Combating deforestation and forest degradation in the context of the UNFCCC: A new opportunity for enhancing SFM in the tropics

SFM and Climate Change Mitigation Options

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Side Event : Sustainable forest management to reduce deforestation and forest degradation in the tropics



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What are the climate change challenges?

To reduce emissions of GHG

To reduce concentration of GHG in the atmosphere

To reduce negative impacts and use new opportunities of climate change

In top of it we are committed to develope in a sustainable way

(Tropical) Forests play a central role in climate change



Forests can increase resilience, fix and maintain carbon

- If average C02 concentration continues to increase to 550 ppm or higher, tropical forests will become highly vulnerable and risk to become an additional factor to increased GHG concentrations in the atmosphere
- Need to increase resilience of forest trees and ecosystems in the same time as using forests as a mitigation option.
- ➡ Forest mitigation potentials: Huge!!!!
 - REDD: 3.76 GtCO2e per year, about 77 GtCO2e until 2030
 - Afforestation/Reforestation: min. 18.7 GtCO2e until 2030
 - Forest Restoration: estimated to 117 GtCO2e until 2030
 - Natural Forest Management: 6.6 GtCO2e until 2030
- Forests are a mitigation option now and over the next 30 to 40 years as a necessary transitional measure towards a low carbon economy. Beyond that, there is too much speculation!!

IPCC Fourth Assessment Report, Working Group III 15/05/2007: Chapter 9 Forestry



Forest mitigation strategies should be assessed within the framework of sustainable forest management ...

Sustainable Forest Management

Managing (permanent) forest to achieve one or more clearly specified objectives of management with regard to the production of a continuous flow of desired forest products and services (e.g. carbon) without undue reduction of its inherent values and future productivity and without undue undesirable effects on the physical and social environment.

- Natural Forest Management
- Forest Restoration
- Planting forest and trees

Mitigation Options in Forestry (fix and maintain carbon in the vegetation and soils)

<i>Mitigation options (general)</i>	Mitigation options (in the forest sector)	
CO2 Sequestration	Afforestation (CDM: on land not forested since at least 50 years)	
	Reforestation (CDM: on land not forested on/after 1.1.1990)	
	Forest Restoration (Not defined in CC: restore degraded carbon stocks)	
Emission Reduction of GHG	Reducing deforestation and forest degradation (REDD)	
	Committing forests as carbon reservoirs	
Substitution of C	Use of wood products	

SF

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years

Sustainable use of existing forest:

 →Emission reduction and managing carbon reservoirs: Considered in most of the REDD proposals for a post-2012 climate change regime
 Forest Restoration: Emission reduction + carbon sequestration

 \rightarrow Not considered as a mitigation option yet

Plantations & Agroforestry: Carbon sequestration \rightarrow included in A/R CDM

Initial carbon stocks



-- Sustainable use of existing forest: Committing forests to keep existing carbon reservoirs over a given period of time

A REDD model: Committed forests Emission of tCO2 Committed period for REDD incentives 1990 Date of <mark>S2</mark> mesurement carbon R 2005<u>S1</u> C Gain 2 C Gain B Year 2009 2029 S1: Scenario 1: based on C S2: Same as S1, but potenial and local stakeholders R: Setting a **B:** Baseline DD high stakeholder priority in objectives: low priority in baseline of DD without REDD respect to committing forests: respect to committing forests: **Forest restoration** Forest conservation

Basic approach to commit forests

- Not all deforestation is undesirable. Deforestation is needed to feed people, to contribute to economic development. However, deforestation should be discouraged when:
 - it is economically inefficient;
 - it is a threat to environmental stability;
 - It leads to a significant loss of biodiversity/endangered species; and
 - it leads to social inequities and conflicts



 How to commit and manage forest areas as carbon reservoirs?
 Use the concept of Permanent Forest Estate
 SFM includes a range of activities that are in line with REDD: maintaining existing carbon reservoirs + forest restoration + A/R



SFM and forest mitigation AIM: Moving the national baseline scenario

Sources of emissions from global land use change 2000



Source: Reproduced from Baumert et al (2005)

What forests to commit? SFM (incl. REDD, A/R and Forest restoration): an instrument to maintain carbon pools and support sustainable development

- The permanent forest estate
 - Protection forests
 - Production forests
- Quantification tools
 - National baseline scenario (national forest inventory; register of committed forests)
 - Local accounting of social and economic costs and benefits, carbon monitoring

Which actors?

- Direct forest users
- Forest owners
- What incentives?
 - Adapted to local needs
 - Transformed in CERs that are internationally marketed

Committed Forests through SFM: The overarching issues

- creates co-benefit that counts (timber, biodiversity, soil conservation, social)
- potential to generate annual funds in the order of several billion US\$
- Alternative development pathway: if well designed, implemented and policed, at national and local level, can directly benefits rural /forest dependent people
- Maintain a realistic perspective on the potential to commit forests: Countries with a high potential income from REDD score low in governance:
 - Do not succeed in lowering D&D rates;
 - Unable or unwilling to pass incentives to the real D&D drivers).
 - → An obvious Link: FLEG and REDD

Hence a need for a two-fold approach:

- Voluntary forest mitigation targets and national baseline setting
- A market-driven scheme to be focused on implementation at the level of committed forests

Committed forests Final considerations

REDD/SFM, CDM A/R and forest restoration are transitional measures towards a low carbon economy. They will happen in the next 30 to 40 years. The action is now!

Climate change might progress faster than expected and can jeopardize the mitigation options in forestry. Adaptation and enhancing resilience is thus also of importance



Thus the forest sector has to react now. Not negotiate on details (e.g. methodologies, leakages, additionality), but get the big picture right.

A final conclusion:

Mitigation options in the forest sector:

- REDD
- Forest restoration
- A/R
- Forest management
- Biofuels





MDG:

 Eradicate extreme poverty and hunger
 Promote gender equity and empower women
 Ensure environmental sustainability
 Develop a global partnership for development



Thank you very much for your attention!! Climate@intercooperation.ch