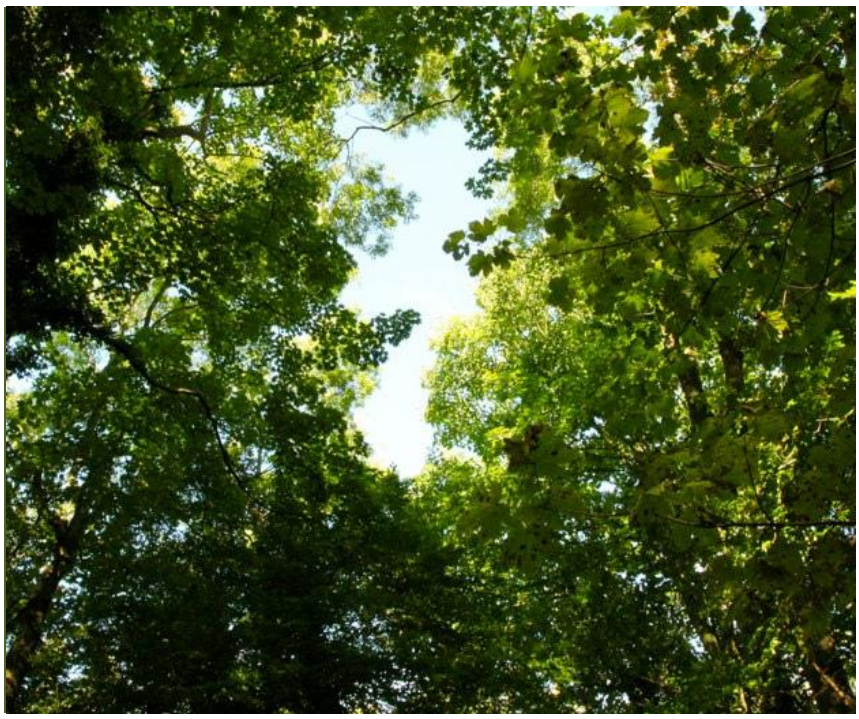
Catalyzed workshop

CCI workshop report: REDD and biodiversity (14th October 2008)



Thematic Area:

Biodiversity and climate change

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Summary

This workshop on Reduced and Emissions from Deforestation and Degradation (REDD) was convened through the Cambridge Conservation Initiative Horizon Scanning project to bring together policy-makers, NGOs and academics to:

- Share an update on REDD policy negotiations;
- Discuss key issues for biodiversity related to alternative mechanisms for REDD and REDD implementation
- Identify short and longer term research priorities on biodiversity and REDD

The event was attended by 49 people from UK government, intergovernmental organisations, NGOs, academics and business (see the list of participants on the final page of this report).

Agenda

11.00	Arrival and Coffee
11.30	Welcome and introduction: Tim Johnson, Deputy Director UNEP-WCMC
11.40	Update and key issues from policy negotiations: Samantha Baker, DECC
12.00	Implications for biodiversity: John Lanchbery, RSPB
12.15	Discussion
13.30	Lunch
14.30	REDD and Biodiversity research: Bernardo Strassburg, University of East Anglia
14.45	Break out groups
16.30	Report back and close

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Background

The United Nations Framework Convention on Climate Change (UNFCCC) agreed at its 13th Conference of Parties (COP13, Bali 2007) that Reducing Emissions from Deforestation and Degradation (REDD) should be included in its post-2012 agreement, and set out a process under the Bali Action Plan for establishing how to achieve this by COP15 in Copenhagen. The UN Convention on Biological Diversity established at its ninth conference of Parties an Ad-hoc technical expert group (AHTEG) on climate change and biodiversity. It has a specific mandate to compile information on the current degree of integration of biodiversity considerations, and propose ways and means to improve the integration of these considerations, into climate change responses designed to reduce the emission of greenhouse gases, including REDD.

The conservation community are in broad agreement that REDD is an essential development in steps to tackle climate change and could bring significant benefits for biodiversity. However, this will require a number of key issues to be resolved; and there are risks to biodiversity and development goals if these are not addressed at an early stage. Though there is significant existing work on REDD, we identified a need for a workshop to take stock of developments so far, to explore key issues and identify how these might be addressed through new collaborative projects.

