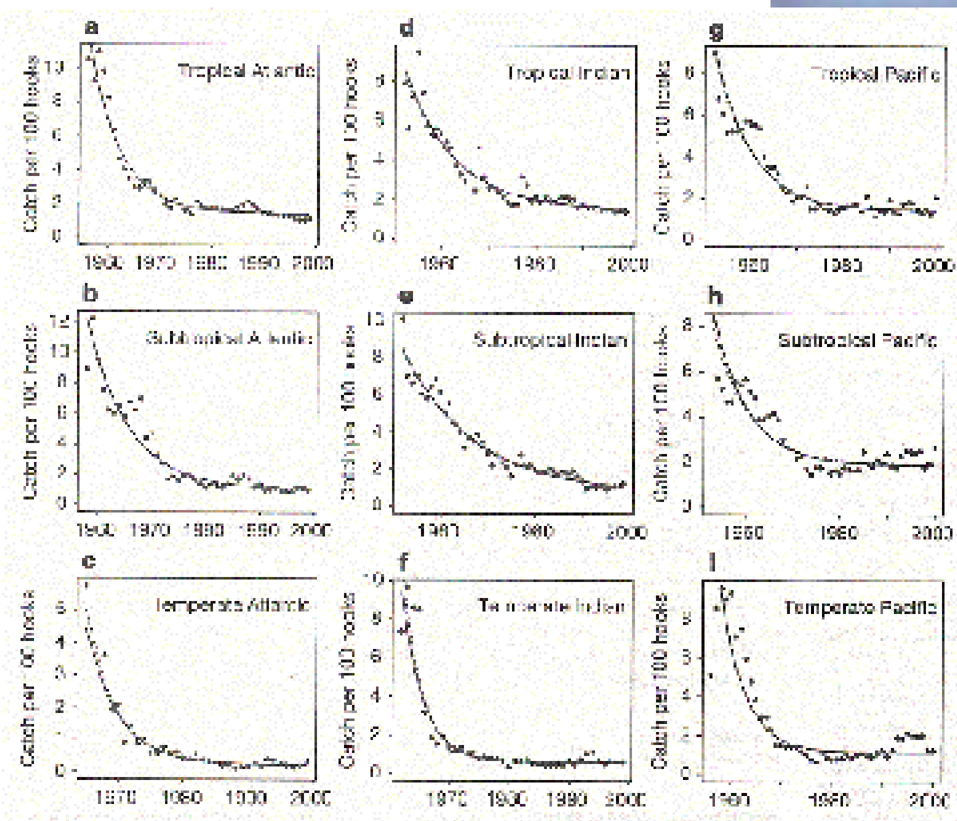
Water Quantity & Quality

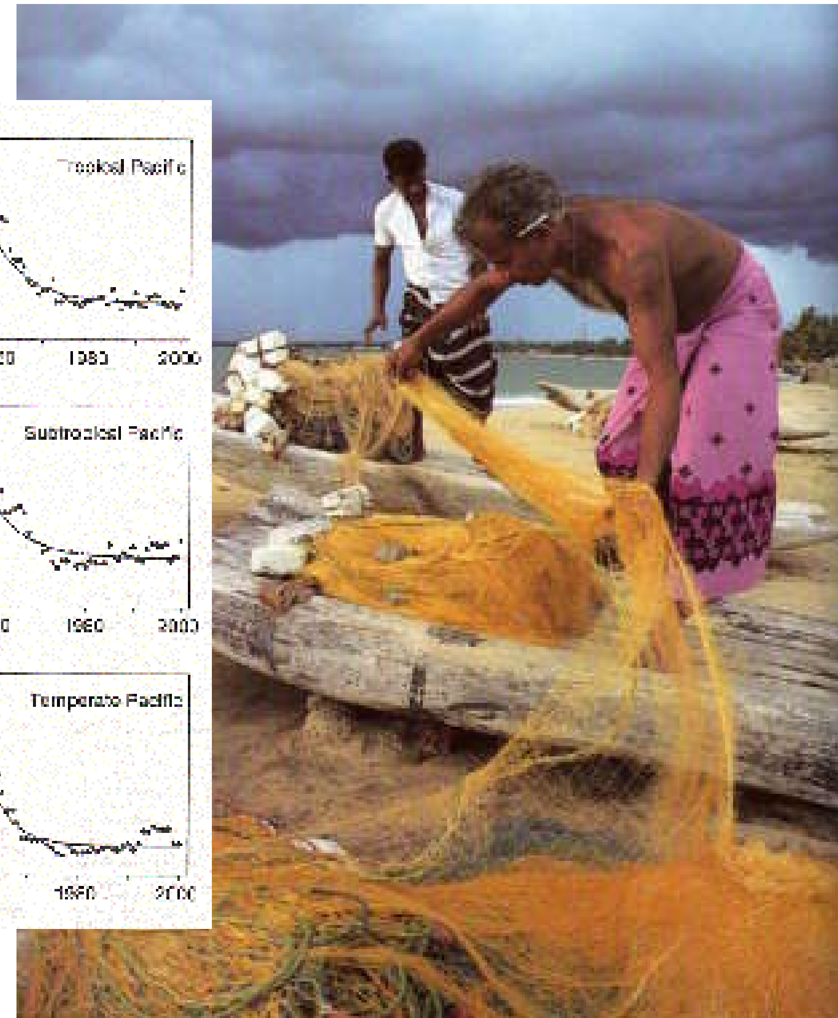
Extreme Weather Events



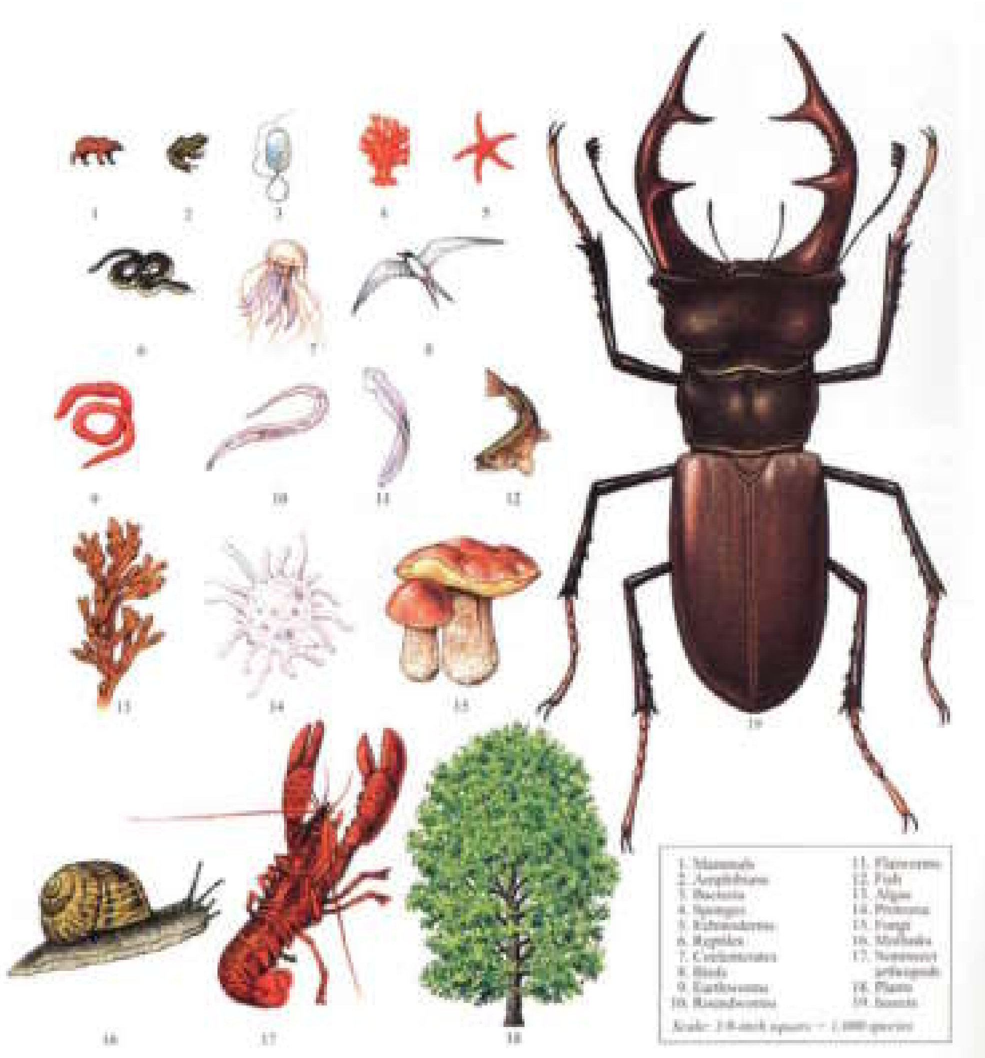
Impacts on Coral Reefs

Local & Global Fisheries





Species and Populations



Vertebrates
- 56,586 spp.
- 21% threatened

Invertebrates
- 1,190,200 spp.
- 58% threatened

Plants
- 287,655 spp.
- 69% threatened

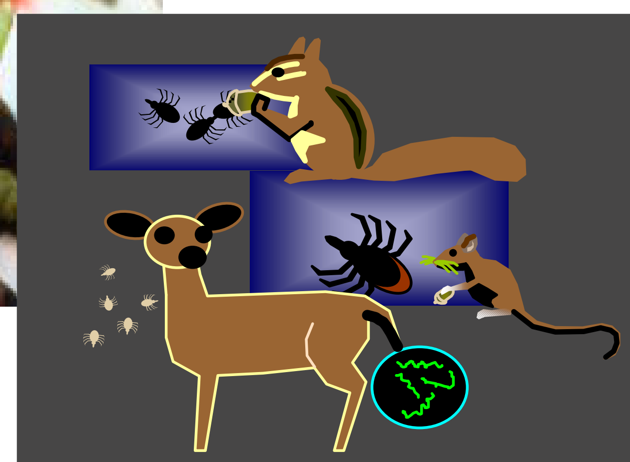
Total
- **1,534,441 spp.**
- **59% threatened**

