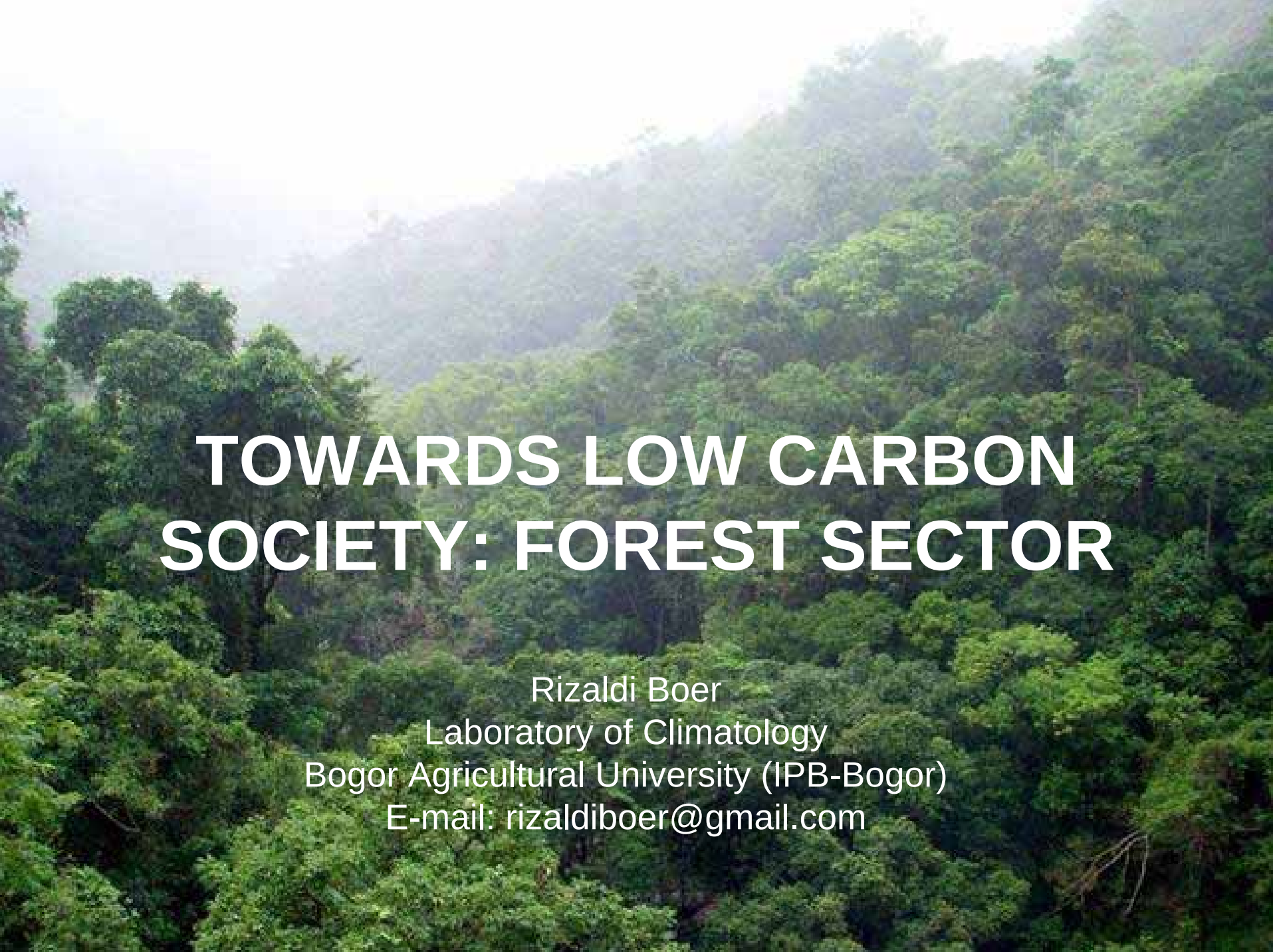
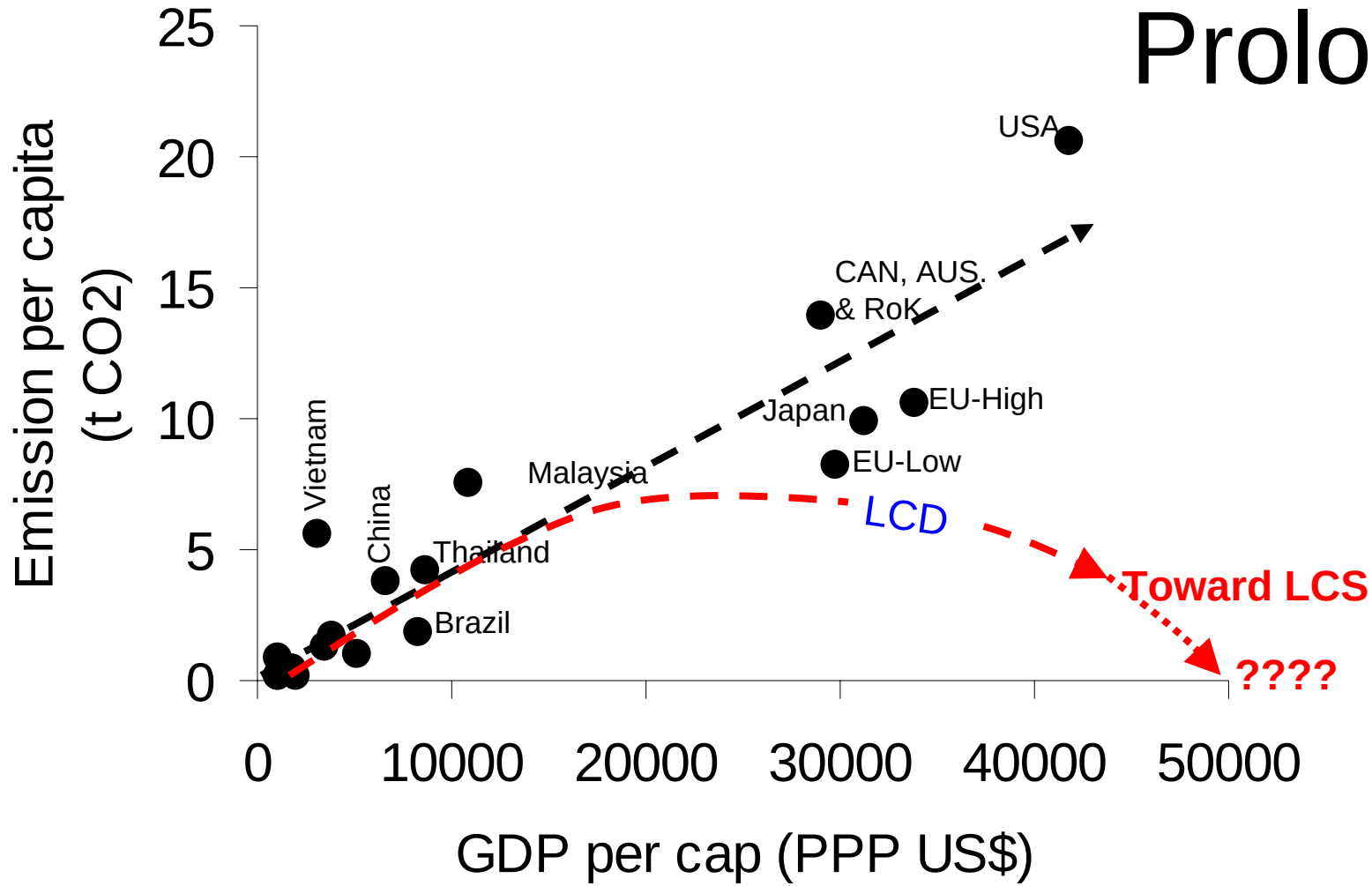


