International Workshop "REDD+: A New Framework for Conservation of Tropical Forests – Monitoring, Biodiversity and Practices"

Nagoya, 25/10/2010



Realizing REDD+, a global comparative study



A quick introduction to CIFOR



- Established in 1993
- One of 15 centers in the CGIAR
- Focus on forest policy research and global comparative research
- Headquarters in Bogor, Indonesia
- 80 Scientific staff working in the major forests of Southeast Asia, Africa and South and Latin America
- "Center without walls"

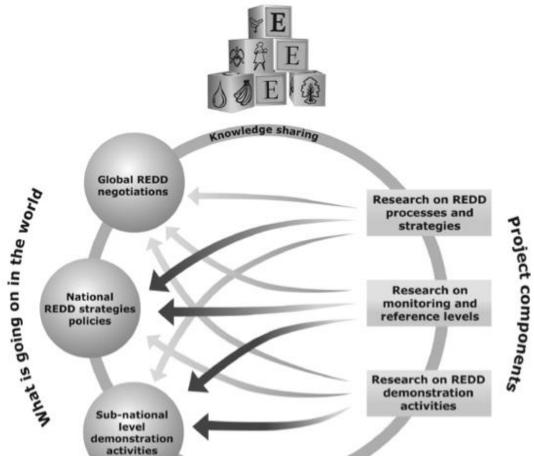


CIFOR's research strategy

- 1 Enhancing the role of forests in **mitigating** climate change
- 2 Enhancing the role of forests in **adapting** to climate change
- 3 Improving livelihoods through smallholder and community forestry
- 4 Managing trade-offs between conservation and development at the landscape scale
- Managing impacts of globalised **trade** and **investment** on forests and forest communities
- 6 Sustainably managing tropical production forests



Global Comparative Study on REDD (GCS-REDD)



Knowledge sharing

- National REDD process and strategies (C1)
- REDD demonstration activities (C2)
- Monitoring and reference levels (C3)
- Knowledge sharing (C4)

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GCS-REDD: Countries and activities

| Asia Pacific | Africa | Latin America |
|--------------|----------------------|---------------|
| Indonesia | Cameroon | Bolivia |
| Vietnam | Tanzania | Brazil |
| Nepal; PNG; | DR Congo; Mozambique | Peru |

| C1: National policies & politics | C2: REDD+ pilot impact assessment | C3: MRV & reference levels | |
|--|-----------------------------------|--------------------------------------|--|
| Comparative policy process analysis | Comprehensive methodology: BACI | Field testing of methods | |
| 8-9 policy processes & selected policy studies | 20+ projects/sites | Defor. & degradation modelling -> RL | |
| Surveys 2010-2011 | Surveys 2010 - 2012/13 | National MRV systems | |



Component 1: Research on national REDD strategies, policies, and activities



Hypotheses

- Formulation of a national REDD strategy and implementation of REDD projects is delayed due to limited institutional capacity, shortcomings in existing financing and MRV mechanisms, and tradeoffs and economic incentive structures outside climatic goals.
- Corruption, lack of transparency and accountability beside other factors in countries' governance context result in low political will and limited effectiveness, efficiency and equity of REDD+ strategies
- Political commitment for the implementation of 3E REDD+ is low because powerful national actors are not engaged in the decisionmaking process.
- Lessons from ongoing REDD activities and other forest and governance initiatives have little role in informing political decisions for REDD.



Flexible Element: Specific Policy Studies to capture emerging or country specific issues **Country case** and questions, focus on political economy studies **Cross-country** comparative

studies

analysis

Discourse Media Analysis → Why: To

determine what kinds of actors are shaping public debate and influencing the policy process.

→ How: mediabased analysis

Country profile

→ Why: To reveal contextual conditions (drivers of deforestation, institutions, political economy, REDD architecture as discussed)

→ **How:** literature review, expert interviews

Strategy Assessment

→ Why: To assess the adequacy of proposed response measures to secure 3E outcomes?

→ **How:** situational analysis, R-PP scoring

Policy Network Analysis

→ Why: To analyse structural conditions in the policy arena, Actors, Perception, Power, Position → **How:** survey and in-depth interviews

Comparative analysis

→ Why: to identify structural and governance barriers for 3E REDD outcomes, and options for improvements

→ **How:** comparative analysis of individual research elements (country profile etc), qualitative comparative analysis (QCA)

Challenges ahead

REDD dynamics in the policy arenas at all! levels will have implications for C1 regarding country choice, methods and research questions:

- Level → regional, national, subnational decision making needs to be researched
- Cross component work → needs to be strengthened
- Donor and ideology dynamics → country specific (LOI..)
- Research questions → update needed, and like country or regional case specifities can be incorporated in C1 structure





Component 2 : REDD demonstration activities



Research questions

Overarching

How can REDD projects be designed in such a way that their outcomes fulfill the 3E+ criteria?

