Marketing of ecosystem services from tropical forests -
The demand side’s perspective

Shaping the Global Agenda for Forests & Climate Change
Forest Day: UNFCCC COP13, Bali, 8 December 2007

Joachim Sell, Ana Moeri and Luzia Bieri
Factor Consulting + Management
www.factorglobal.com
Examples of forest ecosystem services

- Ecosystem services are functional properties of ecosystems that contribute to human welfare

- Maintenance of biodiversity
- CO$_2$ sequestration
- Watershed protection
- Soil protection
- Scenic beauty
- Protection services
- ...
Continuous depletion of forests

Countries with large net changes in forest area 2000–2005

- >0.50% decrease per year
- >0.50% increase per year
- Change rate between -0.50 and 0.50% per year

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Tropical deforestation can rarely be explained by one single direct driver...

Sustainable or protective use has low economic value

- Typical succession of land use change in e.g. Brazil
  - Extraction of valuable timber by timber industry (boom)
  - Burn biomass and livestock farming (3-4 years) \(\rightarrow\) degradation
  - Cash crops \(\rightarrow\) requires investments (fertilizer, soil preparation) \(\rightarrow\) collapse
Value of ecosystem services

- Studies on total economic values (incl. non-use values, intrinsic values), few studies on local use values → high total economic values do not hinder tropical deforestation
- Most ecosystem services are public goods → no economic value
- Difficulty of commodization:
  - Carbon currencies: tCO2e, tCERs, ICERs, ERUs, AAUs, RMUs, etc
  - Biodiversity: Comparability of biodiversity index values?
  - „Currencies“: ha, species, certificates (?)
Demand side motivations and their implications for quantification, valuation

- "Polluter pays" approach, offsets
  - Reaction to negative env. impact that needs to be offset by an equivalent positive impact → Requires quantification of impact and offset
  - Usual suspects: Mining industry, agricultural industry, road construction (?)
- "Beneficiary pays" approach
  - Motivation often inherent in business plan; proactive.
  - Env. benefits translate into economic benefit → quantifiable
  - Example: Sustainable watershed management to avoid filtration technology in case of hydropower plant or beer brewery
- "Contribution to human welfare"
  - May include engagement in regions to be managed sustainable (e.g. tourists, landholders, cons. Orgs.)
From carbon stocks to forest ecosystems

• Forests are more than carbon stocks
  - How to provide additional investments for additional services?

• REDD has a potential to sustain forest ecosystem services
  - Quantification and commodification of other ecosystem services, to attach additional value and attract investors

• Combination of conservation mechanisms
  - REDD
  - Payments for ecosystem services
  - BBOP
  - Governmental protection
Thank You!

Carbon Financing

Carbon Asset Development

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www.factorglobal.com

joachim.sell@factorglobal.com