

Deforestation and forest poverty: Drivers, policy responses, and implications for REDD evaluation

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EG

Outline

- Deforestation is incentive driven
- Forest poverty: no simple connection with deforestation
- Deforestation pressures, impacts and policy responses differ systematically by forest type.
- Forest governance is key
- Challenges for monitoring and evaluation

Note: this presentation is largely based on the Development Research Group's Policy Research Report, *At Loggerheads?*

1986

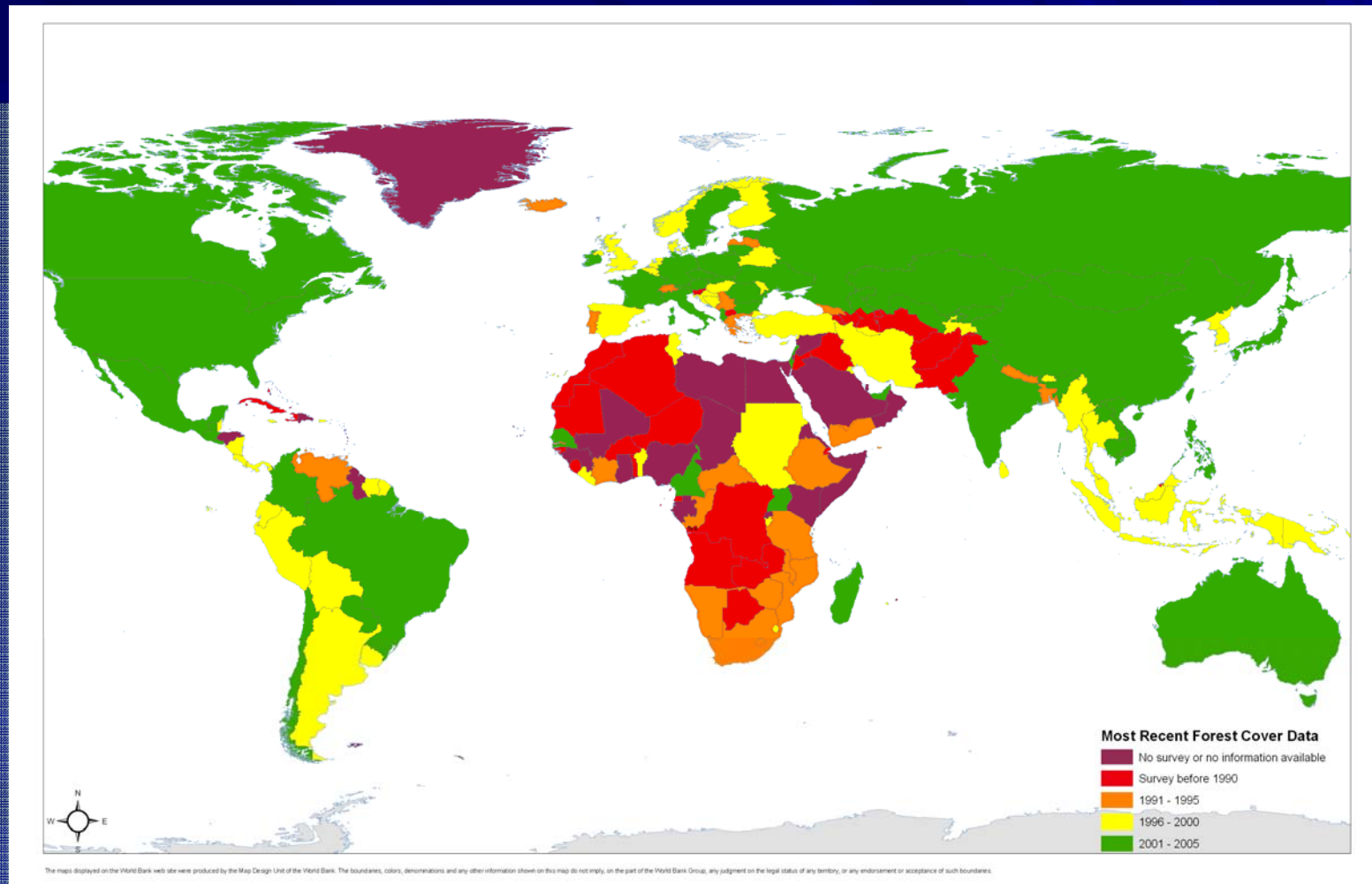
Deforestation



2003

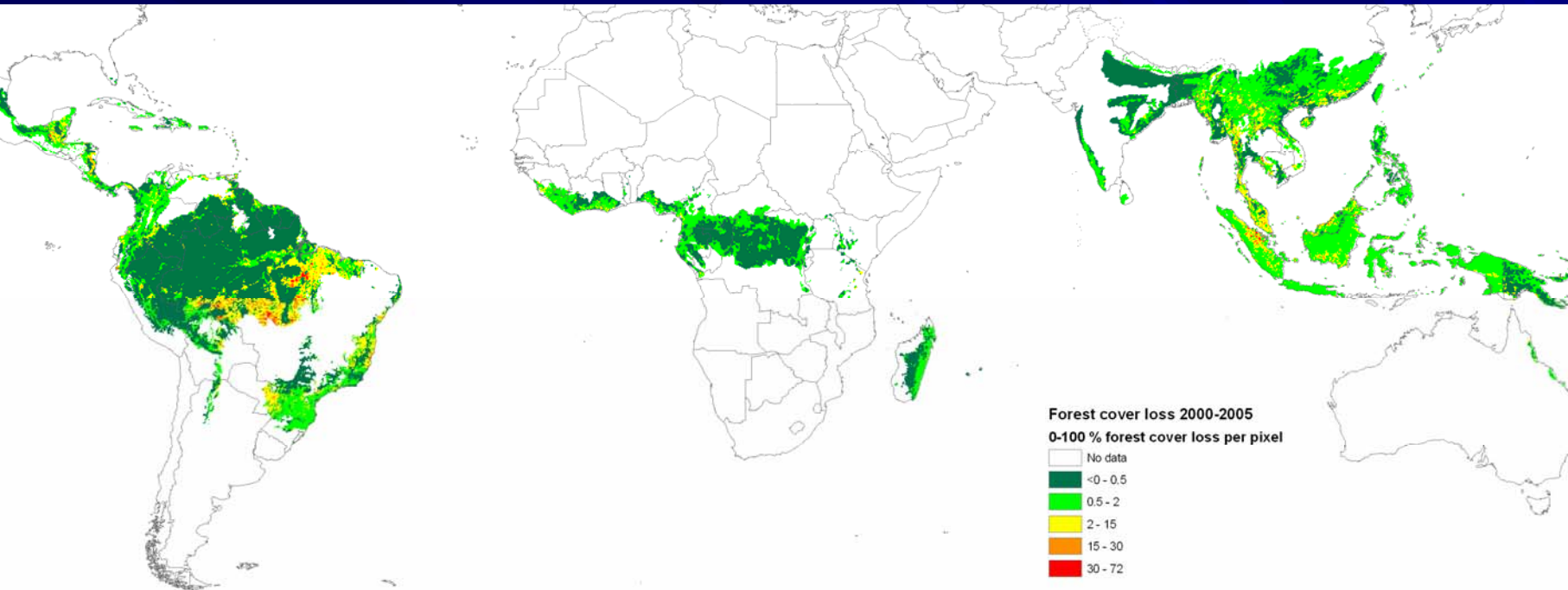


Many countries lack recent forest inventory or remote sensing survey



Source: Mapped from data in FAO, Forest Resources Assessment 2005

Where is tropical deforestation?



2000-2005 (based on Hansen et al 2008, PNAS)

Brazil: 48%

Indonesia: 12%

Forest poverty

800 million people live in tropical forests and woodlands
No comprehensive measures of poverty rates



What's the connection between deforestation and poverty?



