

**Avoided Deforestation with Sustainable
Benefits: *A Simple Way to Reduce
Carbon Emissions from Deforestation
and Degradation (REDD)***

**IISD side event on Market Mechanisms for
Sustainable Development: Achieving Benefits
for Developing Countries post 2012**

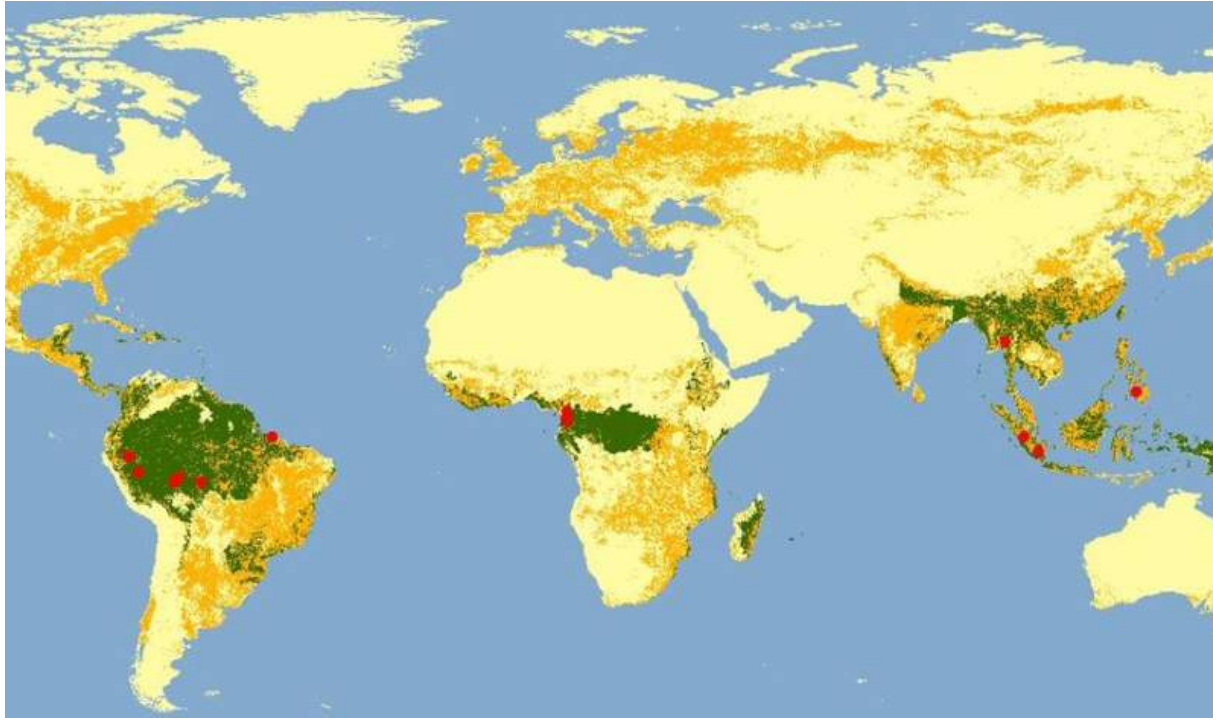
**Meeting of the Sessional Period of the
Subsidiary Bodies to the UNFCCC, Bonn,
Germany, May 16, 2007**

Brent Swallow

ASB Consortium and World Agroforestry Centre

Avoided Deforestation with Sustainable Benefits

- Discussion since Montreal (Dec 05)
- ICRAF Submission: Mar 07 (before Cairns)
- Based on extensive research across humid tropics (Brazil, Peru, Cameroon, Thailand, Indonesia and the Philippines) by the ASB consortium.



