

Measuring Carbon Stock : Indonesia Experience



By : Ari Wibowo
Forestry Research and Development Agency
Ministry of Forestry of Indonesia
Email : ariwibowo61@yahoo.com

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Indonesia Condition

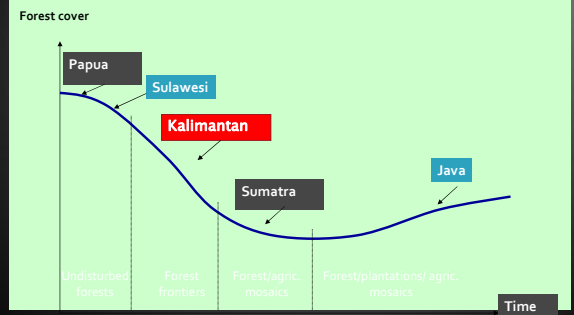


1. Country land area : app. 187 millions ha, population : app. 230 millions
2. 7 major islands (from total of > 16 thousands islands), > 300 tribes,
3. 33 provinces, > 300 districts, autonomous governance system
4. ±60 % of the country area are forest land/state forest (± 37 % of them are degraded at various levels)
5. Forest transition from the east (Papua : low historical DD) to the west (Sumatera : high historical DD, Java : forest cover increases)

Forestry Sector

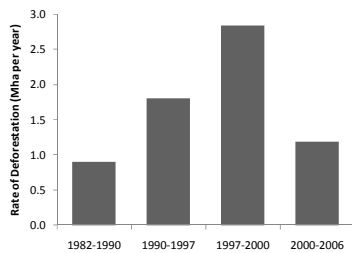
	Forest Area (x 000 ha)				Other Land Use
	Conser- vation	Protec- tion	Produc- tion	Conver- tible	
Forested land	14,365	22,102	38,805	10,693	7,960
Non-forested land	4,009	5,622	18,404	11,057	44,163
Unidentified	1,502	2,328	3,706	981	2,216
Total	19,876	30,052	60,915	22,732	54,339

Forest transition in Indonesia



Redrawn from Muriarsno 2008

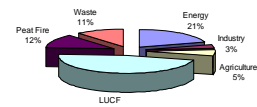
Deforestation Rate



Emission in Indonesia (SNC)

Sektor	CO2 emission	CO2 removal	CH4	N2O	PFC	CO2e
Energy	247,522		1,437	10		280,938
Industry	40,342		104	0.43	0.02	42,815
Agriculture	2,178		2,419	72		75,420
LUCF	1,060,766	411,593	3	0.08		649,254
Peat Fire*	172,000					172,000
Waste	1,662		7,294	8		157,328
TOTAL	1,524,472	411,593	236,388	28,341		1,377,754

IPCC GL 2006



In National Level

- ▶ SNC applied IPCC GL 2006
- ▶ Tier one, using statistical data dan IPCC defaults
- ▶ High uncertainty
- ▶ Lack of data
- ▶ Current Progress
 - INCAS (development of Indonesia National Carbon Accounting System in cooperation with Australia)
 - Use of NFI data
 - Current studies on local emission/removal factors
 - Progress to develop MRV institution and mechanism

In Sub National Level

- ▶ About 40 DA's
- ▶ Using IPCC GL 2006 methodology
- ▶ 5 carbon pools
- ▶ Development of allometric equations for plantation and natural forest through destructive sampling (in DA's, research institutions)
- ▶ Non destructive using allometric equation

In Community Level

- ▶ Climate Change something new to community
- ▶ Need capacity building to increase awareness, knowledge and skill
- ▶ Training to measure C in 5 C pools in some DA's
- ▶ Ground measurement
- ▶ Still in learning process
- Challenge
 - Uncertainty
 - Benefit to community
 - Co benefit to biodiversity