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Economic Analyses for REDD+

UN-REDD Asia Region Workshop

9-11 October

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1. **What is the role of economics?**

Economics does not just consider financial costs v payments, forests underpin local livelihoods and economics can make ‘non-market’ values visible

<u>Economic analyses can enhance country net gains from REDD+</u>

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2. **Why include multiple benefits?**

Multiple benefits from forests:

- ✓ Water flow regulation (reduced downstream flooding)
- ✓ Water purification (for clean drinking water)
- ✓ Soil conservation (sedimentation control - dams)
- ✓ Nutrient cycling (keeping ground fertile)
- ✓ Local climate improvement (shade from sun, shelter from winds)
- ✓ Improved crops pollination (bigger yield for crops bordering forests)
- ✓ Edible plants (inc. nuts and berries) and animals (and honey)
- ✓ Traditional medicines (using forests plants)
- ✓ Cultural and spiritual values (special places)
- ✓ Nature-based tourism revenues (foreign currency earner)
- ✓ Selective harvesting (of timber, fuelwood, fibres, resins)
- ✓ etc...

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3. 'Best practice' for economic analyses

Economic analyses of REDD+ should aim to:

- consider all REDD+ options
- assess change to a situation without REDD+
- assess the spatial variation
- identify indirect impacts of REDD+
- analyse costs and benefits over time
- check the sensitivity of estimates
- avoid partial appraisal or double-counting
- ensure capacities for data collection and analysis

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4. Quantifying the costs and benefits

Costs.... Opportunity, transaction and implementation &
Benefits:

	direct market valuation			revealed preferences		stated preferences			benefit transfer
	market price	cost-based	production-based	travel cost	hedonic pricing	contingent valuation	choice experiment	auction	
timber	x								x
fuel, NTFP	x	x	x	x					x
genetic resources	x		x		x				x
research/education	x								x
cultural benefits						x	x	x	x
recreation	x			x	x	x	x	x	x
water flow/quantity/quality		x	x			x	x	x	x
soil fertility/sedimentation control		x	x			x	x	x	x
clean air		x	x			x	x	x	x
climate regulation	x	x	x			x	x	x	x
option value						x	x	x	x
non-use value						x	x	x	x

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5. Basic v Advanced

Level of analysis:	Basic	Advanced
Why this level?	For a general analysis of REDD+ options in order to determine the likely scale of economic benefits and costs associated with different options and locations.	For a detailed spatial plan of where the economic benefits associated with REDD+ can be increased, and/or for the calculation of payment levels in a PES scheme.
Degree of effort required?	Initial trawl of country/regional physical and socio-economic data to identify gaps, otherwise minimal collection of data (no new primary data collection). Basic knowledge of economics required (investment appraisal), though use of some specialist software could be required.	Extensive field work and modelling to collect and map information on relevant physical ecosystems, along with design and implementation of market/ social/valuation surveys. A good understanding of a number of specialist economic tools and methodologies is a prerequisite.

Economic analyses for REDD+

Workshop exercise

Divide into 3 groups

Task: use economic information to increase the benefits of REDD+ to your country