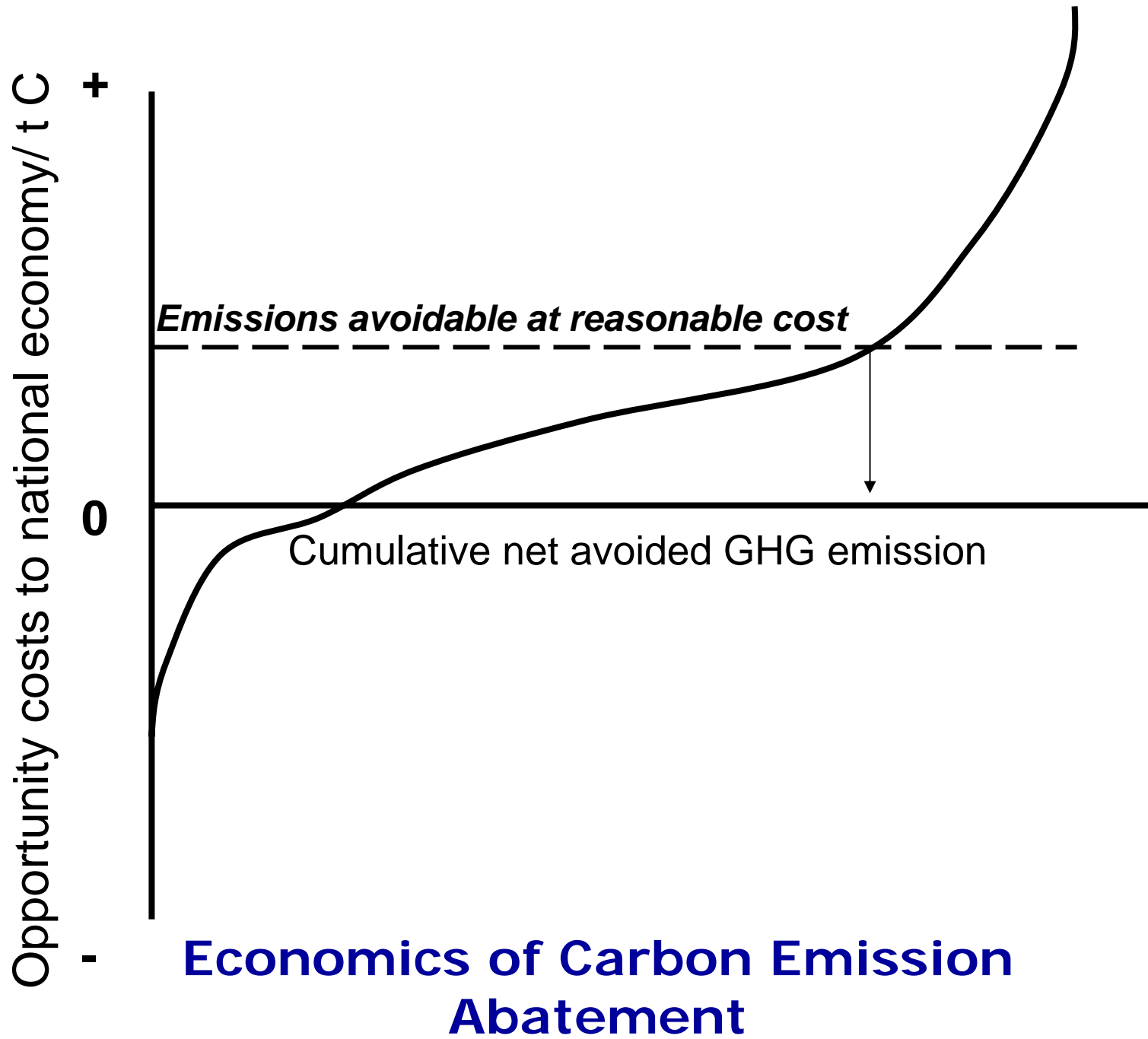
Good reasons why REDD isn't in the CDM

- **Arbitrary national definitions of 'forest'**
- **Project approach requires great attention to permanence, leakage & additionality – near impossible for REDD**
- **Easier to monitor carbon stocks and attribute changes to project activities on re-forested degraded lands**
- **60% uncertainty on country-wide carbon stocks according to IPCC 2006**
- **Much deforestation is planned – partial avoided deforestation difficult to implement at the project level.**

