

Integrating REDD into the Global Climate Protection Regime: Proposals and Implications

Workshop Summary Report

On 24 June 2008, the Center for International Forestry Research (CIFOR), the Amazon Institute for Environmental Research (IPAM), the Overseas Development Institute (ODI), the Institute for Global Environmental Strategies (IGES) and the Forestry and Forest Products Research Institute (FFPRI) hosted an introductory workshop in Tokyo, Japan where participants provided input to their collaborative research project to analyze the implications of proposals for integrating reduced emissions from deforestation and degradation (REDD) into the global climate protection regime.

This document provides a summary of the discussions during the workshop and outlines the short-term analysis objectives that CIFOR and its partners are pursuing based on input from workshop participants.

Forty-three individuals from a broad range of organizations (i.e., academia, government, civil society organizations, international institutions, companies, etc.) and from developed and developing countries attended the workshop (see [Appendix A](#) for the participant list). The meeting was designed to bring negotiators and delegation staff together with researchers and analysts to discuss and identify the critical research questions where analysis will be most useful to inform negotiations about the implications of different REDD designs at COP-14 in December 2008 and COP-15 in December 2009 (see [Appendix B](#) for the workshop agenda).

We would like to thank IGES and FFPRI for the in-country organization of the workshop and the Meridian Institute (Rex Raimond, Shelly Foston and Mike Lesnik) for facilitation and reporting.

I. Welcome and Introductory Remarks

Frances Seymour, Director General of CIFOR, opened the workshop with introductory remarks. Ms. Seymour expressed her excitement about the opportunity to work with this diverse, balanced group of highly respected individuals. Ms. Seymour explained that there was no official link between this workshop and the official UNFCCC meetings and process; but rather this workshop was intended to provide a complementary, informal venue for negotiators and researchers to identify analysis that would contribute significantly to ongoing international climate negotiations. She stressed that the workshop was not a negotiating forum and the participants were not trying to achieve consensus but rather provide input to a research agenda. Ms. Seymour also noted that specific comments made during the workshop would not be attributed to individuals, organizations, or countries in post-workshop correspondence or in documents such as this report. Ms. Seymour provided the following timeline for follow-up from this workshop:

- *Immediate* – The collaborating institutions (CIFOR, IPAM, ODI) will further refine and decide among the potential questions for short-term research and analysis
- *Mid-July* – CIFOR will distribute a summary workshop report (this document) and update on research-related decisions
- *September* – Collaborators will complete a first draft of the analysis
- *November* – CIFOR will release a report for use by negotiators and others in preparation for the COP-14 and related meetings in December.

Henry Scheyvens, Senior Policy Researcher, Forest Conservation Project, IGES also welcomed participants to the workshop and to Tokyo, mentioning that 2008 is IGES' tenth anniversary year.

Rex Raimond and his colleagues from Meridian Institute facilitated the workshop and breakout groups. After completing opening remarks, reviewing the workshop agenda and guiding brief participant introductions, Raimond introduced Daniel Murdiyarso, Senior Scientist, Environmental Services and Sustainable Use of Forests, CIFOR.

II. Review of Draft Research Framework and Subsequent Discussion

Murdiyarso reviewed the draft research framework (See [Appendix C](#) for the draft research framework) and noted that the workshop was designed to help participants clarify the right questions to be explored. The workshop was not intended as a forum to review and critique the research framework beyond what was necessary to enable open and creative discussion. He noted that the framework has evolved a great deal and that CIFOR, IPAM, and ODI (who developed the framework) recognize several limitations of the format (for example, there is no straightforward way to capture the effects of time scale, scope, and differences in country circumstances). Murdiyarso stressed that the key point of the framework was to illustrate that carbon effectiveness, cost efficiency, and equity and co-benefits are key components of analyzing methodological, financial, and institutional issues related to REDD.

The following key points and questions were raised during the discussion following Murdiyarso's presentation of the research framework.

- One participant raised the question of why cost-efficiency and carbon effectiveness are differentiated. The participant made the point that, in this context, if an action is not carbon effective then it is not cost efficient either. Murdiyarso and others from CIFOR pointed out that "cost efficiency" in the framework is a practical issue intended to capture the financial cost of setting up and running a project. On the theme of measuring effectiveness, one participant suggested that on-the-ground impacts should be examined (for example, examining implications of REDD for other issues such as land tenure, and so on) because if actual impacts are not realized, then the primary measure of effectiveness is not met.
- Participants discussed the idea that, at present, REDD might be appropriate only for countries at some points on the forest transition curve and that there could be other mechanisms or time horizons for countries that are not ready, where deforestation rates are low, or where afforestation/reforestation is taking place. In addition, participants commented that much of the conversation related to REDD focuses on forest lands and forestry whereas some believe the most interesting REDD work will include non-forested lands. Other participants made the related comment that mitigation and adaptation may have a larger impact on forests than REDD so the policy discussion should be broader than just REDD.
- A participant suggested a need to consider the linkage between REDD and overall climate strategy: specifically asking to what extent adding a forest-related component to an international climate change mitigation strategy will drive a deepening of carbon targets or will it just provide another way to meet carbon targets.
- Participants raised the topic of using scenarios (IPCC and other) as a tool to analyze different aspects of REDD. Workshop organizers noted that they will look for guidance from the group regarding how best to utilize such scenarios given the short time frame for this analysis.
- One participant noted that the UNFCCC process is focusing on methodological issues and suggested that the June SBSTA annex might be helpful to review because it identifies methodological issues already under consideration. CIFOR and others might add most value if they focus their short-term analysis efforts on other issues.

III. Plenary Discussion about Priority Research and Analysis

Following the open discussion about the research framework and general thoughts, Raimond (Meridian) asked the workshop participants to talk briefly in small groups about what each person believed to be the most pressing research question and why. Raimond then led an initial plenary discussion about key questions of interest for research and analysis. Although the focus of the workshop was on short-term products, some of the discussion went to larger or longer-term issues that could not be addressed fully prior to COP-14 or even COP-15. The discussion, questions, potential related analysis to consider, and other highlights from the plenary discussion follow.

Guidance to Researchers

Participants noted that the background paper and annotated bibliography prepared by the workshop organizers in advance of the workshop were helpful and suggested that additional or expanded

versions of such materials would be helpful to negotiators and can be developed within the project time-frame. It was noted that though the IPCC guidelines are the most widely followed by UNFCCC parties, even these can be controversial; these guidelines, therefore, set the mark for what is acceptable to the broadest cross-section of UNFCCC parties. Research which explores social and economic matters is even more likely to get disagreement. The group suggested that a key task for the project will be to provide sensible analysis and background materials and let each national delegation use the materials as they find them useful and appropriate.

One participant commented that the key timeframe is 2013-2020 so researchers and analysts should not rush to immediate answers but rather should focus in the short term on clarifying what is and is not known, what can be known by 2013, and determining how best to fill in the knowledge gaps.

