The economics of REDD+

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The core REDD+ idea: multi-level PES

PES = Payment for Environmental/Ecosystem Services)
Evolving REDD+

**SCALE**
- Carbon w/PES
- Carbon w/PAM
- Carbon + NCB w/PAM

**AIM & MAIN POLICIES**

**Global**
- ORIGINAL IDEA

**National**
- CURRENT

**Local**
- ACTION

NCB = Non-Carbon Benefits
PAM = Policies And Measures
What is needed to create a carbon market?

Commodity/service (CER, VER)

Sellers

Buyers

Institutions

MRV; Ref.level

CAT; Aid; Voluntary?

Market place, standards, etc.

Carbon rights; Attribution

VER/CER = Certified/Verified Emission Reductions
CAT = Cap And Trade system
From PES to PES-like and PAM

- Small-scale MRV costly
  - Reward individual users?
- Reference level (= additionality)
  - Difficult even in theory
  - Fairness (e.g. semi-illegal activities in the past)
- PES is expensive
  - USD 12-13 bn/year (50% cut, USD5/tCO2, RL=hist.def.)
- Ideological opposition (anti-market)
- Most current “PES”-systems far from textbook PES
  - Will they be effective?
The simple economics of deforestation

• The basic economics of land use: *Land is put into the use with the highest land rent (profit, annual or NPV)*
  • Deforestation happens because non-forest uses more profitable than forest uses (to land owners/users)
  • A race between agric and forest rent!

• Three basic policies:
  1. Lower agric rent
     • Lower prices
     • Poor technologies (!)
     • Inputs costs (credit, labour – increase opp. cost)
  2. Increase (capture of) forest rent
     • Much forest rent is from public goods
     • Must be captured by land users to change the land use (key idea of REDD+)
  3. Command and control
Deforestation: agric rent > forest rent
(for land owner/user)
Agriculture

• Make agric. less profitable
  • Remove subsidies & support?
  • Trade-offs with poverty & development objectives!
• Place-based agric policies
  • Distinguish intensive & extensive (forest-encroaching) agric
  • Shift resources to intensive agric.
  • Trade-offs?
• Agric intensification (higher yield)
  • Full-belly assumption or global food equation: *produce same amount of food on smaller area* => *less deforestation*
  • Problem: demand (production) not fixed
  • Higher yield can make forest encroachment more profitable!
  • CSA (Climate Smart Agriculture): win-win assumed, but higher yield (locally) often increases pressure on forests
Other PAMs

• Tenure
  • Capture private and local public goods, but not global carbon services provided by forests
  • Prerequisite for PES
  • Many policies feasible w/o tenure reforms

• Roads and infrastructure
  • “The best thing you could do for the Amazon is to bomb all the roads” (Eneas Salati)

• Protected Areas (PAs)
  • PAs not perfect and have costs
  • But oftentimes quite effective
Concluding remarks

• Economic incentives matter
• Creating good incentives is hard
• Not only incentives matter
  • Perceptions of fairness
  • Addressing drivers (agric rent)
  • Direct regulations

• REDD+ is an objective
  • REDD+ is a huge policy experiment that we should learn from
  • Be pragmatic & test what works or what doesn’t
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References:
