



BACKGROUND

- Total Land Territory:
180 million ha
- State owned Forest Land:
120 million ha (63%)
- Forest Cover:
88 million ha
- Population:
220 million this year



Deforestation/Forest Degradation

Period	Area
1982 - 1990	0.9 M ha/yr
1990 - 1997	1.8 M ha/yr
1997 - 2000	2.83 M ha/yr
2000 - 2006	1.08 M ha/yr

Drivers of Deforestation & Degradation

- Degradation
 - Forest fire
 - Logging and extraction
 - Slash and burn
- Deforestation
 - Forest fire
 - Forest conversion
 - Open pit mining

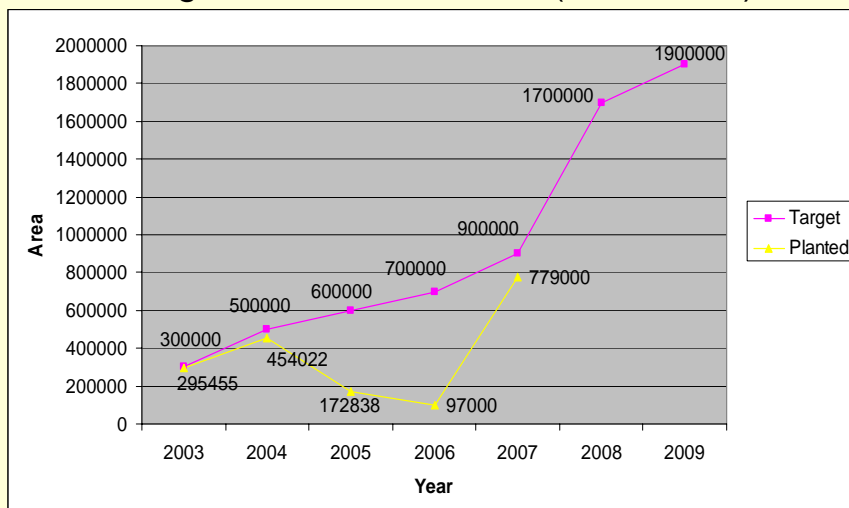


Pictures: taken from UNFCCC website

Rehabilitation Program

- Forest and Land Rehabilitation is one of priority policies on forestry
- This policy is implemented through:
 - Regular Forest and Land Rehabilitation (RHL), regreening, reforestation, soil conservation practices, etc.
 - National Movement on Forest and Land Rehabilitation (GERHAN), where government provide seedling and planting cost

National Movement on Rehabilitation Target: 6 Million hectares (2003-2009)



The target and the realization is lower than the degraded land

As a result:

The rate of rehabilitation will not possible to take-offer the rate of degradation

Therefore:

Need a mechanism to speed-up the rate of rehabilitation.

**AR CDM
is believed as one of the solution**

AR CDM in INDONESIA

- AR CDM is expected as one of potential mechanism to solve forestry problems in Indonesia, such as:
 - Speed up rehabilitation of degraded forest and land
 - Generate local income
 - Create employment opportunity
 - Supporting sustainable development

**Up to now there is no AR CDM
implementation and registered at EB**

PROBLEMS

- Eligibility of land is difficult to be define
- Complicated Procedure
- Lack of investor who are willing to provide up-front finance
- High transaction cost
- Discouraging carbon price