Scope and Objective

A participant asked whether the international objective is reduced deforestation or zero deforestation, and, if it is reduced deforestation what would be the value of merely delaying complete deforestation by a few decades.

A participant also raised the question of whether and how non-CO₂ greenhouse gasses could or should be included in a REDD mechanism (for example related to forest on peat land).

Basic Information and Analysis Needs

Participants raised the question of whether REDD (and land-use in general) should be addressed within Kyoto, inside or out of CDM, or outside Kyoto but within the climate convention. For analysis, participants suggested laying out the options for where and how REDD could be addressed in an international climate convention and related implications for each option.

Participants discussed that there is a clear need for articulation of some fundamental information such as:

- minimum requirements necessary for the global community to include REDD topics in the negotiations;
- strategies for allowing improvement to the mechanism over time;
- minimum requirements for different types of REDD mechanisms to launch and function effectively;
- different national circumstances; and
- country specific requirements to make REDD credible (such as land-tenure reform).

Participants mentioned a need for methodologies or extended literature review of existing works related to: developing reference scenarios and baselines for countries or regions at different points on the forest transition curve; minimizing displacement or leakage; and validating models in the absence of being able to verify models.

Some participants expressed a need for analysis that lays out the different potential ways of assessing the scope of REDD (deforestation, degradation, regeneration, and so on), and then approximates the percentage of land and the percentage of carbon each option represents for each country (perhaps all forested countries, not just tropical). This analysis might also include implications of REDD being verified globally as having not just climate benefits but also forest management benefits.

Several aspects of the complexity, definition, and treatment of degradation were highlighted by participants. The formal definition, loss of capacity to generate ecosystem services, might not be broad enough to encompass some of the complexities of on-the-ground land management, land-use patterns, vulnerability, adaptation, and permanence. Specifically, some noted that the term “degradation” could encompass a wide range of land uses and national situations. Analysis is needed to clarify how and over what timeframe these issues can be investigated scientifically.

Level of Decision-Making

Participants noted that at this point it is not clear how sub-national communities can best be included in REDD-related discussions. Participants suggested that analysis might help decision makers determine what types of decisions can be sub-national or multi-stakeholder, and how this is

likely to change over time. On a related topic, others suggested to develop guidance on national development models that are likely to result in lower risk medium-term investments.

Demand-Side Analysis

Some participants noted the critical nature of demand side analysis, specifically research into how the price of alternatives is likely to impact the success of reduced deforestation and degradation schemes (and vice-versa). Participants suggested analysis on the global demand and production functions for wood, oil palm, soy, and other related goods. This analysis could also articulate for negotiators what types of relationships and rates are predictable and to what degree of certainty. For example, oil palm prices are highly volatile, if price prediction is not possible, permanence and additionality of carbon emission reductions from oil palm plantations may be affected.

IV. Small Group Discussions

After lunch the workshop participants broke into three smaller discussion groups. Each group was assigned a specific set of issues or features of potential REDD mechanisms and the participants were asked to focus on answering the following two questions: 1) What are the priority areas or questions where research or analysis can best contribute in the short term; and 2) What type of research output is the most appropriate to tackle these questions. (See [Appendix D](#) for the lists of research questions distributed to each group.)

The small groups were assigned the following topics, a summary of each group's discussion is below (note the summary for each group is structured to capture the flow of conversation in that group).

- a) **Reference Levels and National, Sub-National, and Nested Approaches;**
- b) **Estimation, Scope, and Verification; and**
- c) **Funding Mechanism and Capacity Building Requirements**

Group A) Reference Levels and National, Sub-national, and Nested Approaches

The small group discussed a range of issues regarding the establishment of reference emission levels and the implications of national, sub-national and nested approaches to designing REDD mechanisms.

Reference Emission Levels

Participants discussed baselines (usually discussed in proposals and submissions under the heading 'reference emissions levels'), which are used as the basis for assessing performance in reducing deforestation (and degradation) rates. They are necessary for ensuring that reductions in emissions are additional to what would have happened without REDD schemes in place. Participants emphasized that the COP-14 in Poznan needs 'practical guidance' or in other words 'what do we know today and what can we know by 2013'. Specifically, elements of the discussions included the following.

Participants emphasized the difficulty of constructing baselines, especially projected baselines, both due to constraints in data and lack of understanding of deforestation drivers. One participant reminded others that it was because of this, that avoided deforestation' remained outside Kyoto Protocol CP-1. Some participants were particularly skeptical whether you can actually compute appropriate baselines (and emphasized the need to reflect on the ultimate goal – access to policies or access to carbon markets). Others felt that credible baselines could be created with appropriate methodological approaches (for example, there may be a lot of fluctuations in deforestation rates over a short time period, but trends can become visible if a sufficiently large time period is considered) and emphasized the need for guidance on 'how to construct baselines' (for example, the number of data points, length of time period analyzed, and so on).

Participants discussed possibilities for overcoming difficulties associated with purely historical baselines including the use of projected global baselines (for example, carbon stock approach) because global baselines might be considered more robust than national baselines or the use of approaches that rely on future data only (for example, where forest cover is measured and compared in 2012 and in 2020). However, these options also have risks. For instance, some countries (such as those in the Congo Basin) may lose out if global baselines are used, while moral hazard problems

could arise with future data approaches (meaning, if 2012 forest cover was used as reference, countries could be induced to deforest a lot before to increase their rents). One participant added that UN Food and Agriculture Organization (FAO) is about to release MODIS-data of the past 20 years for all tropical countries which would mean that current limitations in comparable past deforestation data could be overcome by reconstructing historical baselines for tropical countries.

Participants noted capacity requirements associated with the establishment of baselines and suggested conducting a small exercise to identify those countries actually capable to establish baselines (with the hypothesis that many countries are probably not able to construct robust baselines as would be required for carbon markets).

Participants discussed the variability among conditions in tropical forest nations and the difficulty of assessing the implications of various approaches for establishing reference emission levels against different national conditions. Participants suggested using the forest transition curve as a scenario to illustrate how forest cover tends to change over time in response to (agrarian) development. One participant mentioned that for the negotiations, it is useful to know ‘what is going on in a country’ (deforestation drivers) and that a forest transition curve can be a useful scenario to understand this better (including clusters of policy preferences).

Participants suggested grouping countries (or regions within countries) according to their location on the forest transition curve (see figure 1) and assessing different methods for baseline construction in the context of conditions that may be associated with different locations along the curve. Participants noted that constructing baselines for the “high deforestation phase” in the forest transition curve was the most complicated.