Elements of a REDD mechanism: Avoided deforestation with sustainable benefits

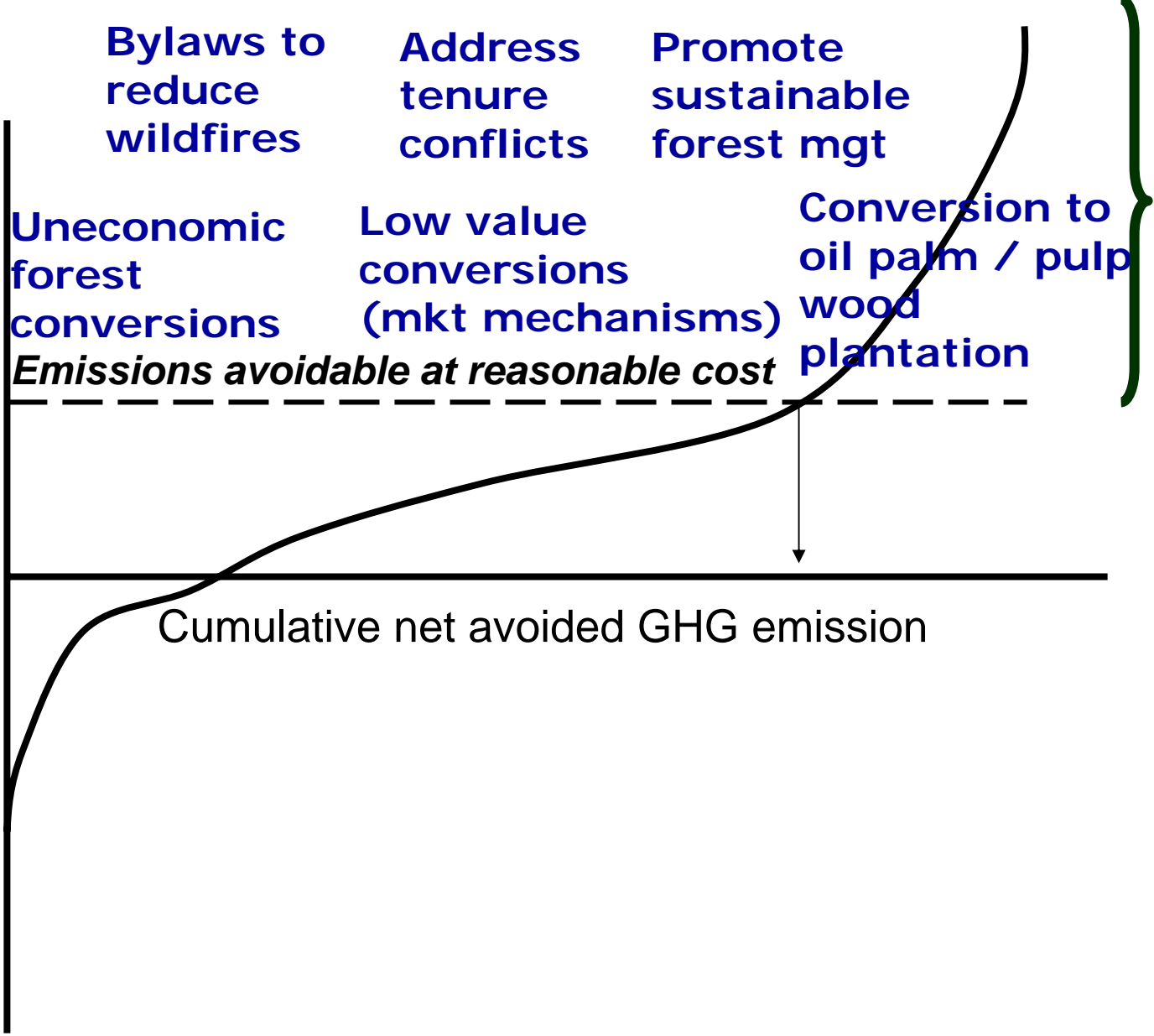
- Annual national accounts of carbon stocks following IPCC (2006) guidelines for Annex 1.
- National accountability with improved methods & data
- National pgms based on accurate assessment of:
 - (1) economics of conservation, deforestation & reforestation
 - (2) tradeoffs of economic development, carbon & other ecosystem services
 - (3) potential of a range of policy instruments, including markets