Update on REDD policy negotiations

Samantha Baker, from the new UK Department for Energy and Climate change (DECC) presented some background and an update on REDD policy negotiations. Later in the workshop Jim Penman (head of Climate Change and greenhouse gases response strategies, DECC) added his own perspective on the potential for REDD negotiations to secure provisions on biodiversity and how these might be pursued. Key points from these presentations and the discussion are summarised below.

There are outstanding issues to be resolved, including on policy approaches and positive incentives, but REDD has the potential to yield measurable and verifiable actions on emissions mitigation consistent with the deep cuts needed to avoid dangerous climate change. It also brings significant opportunities to implement climate change mitigation and adaptation in ways that are mutually beneficial to and synergistic with the goals of the CBD and the UNCCD (United Nations Convention to Combat Desertification).

The Ad-Hoc technical expert group established by the CBD is a useful means to secure interaction between the UNFCCC and the CBD with the potential to produce useful guidance on integrating biodiversity into REDD implementation that both treaties can refer to.

UNFCC has formally acknowledged the need for REDD to be consistent with sustainable forest management, noting the provisions of the United Nations Forum on Forests (UNFF), the CBD and UNCCD. The question is whether it would be possible to include something more detailed on biodiversity in its future REDD decisions. There are risks that detailed text could be blocked as outside the UNFCCC mandate and on the basis of national sovereignty. But the UNFCC could, at least, establish biodiversity safeguards and endorse the CBD AHTEG guidance-including for securing biodiversity co-benefits.

To influence these negotiations the conservation community must contribute specific and implementable text. It will also be important for a coherent proposal on biodiversity provisions to emerge and for the conservation community to reach consensus as far as possible on objectives for the UNFCCC negotiations. It could also be useful to try and secure some biodiversity provisions at the UNFCCC COP 14 in Poznan (December 2008). This could help avoid the potential danger, at COP 15 (Copenhagen), of biodiversity being sidetracked by the need to resolve more ‘fundamental’ issues.

There is likely to be a process of ‘ramping’ up REDD over time, and significant public sector financing stage before REDD’s formal mechanisms become properly established. There is potential to have guidance on biodiversity (safeguards at least) at this publicly funded stage. Publicly funded pilot demonstration projects (e.g. the UK funded Congo Basin project) should be encouraged to show what can be achieved on biodiversity and to disseminate lessons learnt. There is a leading role here for the conservation community.

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Key issues

John Lanchbery (Global climate change policy and advocacy coordinator, RSPB) presented an overview of alternative REDD mechanisms, key issues and implications for biodiversity. Alternative proposals for REDD mechanisms include market based approaches (which have the biggest potential to deliver the amount of money to address drivers of deforestation- approximately 10 billion USD a year); fund based approaches; and market-linked approaches. Alternative mechanisms were not discussed in detail but it was noted that each brings issues and concerns (some shared, some unique) that would need to be resolved. Biodiversity implications of each alternative mechanism need to be further evaluated to decide which type of mechanism the conservation community should advocate.

Baselines

Countries differ significantly in terms of historical deforestation rates e.g. Guyana has high forest cover and low deforestation rates; Brazil has high cover and high deforestation rate; India has a stable, low forest cover; Costa Rica and China are actively reforesting. Baselines set by recent rates of deforestation provide very little incentive for countries that have recently reduced rates to continue to do so. There are ongoing negotiations on how to include countries with high forest cover and low deforestation rates in the REDD system.

Plantations vs. natural forests

Baselines also need to take into account rates of deforestation of natural forest vs. afforestation through plantations. Clear definitions of natural forests and plantations are essential to help prevent natural forest loss, on a significant scale, being compensated for by planting plantations which are likely to be far less valuable for biodiversity. Detailed international definitions might be unhelpful but national definitions (e.g. using tier 2 IPCC accounting) are necessary.

There is a need to identify where biodiversity-rich areas are at particular risk from conversion to plantations. Good practice for biodiversity conservation and carbon sequestration in plantations should be captured and incentivised.