Deforestation is
undertaken by rich
people

*Large scale
deforestation in
the Brazilian
Amazon*



...and poor people

*Rice farming,
Madagascar*



...for gains large and small



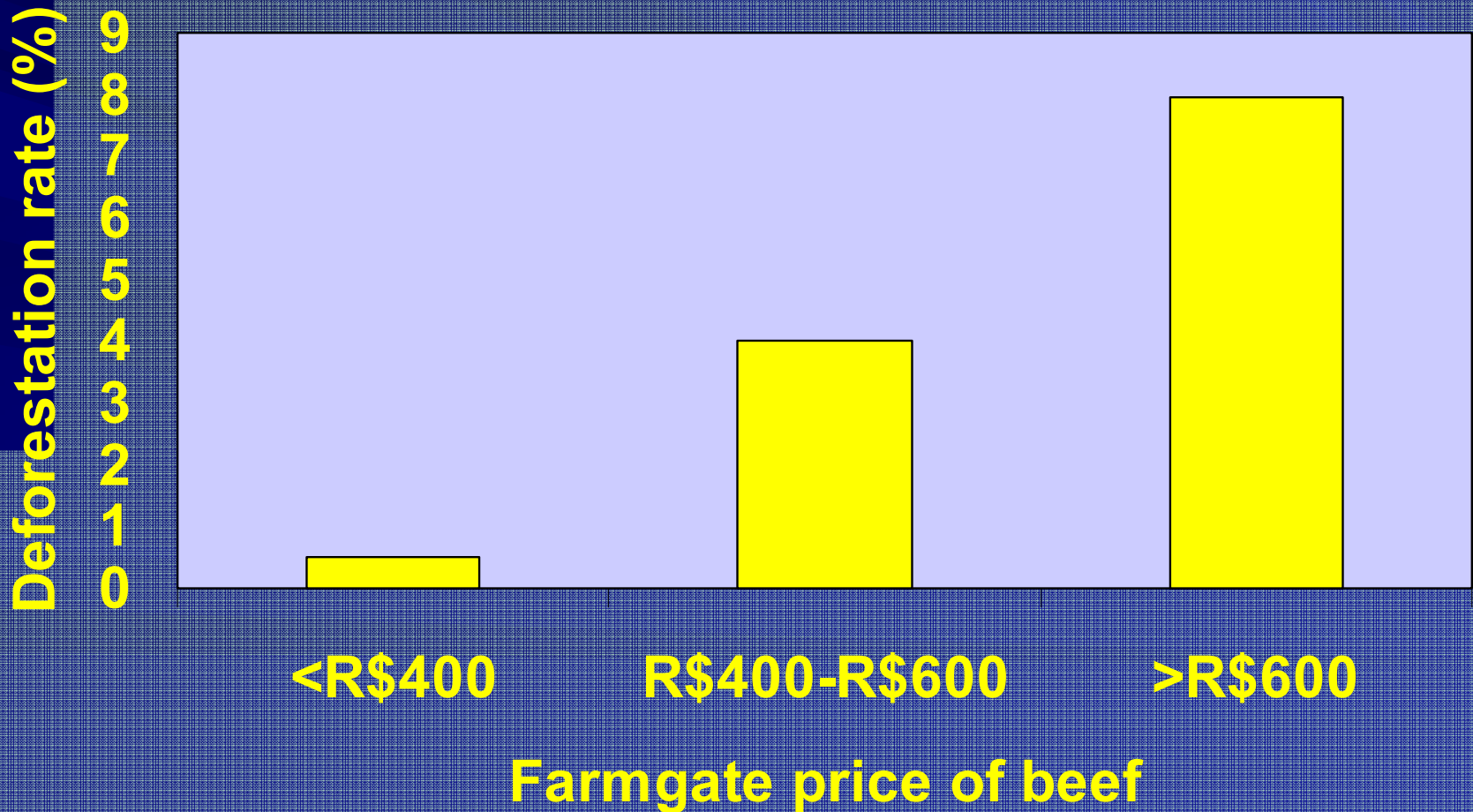
\$80 per
hectare



Up to \$3000
per hectare

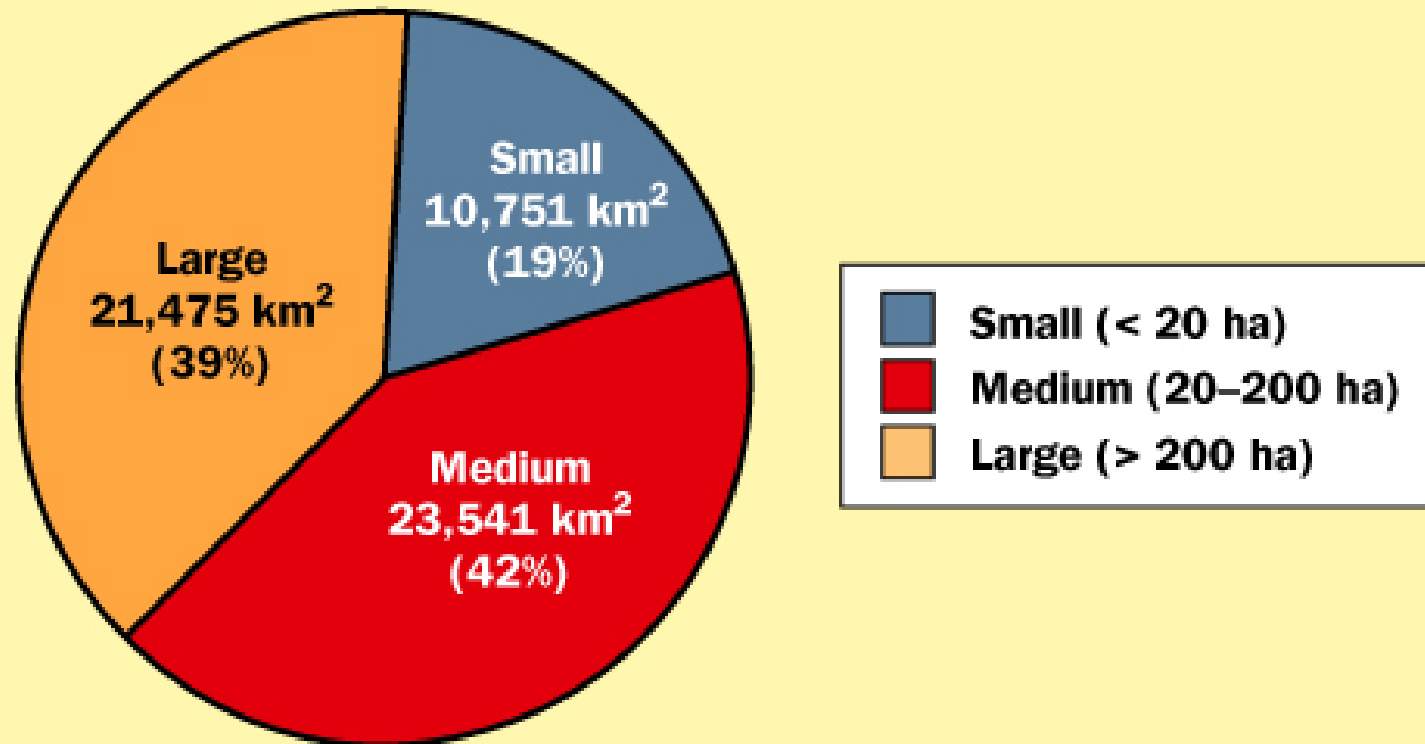


Deforestation is driven by incentives



In Brazilian Amazonia, most deforestation is undertaken by large-scale operators

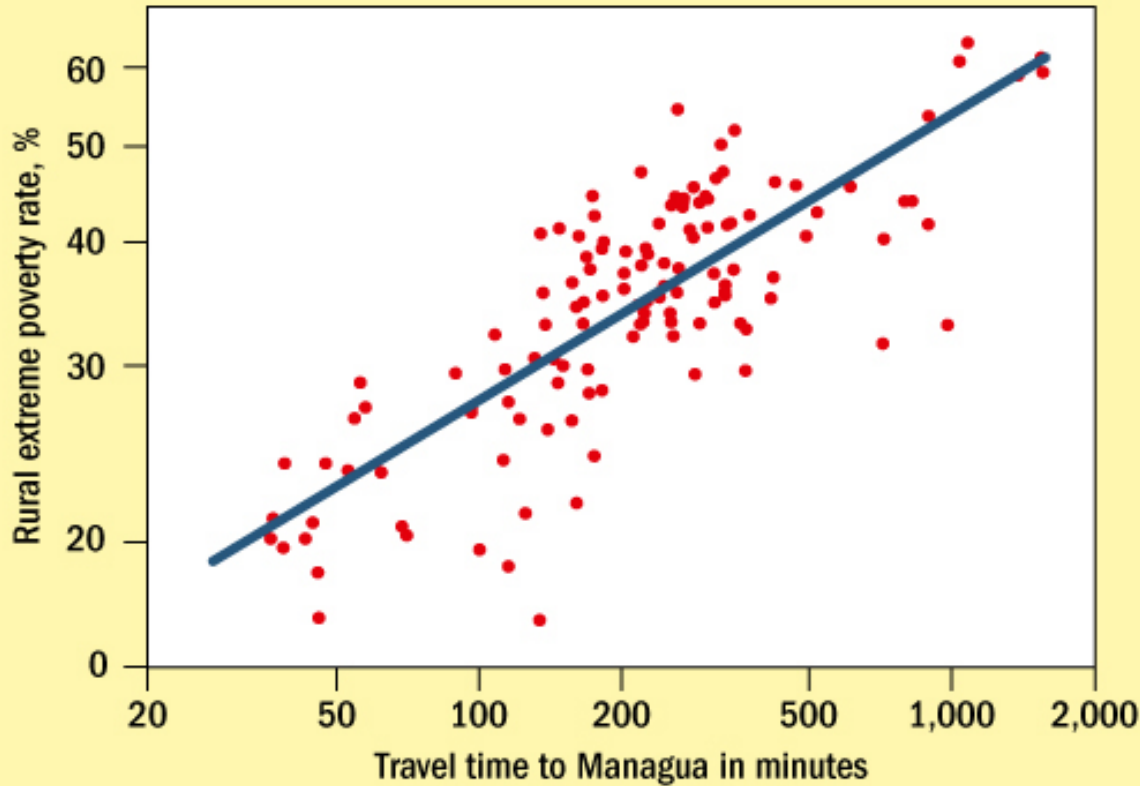
Deforestation 2001-2003 by size of clearing



Drivers of forest poverty

- 
- A photograph showing three individuals from behind, walking along a dirt path. Each person is carrying a large, heavy bundle of firewood balanced on their head. The person on the left is a woman in a patterned dress, the middle person is a woman in a light-colored wrap, and the person on the right is a man in a light blue shirt and pink shorts. The background shows a dry, open landscape under a cloudy sky.
- Lack of rights over forest resources
 - Government restricts access by poor
 - Elites grab resources
 - No one has enforceable rights, so resources are degraded
 - Remoteness
 - Poor market access
 - Poor access to health and education services
 - Voicelessness