Opportunity costs to national economy/ t C

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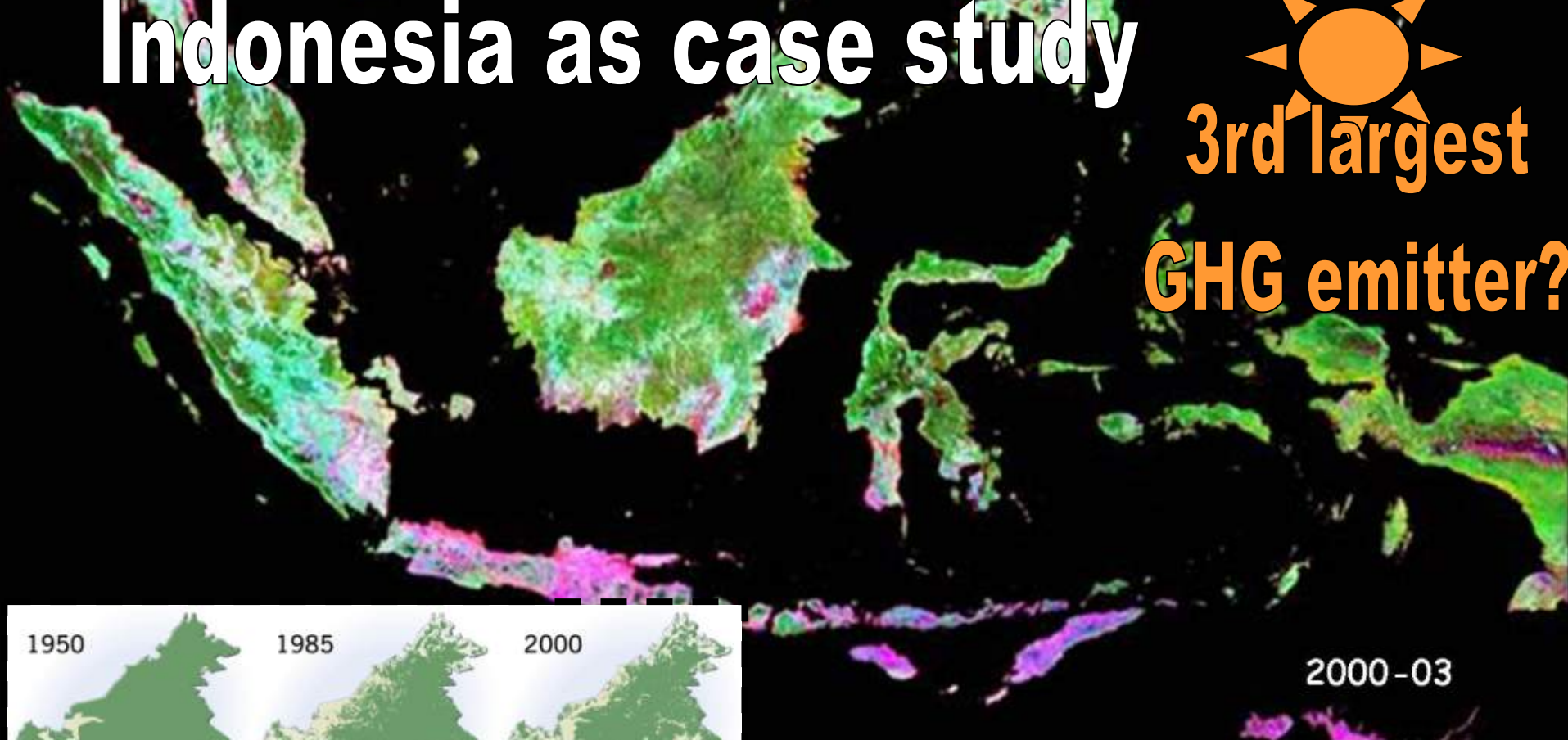
Economics of Carbon Emission Abatement

