



Thinking beyond the canopy

MRV Constraints on Benefit Sharing

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Seeing REDD+ with 4 'I's





REDD Costs and Benefits

Benefits

- Monetary gains
- Improvement in the way forest are being used.
- Costs
 - Opportunity costs
 - Transaction costs:
 - Implementation costs

Part of the benefit distribution must be based on who bears what costs, but is also must be based on performance – who has achieved what







Measurement, Reporting and Verification challenges

- MRV Institutions
 - Capacity is low and not increasing rapidly
- Emissions factors
 - Account for as much as 60% of the uncertainty of GHG inventories

- Reference emissions levels
 - Stepwise approach adapted to data availability
- Participatory measurement
 - Community ownership of actions
 - Scale is a constraint



Assessment of capacity to do forest GHG inventories



MRV capacity gap analysis



MRV capacity gap in relation to the net change in total forest area between 2005 and 2010 (FAO FRA)

Change in forest area monitoring capacity



Change in forest inventory capacity



Stepwise approach for RELs/RLs



Criteria for comparing country circumstances and strategies





Tier 1 case for 4 countries using FAO FRA data

Brazil





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Step 2:	Category	Regression coefficient	
Brazil	Deforestation rate (2000-2004)	0.395	
Predict deforestation rates 2005- 2009	Trend variable	-0.136	-0.145
	Deforestation dummy	-0.373	-0.773
	Forest stock	2.18	4.756
	Forest stock squared	-1.8	-3.826
	Log per capita GDP	-0.034	-0.13
	Agric GDP (%GDP)	0.28	0.28
	Population density	0.081	-0.81
	Road denisty	0.039	0.076
(m 35 ⊓	R ²	0.831	0.789
р 30-	Ν	3595	3595
Deforestation rate A(thousa Deforestation rate A(thousa 20 - 20 - 15 - 10 - 10 - 15 - 10 -	A,995,996,991,998,999,200,200,200,200,200,200,200,200,200	THINKING beyond the canopy	CIEOR
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Good practice in the use of emissions factors



Tropical countries lack basic data for development of representative EFs example: peat decomposition

Land use	R _h	SE	n
Forest	6.5	1.3	11
Burned/logged forest	6.4	2.6	7
Cropland & shrubland	12.3	4.8	21
Rice field	9.9	4.7	4
Oil Palm	8.9	2.7	5
Acacia plantation	21.8	4.7	1



We surveyed 17 REDD+ demonstration projects

- 53% use site specific biomass equations
- 24% had methods for belowgound C
- 41% had methods for dead wood and litter
- Most projects will use IPCC defaults for soil-C



Community based MRV

- Third data stream for MRV systems
- Links REDD+ implementation to local decision making and forest management
- Moreover, it reduces the risk that REDD+ will undermine local forest tenure.
- Helps to promote the transparency and accountability of REDD+ initiatives and contributes to equitable governance and benefit sharing



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