Indonesian Perspectives on Compensated Emission Reductions

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Outline

- Introduction Indonesian context
- Global C-budget and deforestation
- Why avoided deforestation should be compensated?
- Political and technical challenges
- Indonesian opportunities
- The way forward

Land cover of the insular SEA - 2000



Source: Stibig et al.(2002)

Land use type in Indonesia - 2000

No	Land use type	Area (ha)	Percent
1	Forest cover *)	108,571,713	56.7
2	Wood land / agroforestry	8,905,200	4.7
3	Agriculture / paddy field	8,106,356	4.2
4	Plantation	16,543,663	8.6
5	Fallow land	10,260,492	5.4
6	Grassland	2,424,469	1.3
7	Shifting cultivation / waste land / garden	12,768,711	6.7
8	House compound and surroundings	5,131,727	2.7
9	Dyke / ponds	642,905	0.3
10	Mosaic of mixed vegetation cover & others	17,922,705	9.4
Total land area *)		191,277,938	100

Forest land allocation according to its function and legal status

No	Forest land allocation (TGHK)	1990		2000	
		Area (ha)	Percent	Area (ha)	Percent
1	Protection forest	47,515,437	30.9	29,036,994	26.7
2	Conservation Forest (nature reserve, wild life sanctuaries, national park, grant forest park and nature recreation park)	19,152,525	12.4	21,824,627	20.1
3	Limited Production Forest	29,570,656	19.2	16,209,112	14,9
4	Non Convertible Production Forest	33,401,656	21.7	27,823,177	25.6
5	Forest with Specific Function	-	-	7,268	0.01
	Permanent forest areas	129,640,274	84.2	94,901,178	87.6
6	Convertible Production Forest	24,325,772	15.8	13,670,535	12.6
	Total Forest Area	153,966,046	100	108,571,713	100

Land-use and population density



Source: Murdiyarso et al. (2005)

Indonesian GHG emissions 1990 - 1994

	1990	1991	1992	1993	1994
Emissions (Gg)	523,241	610,856	566,821	438,634	559,471
Sequestration	-335,103	-354,309	-371,082	-388,575	-403,847
Net emissions from LULUCF (CO ₂ eq)	197,735	269,143	207.017	58,135	164,119
Total National Emissions (CO ₂ eq)	450,279	547,082	498,278	359,436	479,202
LULUCF share of emissions	44%	49%	42%	16%	34%

Five Priority Policies

- Curbing illegal logging and illegal trade
- Forestry sector restructuring especially forest industry
- Rehabilitation and conservation including accelerating
- Strengthening the economy of local community
- Reaffirming forest area

Global Carbon Budget (Gt)

<u>1980s</u>	<u>1990s</u>
$+3.3 \pm 0.1$	+3.2 ± 0.1
$+5.4 \pm 0.3$	$+6.3 \pm 0.4$
-1.9 ± 0.6	-1.7 ± 0.5
-0.2 ± 0.7	-1.4 ± 0.7
1.7 ± ?	1.6 ± 0.8
	$+3.3 \pm 0.1$ +5.4 ± 0.3 -1.9 ± 0.6 -0.2 ± 0.7

Annual C-emissions from LUC (Pg)



Why avoided deforestation should be compensated?

Not allowed under current rules of CDM Multiple benefits, including biodiversity, watershed services, and scenic beauty May be bundled with PES mechanisms Large potential of emissions reductions (Mt C/y) Non-Annex 1 AR **IPCC** definitions -1600 373

Technical and political challenges

Switching project-based to sectoral activities
Increasing deforestation rates (1980s, 1990s) – database and monitoring systems
Emission reduction target and non-compliance
Voluntary but legally binding issues – imposing binding target will require nation-wide public consultations

Introduction of "hot air" in the Kyoto Protocol





Indonesian opportunity?



Possible approach?



Forested Districts

The way forward

- Use Art. 3.3 rules in Annex 1 countries as a model
- Incentive to improve forest management and finance conservation activities
- □ Robust monitoring system → confidence in accuracy of estimations
- Sectoral approach (national baseline/target, overcome leakage problem)





The First Meeting of Parties (MOP-1) to the Kyoto Protocol

Montreal 2005 The eleventh session of the Conference of the Parties to the Climate Change Convention (COP 11) held in Montreal is in conjunction with the first session of the Conference of the Parties serving as the meeting of the Parties to the Kyoto Protocol (COP/MOP) in Montréal. The chilly weather of Montreal but hot political temperature of Canada, whose government lost the vote of non-confidence marks the arrival of the long-awaited MOP, as the Protocol entered into fore on 16 February 28 Nov - 09 Dec, 05 Montréal - Canada COP 11 and COP/MOP 1 -Montréal - Canada 28 Nov-09 Dec 05

Canada will host the first meeting of the Parties to the Kyoto Protocol in Montréal in conjunction with the eleventh session of the Conference of the Parties to the Climate