Ecosystem Services

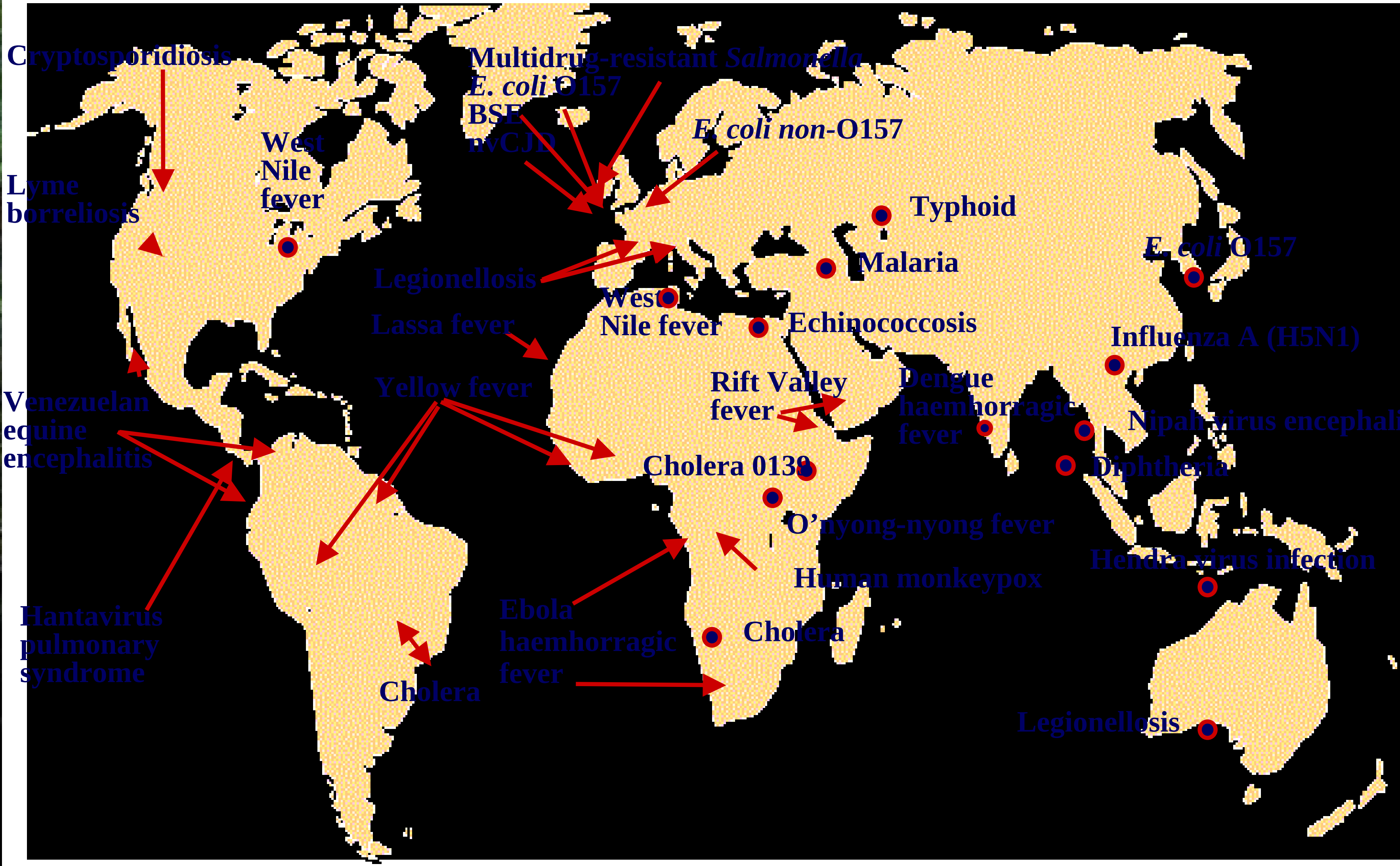
Pest Control

Pollination

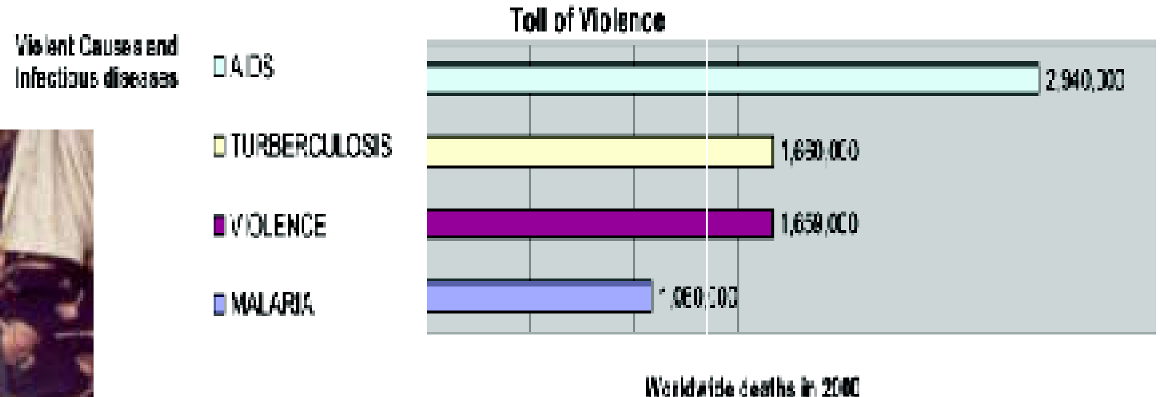
Disease Buffering



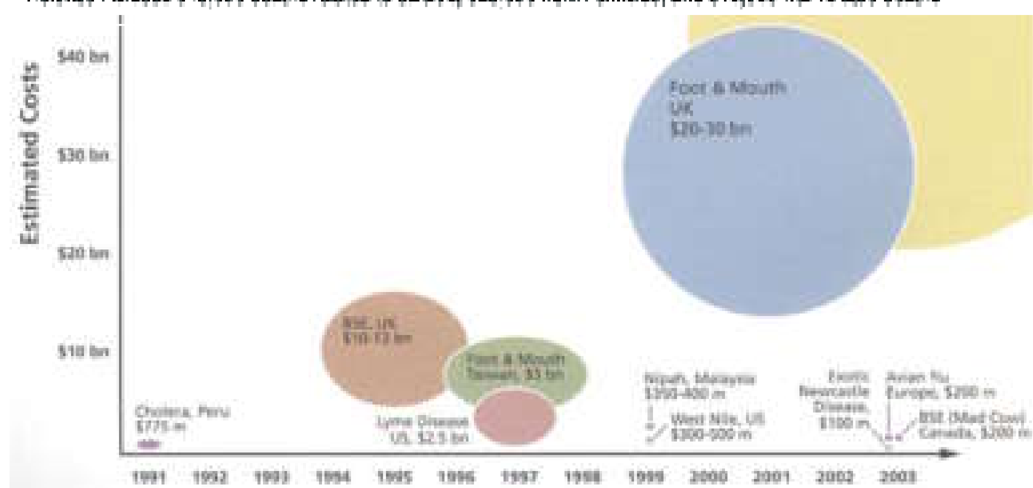
Infectious Diseases



Disease & Violence



Violence includes 815,000 deaths related to suicide, 520,000 from homicide, and 310,000 war-related deaths