'Leakage' of biodiversity threats

In the 'post-REDD' world it is likely that threats to biodiversity could 'shift' from forests which become protected to forests elsewhere. Particularly critical could be areas low in carbon but high in biodiversity, adjacent to areas of current rapid deforestation or land use change. There is a need to identify these areas and establish how these can be effectively targeted for biodiversity conservation.

National level implementation

Implementation of REDD at national rather than project level should (for carbon emissions) go some way to resolving issues of leakage within (though not between) countries. But this also means that REDD will be implemented very differently in different countries- influenced by a range of factors, including governance, capacity, and extent of land ownership by communities (e.g. in PNG most land owned by local communities; in Indonesia most is controlled by the Department of forestry). Such factors could be critical in determining how well REDD can be integrated with pre-existing priorities for biodiversity conservation and produce co-benefits for biodiversity. It will be impossible to impose completely defined conditions on any country, but good practice can be encouraged and guidance needs to be developed to deal with national level implementation issues.

Source, sustainability and longevity of funding

It was noted (e.g. compared to large sums of money recently generated by governments to bail out the financial sector) that the amount of money needed for effective REDD implementation is comparatively small. However, even taking into account the potential for markets to raise funds, there will still be a shortfall and sustainable, long term funding solutions are needed. In theory, REDD needs to operate 'forever' to ensure sustainable reductions in deforestation, but it is not clear how this could be achieved.

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Governance

There are a host of governance issues associated with REDD, and securing biodiversity benefits. These range from international governance e.g. compliance and accountability through to national and local level governance e.g. effective and equitable dispersal of funds to local communities.

Capacity Building

There are significant limitations in capacity of some countries to implement REDD, particularly with the magnitude of funding that will need to be dispersed, and with governance and enforcement at all levels. Capacity building (to varying degrees) will be necessary in all countries and NGOs need to play a significant role in developing this and pressing it as a priority with the international development community.

Research priorities

Bernardo Strassburg presented some of his own research on concordance and tradeoffs in the distribution of biodiversity and carbon stocks. He then presented alternative prospects for the REDD and Biodiversity agenda (based on the extent to which biodiversity can be integrated into REDD mechanisms) and the associated research needs. These are summarised below.

Integrating biodiversity into REDD mechanisms

Biodiversity could potentially be integrated into REDD mechanisms by either i) biodiversity being included (in addition to carbon) in the relative values of conserving areas, or ii) a fraction of REDD revenues being used to target biodiversity conservation. Both options would require a strengthened scientific argument that biodiversity increases the resilience of forest ecosystems.

Integrating biodiversity values would also require maps or an agreed a set of indicators that national governments can use to link biodiversity values to specific locations at national scale -therefore ‘adjusting ‘ the identification of priority areas for carbon for their biodiversity value. Monitoring for this could be linked to land use change, though additional biodiversity monitoring might be needed to capture sensitive changes. The conservation community should identify existing sources of biodiversity monitoring that could be used.

This approach requires *redundancy* to be considered. In areas of high carbon and biodiversity overlap it might be unnecessary to pay a biodiversity premium if the forest would already be protected. The merit of additional financing for biodiversity needs to be considered against the nature of threats to biodiversity, and incentives for alternative land use.

Biodiversity safeguards

Even if biodiversity is not directly integrated in to the REDD mechanisms then biodiversity safeguards should be built in to the general REDD agreement. Related research needs would include anticipating perverse outcomes for biodiversity that could arise from REDD implementation and producing good practice guidance on achieving positive impacts for biodiversity conservation without additional costs.

Reacting to REDD

Models, currently being produced to predict outcomes of alternative REDD mechanisms in a spatially explicit way, could be developed to predict the impacts of REDD on biodiversity conservation. In theory, there will be potential to transfer current resources and efforts from areas currently demanding conservation expenditure (that would be protected under REDD) to areas that might be under increased threat from land use pressures (e.g. agricultural expansion) diverted from REDD areas. Identifying where efforts need to be refocused and where funding could be liberated from and applied to should be a priority. Such work also needs to consider leakage in to other countries.Against all of the above we need to take into account impacts of climate change on biodiversity.

Break out group discussions

Break out group discussions were focused around areas agreed to be of high priority to discuss and further consider implications for carbon, biodiversity conservation and people:

- Alternative REDD financing mechanisms
- Baselines
- Natural *vs.* Plantation forests
- National level implementation

Groups were asked to frame their discussions around the known concerns on an issue, pressing gaps in knowledge and how these might be addressed. A summary of these discussions is below.