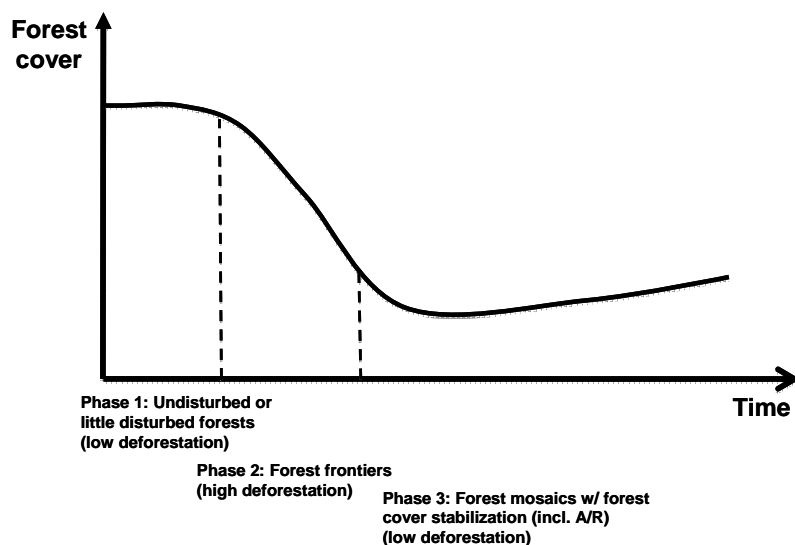


Figure 1: Forest Transition Curve

Participants noted that different policies and measures were needed to address deforestation in different phases along the forest transition curve. A participant made the point that key issue is “how to advance the turning point of the forest transition” so that less forest cover is lost until stabilization of forests occurs. Some participants were interested in developing policy guidance for countries or regions at various stages in the forest transition curve. Countries that are in the same phase along the curve might have similar interests and similar policy options might be relevant. Some participants suggested that it might be helpful to assess policy options for influencing the “shape of the curve”.

Some participants suggested that it might be helpful to provide information on macro-level conditions that might affect the direction of the curve in a given country or region. In the near term, it might even be helpful to provide negotiators with basic information (for example, location on the curve, GDP, structure of the economy), so that they might have an idea of what might happen to emissions levels in the future.

Participants mentioned several additional design options for emissions levels and there was an exchange of views on policy options to reward those countries that have done a good job at managing their forests. Instead of measuring and rewarding reductions in emission levels, countries might be rewarded for the effort being put into reducing emissions, or strictly for managing forest cover (eg. a comparison of how many trees a country has at a given point in time and how many are left or added some number of years later). However, UNFCCC negotiators explained the difficulty associated with this – i.e. that even though it seems attractive to pay for policies (rather than REDD credits), policies are not (or hardly) measurable and therefore incompatible with UNFCCC requirements.

The group agreed that baseline issues are very important to establishing a credible international REDD mechanism. The group quickly identified the following priority question for further analysis: *What are policy design options for overcoming the problem of non-existing or non-comparable historical data across developing countries, and what are the implications?*

Participants agreed that this question encompasses several other questions from the background document, in particular question 1 (i.e. what are the implications of using different types of baselines or different degrees of combination of the two) and question 2 (i.e. what are the options for addressing the problem that could occur through the use of purely historic baselines and what are the implications?). Question 4 (i.e. what are the options for who governs the establishment and management of baselines and what are the implications?) was considered not a priority.

Therefore, the group suggested that the analysis pay attention to the *policy design options to address problems relating to the use of purely historic baselines (for example, compensating forest conservation; stabilization funds; applying a development adjustment factor, deforestation allowances, etc.) and their implications*. In particular, they suggested assessing policy design options in the context of countries' locations along the forest transition curve.

National, Sub-national and Nested Approaches

Participants discussed that REDD may be designed around a national, sub-national, or nested approach. Under a purely national approach, all REDD activities (monitoring, accounting, transactions of REDD credits etc.) would be centralized through national governments. Under a purely sub-national approach (similar to a CDM-like project-level approach), all REDD activities would be carried out by sub-national local projects developers. In a 'nested approach' - a hybrid between the two - a REDD scheme would allow local or sub-national project activities to start independently and immediately while national level emission reduction programs are progressively being developed.

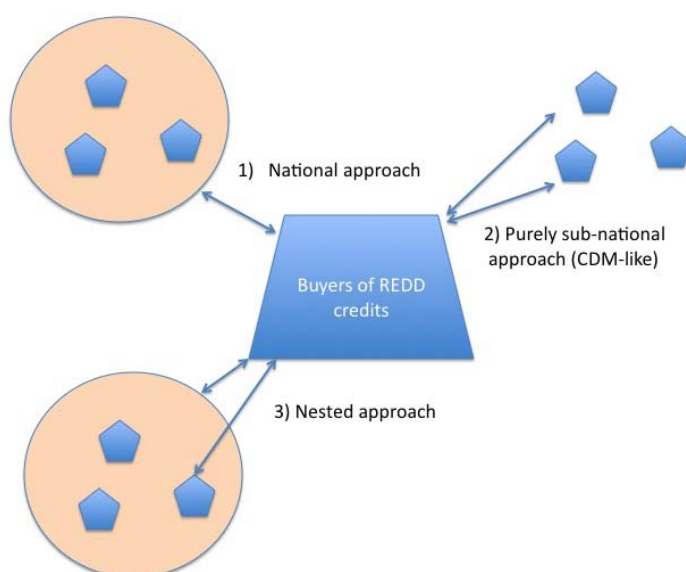


Figure 2: National, Sub-National, and Nested Approaches Source: Duncan Marsh pers. comm. Tokyo Workshop

Participants mentioned that further clarification is needed on the definition and implications of national versus sub-national approaches. In particular, participants noted confusion as to what ‘national/sub-national’ approach refers to (i.e. whether it refers to ‘accounting’, i.e. where incentives lie, or other) and what it means exactly. An assessment of the implications of selected features of national, sub-national and nested approaches in terms of accountability (institutional and capacity requirements, reference setting, leakage) and financial design (risks, payment flows) would be valuable.

A participant emphasized that estimates on leakage were needed and suggested research to focus on a ‘significant study of leakage estimates by major deforestation drivers (crops, shifting cultivation, etc.) and by region to thus establish a look up table with default values. A related question posed by another participant was related to the feasibility of sub-national approaches in terms of leakage, and in terms of monitoring?

Participants discussed who should receive the REDD money (governments, local stakeholders), and what institutional design would be needed to manage REDD payments – this could help reveal what architecture is appropriate. In this context, participants noted the relevance of the following question: “What are the capacity requirements of a national approach, and how do these compare against the financial benefits that a participating country might receive through REDD”, especially for sub-national approaches. Another question (related to the finance) was: Does a REDD system require a direct relation between payments made and action on the ground?