Indonesia as case study

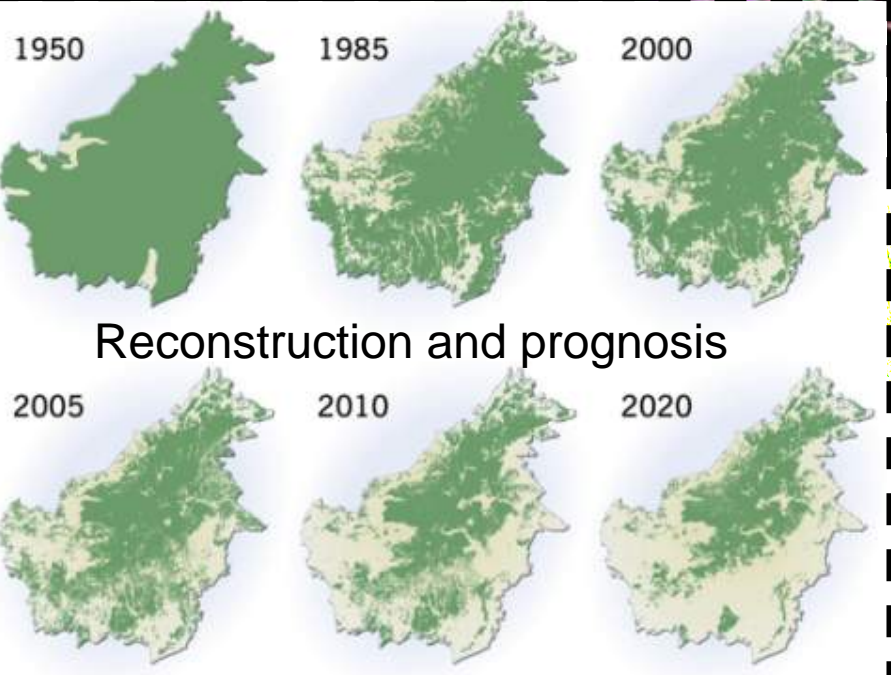


3rd largest

GHG emitter?