Alternative financing mechanisms

Broad concerns
The following alternative financial mechanisms were identified:

1) Market-based approach. Countries that reduce their emissions from deforestation below some historical baseline can sell this, e.g. to a developed country to offset industrial emissions.
2) Fund-based approach. Developed countries pay into a fund and grants are given to developing countries with forests to reduce deforestation.
3) Market-linked approach. Each government has to buy emission allowances and countries with forests could auction forest credits.
4) Tax on aviation and shipping emissions, hypothecated to REDD

Knowledge gaps and priorities for action
It is unclear what extent of analysis that has been done on the implications of alternative financing mechanisms for biodiversity conservation, but it does not appear that effectiveness in GHG reduction, leakage, impact on biodiversity etc. have been systematically compared across options. Such a comparison would require models (scenarios?) of future land use change incorporating an economic model of the uptake of the scheme in competition with other land uses and its effects on forest extent, including leakage and displacement effects. Effects on GHG emissions, food production etc. would also need to be assessed.

Other gaps identified include

A land use model (as above) could also be used to explore effects of higher funding or different rules for protected areas.

1) A meta-analysis of case studies of other existing international funding mechanisms and of other schemes for funding forest conservation at the site or project level could identify what does and does not work in producing change, governance etc. [Similar priorities were identified in the 'National level implementation' discussion].
2) Research to develop and recommend methods for monitoring REDD impacts when pilot projects are implemented, so that these pilots can be properly analysed when further advanced. We need to ensure biodiversity impacts (as well as e.g. GHG) are properly covered by such monitoring.

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Baselines

Broad concerns
IPCC Good Practice Guidelines allow for calculation of baselines but there are a number of issues to be resolved for REDD to be made effective. In addition, countries vary significantly in their capacity among countries to assess their baselines.

Countries with no (or low) historical baseline of deforestation currently stand to gain little REDD money. If they do not receive money, then there will be a perverse incentive for them to start deforesting, with obvious implications for biodiversity.

Some have suggested that REDD systems that could combine incentives for both reducing emissions and maintaining standing forests. This would involve countries with high forest cover and low-deforestation rates being paid to stay below the global average deforestation rate and retain their carbon stocks (as opposed to reducing emissions from their forests). As global deforestation rates decline towards zero, all countries could ultimately be paid to maintain their standing forests.

The loss of forests on *peatlands* and the resulting drainage and degradation of peat emits huge amounts of carbon. However, it is unclear to what extent tropical peatlands will be included in the REDD mechanism. Some peatlands may have been deforested years ago but are still being degraded and emitting carbon. However, the sense in some quarters is that peatlands will be kept out to begin with and may be added to REDD at a later stage. Given the role of peat swamp forests as orangutan habitat and water flow regulators, the inclusion or exclusion of peatlands from REDD could have significant implications for biodiversity and people.

The impact of human activities on carbon stocks depends on the degree of impact. Some activities such as agroforestry and shifting cultivation can maintain relatively high levels of carbon in landscapes, while also supporting biodiversity. Hence, the *definitions* of forest, deforestation and - more importantly - degradation used in the REDD mechanism could have implications for (poor) people and biodiversity.

Another aspect of *degradation* that is unlikely to be included in any UNFCCC decisions is the loss of biodiversity through overhunting in tropical forests (the empty forest syndrome).

It is clear that *protected areas* (including indigenous lands) have played a crucial role in protecting tropical forests. However, sub-national areas that have no history of deforestation may not be seen as the primary target for REDD funds and some REDD proposals exclude protected areas as being eligible for REDD funds.

Knowledge gaps and priorities for action
Gaps in knowledge include to what biodiversity loss (e.g. the impact of the loss of seed dispersers on regeneration; extinction chains) could reduce the resilience of forests to climate change and cause degradation in carbon stocks. The conservation community needs to explore, demonstrate and raise the profile of the role of wild nature, and of protected areas in providing carbon maintenance services that ought to qualify for REDD funds.