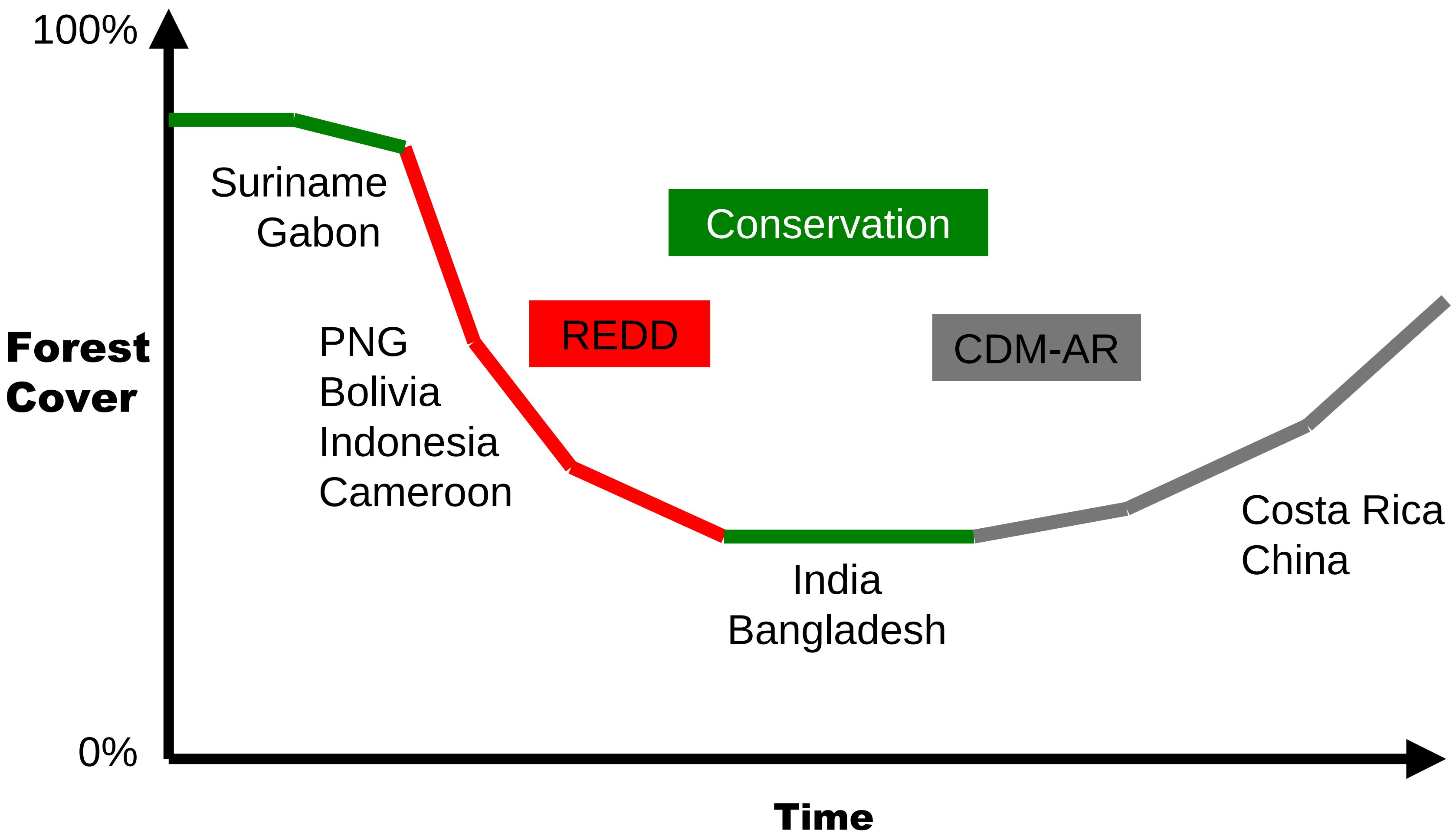


Rural Landscapes

Carbon + : Social Benefit

- **Climate:** Capture a significant source of carbon emissions currently outside frameworks.
- **Rural Development:** Significant new revenue streams to addresses poverty in rural areas with clear metrics to access effectiveness.
- **MDGs:** Underpins MDG objectives related to environment, poverty, gender equality, health, etc.
- **Ecosystems:** Great effect on marine resources, species diversity, pest control, disease buffering, pollination, etc.
- **Biodiversity:** Major biodiversity conservation benefits.
- **Soils:** Supports efforts against desertification and soil erosion.
- **Water:** Watershed protection and potable water supply.