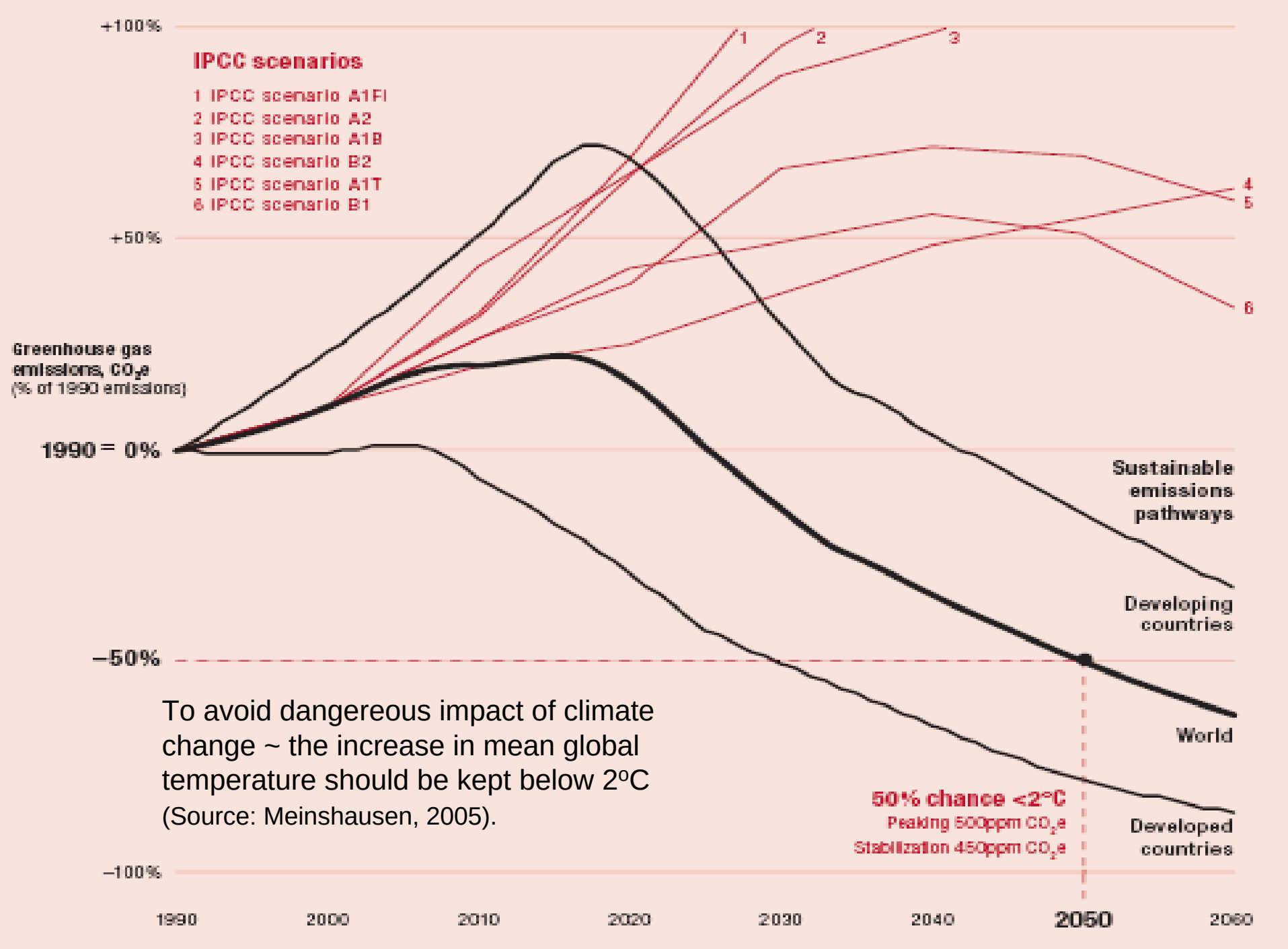
TOWARDS LOW CARBON SOCIETY: FOREST SECTOR

Rizaldi Boer
Laboratory of Climatology
Bogor Agricultural University (IPB-Bogor)
E-mail: rizaldiboer@gmail.com