Participants identified the following question as high priority for further analysis: *For the three options for spatial scale (national, sub-national nested), what are the implications in terms of monitoring requirements, accounting requirements, reference setting, leakage, REDD payment implementation, and risks?*

Group B) Estimation, Scope, and Verification

Overview Discussion

The group agreed that using the term “accounting” is not a particularly helpful term for negotiators and suggested that it would be better to use “measurement or estimation” and “assessment.” For example, reference levels involve measurement and this is “accounting” too. Members of the group suggested that the project(s) going forward might sort through how best to make use and take advantage of work already done, particularly work done already by the IPCC. Several work group members indicated that the effort might emphasize how to use the existing guidance (such as IPCC Good Practice Guidance for Land Use, Land-Use Change and Forestry (GPG-LULUCF)) which combines all possibilities including combined use of remote sensing and ground-truthing. Some in the group urged advice to make use of the IPCC work but not to restrict the thinking and analysis to this alone.

Degradation

Participants discussed the way in which the scope of REDD has grown rapidly over the past several years and additional issues like degradation, are adding complexity to international and national discussions. Countries need to identify specific causes of degradation relevant to their current situation and conditions, and then to address longer terms issues that draw upon estimates based on anticipated activities and interactive effects. Degradation is a particularly important issue in Africa where there is a lot of forest cover. It was noted that degradation is also related to the issue of incremental changes and sustainable forest management (SFM).

The discussion focused around the way in which degradation is much more complicated to identify, estimate and monitor than deforestation. Given the problems of estimating degradation, it was suggested that it might be most desirable to estimate deforestation and then to take up the problems of degradation estimation separately. IPCC has already worked on the estimation of degradation and on how to handle uncertainty so we need to be careful about re inventing methodologies that already

exists. However it was noted that the IPCC methods may not be very practical so case studies that try to use the IPCC rules in practice would be very useful.

Participants agreed that it is important to move forward on the inclusion of degradation despite the challenges and therefore initial estimates may be crude. Nonetheless, estimations are important only when they are verifiable. There was some agreement that the issue involves some combination of ground truth and remote sensing. The group noted that India has been using remote sensing and ground-truthing for estimates for the whole country. However, the uncertainties associated with remote sensing and ground truthing have to be treated differently.

It was pointed out that the IPCC approach has many default parameters and it would be helpful to see to what extent those can be refined on a national or ecosystem level. IPCC tiers one and two have similar equations; tier one uses default parameters, tier two uses location-specific values, tier three substitutes other models. But there is a need to improve the IPCC default values (Tier-one and –two). In the inventory system of the UNFCCC, GHG estimations are done on a national basis. In Japan, a combination of Tiers one and two methods is used.

Participants discussed the challenges of considering how degradation relates to the multiple implications of interest to this study (i.e., efficiency, equity, effectiveness) and how to estimate the impact on each. It was also noted that degradation is intertwined with other land uses and activities the topic, measurement, and other associated issues will be politically sensitive.

Capacity Building

The group discussed measurement-related capacity building needs. It is not enough to simply say that there are capacity needs in general terms. It is important to recognize that different countries have different capacities in this area. Some do not have data, others do not have the required analytic capabilities. Some have or have ready access to remote sensing capabilities, some do not have access to remote sensing at all. Some want to rely on ground-based methods. There is a need, therefore, to bring the methods under an overall framework, based on uncertainty, cost, and verification (for example, ground-based methods tend to be difficult to verify in the face of rapid change; remote sensing is cost-effective in estimating areas, but biomass estimation is weak via remote sensing). The group suggested that it would be very helpful to look at differences among national circumstances.

Verification

The group suggested that the CIFOR research effort consider examining two sets of issues on verification: 1) what is available today and how can these approaches be augmented; and 2) what will be available in five years time?

Priority Research Areas:

The group identified three priority areas for consideration in the research program:

- What are the implications of assessing incremental changes in sustainable forest management? One way to frame this might be to investigate the application of IPCC methods to deforestation, degradation, incremental changes due to degradation, and, sustainable forest management. The focus should primarily be on how to apply the methods and the implications should be a secondary matter. The fundamental implication would be that deforestation equals land use change. It will therefore be important to consider how to estimate gains in carbon stock from new land use.
- Assess the relative difference and implications of using gross and net deforestation¹ (for example, in Indonesia, land-use changes normally result in some photosynthetic activity [eg from plantation, gardens] that have trees on them). Brazil's approach, for example, is to count only gross deforestation so as to prevent perverse incentives.

¹ 'Gross' does not include what replaces forest in the carbon calculation and assumes a complete change of forest into non forest. 'Net': includes the carbon content of the replacement land use and ground cover.

- Discuss the implications of different definitions of forest, deforestation, degradation. This could be included into the first two questions.

Additional Areas for Possible Research:

- Participants suggested that a vulnerability analysis is needed because climate change is already affecting forests. The group thought that an eventual mechanism will need to factor this in and relate it to the issue of permanence of carbon stocks. The IPCC does not address the question of how to separate anthropogenic changes from non-anthropogenic causes (for example, fires, CO² fertilization). Clearly this is a long-term research question of considerable complexity. This is linked to the permanence question and is a tough commitment for governments to make, though it could be a crucial element of truly understanding financial compensation. There are likely to be droughts, fires, and changes in forest condition. There is analysis in some places to draw upon for vulnerability mapping. A credible vulnerability analysis could influence the discussions in Copenhagen, but could also lead to a decision that forests will be lost anyway, so REDD is irrelevant.
- The group suggested including map-based products and taking a holistic view of the forest in all analysis and research products.
- Participants commented that the significant contribution in putting together a (more) holistic view of the knowledge that is already out there should not be underestimated. For example, they noted that no one has published a holistic view regarding adaptation and mitigation. CIFOR and its partners can contribute in meeting this need.
- The group noted that the human dimensions of forests and climate are both important but also raise difficult challenges of verification such as related to the topic of how forest degradation affect forest-dependent people.
- The group thought it would be helpful if critiques on methodologies can be carried out from neutral research organizations given the political spin in all research.

Group C) Funding Mechanism and Capacity Building Requirements

This group had a far-reaching discussion centered around the topic of funding mechanisms and capacity building requirements. Participants noted that these topics in particular quickly become very political and so acknowledged that whatever resulting analysis is performed will need to capture the complexity of varying views and perspectives. The group identified and discussed the following key questions and related potential analysis.

The group discussed the need for negotiators, if they are to make rational decisions about the likely effectiveness of various REDD mechanisms, to understand the global long-term overall emissions trajectory and the contributions that can reasonably be expected from land-use within that long-term trajectory. Participants noted that this is not contained in the IPCC report.

Participants suggested a review and compilation of existing types of funds and financial mechanisms in the forestry sector (for example loans, forest bonds, voluntary market (such as in Brazil), and so on), including details of each option such as any size requirements, lessons learned, compatibility with other mechanisms, and specific requirements for success. The group discussed the importance of considering the full range of forest-related funds including maintaining carbon stocks and sustainable forest management. Members of the group pointed out that the funding mechanism can change the relationship between livelihoods and forests and that each region has a different relationship in economic terms. This led the group to suggest that an international REDD mechanism would need to be flexible enough to take into account local circumstances and understanding. Such an analysis document could be used as a source document before even getting into discussions about national capacity building needs.