Forest Cover Trends



Economic Context

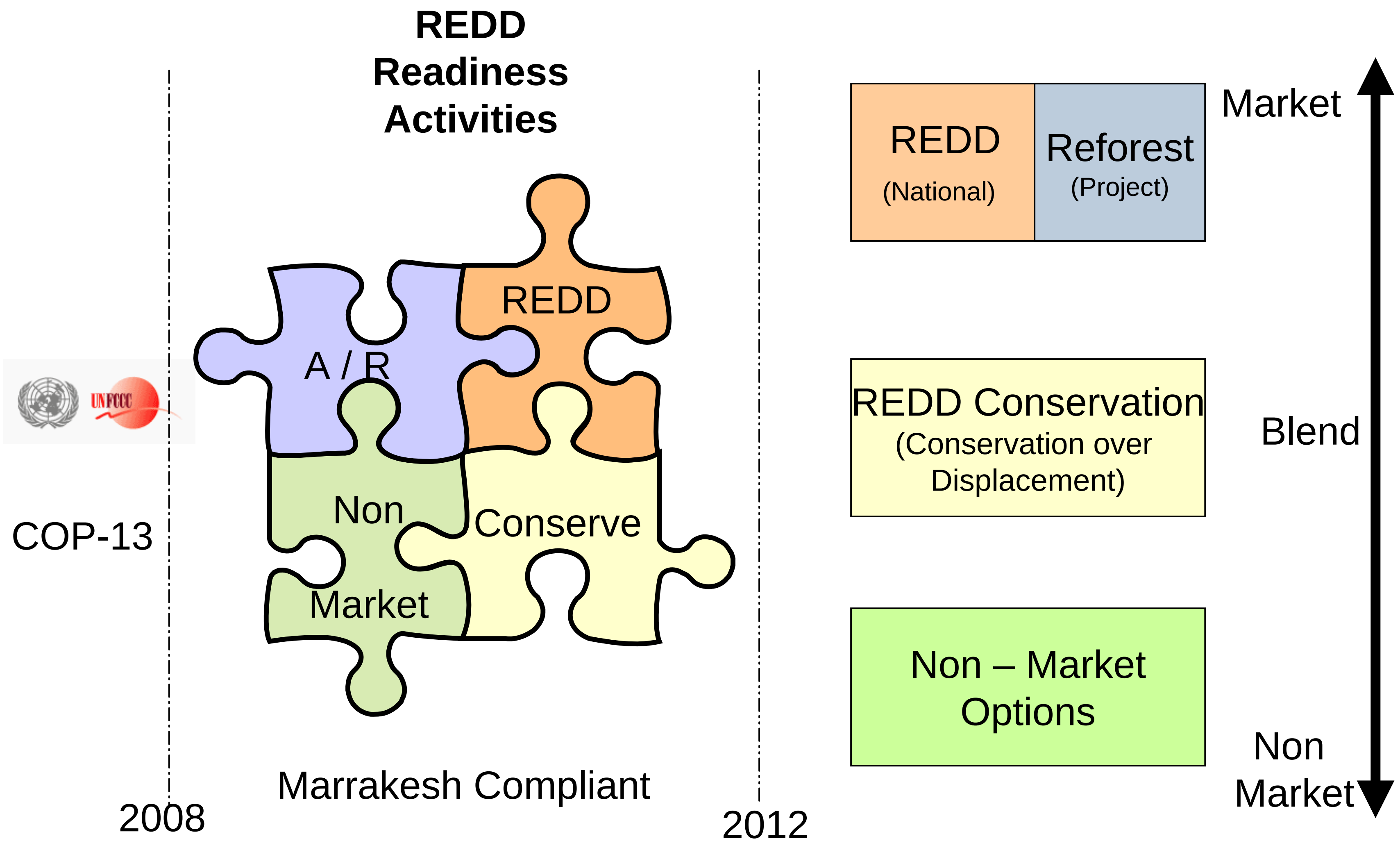
Stern Review: Estimates **$5 - $15 billion/year** to reduce global deforestation by 50% (likely underestimated.)

- **GEF:** $100 million/year in forest
- **Ecosystems:** $80 million/year
- **Certified Forest Products:** $120 million/year
- **Bio-prospecting:** $14 million/year
- **ODA Protected Areas:** $800 million/year
- **Major NGO's:** $1.2 billion/year
- **CDM (Energy):** $1 - $5 billion/year (est. for 1st CP)