Prolog

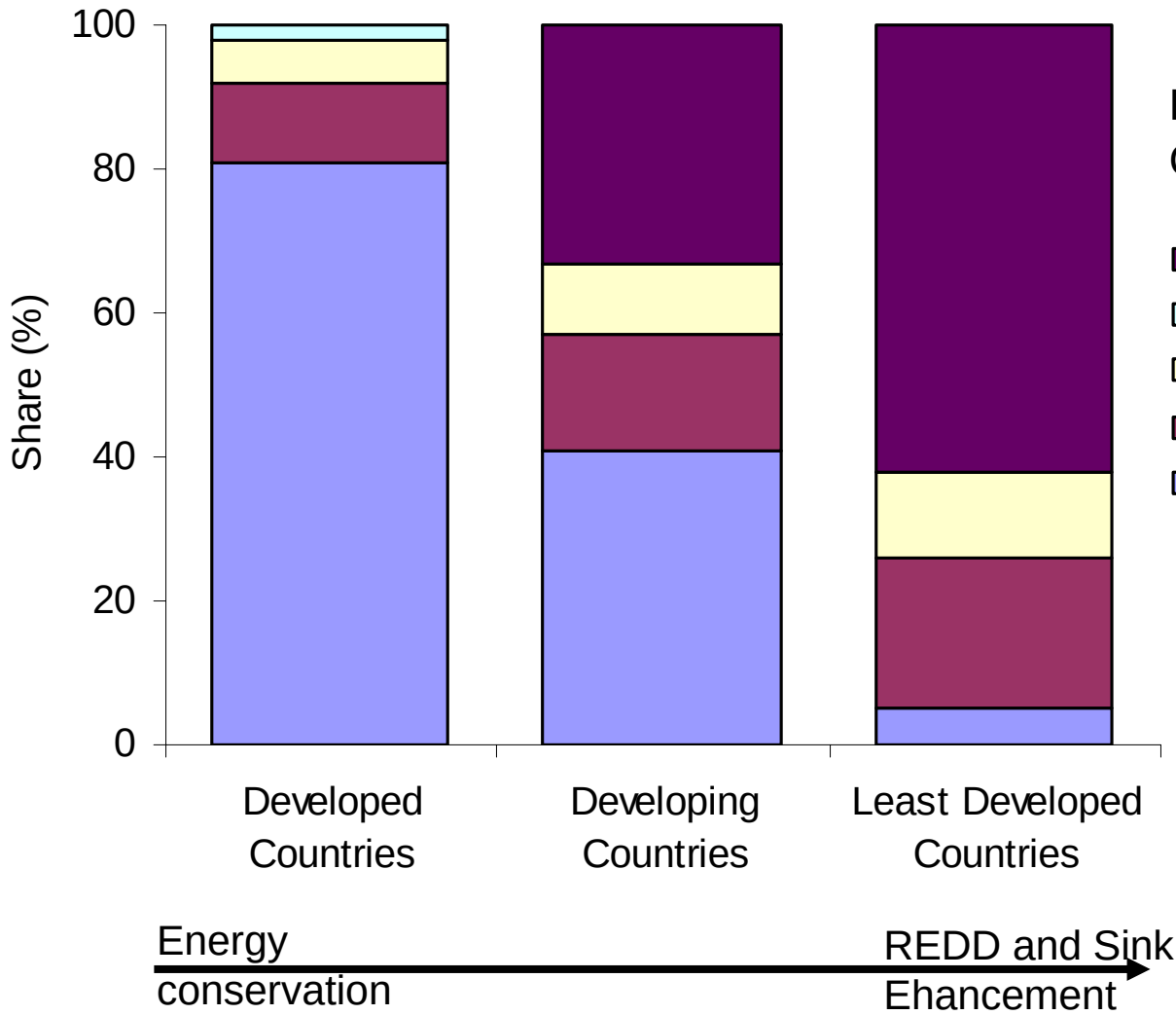


- Emission per capita has linear relationship with GDP/Cap.
- Can we maintain our emission low when level of our wealth improved?



To avoid dangereous impact of climate change ~ the increase in mean global temperature should be kept below 2ºC (Source: Meinshausen, 2005).