Subordinates

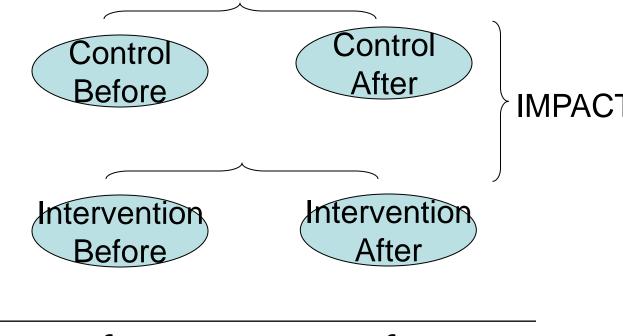
- Do the 1st generation REDD projects attain the 3E+ criteria?
- If yes, how? If not, why not?
- How do we improve the design and implementation of 1st and 2nd generation projects?



BACI

Comparison (Control)

Project site (Intervention)



Before

After



Intensive and extensive approaches

Intensive Approach

- Narrow but deep
- · Few sites
- Deliberately selected
- · Unit of analysis:Household
- Research period: Months
- · In-depth analysis

Intersection

Identical village-level survey instruments

Extensive Approach

- Wide but shallow, Many sites, randomly selected;
 Unit of analysis: Village; Research period: Days;
 - · Relatively superficial research



Research countries and projects

| | Continent | Country | REDD project site | MOC | Int / Ext |
|---|-----------|-----------|--|------------|-----------|
| | | BRAZIL | Government of Acre (SEMA). Acre | YES | INT |
| | LATIN | | Instituto Centro de Vida. Mato Grosso. | YES | INT |
| ٩ | AMERICA | | IPAM. State of Para. | YES | INT |
| | | | TNC. Sao Felix du Xingu | YES | INT |
| | | | Bolsa Floresta - Not part of BACI | YES | INT/EXT |
| | CA | CAMEROON | CED. South and East region. | In process | INT |
| | AFRICA | | GFA. South West province. | In process | INT |
| | | TANZANIA | TaTEDO. Shinyanga. | YES | INT |
| | | | Tanzania Forest Conservation Group (TFCG). Kilosa. | YES | INT |
| | | | Tanzania Forest Conservation Group (TFCG). Lindi. | YES | EXT |
| | | | HIMA. Care International. Zanzibar. | YES | EXT |
| | | | JGI. Masito Ugalla Ecosystem. | YES | EXT |
| | | | MCDI. Mpingo. | YES | EXT |
| A | | | Government of Aceh. Ulu Masen. | YES | INT |
| | | | Community Carbon Pool. FFI. West Kalimantan. | YES | INT |
| | ASIA | INDONESIA | KFCP. AusAid. Central Kalimantan. | MOU | INT |
| | AOIA | INDONESIA | Rimba Raya . Infinite Earth. Central Kalimantan. | YES | EXT |
| | | | Katingan Peatland. Starling Resources. Central Kalimantan. | YES | EXT |
| | | | TNC Berau. East Kalimantan. | Discussion | INT |
| | | VIETNAM | SNV. Cat Tien . Lam Dong province. | YES | INT |

REDD project sites in Indonesia

Conservation of the Upper

Kutai Barat, HKM: Heart of

Betung Kerihun National Park

Kalimantan

Global Green

Kutai regency

Global Green in East

Kapuas Lakes System

FFI/ Macquarie Bank

West Kalimantan

WWF

Tesso Nilo Pilot Project - REDD WWF Riau

Sumatra Forest Carbon Partnership

Berbak Carbon Value Initiative

West Kalimantan Community

FFI/ David and Lucile Packard

ZSL / DEFRA / LIPI / Berbak

National Park / US Fish and

Carbon Pool

Foundation

West Kalimantan

Wildlife Service

Berbak Natinal Park

Australian gov

Jambi

Reducing Carbon Emissions from Deforestation in the Ulu Masen Ecosystem - A Triple-Benefit Project

Aceh Provincial Government, Carbon Conservation, FFI Ulu Masen

Leuser Ecosystem REDD Project

Global EcoRescue / Government of Aceh Leuser

Global Green Ecosystem **Restoration Project**

Global Green Siberut island

Kampar Ring - A Sustainable **Development Model Based on Responsible Peatland Management** WWF