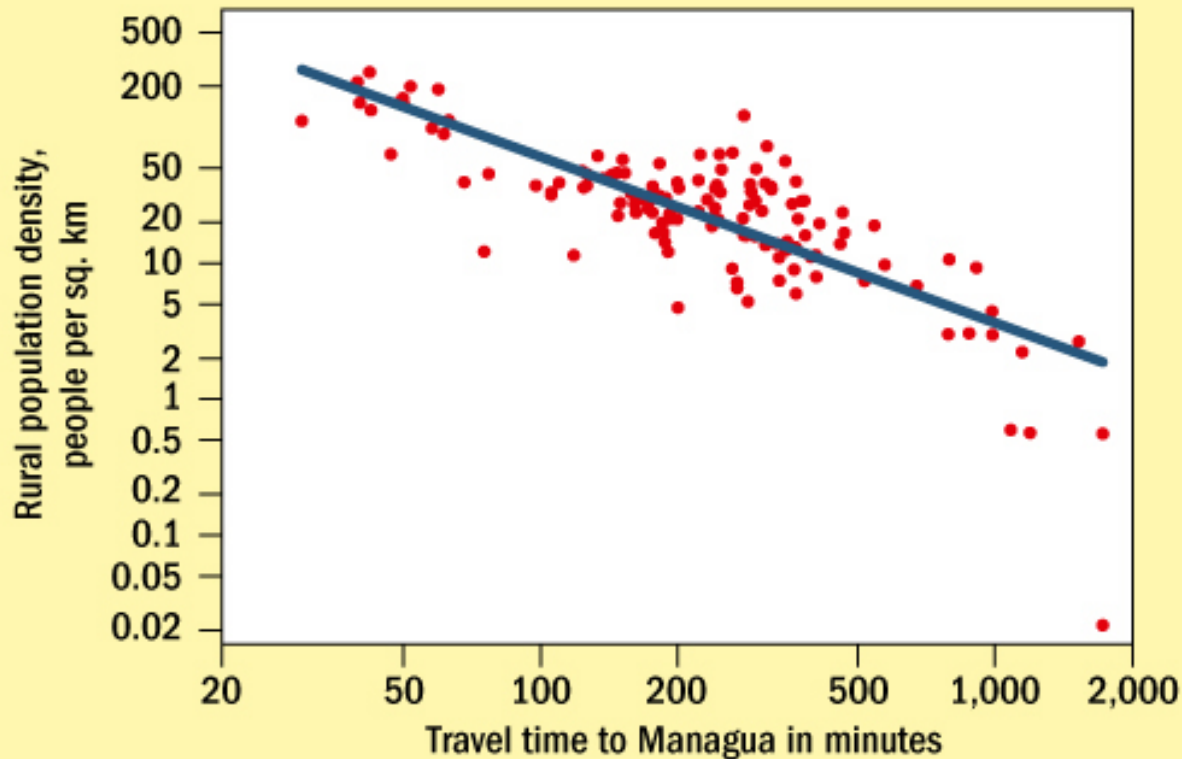
Remoteness, forests and poverty



Nicaragua

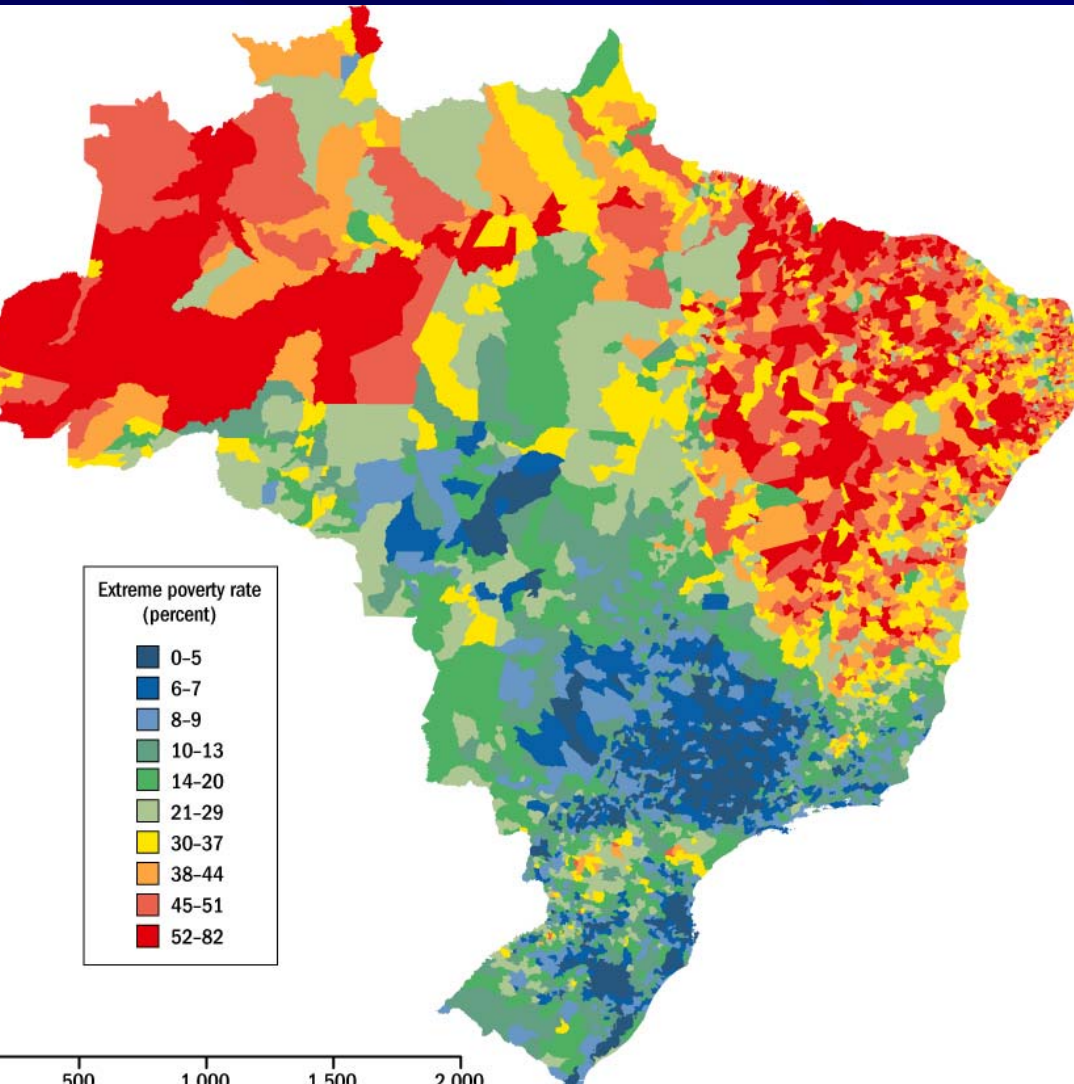
Poverty *rate* increases with remoteness