Global GHG Emission

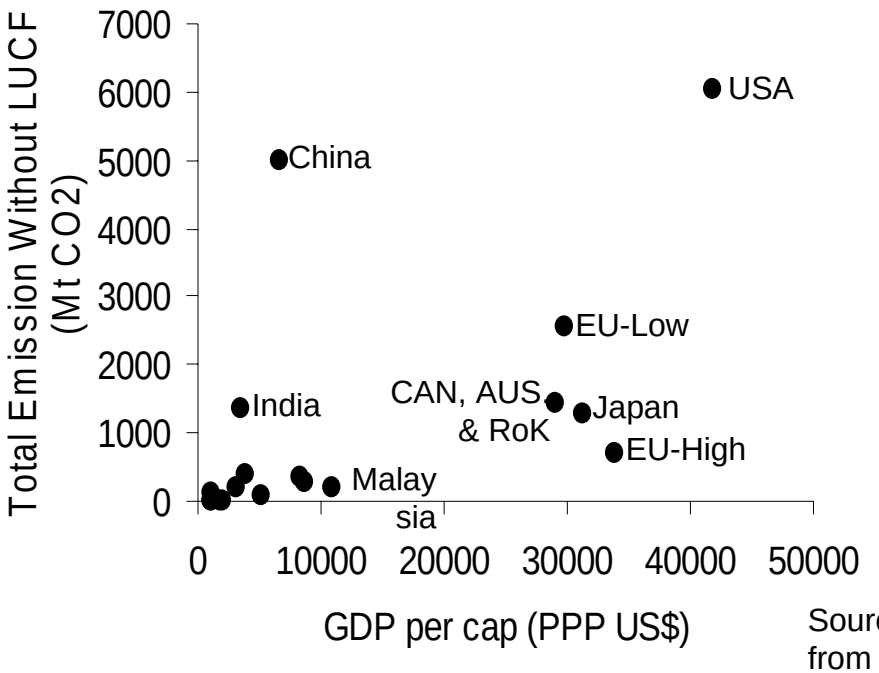


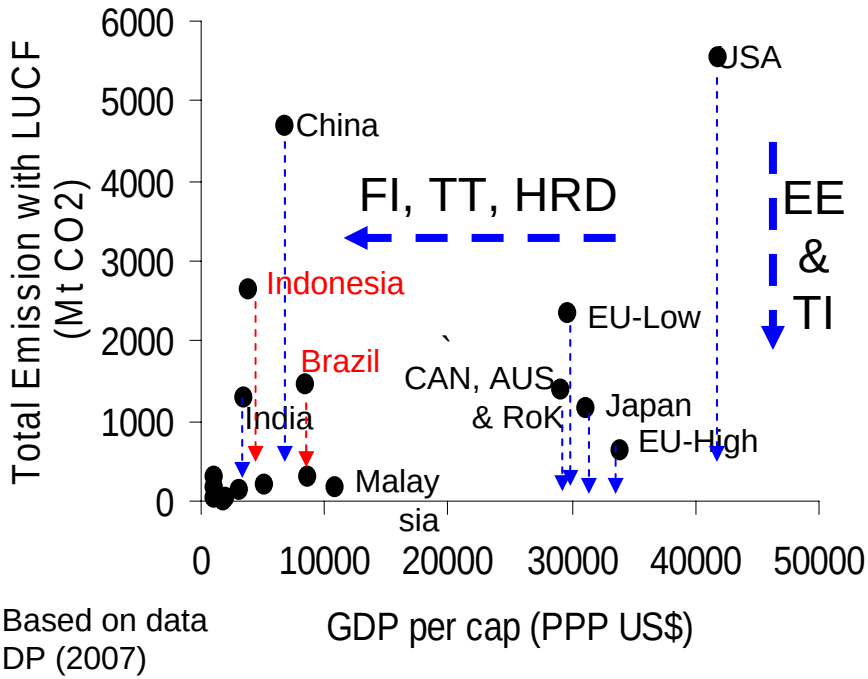
Redrawn from WRI and CAIT data of 2000:

- CO2 LULUCF
- F gases
- N2O
- CH4
- CO2 from fossil fuel

The less developed a country the higher emission rate from LULUCF, the more developed a country the higher emission rate from the use of fossil fuels

Indonesia Emission Compare with Other Countries

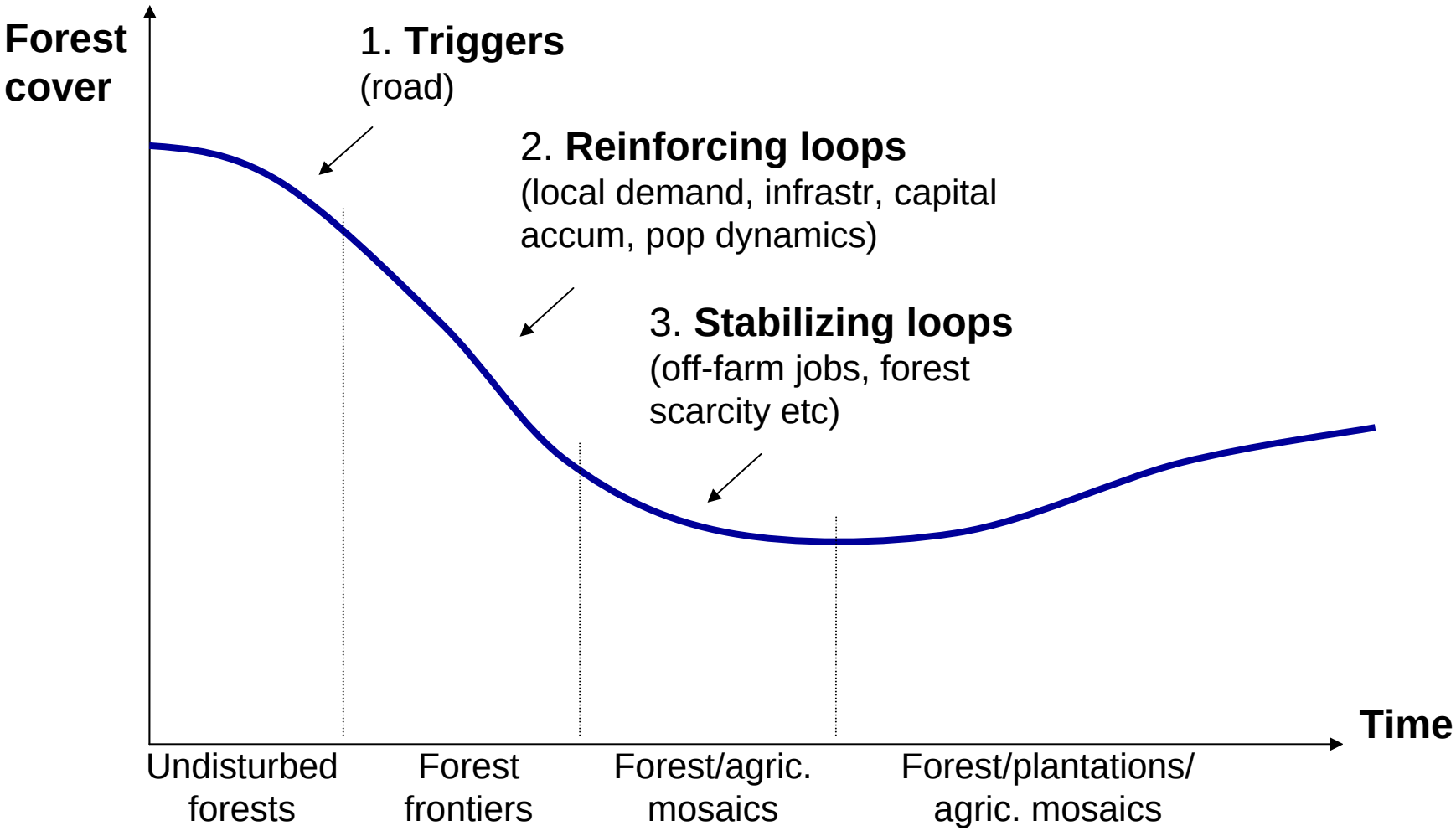




Source: Based on data from UNDP (2007)

Concept on green economic growth (ecological quality)? If yes how we do it ? Can we give price for UER (Unilateral Emission Reduction) not bothering too much with additionality ~ benchmark? CDM Reform? Can we increase pollution tax and use the money to assist developing countries to accelerate the achievement of LCS?