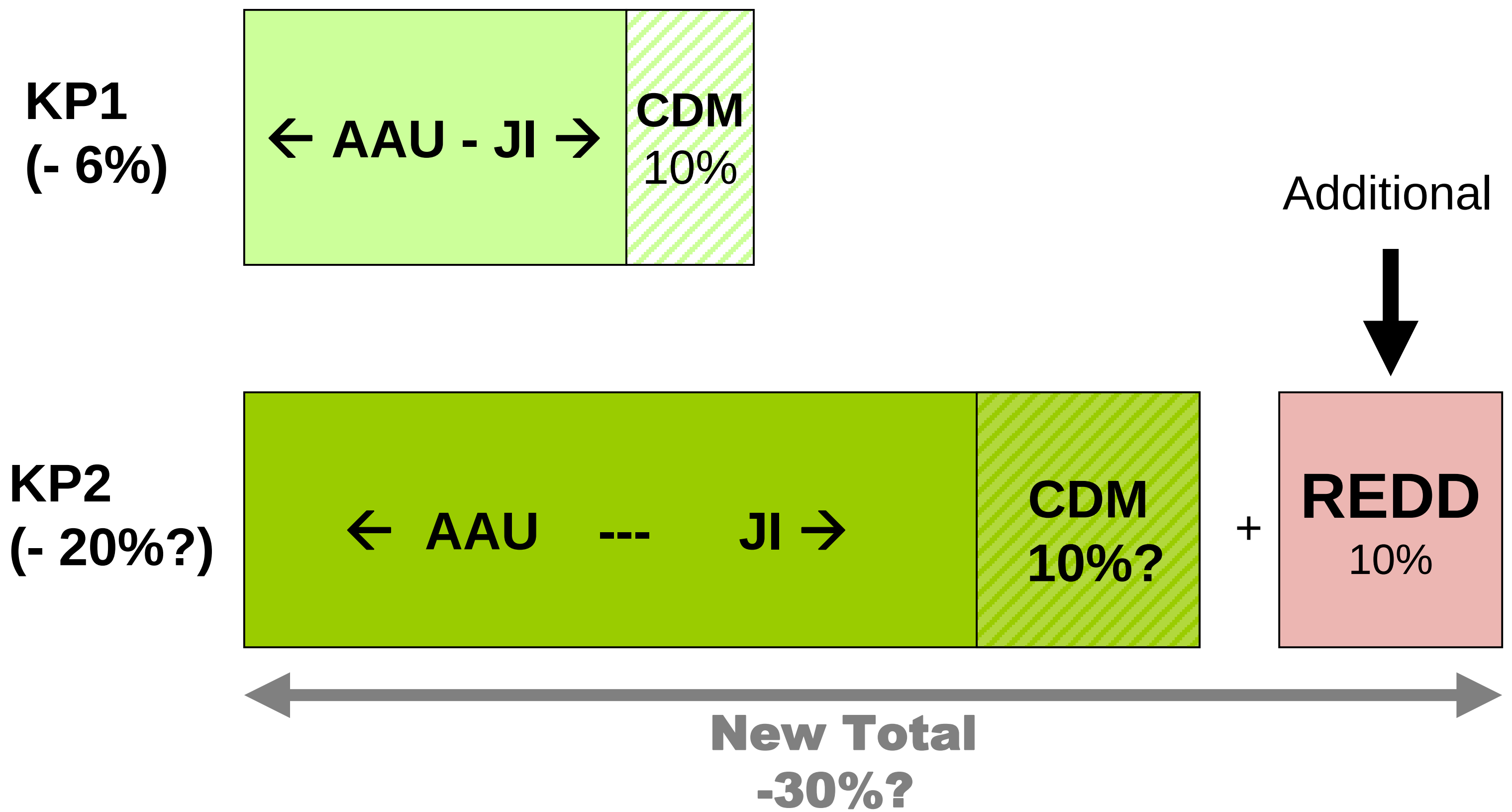
Total ODA: $80 billion/year

Carbon Market Growth:
$100 billion/year?

Basket of Instruments



Additional: Deeper Cuts



NOT CDM
NEW CREDITS = DEEPER CUTS

Bali: Global Response

Phase 1

Readiness

Capacity

Analyze
Past, present, future

Evaluate
Drivers, Opp. Costs., Data and Methods.

Institutions
Policies & Instruments

Pilot Initiatives
Test Policies & Instruments vs. drivers

US$ 250 - $500 mil.

Phase 2

Early Action

Scale Up Funding

National / Reg. Markets
IPCC Standards
Early Action: Credits
Transferable to future.

Linking Sectors
Airlines / Shipping
Tax: $15/ton = $6-$12 B/Y

Tax
Oil: $0.39/b ($10 B/Y)
AAU: $0.90/u ($10 B/Y)
Energy Subs: ($250 B/Y)

