

Land Tenure, Carbon Rights and Livelihoods in the Brazilian Amazon: Learning from Four Incipient REDD+ Initiatives



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REDD+ in the Brazilian Amazon

Optimism for REDD+ implementation in Brazil (national policies/state initiatives, high MRV capacity, engaged civil society...)

Yet, pervasive tenure insecurity in Brazilian Amazon considered to be the major challenge (concerns that REDD+ will exclude people without formally recognized rights):

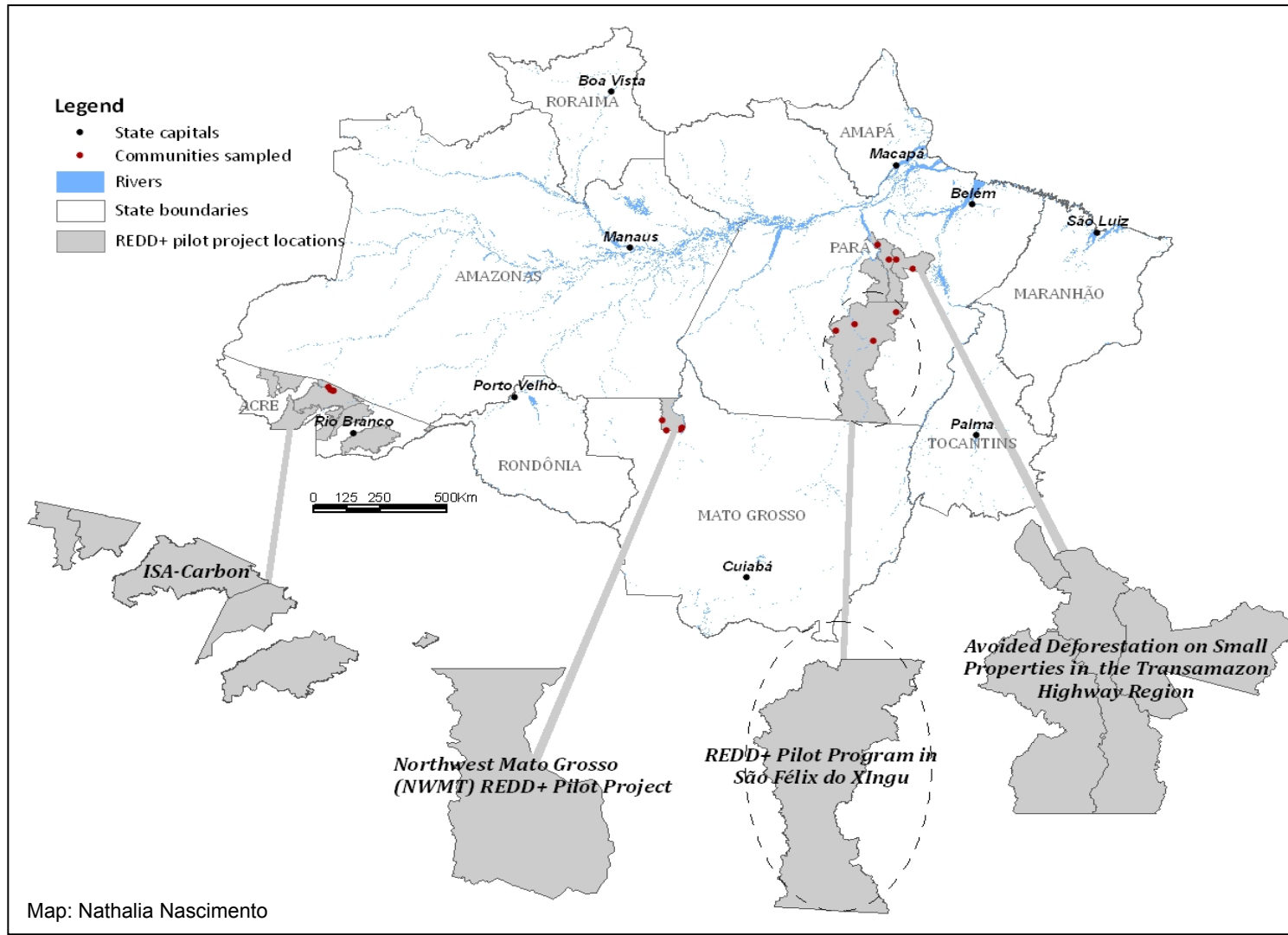
- History of Amazonian settlement => rural violence and inequality (*Schwartzman 1991; Schmink & Wood 1994*)
- Tenure claims unclear or conflicting on majority of undefined public and privately-used land in region and little compliance with the Brazilian Forest Code (*Barreto 2009*)