Betung Kerihun National Park

Harapan Rainforest Project

Burung Indonesia / The Royal Society for the Protection of Birds / Birdlife International / PT REKI / Yayasan KEHI Jambi, South Sumatra

Merang REDD Pilot Project (MRPP)

South Sumatra

Rehabilitation of the Sungai Putri peat swamp forest FFI/ Macquarie Bank

Gunung Palung National Park

Lamandau RARE / YAYORIN / Clinton Foundation Lamandau Reserve

Central Kalimantan

The Rimba Raya Biodiversity **Reserve Project** Infinite Earth / Orangutan Foundation International

Taniuna Putina National Park

Australian Government partnering w GOI. Implementation

Kalimantan Forest and Climate Partnership

partners are CARE, BOS, Wetlands International

Meru Betiri National Park ITTO / Forestry Research and **Development Agency** Meru Betiri National Park

REDD in Sebangau National

WWF / Sebangau National Park Sebangau National Park

Gorontalo: Establishment & Management of Nantu National Park Gorontalo University / YANI - Yayasan Adudu Nantu Internasional Nantu National Park

Sustainable Management of

Poigar Forest: REDD in North

Sulawesi

Berau, Indonesia Climate Action Project; Kabupaten Berau Forest Carbon Program TNC / ICRAF / Sekala / University

Malinau Avoided Deforestation Project

GER / PT Inhuntani II / Malinau Regency / KfW /

FFI / District Governemnt / GTZ / Tropenbos

International / Global Eco Rescue / Borneo

Tropical Rainforest Foundation

Malinau

Berau

ONF International / Green Mulawarman / Winrock IntÆl / University of Synergies Queensland **Poigar Forest**

> Lamandau RARE / YAYORIN / Clinton Foundation Lamandau Reserve

Mamuju Habitat PT Inhutani I Mamuiu

Jayapura Pilot Project WWF Cyclops Mountain

Hutan Lestari untuk Orangutan

PT. RHOI (Restorasi Habitat Orangutan Indonesia) formed by Samboja Lestari

Perpetual Finance for Carbon

New Forests Asset Management / PT Emerald Planet Papua

Kabupaten Katingan and Kotawaringin Timur

Peatland Capstone Project

Starling Resources

Katingan Conservation Area: A Global

TEBE Project (Towards Enabling Mitigation of Climate Change Through Promotion of Community-Based Economic Growth)

KYEEMA Foundation/ AusAID/ Yasan Peduli Sanlima (SANLIMA)/ Yayasan Timor Membangun (YTM) Mutis-Timau



Process outcomes

- Outcomes in the "before" period:
 - Project success in establishing carbon baselines
 - Local permission for the project
 - Degree of involvement in shaping project
 - Degree of involvement in implementing project
 - Degree of understanding of REDD & project
 - How tenure issues addressed
 - To what extent social and environ. standards being met (e.g. CCBA)



Impact outcomes

- Baseline measurement to lay foundation for impact in the "after" period:
 - > MRV baseline
 - RS imagery at project sites
 - Model of causes of D and D
 - Household wellbeing, livelihoods, assets
 - Wealth ranking by local standards
 - Existing tenure conditions
 - "Is your HH worse off or better off than one year ago?"
 - "What are reasons for improvement or worsening of HH wellbeing?"

Future challenges

- How follow through on BACI in four-year time frame if REDD+ incentives slow to get off ground?
- Representativeness of sample of projects and villages in the global arena?
- How to make an adequate assessment of REDD project costs?
- How to address biodiversity as a co-benefit?





C3: Research on MRV and reference levels



Background

- The empirical basis for assessing likely future emissions is virtually non-existent.
- Many policy makers, NGOs and research institutions routinely call for standardized methodologies for assessing reference emissions.
- Most carbon accounting systems (e.g.BioCF) focus solely on aboveground biomass.
- IPCC procedures are inadequate for forest degradation

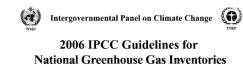


Five identified constraints

- Integration of historical deforestation data with knowledge of drivers of deforestation.
- Unavailability of country- or region-specific factors for the IPCC GHG accounting equations.
- Lack of data and understanding of human induced carbon stock changes in all five pools.
- Institutional capacity to undertake the appropriate work necessary for setting national emission reductions targets, MR of forest related carbon emissions.
- Lack of information on cost-accuracy tradeoffs between highly technical approaches and community-based measurement approaches.