Forest transition



Source: Kaimowitz and Angelsen (1997)

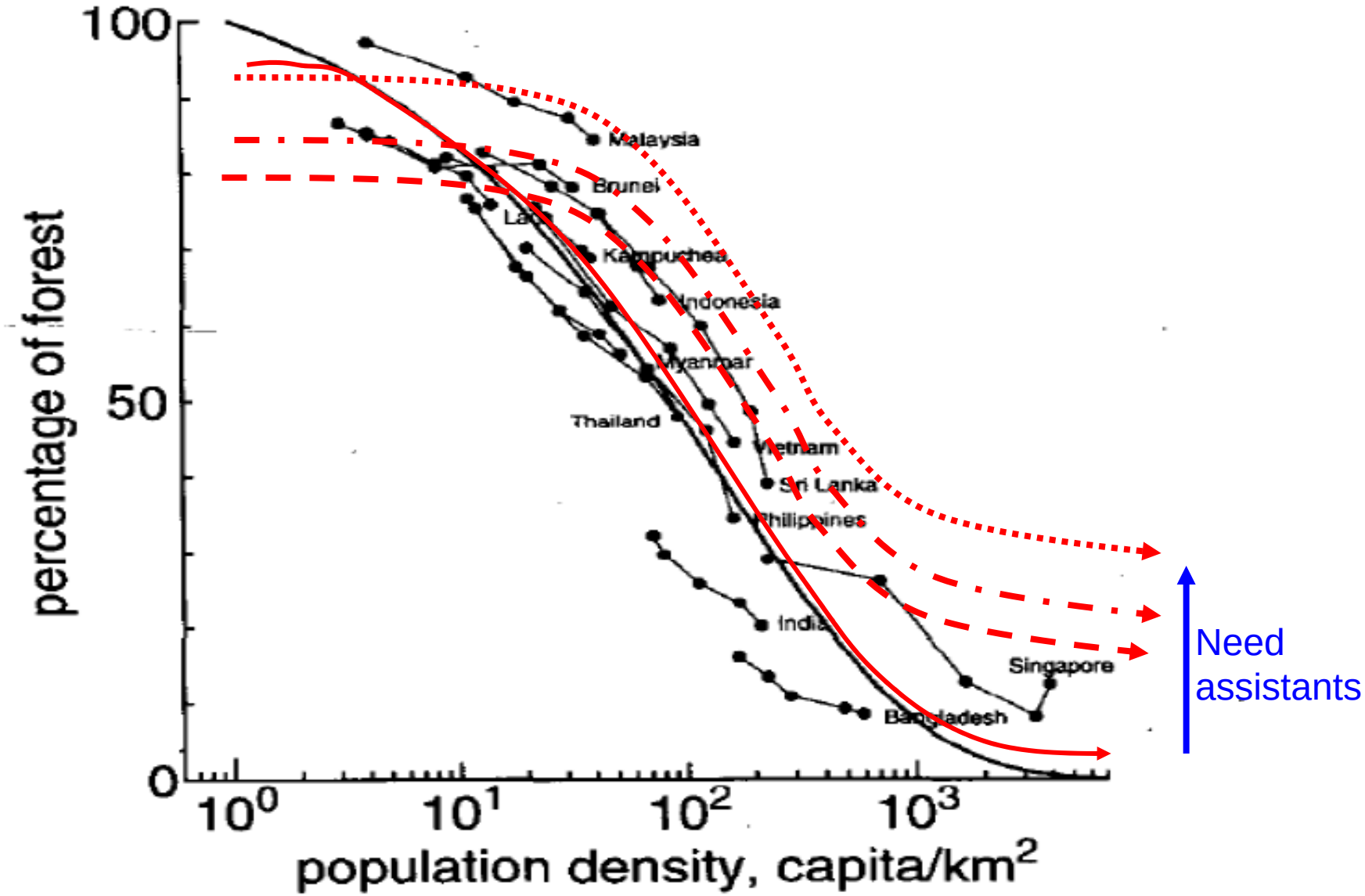
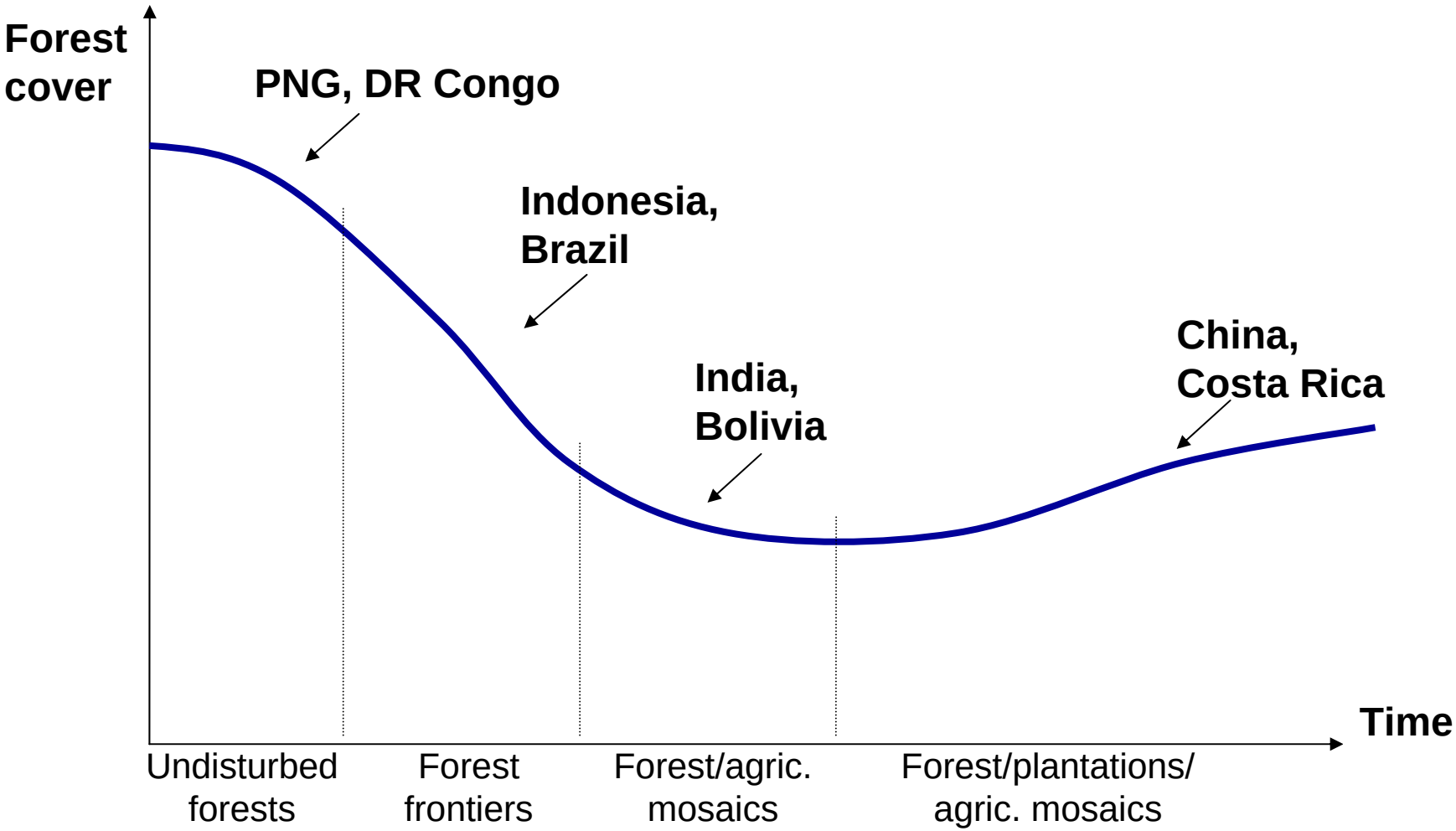