Remote areas have low population densities

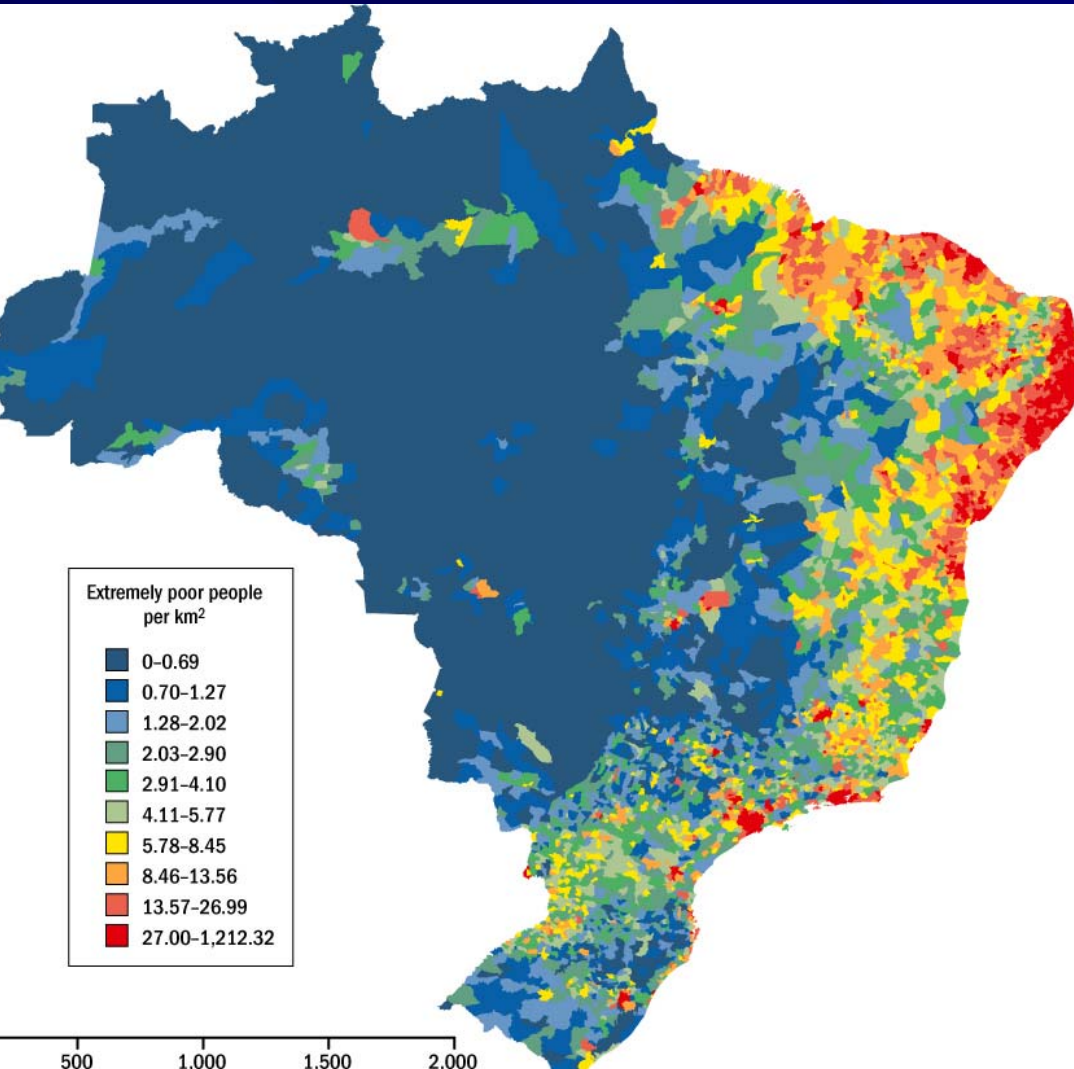


Poverty *density* increase with remoteness

Poverty rates



Poverty densities



Challenges differ by zones