Eligibility of Land

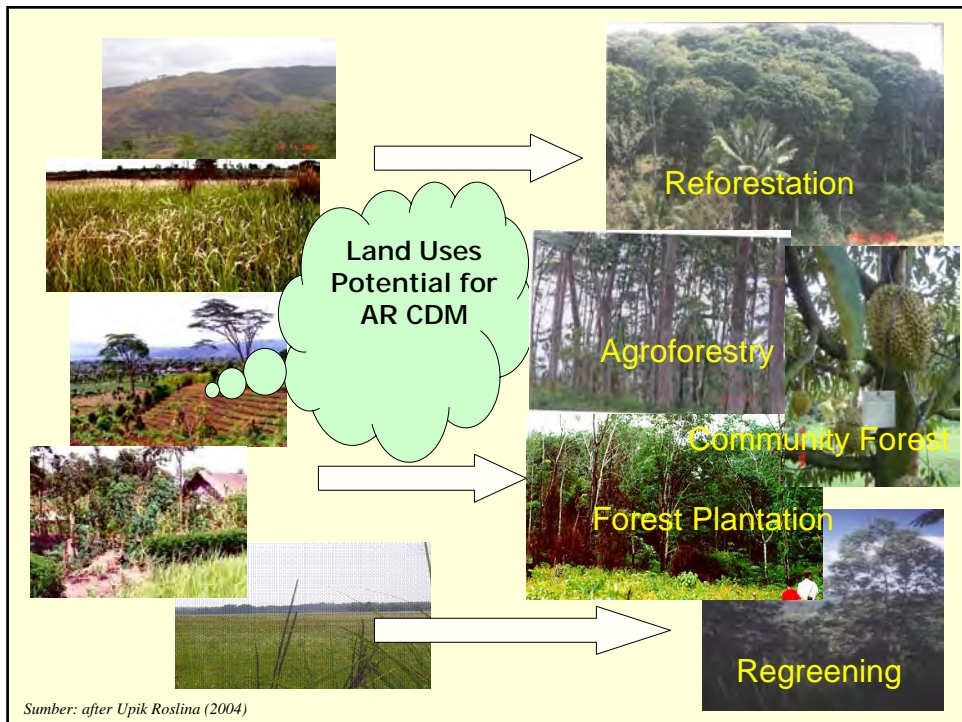
- The definition of forest has been decided by COP9 in a range of crown cover, tree high, and land area.
 - Minimum of tree crown cover is 30%
 - Minimum height at maturity is 5 meters
 - Minimum area of land is 0.25 hectares
- Tree grows all day long in the year, there is no dormant period.
- Deforested/degraded forest area will recover into 'forest' within 2 years if there is no disturbance.

Eligibility of Land

- Therefore, areas that will be eligible for AR CDM in Indonesia are:
 - Land that have been cultivated by community since 1990 for agricultural practices which will not allow the land to regenerate into forest, such as tillage and no tillage farming
 - Area in which the stand is vulnerable to fire (burned almost regularly).
 - Heavily degraded land
 - Settlement establish before 1990
 - New land for mangrove

Eligibility of Land

- NSS study identified that 32.5 million ha of land is potentially included in the forest carbon projects,
- However only about half of it was eligible for CDM projects.
- The allocation of the area for the forest carbon projects were:
 - Reforestation: 3.2 million ha
 - Agroforestry: 12.7 million ha
 - Community forestry: 9.8 million ha
 - Forest plantation under Concessionaire (HTI): 1.9 million ha
 - Forest plantation non Concessionaire (*Reboisasi*): 4.9 million ha



CDM Procedure

- Procedure of CDM is complicated especially for ordinary parties
- Many stages have to be passed through within project cycle.
- Not many project developers and investor aware of CDM cycle and procedure.
- Lack of expert on AR CDM who understand the procedure.

Transaction Cost

- Without CDM 1 ha plantation cost US\$ 650
- With CDM, transaction cost will be added to the plantation cost. The cost is more or less as follow:

Feasibility & Due Diligence	\$5,000 - \$10,000
PDD formulation	US\$ 20,000 –\$100,000 (new method)
Public consultation	US\$2,000 – US\$10,000
Validation	US\$8,000 - US\$15,000
Registration to EB	US\$0.10/ CER - US\$0.20/ CER
Underlying investment	Depend on the project
Project implementation	Depend on the project
Monitoring	Depend on the project
Verifikasi	US\$5,000 – US\$10,000

Investor

- Many investor and broker has came to observe the possibility of AR CDM Implementation, and many of them show their willingness to invest in the AR CDM.
- However, although some of PDDs already prepared, none of the AR CDM project go into implementation due to no one willing to be a project developer.
- Some reasons are:
 - CDM forestry is high risk
 - CDM forestry is not permanence
 - CDM forestry is not profitable with current carbon price and cost
 - Future uncertainty, including policy and social condition
 - Policy (ETS does not consider AR CDM in the trading)

Important point in CDM Implementation

Points should be taken care in implementing AR CDM in Indonesia are:

- Land ownership/right
- Concession rights
- Stakeholder participation
- Level of risk

CONCLUSION

- AR CDM implementation in Indonesia require good understanding of local, national, and international institutions.
- AR CDM process is clearly guided by Ministry of Environment Decree No. 206/2005, and Ministry of Forestry Decree No. 14/2004.
- Several aspects and problems need to be addressed specifically to ensure benefits of AR CDM implementation, such as: land ownership, participation, incentive distribution, socio-economic and biophysical impacts, and costs.



Thank You

Terima Kasih