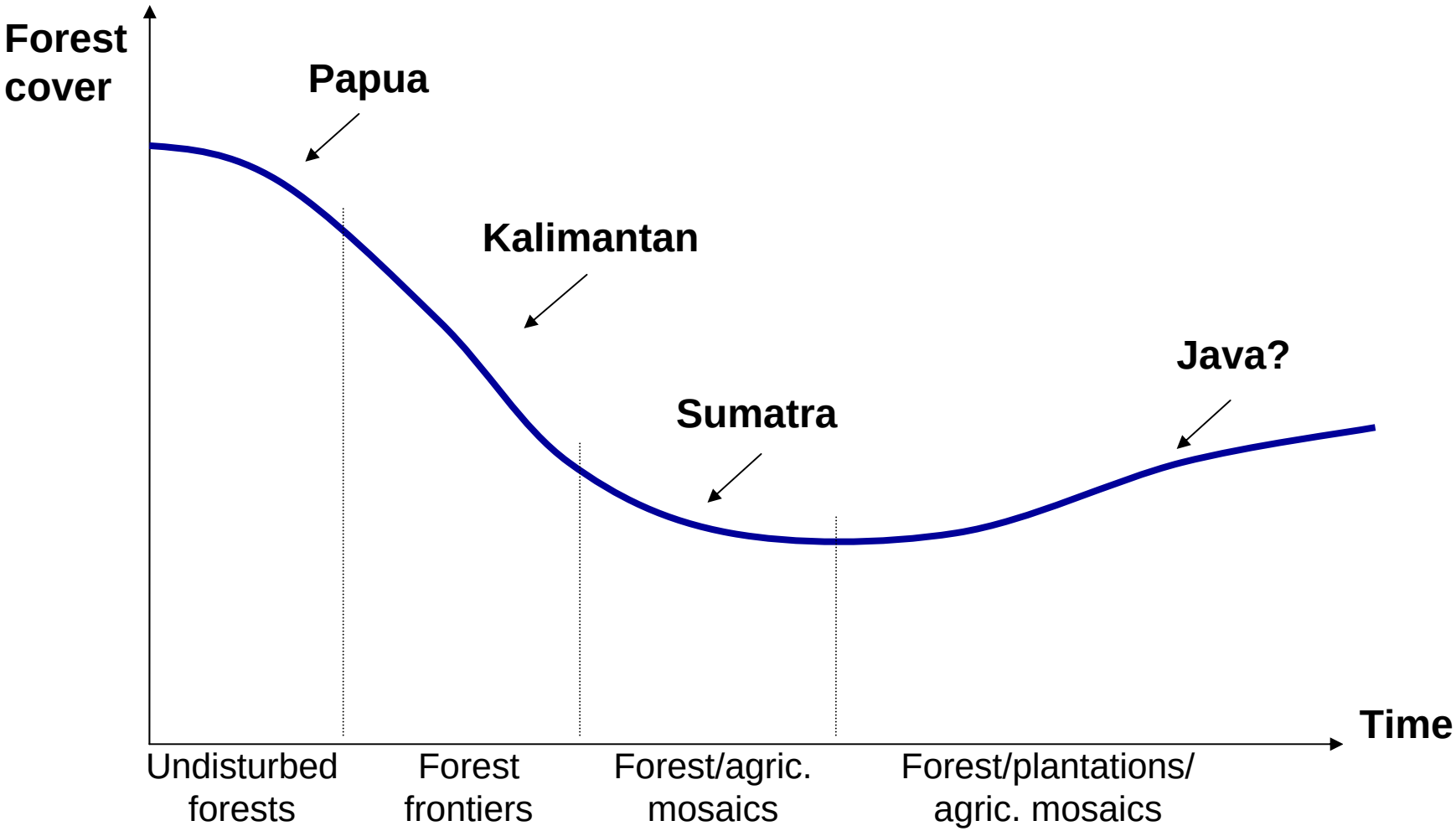
Figure 2. Relationship between percentage of forest area and population density in tropical Asian countries (Matsuoka et al., 1994)