Objectives

- To develop equations and factors for better carbon accounting
- To provide guidance to project developers on using a Tier 2 approach with country and site specific factors for the IPCC Greenhouse Gas Accounting Guidelines equations.
- To assess approaches and synergies for integrating detailed project-level monitoring and national level estimation, accounting and reporting

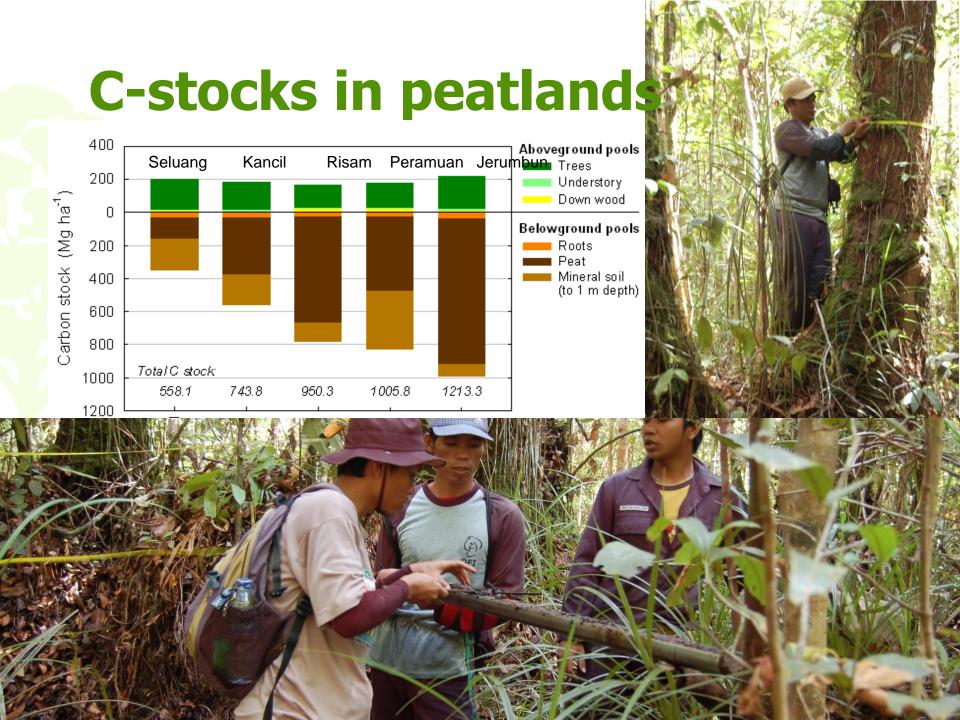


Volume 4

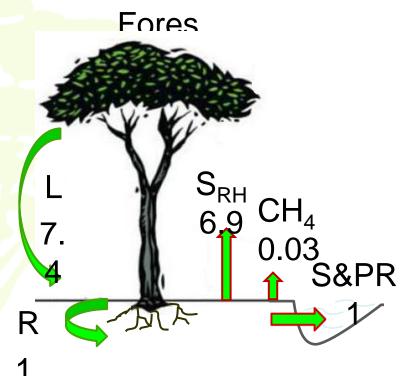
Agriculture, Forestry and Other Land Use

Edited by Simon Eggleston, Leandro Buendia, Kyoko Miwa, Todd Ngara and Kiyoto Tanabe

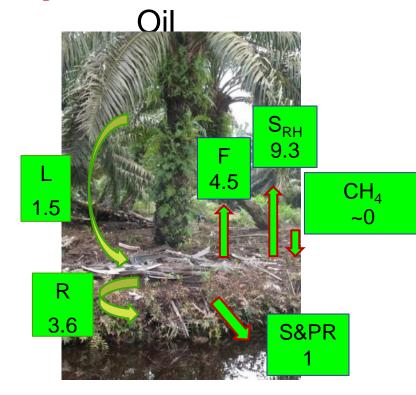




Assessment of C budgets in peat swamp forests and oil palm plantations



$$\Delta c_{\text{peat FOREST}} = C_{\text{IN peat}} - C_{\text{OUT peat}}$$
$$= 8.9 - 7.9$$
$$= 1.0 \text{ Mg C ha}^{-1} \text{ y}^{-1}$$



$$\Delta C_{\text{peat OP}} = C_{\text{IN peat}} - C_{\text{OUT peat}}$$

= 5.0 - 14.8
= - 9.8 Mg C ha⁻¹ y⁻¹

Net C $_{loss}$ = 428 Mg C ha^{-1} over 25 years

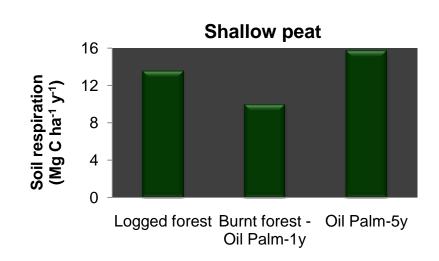


Preliminary results on peat soils

1) Soil respiration

LF → BF-OP1y: due to root respiration

BF-OP1y → OP5y: due to both root respiration and peat decomposition (vicinity to drainage canal)