Mosaiclands

**Frontiers and
areas of
disputed
tenure**

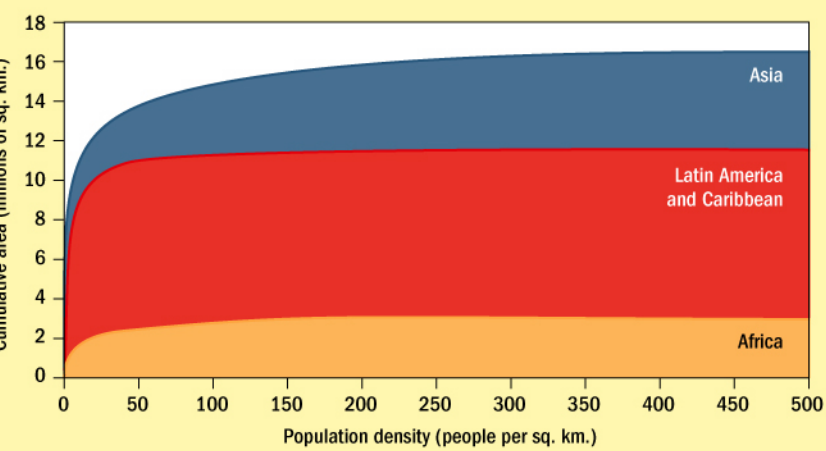
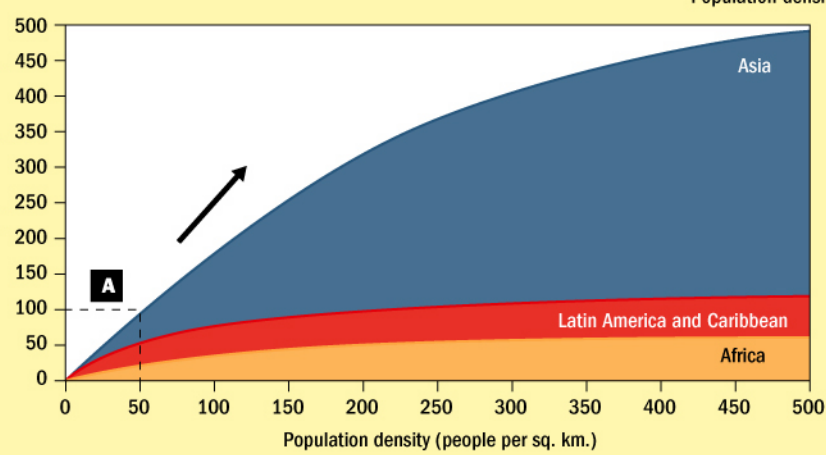
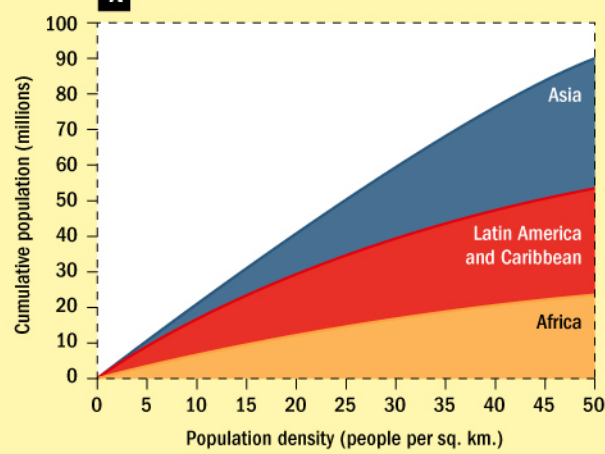
**Beyond the
frontier**