Forest transition: Region



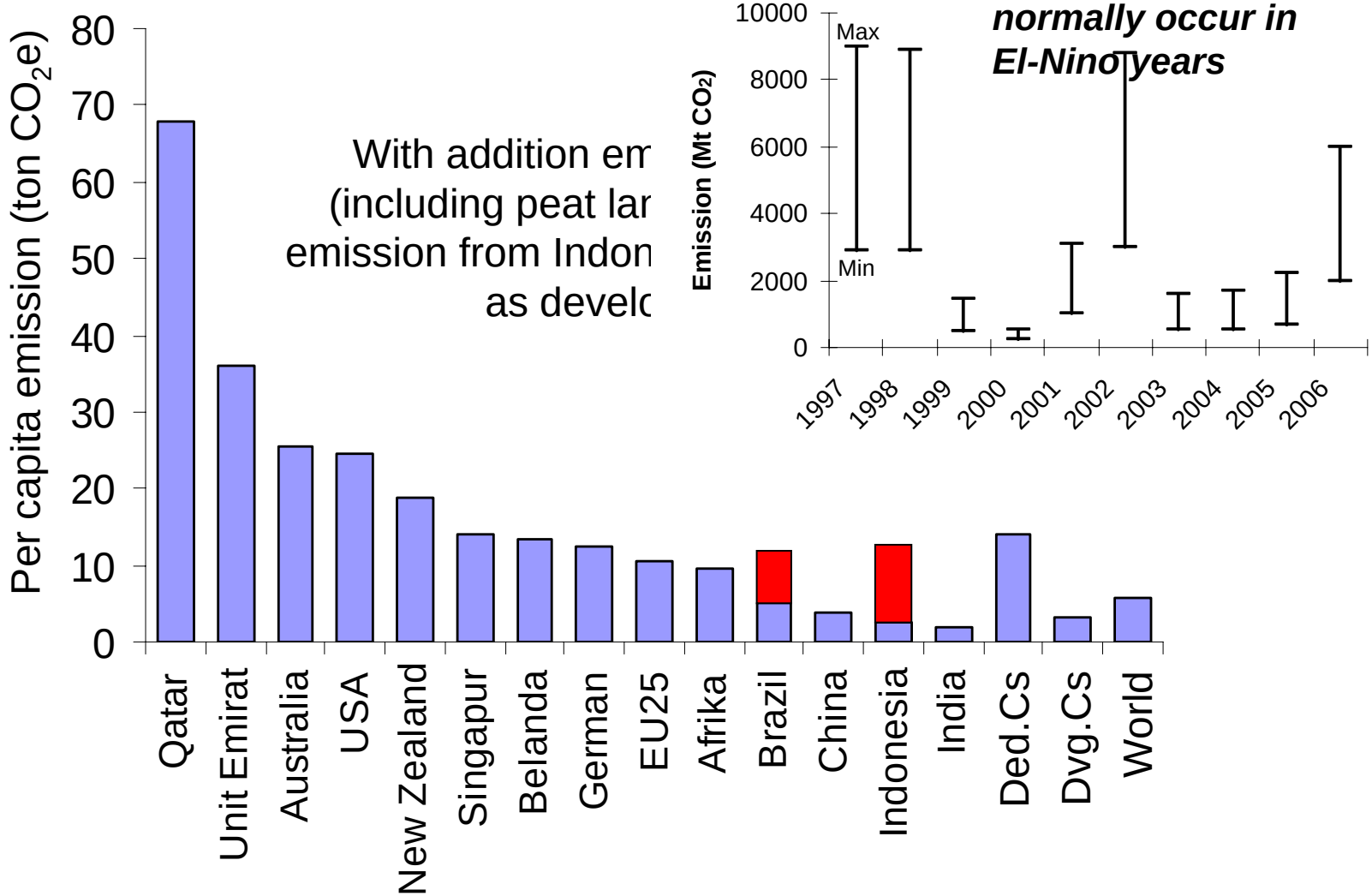
Source: Slide of Murdiyarso (2008)

Forest transition: Indonesia



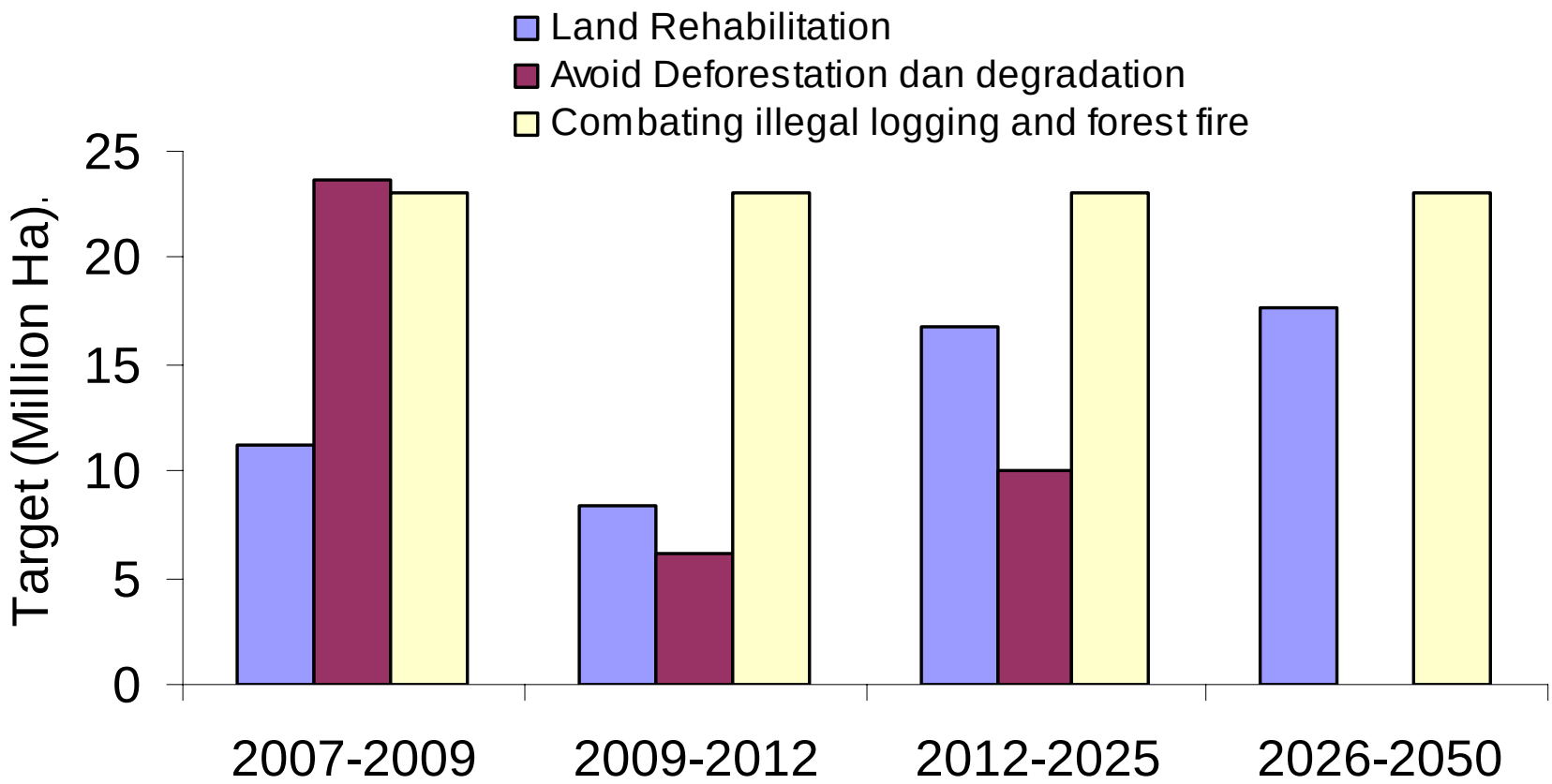
Source: Slide of Murdiyarso (2008)