Plantations vs. Natural Forests

There is concern that plantations could be encouraged for carbon sequestration, but could damage biodiversity. Plantations are often difficult to distinguish from natural forests using remote sensing. There are also concerns on the use of GM trees designed to grow extremely fast and sequester carbon more rapidly than a natural forest. It could be good for climate to cut a natural forest, use the wood for long-lasting infrastructure, burn the slash for biomass energy, and replace with a plantation of GM trees, but this would be bad news for biodiversity. We have a broad understanding of how much carbon is stored in different types of forests and plantations (default assumptions of IPCC), but there are still uncertainties (e.g. below ground carbon and how to account for harvested wood products). There have been many studies of biodiversity in plantations relative to natural forests, but the information is scattered.

Knowledge gaps and priorities for action
The most pressing gaps in knowledge identified included:

- Synthesis of the biodiversity value of different types of plantations relative to natural
- forests.
- What metrics are most appropriate for describing "biodiversity value"?
- Belowground/soil processes.
- Influence of other processes (e.g. introduced plants, herbivores)
- What low carbon, high biodiversity habitats are most at risk from plantation expansion?

There was insufficient time to address priorities beyond addressing the above gaps. It was noted that the Cambridge university Plant Sciences group and others are working on means to assess the conservation value of fragmented forest landscape. Some of these techniques could be usefully transferred to assessing some of these questions.

National implementation of REDD

The group started with a brainstorm of broad concerns on national and sub-national implementation of REDD. These included:

- Governance
- Potential disbenefits from 'gazettement' or 'heavy handed' means to protect forests
- Danger of undermining community based management including existing natural resource management
- Equity
- Incentive transfer mechanisms
- Distribution of funds to local communities
- Different taxation systems and levies in different countries
- Balancing return on investment with local benefits
- Land tenure
- Longevity of incentives
- The need to acknowledge and reconcile different value sets (e.g. international, with national and local; carbon and biodiversity etc.)
- Integration of national biodiversity concerns and priorities
- Prioritisation- establishing which sites should be chosen for REDD mechanisms and what criteria should operate
- Relating REDD to work to address drivers of forest loss (e.g. population growth, job creation, poverty etc.).

The issue of governance was identified as one of the most challenging and an issue to be explored in depth.

It was acknowledged that the 2009 Copenhagen agreement was unlikely to include stringent conditions on governance and other means are needed to secure and develop governance mechanisms at national level. It is clear that good governance will be essential to secure long term benefits for climate, biodiversity and

people. At the very least it needs to be ensured that the implementation of REDD does not conflict with goals for biodiversity conservation or cause harm to people.

Many of the countries likely to receive significant amounts of REDD funding have weak/corrupt central governments and poor records of service delivery. The gaps in our knowledge (on how to make this work) are significant, particularly as large scale transfers of money between countries for this means have not been attempted before.

Whilst the majority of aid projects may have a lifespan of 2-5 years REDD will have to work over much longer time periods. This in itself may cause problems since governments usually work on 4-5 year electoral cycles and REDD will require consistent policies. One solution will not fit for all. Governance solutions will need to be developed on a country basis, but good practice should be shared between them.

Knowledge gaps and priorities for action
Gaps in knowledge include:

- What gaps in capacity will impair countries ability to achieve REDD goals? What resources need to be made available for capacity building for REDD and how could the conservation community contribute?
- What strategies for forest law enforcement and governance, and reducing deforestation have been most effective (for biodiversity and people) in past and what lessons can be applied to REDD?
- What are the successful models to build on? What lessons can we learn (including how not to do things) from GEF? From ODA?
- How can government departments in country be best brought together to develop and govern REDD

There was insufficient time to discuss research priorities in full but some opportunities for the conservation community were identified including:

- Collating and disseminating relevant lessons for REDD from experience with direct budgetary support (ODA); successes and failures of previous and existing attempts to cut deforestation rates; forest governance initiatives and community based natural resource management.
- Building on and transferring experience from in-country governance work (for conservation, distribution of ODA, on poverty reduction strategy papers etc.). Capacity building of civil society in developing countries to be able to engage with national level implementation including by communicating (and summarizing) REDD developments and implications.
- Ensuring that governance issues and other national level implementation issues are adequately discussed, addressed and financed by the international development community

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List of Participants

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