Land tenure security and livelihood strategies affect type of REDD+ mechanisms that can be implemented:

- Insecure land tenure could increase REDD+ costs and favor regulatory mechanisms over PES-based approaches (*Börner et al. 2010*)

Sub-national REDD+ projects provide important testing ground for REDD+ implementation (esp. land tenure and carbon rights)

CIFOR's Global Comparative Study on sub-national REDD+ projects in Brazil



Research Questions and Methods

- 1) Do proposed REDD+ mechanisms include anticipated changes in land tenure and livelihoods? => Interviews with REDD+ project proponents and review of project documentation
- 2) What does the local land tenure and livelihoods situation mean for REDD+ implementation at these sites (and for conservation and human well-being?)



Village Surveys
(n = 4 per project site)



Women's Surveys
(n = 4 per project site)



Household Surveys
(n = 120 per project site)

1) Do proposed REDD+ mechanisms anticipate changes in land tenure and livelihoods?

	Acre (ISA-Carbon)	Transamazon, Pará	São Félix do Xingu, Pará	Northwest Mato Grosso (NWMT)
REDD+ PROJECT CHARACTERISTICS				
Proponent(s)	Government (part of new state law)	NGOs	NGO-Government partnership	NGO-Government partnership
Scale	Entire state with 8 priority areas; (ZAP = 11,405 km ²)	350 families that were part of <i>Proambiente</i> (318 km ²)	Entire municipality (41,466 km ²)	Cotriguaçu municipality as the pilot area (9,123km ²)
Target actors	All stakeholders	Colonist farmers	All stakeholders	All stakeholders
Drivers of D&D	Road paving, logging, cattle, swidden ag., fire	Logging, cattle, swidden ag., fire	Cattle, land-grabbing, logging, swidden ag., fire	Cattle, logging, lack of governance in rural settlements
REDD+ MECHANISMS				
Land tenure regularization /carbon rights	Demarcate properties in ZAP; create PDSs/ State Forests. Only project w/ delineated C rights.	Rural Environmental Cadastre (CAR) implementation (smallholders)	CAR implementation (entire municipality)	CAR implementation (smallholders)
Regulatory mechanisms	Environmental compliance	Environmental compliance	Environmental compliance, protected area management	Environmental compliance
Incentive-based mechanisms	PES/rewards, public services, sustainable land use alternatives	PES, sustainable land use alternatives	Sustainable land use alternatives	Sustainable forest management and cattle/ milk production