Beyond the agricultural frontier

Challenge:
avert disorderly
land rushes and
timber grabs

Population and forests





Frontiers and areas of disputed tenure

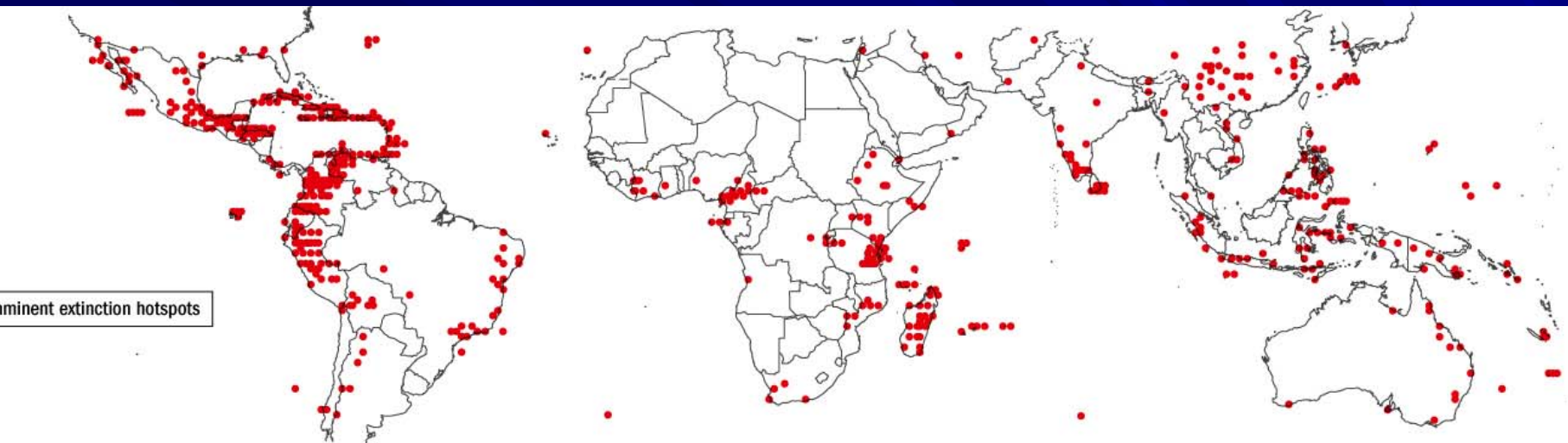
Challenge:
Fairly allocate and
reliably enforce
rights over land and
trees



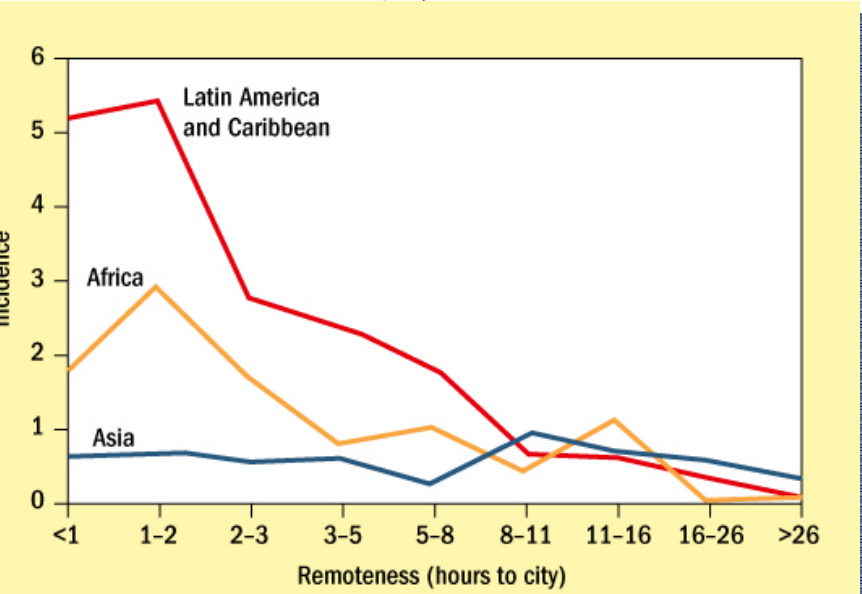
Mosaics of farms and forest

Challenge:
manage
landscapes for
production and
environmental
services

Imminent extinction locations



Imminent extinction hotspots





Hydrological
impacts of
deforestation—
maybe largest in
mosaiclands

Central role of governance and institutions: mediate between groups with claims on the forest



Interventions and monitoring needs

	Forest cover and CO2	Output and incomes	Governance and rights	Biodiversity
Protected areas				
Community forests & rights				
Zoning, road restriction				
Payment for env. services				

Boundaries of Kilimanjaro Park



Literature review on evidence

- Roads promote deforestation.
- Zoning efforts historically unsuccessful
- Protected areas and indigenous tenure can reduce deforestation.
- Limited evidence on community forest impacts
- Overall: inadequate M&E

For further info



A WORLD BANK POLICY RESEARCH REPORT

At Loggerheads?



*Agricultural Expansion, Poverty Reduction,
and Environment in the Tropical Forests*

www.worldbank.org/tropicalforestrepo

End