Per capita Emission in 2000



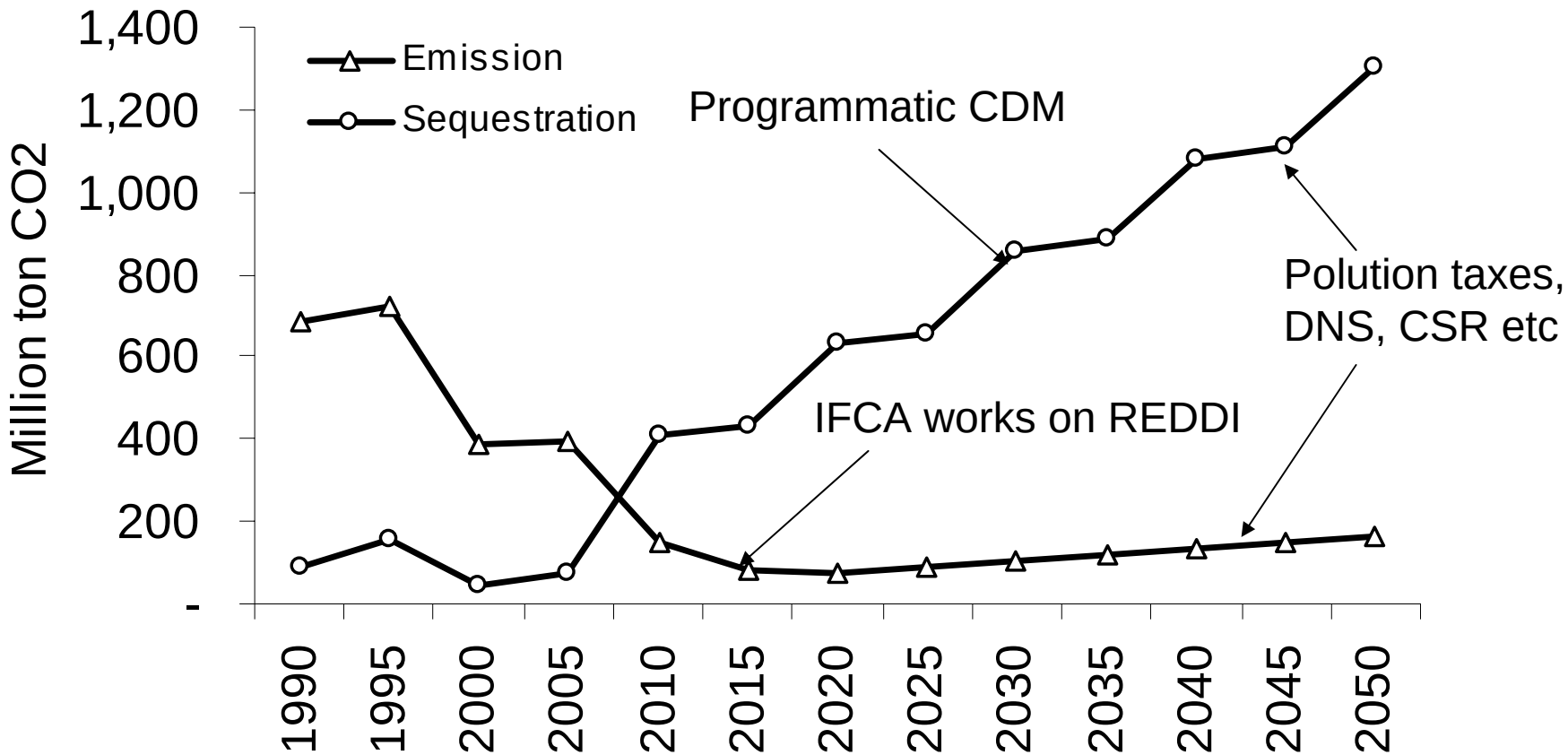
Source: Baumert et al, 2005

National Target for REDD and Sink Enhancement



An ambisious target (funding for land/forest rehabilitation only about 11 trilions or about 1.20 billion USD) ~ 2-4 million ha

GHG Sequestration and Emission Projection for LUCF in Indonesia



REDD STUDY IN INDONESIA

Baseline	Reduced Deforestation	Monitoring	Carbon markets ($)	Payment distribution mechanism
How much forest will be lost in the future?	What can be done to reduce deforestation? What would it take to implement it? How much would it cost? Where to start from?	How can we prove that reduced deforestation as really taken place?	Who is entitled to sell forestry carbon? Who are the buyers ? (Local and Global) How is the price formed?- give benefit to the sellers? How should carbon transactions be regulated?	How will carbon payments be distributed to provide incentives to reduce deforestation? Who has a legal entitlement to receive payments?

Challenges for REDDI

- **Governance**
  - Understanding the drivers of deforestation
  - Illegal logging and illegal trading (leakage)
  - Resolving central-local authorities
- **Payment mechanisms**
  - Via market system: Carbon credit (various types of carbon assets)
  - Non-market system (additional ODA, public fund, DNS etc) ~ carbon and other PES (biodiversity)
- **Payment distribution**
  - Transparency and accountability
  - Efficiency and equitability
- **Social issues**
  - Forest-dependence group (promote benefits for forest-dependent community)
  - Elite capture
- **Legal and regulatory**
  - Rules of the game - how to keep it simple?
  - Property right issues


THANK YOU