One participant prompted a complex discussion by noting that land use emissions should be understood in the context of reaching the goal of maintaining only a 2-degree C rise in temperature. In this regard, the group discussed the need for analysis that lays out the implications of various financial

mechanisms. The group also discussed needing a breakdown of the existing capacity-building needs to get all relevant countries to a minimum standard to participate in a REDD mechanism. To better understand the impact of land-use emissions and country-specific needs, the group recommended a practical 'bottom up' analysis that would include information about each nation's circumstances, location on the forest transition curve, capacity needs, and information about historical or current REDD-like initiatives. That information could be overlaid with a time element (for example that captures current and likely changes in national circumstances) and also detail of how different funding mechanisms could work for that country or region. Participants suggested that this piece of analysis should also provide information to enable effective prioritization of countries for near-term REDD implementation.

Participants suggested that once a better understanding is reached of the activities necessary for each nation to develop the capacity to implement a REDD mechanism; cost analysis will be important to inform policy decisions. Specifically related to cost analysis, the group identified a need to determine the amount of money necessary to: bring all countries up to level of capacity to implement a global REDD mechanism; compensate for avoided deforestation, degradation, or land use change, and how that is likely to change over time at various scales, including sensitivity analysis for different assumptions of demand for alternate land uses; and to set up a system at all scales that enables the transaction to take place.

Participants suggested that analysis could also include testing different policy scenarios based on proposed mechanisms to see whether they are likely to, in fact, contribute to achieving the 2 degree goal and at what financial cost. Participants noted that the timing of different financial options (for example, when a market can develop) and movement of nations along the forest transition curve should also be considered in this effort. A participant noted that the UK government is conducting a review of costs of implementing REDD and that this initiative should learn about this effort to ensure no duplication of effort.

The group discussed the pressing need for an effective working definition of degradation. Participants agreed that this is required urgently because without such a definition it is impossible to do realistic cost analysis. The related analysis could be a collection of options under discussion and a description of what has been agreed upon on this issue.

Participants repeatedly noted that leakage is a major issue and one that is very relevant in market based offsetting mechanisms. They discussed the need to distinguish between national/sub-national and international leakage and several participants noted that they believe international leakage will not be as much of a problem if the system is well designed and inclusive. The group determined that the likely next step for analysis is development of potential criteria for an international REDD mechanism designed to minimize leakage. This discussion was closely tied with the broader topic of capacity building because, as participants pointed out, if a community, country, or region does not have the capacity to implement a REDD mechanism then leakage is much more likely to occur on a broad scale.

Participants discussed the issue of conservation and identified an irony, for example, where China and India have reduced internal deforestation and degradation but their footprint has expanded considerably. The question arose of whether there should be some sort of levy on products to correct this dynamic. The group noted that it could be relatively easy to assign a levy on tropical timber, for example, but more difficult to assign a levy to soya or beef which might be equally or more responsible for degradation or deforestation in tropical forested nations.

Participants also pointed out that negotiators will need background and guidance on the question of whether conservation in the least cost area is the same as conservation in a high cost area. The group noted that the answer might be 'yes' from a market perspective but not necessarily from an atmospheric perspective.

The discussion was far-reaching but the group determined the following three priority questions for short-term research.

1. What are the various funding sources and how do they map to needs? ('Needs' in this context relates to what one would actually do to meet reduced deforestation and degradation goals, for example through the inclusion of different sources)
2. What is being done in terms of capacity building and how much would it take to get to an international minimum standard for implementing REDD? This would require an analysis of to what extent countries have inventories, forest laws etc. and are putting a price tag on their forest resources. It also would include costing of what it would take to analyze degradation within each country.
3. What are the implications of including forest related funding mechanisms of getting to the 2 degree goal? This would be rigorous qualitative, scenario-based analysis factoring in budgets, timescales, etc. across all market sectors.

V. Wrap-Up and Feedback

The small groups gave brief feedback reports and the discussion that followed these reports included the following issues:

- Some concern that few of the financial topics poised had been dealt with in the small groups. The discussion subsequent to this stressed the importance of addressing questions such as the policy design options for creating REDD market systems, the need to blend different market systems and the options for dealing with the risk of market flooding.
- The importance of taking into account question of demand for forest products and for alternative uses of forest land (e.g., agriculture, biofuels)
- That the research should only refer only to IPCC framework as to open up the discussion to other frameworks would create too wide a scope. Thus the research should not test 'if' the IPCC methods could be used but 'how', for example the IPCC methods could be applied to national case studies.
- The need to address the opportunity, and implementation, costs of REDD.
- A questioning of the emphasis on capacity building. Others pointed out that not all countries are at an equal level and thus such attention is important.
- That it would be useful to provide information that would foster consensus among potentially divergent national positions along the forest transition.
- One participant praised the workshop and the high level of discussion that was maintained through out

Ms. Seymour thanked everyone for participating. She mentioned that CIFOR will be looking to the organizations and individuals in the room for contributions to the analysis, as appropriate. She reiterated the timing of next steps and asked that anyone interested in being involved in the research process eg in a reviewing capacity should please contact Cecilia Luttrell at CIFOR.

Ms. Seymour then asked participants to leave final written thoughts for the researchers and workshop organizers in two parts: 1) reflections on what they heard and what they believe to be most critical for the research team; and 2) what went well or what the organizers could do better in organizing and running future such workshops. The request for additional input was well received and the organizers received a great deal of additional input, primarily reiterating key themes of the day but also highlighting some areas that did not come out as clearly. All comments were considered by the research team in determining next steps.

VI. Update on Next Steps for the Collaborative Analysis Project

Staff from CIFOR, ODI, IPAM, Packard Foundation, and Meridian Institute met on June 25 to further consider the priority research areas that emerged from the June 24 discussions (including small group discussions, the plenary, and written input) and determine what specific research and analysis CIFOR would coordinate in preparation for use at to Poznan COP-14.

The meeting of the core research team focused on four goals: 1) review the outcomes of the Introductory Workshop (June 24), in particular the input received on priority analysis questions; 2) prioritize questions for further analysis by the research team; 3) assign priority topics to team members; and 4) plan next steps in the analysis project. The team reviewed priority research questions developed during the small group discussions, discussed key topics that were raised during the plenary sessions and in the written input, and discussed cross-cutting issues.

Each of the analysis questions identified during the Introductory Workshop were weighed against the following criteria to help determine their relative level of priority for the analysis project.