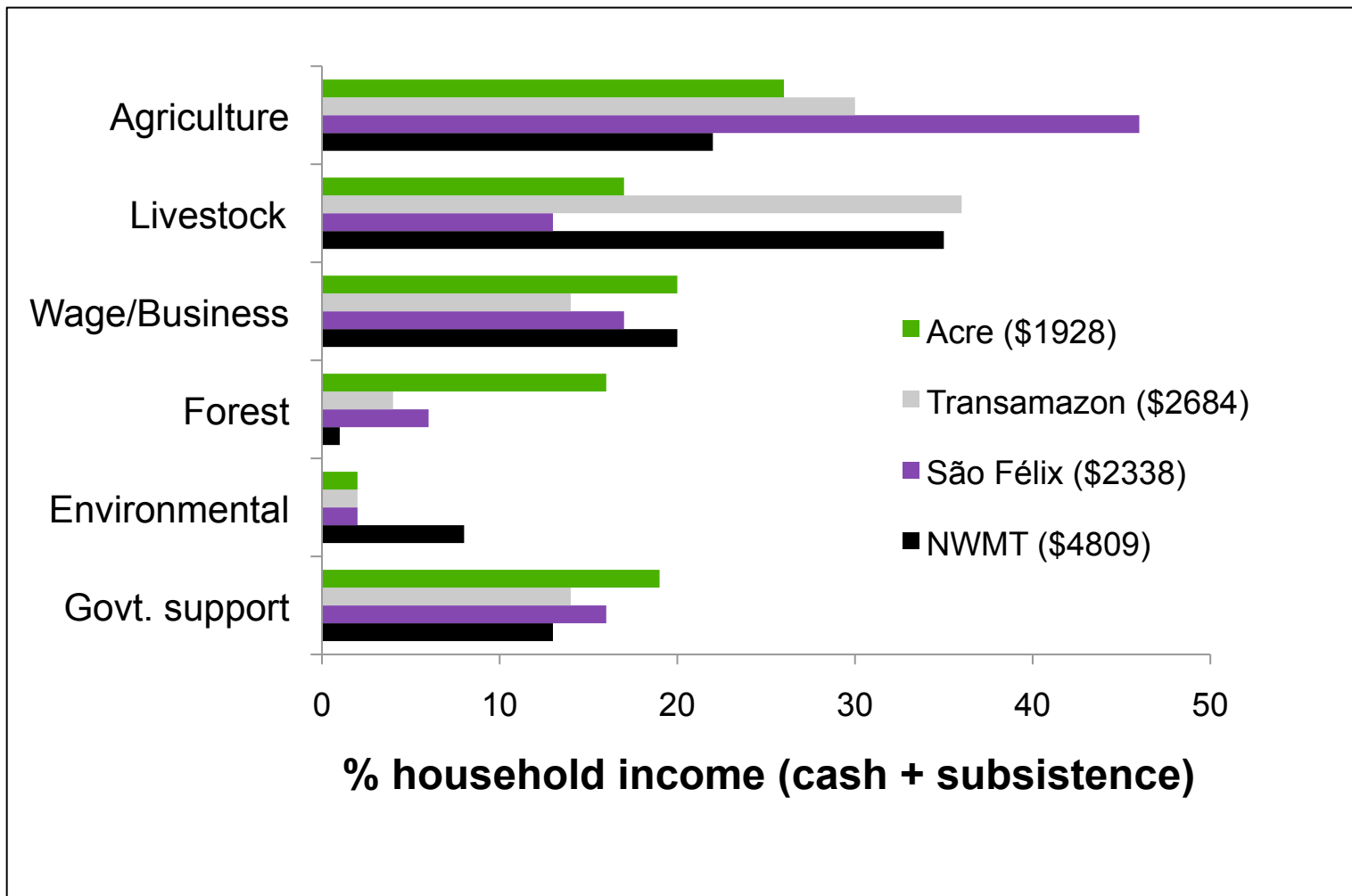
2) What does the local land tenure and livelihoods situation mean for REDD+ implementation?

Land tenure arrangements and environmental compliance at project sites:

	Acre	Transamazon	São Félix	NWMT
Community-level	(n=4)	(n=4)	(n=4)	(n=4)
<i>Land tenure situation</i>				
De jure owner/manager	State	State / Private	State	State
De facto user	Individual	Individual	Individual	Indiv/Comm
Exclusionary rights	2/4	4/4	4/4	3/4
Tenure security	0/4	4/4	2/4	2/4
Household-level	(n=127)	(n=137)	(n=124)	(n=122)
<i>Mean (SD)</i>				
<i>Environ. compliance</i>				
Land area (ha)	127 (45)	90 (70)	74 (66)	55 (30)
Forest cover (%)	87 (14)	69 (17)	43 (24)	40 (27)
Forest cleared (ha; 2008-2010)	1.4 (1.4)	2.7 (4.5)	2.7 (5.5)	2.0 (5.1)

2) What does the local land tenure and livelihoods situation mean for REDD+ implementation?

Sources of household income at project sites:



Concluding Remarks

REDD+ mechanisms similar across sites, yet local land tenure and livelihood contexts very remarkably => unique challenges

- Legal clarification of land tenure is important REDD-readiness activity in all 4 projects, holding promise for effective and equitable REDD+ implementation
 - Could be improved through better collaboration of multiple agencies, recognition of customary rights, clarification of carbon rights
- Compliance with Brazilian Forest Code primary regulatory mechanism; linked to tenure clarification
 - Non-compliant households could bear high REDD+ costs unless supported in maintaining forest remnants, reforesting degraded lands
 - Partnerships between government and NGO proponents are essential
- Sustainable livelihood alternatives and PES as proposed incentive-based mechanisms, require secure land tenure and exclusionary rights, along with Forest Code compliance
- Possible trade-offs between conservation and well-being outcomes associated with REDD-readiness tenure reforms ... but generally holds promise!



Thank You!

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