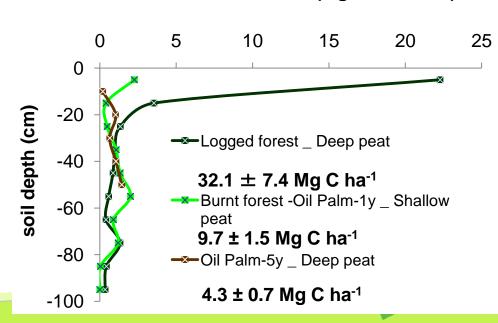
2) Coarse root biomass

Logged forest: high root biomass in the soil top 10 cm

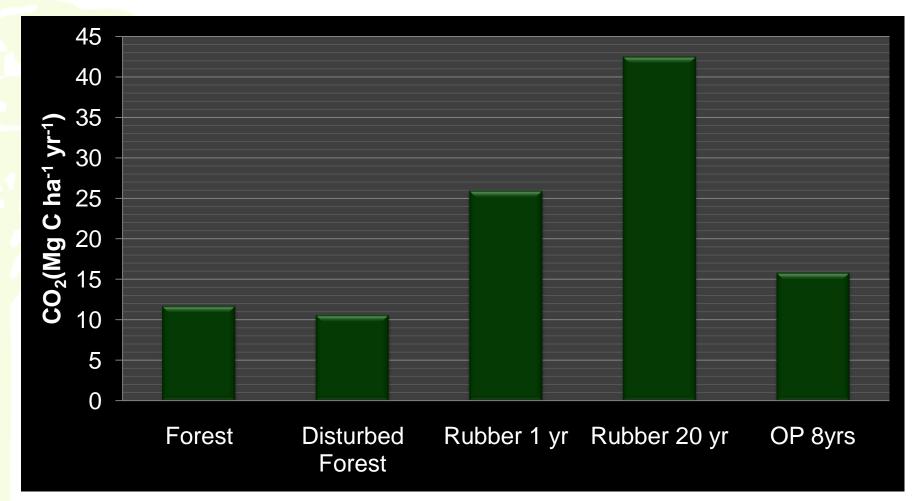
Burnt forest: still many roots from previous forest (LUC 3 years ago)

Conversion Logged forest – oil palm: Loss of 28 \pm 7 Mg C ha⁻¹ from roots

Root biomass (Mg ha⁻¹ 10cm⁻¹)



Preliminary results on mineral soils







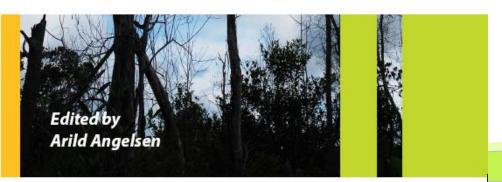
C4: Knowledge sharing





Moving Ahead with REDD:

issues, options and implications



 CIFOR 2008: Book on global REDD architecture

- Key messages:
 - Technical solutions exist,
 but
 - Often trade-offs
 - Political issues
 - Flexibility needed:
 - Country circumstances
 - Learning process



The dilemmas ahead

- REDD+ must be new ... but build on what has gone before
- REDD+ must be transformational in a world where change is incremental
- REDD+ requires targeted interventions ... and broad sectoral coordination
- REDD+ need policies ... but the bias is toward projects
- Promising REDD+ approaches but no silver bullets
- REDD+ is urgent but cannot be rushed
- We know a lot but need to be learning while doing

Key messages

- REDD+ is a unique opportunity
 - the money and political will is there, but past performance mixed
- Context matters REDD+ policies need to work on 2tracks
 - Start long-term transformational reforms, or accelerate some of those ongoing (e.g. land titling cadastre)
 - Start short-term policies, but identify 'low-hanging fruits' important also to demonstrate commitment: "YES WE CAN – AND WILL DO REDD"
- REDD is about PES-like performance-based payments
 - but strong preconditions apply → rely on some old approaches (protected areas)
- Learn from the past, but also while moving forward

http://www.cifor.cgiar.org http://www.forestsclimatechange.org

