Activities that can lead to degradation: not all carbon stock reductions are degradation

http://www.gfoi.org/rd/second-rd-workshop/

Tree logging
Fuel wood harvesting
Land clearing through fire
Animal husbandry
Shifting cultivation

Definition of degradation

Countries monitoring of degradation (Laos, DRC, Indonesia): why is it important?

- To understand what is happening on the ground: what are the processes that lead to degradation and how they interact (logging + enhanced fire risk).

- Monitoring came from political steering to validate the effectiveness of taxes on Amazonian resettlement (making sure enough deforestation is happening), later related to regulating public assets, improve governance: control and fiscalization of land grabbing.

- Understanding costs and capacity needs and developing strategies for action: where and why are the priorities for action?: degradation precedes deforestation.

- Reporting is not leading the monitoring

Which system would be required for forest degradation monitoring?

- It is unrealistic to think we can develop systems that capture all needs. System that starts with a few basic variables, and then moves into a progressive, step-wise integration of other variables to monitor other requirements (CBD, Degradation).

- Monitoring systems that (1) Adjust to the country conditions with (2) political steering on the focus of the monitoring, (3) technical needs, and accuracy needs for the estimates based on country needs but also for (4) funding programmes.

- Degradation monitoring should be source specific, both based on remote sensing and ground data (e.g NFI, forest plots), considers what is feasible under remote sensing and is based on an operational definition, and captures changes on a long term based----- what to do with non AGB pools: Soil pools!

- Monitoring systems should rely on appropriate spatial and temporal scales (e.g. canopy cover closure times, phenological effects).

- There exist data/methods that can measure degradation for different sources with high accuracy but moving from local to national systems is expensive and technically complex: we are not there yet.

Which system would be required for forest degradation monitoring?

- Systems that are transparent (freely accessible)-----promote societal endorsement and consequent policy development: Brazil deforestation peak in 1996 ----the map went public----societal endorsement---------policy development: increase of protected areas.

QUESTIONS

Define a standard minimum accuracy for degradation monitoring:

- We are far from that context (?)
- It would be needed for payments. It has the precedent of Kyoto CDM 90th CI = 10% of the mean. But national scale under REDD+ makes this challenging.
- When pushing too hard on minimizing accuracies at the country level, it might be too demanding and countries might give up on the LULUCF sector completely.

Variables:

Focus on variables or proxies that can be measured for different degradation types, are feasible, which can rely on RS and/or ground data, consider country context that result in technical complications (cloudiness, technical capacities, costs)

Which monitoring system would be required?

Goal of monitoring: under UNFCCC, REDD+ national forest monitoring systems have a focus on GHG measurements for mitigation purposes, but countries' monitoring needs include much wider aspects (forest management, land management, water, biodiversity) to aid policy development. How to reconcile these needs?

How do we move towards to appropriate MRV system----FAO-FRA, now UNFCCC (NC, BUR).

Need to adjust to the country conditions with political steering on the focus of the monitoring, technical needs on accuracy based on country needs but particularly for funding programmes (accuracy for C changes needs to be defined)

(1) Adjust to the country conditions with (2) political steering on the focus of the monitoring, (3) technical needs on accuracy based on country needs but also for (4) funding programmes.

Activities that can lead to degradation

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Importance of degradation, what kind of monitoring tool would you need?

Political side: more cost-effective to work on deforestation, but without degradation monitoring forests are not properly assessed. **Needed for steering forest management for REDD+**.

Dealing wth degradation can be more costly (capacity, money). **Assessing the costs.**

LAOS

1. Need to know the drivers and costs to assess degradation monitoring: mining, shifting cultivation. Identifying activities to reduce degradation. Remote sensing and ground truthing.

DRC

Carbon mapping project: 1. Biomass map for the region, 2. Ground activities at community level. RS + local level monitoring, how to combine?. No practical technical experience yet (?)

Indonesia

Degradation needs to identify causes. But it's not the most important. Causes can be related, logged area becomes more fire prone. More important to understand the processes that lead to degradaton. Monitoring helps but requires an operational definition. Monitoring needs measurements along a long term dataset. They look for the source (fire? Illegal logging?). How to bring the data from local to national level?

Why is degradation monitoring used for/why do you want to do degradation monitoring (the monitoring is a tool to improve management and governance?): reporting Or to anticipate deforestation and therefore help forest governance?