- Intrinsic importance of the question or topic
- Relevance of the question to the UNFCCC negotiations in Poznan, Poland
- Feasibility to develop an analysis with an adequate level of precision
- Relevance to international decisions
- Whether the analysis would fill a gap

Based on these criteria, the research team decided to pursue and coordinate analysis of the following topics – fill in most recent version (a summary of each is available in Annex C)

1. ‘National, sub-national and nested approaches: definition, implementation requirements and their implications’
2. ‘The implications of different definitions of forest degradation’
3. ‘Mapping potential sources of financing for REDD to the differing needs of countries’
4. ‘Stabilizing greenhouse gas concentrations in the atmosphere and subsequent climate change until 2050: What are the implications for REDD design?’²

Detailed terms of reference for each of the analysis topics are currently being developed. As explained during the workshop, the terms of reference and subsequent products will not be distributed wholesale to workshop participants. However, if any workshop participant has questions about how or why particular topics were selected or has specific interest in reviewing or contributing to any of the terms of reference or analysis, please contact Cecilia Luttrell at CIFOR (c.luttrell@cgiar.org).

CIFOR, IPAM, and ODI intend to complete a first draft of the relevant analysis by the end of September 2008 and release a report in November for use by negotiators and others in preparation for the COP-14 and related meetings in December.

² This will probably be merged with Paper (5)

APPENDIX A: PARTICIPANT LIST**INTEGRATING REDD INTO THE GLOBAL CLIMATE PROTECTION REGIME:
PROPOSALS AND IMPLICATIONS***Collaborative analysis coordinated by CIFOR, IPAM and ODI*

Introductory workshop

Tokyo, 24 June 2008

Participant list

Name	Institution
1. Andrasko, Ken	Project Officer, Carbon Finance Unit, Forest Carbon Partnership Facility (FCPF), World Bank, Washington D.C., USA
2. Bamfo, Robert	Head of Timber Rights and Administration Unit, Ghana Forestry Commission, Accra, Ghana
3. Bouyer, Olivier	Program officer , Climate Change and Forests, Ministry of Agriculture and Fisheries, Paris, France
4. Bozzi, Laura	University of Yale, USA
5. Clabbers, Bas	EU REDD issue leader, Netherlands government.
6. Conrad, Kevin	Coalition of Rainforest Nations, Papua New Guinea
7. Dutschke, Michael	Managing Director, Biocarbon Consult, Offenburg, Germany
8. Fry, Ian	Ministry of Natural Resources and Environment, Government of Tuvalu, Canberra, Australia
9. Hirata, Yasumasa	Department of Forest Management Forestry and Forest Products Research Institute (FFPRI), Ibaraki, Japan
10. Hyakumura, Kimihiko	Policy Researcher , Forest Conservation Project, Institute for Global Environmental Strategies (IGES), Kanagawa, Japan
11. Johns, Tracey	Policy Advisor/Research Associate, Woods Hole Institute, Falmouth, USA
12. Kanninen, Markku	Director, Environmental Services and Sustainable Use of Forests, CIFOR, Bogor, Indonesia
13. Karsenty, Alain	International Center for Cooperation on Agronomic Research and Development /SCIST (CIRAD), Montpellier, France
14. Kitamura, Noriyoshi	Advisor to Director General, Department of Forestry, Laos
15. Krug, Thelma	Secretariat of Climate Change and Environmental Quality, Ministry of Environment, Brazil

Name	Institution
16. Lanchberry, John	Global Policy and Advocacy Coordinator Climate Change, Royal Society for the Protection of Birds, UK
17. Lee, Kai	Science Program Officer, Packard
18. Lubowski, Ruben	Environmental Defense Fund, Washington D.C., USA
19. Luttrell, Cecilia	REDD Project Coordinator, CIFOR, Bogor, Indonesia
20. Macey, Kirsten	CAN Europe/consultant to Greenpeace
21. Marsh, Duncan	Director of International Climate Policy, The Nature Conservancy (TNC), USA
22. Massard Makaga, Etienne	Director General, Ministry of environment, nature conservation and city, Gabon
23. Murdiyarso, Daniel	Senior Scientist, Environmental Services and Sustainable Use of Forests, CIFOR, Bogor, Indonesia
24. Musa, Samsudin	Senior Research Officer, Forestry Division, Forest Research Institute of Malaysia, Kuala Lumpur, Malaysia
25. Osafo, Yaw	Technical Advisor on REDD to Ghana Forestry Commission
26. Pai, Rekha	Deputy Inspector General of Forests (FPD), Ministry of Environment and Forestry, New Delhi, India
27. Penman, Jim	Department for Environment, Food and Rural Affairs (DEFRA), London, UK
28. Peskett, Leo	Research Officer, Overseas Development Institute (ODI), London, UK
29. Rofi'ie, Abdullah	Director of Biotechnology Research Centre, Ministry of Forestry, Yogyakarta, Indonesia
30. Sanz- Sanchez, Maria	Programme Officer/ATS, The United Nations Framework Convention on Climate Change (UNFCCC) Secretariat, Bonn, Germany
31. Saxon, Earl	Union of Concerned Scientists (UCS), Washington D.C., USA
32. Scheyvens, Henry	Senior Policy Researcher, Forest Conservation Project, Institute for Global Environmental Strategies (IGES), Kanagawa, Japan
33. Seymour, Frances	Director General, Center for International Forestry Research (CIFOR), Bogor, Indonesia
34. Srinivasan, Ancha,	Project Manager of Climate Policy Project, Institute for Global Environmental Strategies (IGES), Kanagawa, Japan

Name	Institution
35. Stella, Oswaldo	Amazon Institute of Environmental Research (IPAM), Brasilia, Brasil
36. Stolle, Fred	Southeast Asia Regional Manager / Senior Associate II, Global Forest Watch, Biological Resources Program, World Resources Institute (WRI), Washington D.C., USA.
37. Strassburg, Bernado	University of East Anglia, Norwich, UK
38. Sullivan, Amy	Forest and Land Use Advisor - Low Carbon Development Team, DFID, UK
39. Takao, Gen	Scientist, Forestry and Forest Products Research Institute (FFPRI) & Center for International Forestry Research (CIFOR), Bogor, Indonesia
40. Toma, Takeshi	Forestry and Forest Products Research Institute (FFPRI), Ibaraki, Japan
41. Watanabe, Tatsuya	Deputy Director, International Forestry Cooperation Office, Ministry of Agriculture, Forestry and Fisheries (MAFF), Tokyo, Japan
42. Wertz-Kanounnikoff, Sheila	Research Associate, Center for International Forestry Research (CIFOR)
43. Zarin, Dan	Senior Advisor, Tropical Forest Carbon Strategy, Conservation & Science Program, Packard Foundation, USA

APPENDIX B: WORKSHOP AGENDA



Integrating REDD into the Global Climate Protection Regime: Proposals and Implications

***Collaborative analysis coordinated by CIFOR, IPAM and ODI
Workshop co-hosted with the Institute for Global Environmental Strategies and the
Forestry and Forest Products Research Institute***