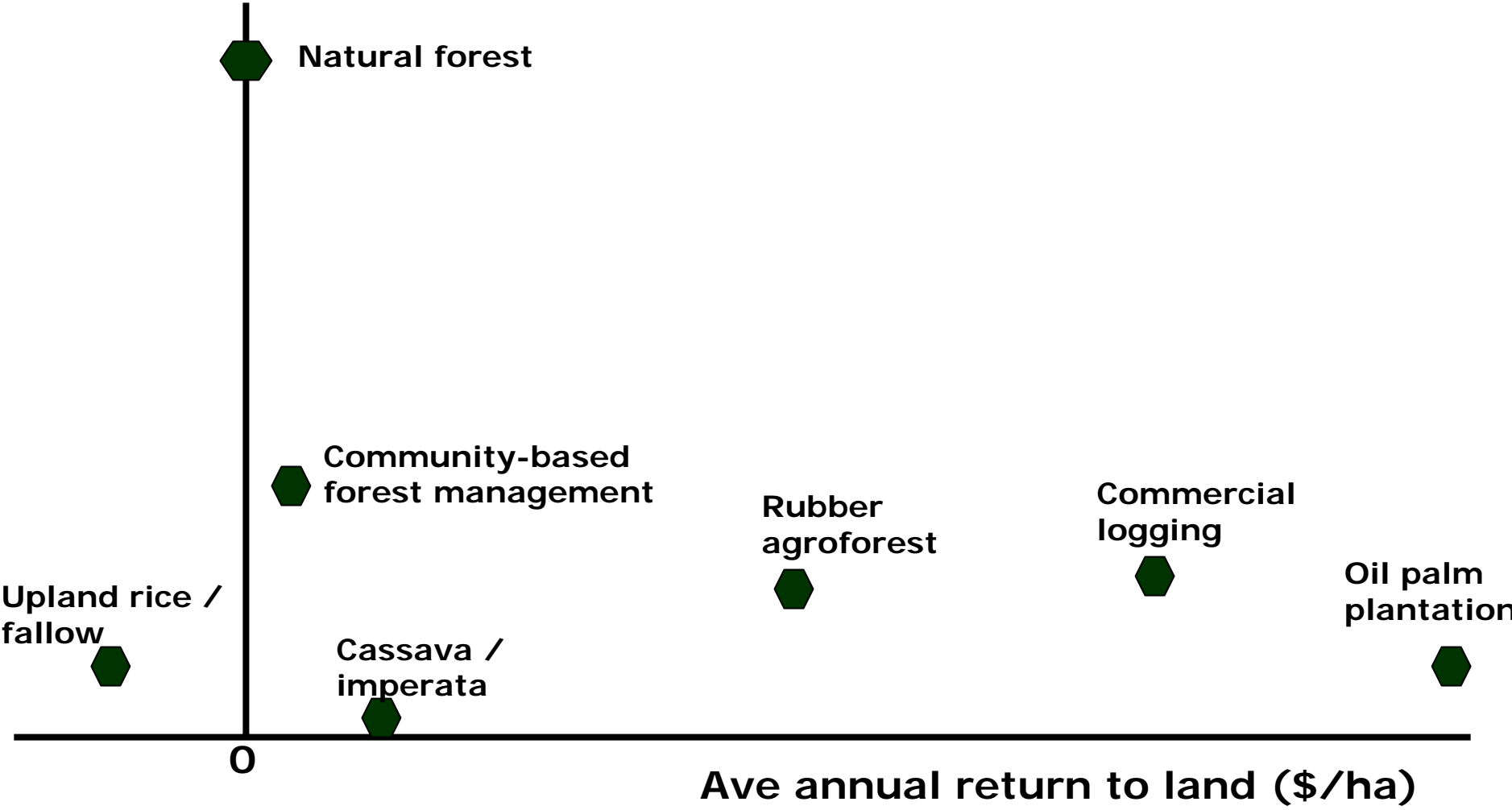


2000-03



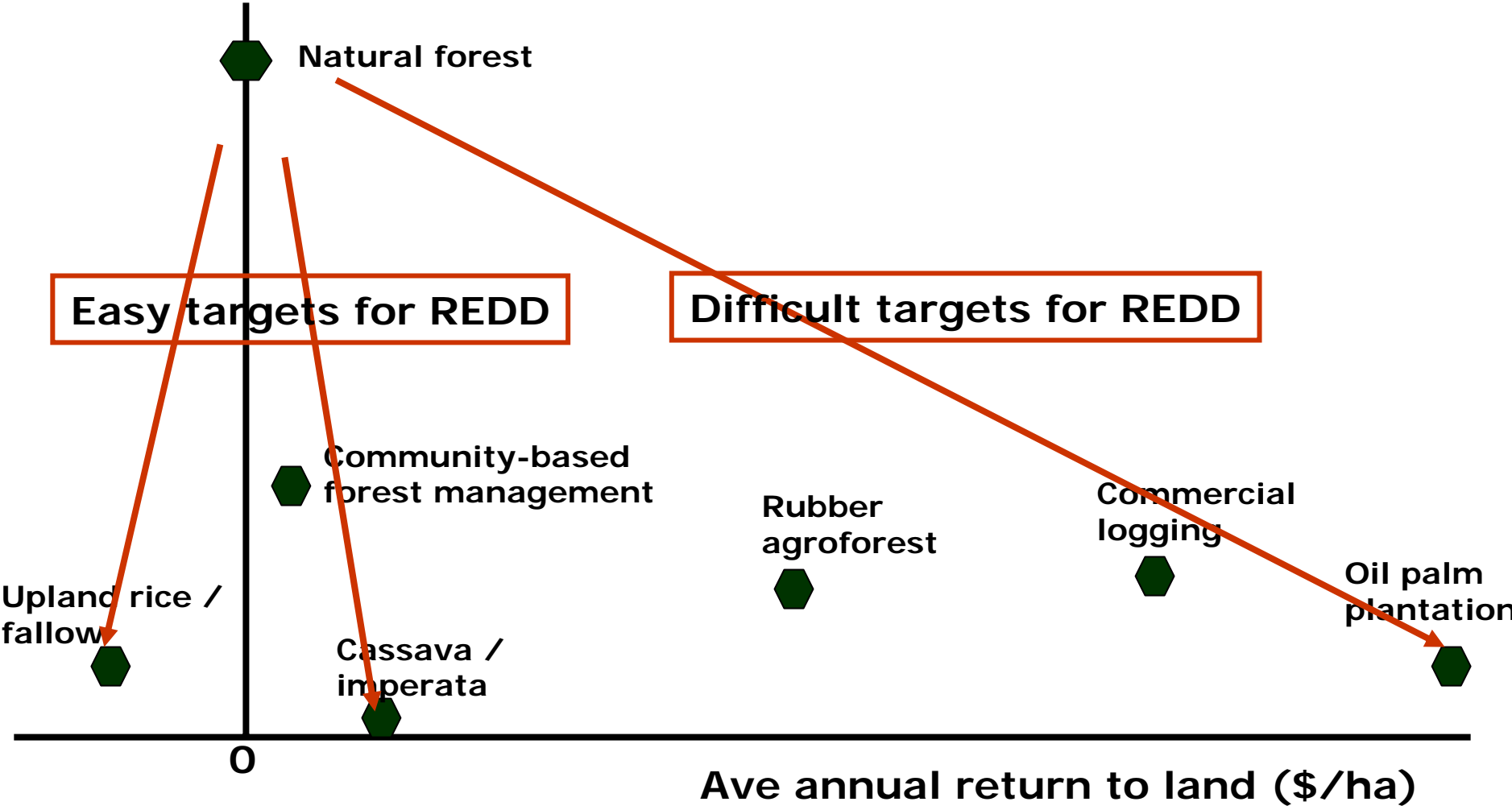
ASB results from Jambi, Indonesia

Time averaged
Carbon stock
(tonnes / ha)



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Easy targets for REDD

Difficult targets for REDD

Natural forest

Community-based forest management

Rubber agroforest

Commercial logging

Oil palm plantation

Upland rice / fallow

Cassava / imperata

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Ave annual return to land (\$/ha)

Reduced Peatland Conversion: another easy target?

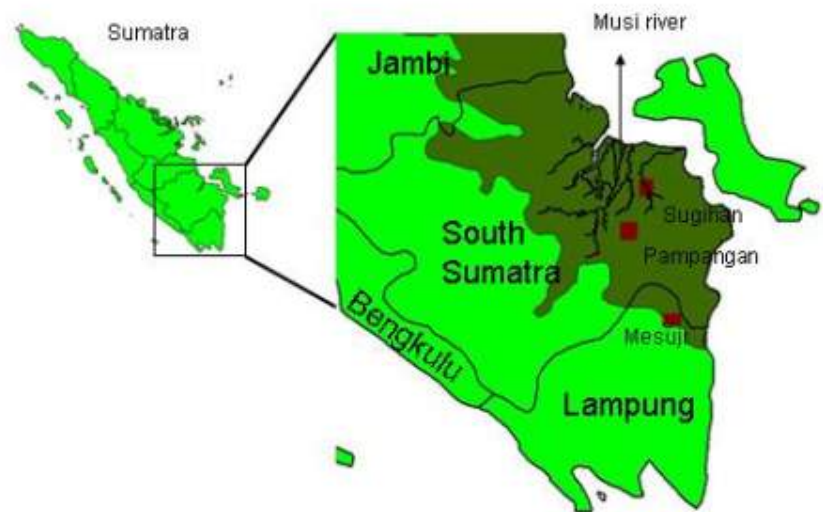
In 1997/1998 fire episode, peatland fires accounted for :

15% of the burnt area

60% of the smoke/haze