US$ 2 – US$ 5 B/Y

Phase 3

Post - 2012

Future Regimes

Voluntary & Fair
Positive Incentives
Cut Process Hurdles

Proportional
20% of Resources

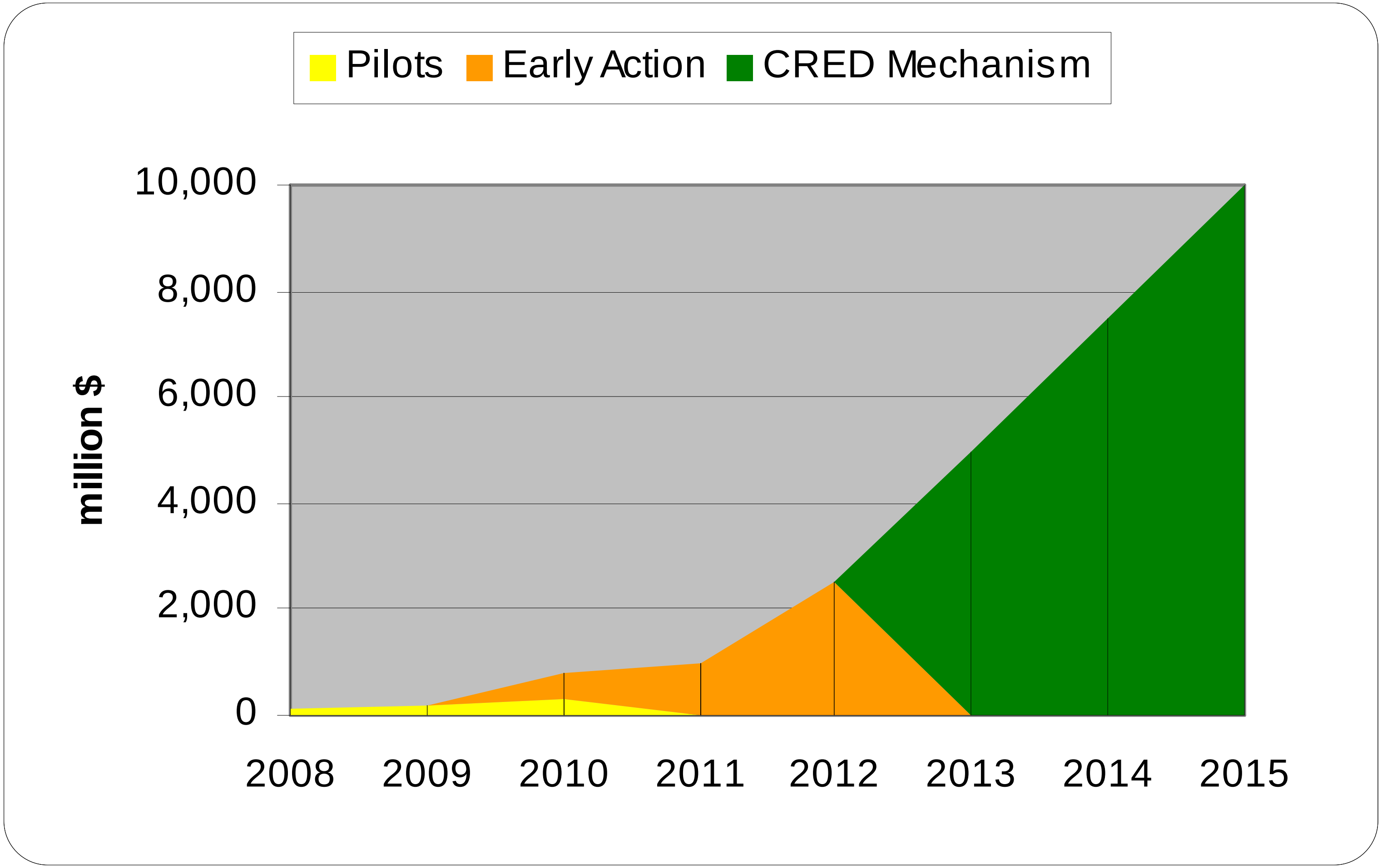
Fungible
Equal Value for Credits

Balanced
Supply = Demand

US$ 10–US$ 25 B/Y

2008 — 2010 — 2012+

Scaling Up



Pilots
Early Action
CRED Mechanism
10,000
8,000
6,000
4,000
2,000
0
million $
2008
2009
2010
2011
2012
2013
2014
2015

Bali: Key Messages

- **Methodologies:** Immediately refine application of IPCC GPG's (Experts Group), consider conservation, expand and simplify A/R.
- **Readiness (2008-2009):** Build capacity. Assess drivers of deforestation – past, present, future. Evaluate policy tools. "Pilot" policies and instruments.
- **Early Action (2009-2012):** Scale Up. Facilitate funding flows. Standardize methods. Harness Voluntary Markets.
- **Sustainable Development Post-2012:** Traditional monies not sustained, not adequate. Countries need certainty – at scale, predictable, sustainable.

Milestones

- **COP-11 / COP-MOP-1 (28 Nov – 9 Dec 2005)**
  - Started 2-Year Process
- **Workshop I (30 Aug - 1 Sept 2006)**
  - Focus: Science, Tech. & Methods
- **COP-12 / COP-MOP-2 (6 – 17 Nov 2006)**
  - Workshop: Policy Approaches & Positive Incentives
- **Submission of Views (23 Feb 2007)**
- **Workshop II (7-9 Mar. 2007)**
  - Focus: Policy Approaches and Positive Incentives
- **SBSTA & SBI #26 (7-18 May 2007)**
  - Consider Process Forward
  - Draft Recommendations
- **COP-13 / COP-MOP-3 (3-14 December 2007)**
- **SBSTA #29 (May 2009) → COP-15 (Dec 2009)**