First priority: understand what is happening on the ground: what are the processes that lead to degradation and how they interact? Reporting is not leading the monitoring.
getting information ready?---what is the cause?---what do we do?---How we move from local to national?

Brazil

1. Deforestation analysis was to validate that the pioneer funds were really resulting in Resettlement. The reason to monitor deforestation was a political tool to understand what was happening once a large plume of fire was detected over the Amazon. (60-80s)
2. When the need to report C emissions came Brazil already had some data to offer, but had to be harmonized with new data.
3. New demands are requested to that original map: F/NF, degradation: fire scars and logging (which can be degradation or not)

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Evolution of the system: by providing more evidence and transparency the monitoring system grew

Deforest. 96 peaked----political response was to increase protected areas. When the map went public there was societal endorsement---------policy development. Benchmark: bilateral agreement with Norway.

Deforestation was reduced validated by transparent monitoring.

Degradation and CBD needs are pressures now---------anticipation of political needs.

System started rather slowly and there was a continuous evolution that allowed monitoring of other variables. Should the monitoring start with basics, and then evolve.

Q. What do you want degradation for?

Q. Legal and institutional setting linked to monitoring?----Timber economy, land grabbing of public land. Regulating public assets. Fiscalization system had to be reinforced to regulate

Degradation general

Need for definitions. To understand areas and to understand the thresholds between degradation and deforestation.

Forest class stratification needed for reduced accuracies.

Forest degradation: carbon stock is not an indicator...(requires a reference, either through time or through forest status not disturbed)

Florien

Degradation requires a robust indicator that does not rely on canopy cover------remote sensing needs right resolution (temporal and spatial resolution that are appropriate) and this means higher capacity and costs. Quantification depends on the degradation cause (fire vs selective logging). Is realistic to measure degradation with remote sensing along?. Quantifying would needs ground data too.

TOPICS under discussion

1. Carbon and REDD+
2. Non carbon issues: are we looking of drivers or impact of drivers from a land use perspective

These two topics are very different and need different monitoring tools/focuses.
Monitoring with RS is useful but cannot avoid ground data.

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1. Carbon and REDD+
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These two topics are very different and need different monitoring tools/focuses.
Monitoring with RS is useful but cannot avoid ground data. Monitoring needs understanding of the processes and what are the needs for RS that are able to capture change properly: phenology needs to be isolated from degradation.

Danilo

1. RS can be useful for understanding where changes are happening from an area perspective.
2. Definitions, and political evolution: degradation came in when countries without deforestation could participate (e.g. DRC), the same for conservation (e.g. India) (understood as management). Sustainable management of forests instead of SFM to avoid on UNFF. Management of enhanced forest C stocks to be different from CDM.

UNFCCC

Conservation: conservation of forest C stocks under REDD+ frame
Reforestation: not hving CDM approach
5 activities: not all needed
Can we create a monitoring system that captures it all?...add from basics a grow from there.

Donors

1. Atmospheric interaction with fire.

Quantification of biomass changes requires one monitoring only? Different needs, and three tracks:

1. Effect on the atmosphere
2. Change---consistency, and change trends
3. Other number of reasons to quantify biomass changes

Political arena

Different routes under REDD+ reporting(?) Questions under discussion on the convention(?)

Indonesia-country

Not specifically for reporting.
Trends are affected by clouds
They only report what can be measured and collected
Monitoring systems is step-wise and updatable and improvable when new data appears.
How do we move towards to appropriate MRV system----FAO-FRA, now UNFCCC (NC, BUR).
Need to adjust to the country conditions with political steering on the focus of the monitoring, technical needs on accuracy based on country needs but particularly for funding programmes (accuracy for C changes needs to be defined)
What about V?

QUESTIONS

Define a standard minimum accuracy for degradation monitoring: we are far from that context. It would be needed for payments. It has the precedent of Kyoto 9/10(?)/ When pushing too hard on minimizing accuracies at the country level, it might be too demanding and countries forget the AFOLU sector completely.

Variables: you need to focus on indicators that can be measured and are feasible for different degradation types, which can rely on RS and/or ground, considering country context that result in technical complications. (Technical feasible, but very expensive to scale to national level)

Reporting can respond to different needs (GHG, donor access)