Introductory workshop

Tokyo, 24 June 2008

AGENDA

24 June 2008, 9.00 – 17.00 hrs

Kodomo no-shiro Centre/National Children's Palace, Tokyo, Japan

09:00 Welcome and Opening Remarks

09:10 Agenda Review

Frances Seymour, Director General, CIFOR (Chair)

Rex Raimond, Senior Mediator, Meridian Institute (Facilitator)

09.15 Participant Introductions

Facilitator

09.45 Presentation of Project Objectives, Process, Timeline, Expected Outputs, and
Typology of Issues Emerging from REDD Design Proposals

Frances Seymour, CIFOR

10.00 Presentation of Draft Research Framework and Agenda

Daniel Murdiyarso, CIFOR

10.15 Questions and Discussion

Participants

10.30 COFFEE

10.45 Full Group Discussion of Research Framework and Research Questions

12.00 LUNCH

13.15 Structured Small Group Discussions

Participants

Participants have been assigned to three small groups. Each group will look at a different set of issues/features of proposed REDD mechanisms. The groups will be asked to review the relevant research questions, and help prioritize research

questions for detailed analysis. Specific questions and guidance for the groups will be provided by the facilitators.

15.15 TEA

15.30 Reports from Small Groups
Rapporteurs from Small Groups

16.00 Plenary Discussion on Small Group Reports
Participants

16.45 Conclusions, Next Steps, and Communication
Chair and Facilitator

17.0 Adjourn

APPENDIX C: AREAS CHOSEN FOR RESEARCH

1 SUB-NATIONAL AND NESTED APPROACHES: DEFINITION, IMPLEMENTATION REQUIREMENTS AND THEIR IMPLICATIONS

REDD may be designed around a national, sub-national or a nested approach. Under a purely national approach, all REDD activities (monitoring, accounting, transactions of REDD credits etc.) would be centralized through national governments. Under a purely sub-national approach (similar to a CDM-like project-level), all REDD activities would be carried out by sub-national local project developers. In a 'nested approach' - a hybrid between the two - a REDD scheme would allow local or sub-national project activities to start independently and immediately while national level emission reduction programs are progressively developed.

Although Decision 13.2 (adopted at COP-13) in Bali allows for sub-national approaches as long as 'they constitute a step towards national approaches', further clarification is needed on the definition and implications of national versus sub-national approaches. This was also noted in the report from the UNFCCC SBSTA meeting in Bonn in June 2008. This study aims at filling the gap by analyzing the 'triple E' framework (of carbon effectiveness, cost efficiency and equity/co-benefits) implications of selected features of national, sub-national and nested approaches.

Summary of the analysis

The analysis will assess the implications of "national approaches" vs. "sub-national approaches" vs. "nested approaches" for their effectiveness, efficiency, and equity, with an emphasis on clarifying a number of misunderstandings about the distinctions between the different approaches. Implications would include such issues as accountability (institutional and capacity requirements, reference setting), leakage and financial design (liabilities, payment flows).

2 THE IMPLICATIONS OF DIFFERENT DEFINITIONS OF FOREST DEGRADATION

There appears to be consensus on the inclusion of forest degradation in the REDD scheme, but there remain outstanding issues surrounding how forest degradation should be defined and estimated. The IPCC GPG on LULUCF provides the framework to address forest degradation but this was not meant to estimate emissions from forest degradation.

Summary of the analysis

The analysis will assess the implications of different definitions of forest degradation -- for the effectiveness, efficiency, and equity of REDD design options. An emphasis will be placed on clarifying a number of misunderstandings about definition and questions about methodologies. The analysis will cover a review the definitions provided and used by a number of organizations in light of their usability and relevance to context and develop a typology of the different types of forest degradation (clarifying the different processes of degradation) and how they might be treated within a REDD policy. The aspects which will be covered include capacity to estimate the different types of forest degradation, the costs involved in monitoring permanence of forest degradation reduction and the implications for participation. - the monitoring and reporting systems for forest degradation could represent a significant barrier to entry into REDD markets for some

3 MAPPING POTENTIAL SOURCES OF FINANCING FOR REDD TO THE DIFFERING NEEDS OF COUNTRIES

Different sources of funding for REDD are available, or will become available, in the future. Absolute amounts and their respective composition will depend on the design of a future REDD mechanism. Different contributors have different preferences on how to spend the money. For both issues, there is also a temporal dimension. How funding sources map to the participation needs of different countries in REDD is thus of interest. The purpose of this study is to identify what financing modalities best satisfy country requirements to participate (as elucidated through country circumstances), and then to identify any gaps where such needs are not met by identified financing sources. Please note that whilst the study may *help* in the calculation of the costs of REDD, it is not a costing exercise.

There are large differences in country circumstances that will need to be considered within a REDD system. These different circumstances are a factor of two primary components. First, countries differ in their institutional capacity to establish and implement REDD. Such capacity requirements include the presence of systems for monitoring and accounting of carbon stocks and land tenure arrangements amongst other factors. Secondly, circumstances differ depending upon a country's placement on the 'forest transition curve.' The forest transition curve broadly lays out four types of forest use circumstances: 1) high forest cover and low deforestation rates; 2) high forest cover and high deforestation rates; 3) low but stabilized forest cover; and 4) low but increasing forest cover (via A/R). Country needs also are likely to vary depending on the scope of REDD (e.g., how forest degradation is defined) and through time (as their forest estate changes or as economic development progresses).

The level of participation in REDD is, to some extent dependent upon the how its design allows for the incorporation of these different elements of national circumstances. To include countries with low institutional capacity requires attention to capacity building. To include countries across the span of the forest transition curve implies a REDD mechanism with a wide scope. To cope with these requirements financing needs to address both start-up costs and opportunity costs. Modalities include both 'traditional' modalities (e.g., ODA; loans etc.) and 'innovative' modalities (e.g., carbon markets themselves; carbon market levies; stabilisation funds; auctioning) used to address both familiar issues (e.g., land tenure reform) and new issues (e.g., development of greenhouse gas registries for REDD). Within the study there is a need to distinguish between where financing comes from (the source) and how it is delivered (the type). The two are often interlinked but not necessarily so. It is also worth exploring how funds are stocked. E.g., a levy on carbon markets could raise funds that are then put into a multilateral fund of some sort and then spent through some type of mechanism.

Summary of the analysis

The main aim of this analysis is to identify the suite of possible funding mechanisms for different 'needs'. This will involve a "mapping" exercise, linking the various potential sources of financing for REDD to the different needs of countries with different national circumstances, including place on the "forest transition" curve, and level of capacity.