76% of carbon emissions

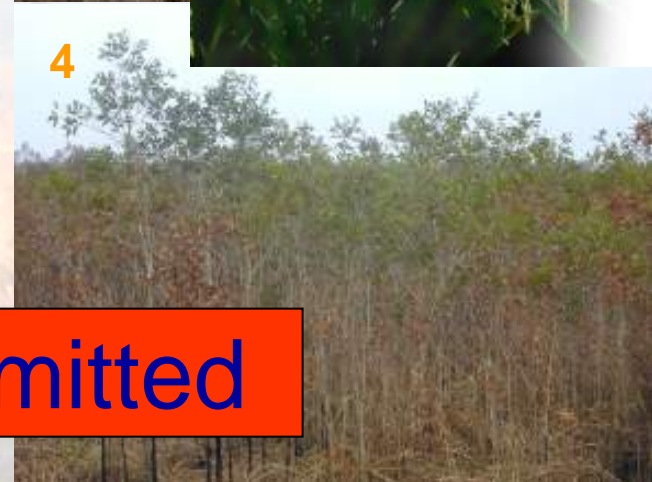
from Indonesian fir



Yes: Reduce incentives for Sonor

In years with long dry seasons, swamp forest is burnt and planted to rice. Yields of 1.5 – 2 t/ha.

Fallow regrowth is mostly gelam (*Melaleuca quinque-*
nervia, Paper bark or Cajuput).



Local income: 0.11 \$/ t CO₂ emitted

Main Points

- **20% of emissions due to loss of forests and peatlands must be brought into climate change mechanisms.**
- **REDD with sustainable benefits requires both national and sub-national scale approaches.**
- **REDD could subsume AFOLU from CDM.**
- **Significant and urgent need for support for national measurement and avoided deforestation with sustainable benefits.**