4. STABILIZING GREENHOUSE GAS CONCENTRATIONS IN THE ATMOSPHERE AND SUBSEQUENT CLIMATE CHANGE UNTIL 2050: WHAT ARE THE IMPLICATIONS FOR REDD DESIGN?:

To reach the UNFCCC goal of stabilising temperature increase by 2050, alternative scenarios of climate strategies with varying roles for the forest sector (including REDD) are possible whereby ‘timing’ constitutes a decisive element. For example, investing predominantly in forests (or LULUCF) at an early stage (possible scenario 1) can help buy time (by keeping carbon out of the atmosphere) to allow ‘low carbon technologies’ to develop further and to become cheaper to maintain climate change stabilization, but could also provide a disincentive for developed countries to take domestic action to lower emissions. On the other hand, investing predominantly in industrial mitigation options while largely neglecting the forest sector (possible scenario 2) could yield greater short term domestic action by developed countries, but could, for example, lead to a growth in deforestation-related bio-fuel production. This scenario also faces the risk that an increased accumulation of GHG can at some point turn forests from being net sinks into net sources of GHG emissions. Awareness of all these risks is important for consideration in the design of REDD mechanisms. A hybrid strategy can consist of a balanced investment in both forest and industrial mitigation (possible scenario 3) with a more gradual curve of GHG emissions. In terms of REDD this may relate to a phased approach with countries joining as and when they reach the participation criteria. All three scenarios will have different implications in terms of carbon effectiveness, cost efficiency and equity/co-benefits. At the same time, due to the 2°C stabilization target, all three scenarios will reveal different requirements for a REDD mechanism, notably in terms of required %-emission reductions and ultimately in terms of REDD design.

Summary of the analysis

The analysis will consist of a conceptual modeling exercise, making explicit the pathways, timing, sequencing, assumptions, feedback loops, options and risks of bringing REDD into the overall effort to reach a target of limiting GHG concentration in the atmosphere. The exercise will include "modules" related to issues such as the demand-side effects of high commodity prices, and the time-value of forest carbon.

APPENDIX D: RESEARCH QUESTIONS FOR SMALL-GROUP DISCUSSIONS

DISCUSSION GROUP 1: REFERENCE LEVELS & NATIONAL/SUB-NATIONAL APPROACHES

1. What are the implications of using different types of reference levels (including historic or predictive reference levels; and different base periods)? What are the implications of varying combinations of historic and predictive reference levels?
2. What are the policy design options to address problems relating to the disincentives that could occur through the use of purely historic reference levels (e.g. compensating forest conservation; stabilisation funds; applying a development adjustment factor; deforestation allowances, etc.) and what are their implications?
3. What are the policy design options for overcoming the problem of non-existent or non-comparable historical data across developing countries? What are the implications of these options?
4. What are the options for who governs the establishment and management of reference levels (e.g. international community; national governments; independent experts) and what are the implications?
 - a. What are the options for the degree of liability in the establishment of reference levels (e.g. voluntary commitments; no-regret targets; mandatory commitments) and what are their implications?
5. What are the policy design options for establishing reference levels for degradation, and what are their implications?
6. What are the implications of national and sub-national approaches?
 - a. Is the risk of leakage by default higher in a sub-national approach than a national one?
 - b. What are the policy design options for dealing with leakage in national and sub-national approaches and what are their implications?
 - c. What are the capacity requirements of a national approach, and how do these compare against the financial benefits that a participating country might receive through REDD?
 - d. To what extent can sub-national approaches help as a step towards the development of national approaches? And to what extent can the two approaches co-exist?
 - e. To what extent do sub-national or mixed approaches reduce investment risks compared to national approaches?

DISCUSSION GROUP 2: ACCOUNTING, SCOPE AND VERIFICATION

1. What are the implications of using different potential forest carbon monitoring methods (including remote sensing and ground measurements)?
 - a. How does this affect eligibility of countries to participate?
2. What are the policy design options to ensure that the assessments of carbon stocks across diverse ecosystems and national circumstances are comparable, and what are the implications?
3. What options exist to deal with uncertainties (e.g. ground-truthing; sound definitions), including those existing within IPCC guidelines?
 - a. What are the implications of uncertainties in estimates?

4. What are the implications of using emissions and stock-based accounting approaches?
5. What are the implications of different approaches to include degradation, forest stock enhancement and conservation into REDD?
 - a. When degradation is included, do the required monitoring and reporting systems represent a significant barrier to entry into REDD markets for some (sub-) countries?
6. What are the policy design options for including broader sources and sinks, and what are their implications?
 - a. For instance, what are the methodological implications (historical data is limited at best to past deforestation data whereas information on past carbon pools is missing)?
7. What are the policy design options for REDD verification systems, and what are their implications?
 - a. Can existing institutions such as the Executive Board and Designated National Authorities be extended, or do new institutions need to be established?
 - b. How can the concept of "peer-review monitoring/verification" (as stated in the indicative modalities annexed to the decision 2/CP.13) be operationalised?
 - c. What are the advantages and trade-offs of including non-GHG related factors (e.g. social co-benefits and biodiversity benefits) within verification systems?

DISCUSSION GROUP 3: FUNDING MECHANISM AND CAPACITY BUILDING REQUIREMENTS

1. What are the policy design options for creating REDD market systems (e.g. fully integrated markets; parallel markets; dual markets etc.), and what are their implications?
 - a. What are the policy design options for dealing with the risk of market flooding (e.g. banking; capping REDD credit volumes etc), and what are their implications?
2. What are the options for different levels of country/actor participation in REDD markets (e.g. all tropical forested countries; only major emitters etc.) and what are the implications?
3. What are the implications of alternative options to overcome problems of upfront funding (e.g. buyers taking on risks; use of ODA; loans)?
4. What financial options exist for dealing with risks of non-permanence and non-delivery (e.g. tCERs³; discounted CERs; payment on delivery; carbon buffers etc.) and what are their implications?
5. What are the options for creating fund-based REDD systems (e.g. bilateral funds; multilateral funds stocked through carbon market levies etc.) and what are their implications?
 - a. What are the options for establishing the value of REDD carbon in fund-based systems and what are the implications?
 - b. What volumes of finance may be raised through fund-based options and over what timescales?
 - c. Are there options for fund-based and market-based systems to co-exist and what are their implications?
6. What are the options for the types of credits in REDD systems (e.g. preventive credits; reserve credits etc.), and what are their implications?

³ Temporary Certified Emission Reduction (tCER)

7. What are the options for regulated and voluntary REDD markets to co-exist and what are the implications?
8. What are the options for different levels of capacity building for REDD (e.g. purely technical support for monitoring or broader institutional support in the forest sector) and what are the implications?
 - a. What activities need to be covered by capacity building in REDD schemes in order for systems to be effective?
 - b. What eligibility criteria are needed for determining access to capacity building funds?
 - c. What scale of capacity building- related finance is required in order to implement REDD?
 - d. Can sufficient additional funding be raised and through what means?
 - e. Could capacity building for REDD divert resources from other areas and under what circumstances (e.g. development aid)?
 - f. How would different levels of investment in capacity building and the types of interventions increase investor confidence in REDD schemes?