

Reducing Emissions from Deforestation and Forest Degradation (REDD): An Options Assessment Report

Executive Summary

Prepared for
The Government of Norway



Meridian Institute

Connecting People to Solve Problems

This document is in the public domain. The authors encourage the circulation of this paper as widely as possible. Users are welcome to download, save, or distribute this document electronically or in any other format, including in foreign language translation without written permission. We do ask that, if you distribute this document, you credit the authors and mention the website <http://www.REDD-OAR.org> and not alter the text.

An electronic copy of the full report is available at <http://www.REDD-OAR.org>

The Government of Norway has made the inclusion of a mechanism for reducing emissions from deforestation and forest degradation (REDD) in a post-2012 climate regime a policy priority in the United Nations Framework Convention on Climate Change (UNFCCC) process. To achieve this, sufficient fact-based analysis of options on how to effectively reduce emissions from deforestation and forest degradation and impacts of an agreed mechanism will be crucial. This report is one, important contribution in that regard.

The Meridian Institute, a nonprofit NGO internationally recognized for convening and facilitating neutral and independent dialogues and assessments, in our view was the ideal facilitator of this process. The Institute has assembled a high-quality, diverse, and independent group of experts to provide pragmatic, fact-based analysis and assessments of a set of proposed options for critical elements of the REDD component of a Copenhagen agreement. We wish to thank the Meridian Institute and the analyst group for their efforts. We are also grateful to the David and Lucile Packard Foundation for assisting with the up-front costs of the assessment.

There have been extensive consultations as part of this effort—with governments, civil society, indigenous peoples' representatives, and other key stakeholders—to ensure that all key perspectives are considered. However, the intent of this process has not been to reach or form consensus, but rather to provide an analytically driven effort to produce additional substantial insights regarding the impacts of potential REDD mechanisms.

We feel that this report will be a valuable contribution to the “global public good” of substantial insights regarding a REDD mechanism, and hope that others—both in and out of government—will also find it useful.



Hans Brattskar
Ambassador

Director, The Government of Norway's
International Climate and Forest Initiative

Executive Summary

The Bali Road Map should lead to a Copenhagen agreement that commits to climate stabilization at a maximum 2°C temperature increase, consistent with atmospheric CO₂ concentrations below 450 parts per million (ppm). Reducing emissions from deforestation and forest degradation (REDD) will address a source of greenhouse gas (GHG) emissions larger than the entire global transportation sector. Without REDD, the 2°C climate stabilization goal will not be reached.

This report assesses several important considerations for a future REDD mechanism within the UNFCCC, and strives to clarify and inform some of the critical choices that will need to be made about including REDD in a Copenhagen agreement.¹ At the international level, a good outcome for REDD would create the enabling conditions for effective implementation in REDD countries, including:

- Financial incentives, (Chapter 2);
- Procedures for setting reference levels (Chapter 3);
- Methodologies for monitoring, reporting, and verification (MRV – Chapter 4); and
- Processes to promote the participation of indigenous peoples and local communities (Chapter 5).

Capturing the mitigation potential of REDD requires a flexible, phased approach to implementation in order to accommodate (i) the diverse capabilities of REDD countries; (ii) an expanded scope of REDD to include conservation, sustainable management of forests, and enhancement of forest carbon stocks;² and (iii) the near-term constraints of the current global financial crisis.

¹ The scope of the report is necessarily limited, and there has been no attempt at comprehensive review of every REDD issue, proposal, or option. A number of important and challenging issues relevant to REDD implementation are not discussed herein, including country-specific approaches to readiness, nationally appropriate REDD strategies, and the promotion of sustainable consumption patterns in industrialized countries. Consultations and written reviews including individuals from governments, indigenous peoples organizations, and NGOs involved in REDD negotiations were conducted to solicit input on the scope and contents of this report, but not to seek consensus. Those consulted have in no way endorsed the contents of this report, for which the authors are solely responsible.

² Decision CP.13 Bali Action Plan.

Phase 1: National REDD strategy development, including national dialogue, institutional strengthening, and demonstration activities.

These activities should continue to be supported by voluntary contributions that are immediately available, such as those administered through the World Bank's Forest Carbon Partnership Facility (FCPF), UN REDD, and other bilateral arrangements. Eligibility for access to funds should be based on a demonstrated national commitment to REDD strategy development.

Phase 2: Implementation of policies and measures (PAMs) proposed in those national REDD strategies.

These activities should be supported by predictable funding from a global facility supported by an internationally binding finance instrument with enforceable commitments, such as assigned amount units (AAU) auctioning revenue. Eligibility for access to those funds should be based on a demonstrated national commitment to REDD strategy implementation, with continued access based on performance including proxy indicators of emission reductions and/or removal enhancements (e.g., reduction in area deforested). Once the financial instrument for Phase 2 has been established, most Phase 1 activities could be incorporated into the Phase 2 instrument.

Phase 3: Payment for performance on the basis of quantified forest emissions and removals against agreed reference levels.

This could be financed on a large scale by the sale of REDD units within global compliance markets or a non-market compliance mechanism, with eligibility contingent upon compliance-grade monitoring, reporting, and verification (MRV) and accounting of emissions and removals. No Phase 3 REDD units should be earned for emission reductions or enhanced removals achieved during Phase 2, but Phase 3 should allow crediting for the results of the continuation of policies and measures initiated in Phase 2.

The timing of graduations from one phase to the next will vary, and REDD countries could skip a particular phase provided they meet the eligibility criteria for the next phase. Within countries, overlap between phases may also be necessary and even desirable. MRV should advance progressively with phase graduation, and should be upwardly compatible with a future framework that could encompass the whole agriculture, forestry, and other land uses (AFOLU) sector of Intergovernmental Panel on Climate Change (IPCC) guidelines for GHG inventories. Although participation in a REDD mechanism would be voluntary, liability for participating countries would increase from one phase to the next, with an eventual national sectoral commitment in Phase 3.

Options for REDD Finance: International REDD funding will have to be integrated into the overall financing architecture developed under the UNFCCC as part of a Copenhagen agreement. To ensure predictability, international REDD financing should be clearly identified and funding commitments firm, verifiable, and enforceable. International REDD finance would complement domestic funding by REDD countries in accordance with their respective capabilities, taking into account preexisting national efforts and expenditures in sustainable forest management, forest protection, and forest inventories.

A central principle of REDD country progression through Phases 1, 2, and 3 is that the financial incentive should increase within and between phases, commensurate with demonstration of commitment and achievement of measurable and lasting emission reductions. Consistent with that principle, we suggest:

- Increased voluntary contributions to support Phase 1 activities, including those developed under the multilateral FCPF and UN REDD initiatives.

- Enforceable industrialized country commitment to Phase 2 REDD funding of a global facility to enable progress toward achieving a 50 percent reduction in global deforestation by 2020. We suggest a COP-level commitment to USD 2 bn/yr in 2010, increasing to USD 10 bn/yr in 2014. The global facility would finance REDD PAMs with continued funding dependent upon performance:
 - The facility would preferably be a single fund, but could also be a clearinghouse that coordinates diverse support streams.
 - Disbursement could be based either on five-year national REDD implementation plans and annual performance indicators, or left to the responsibility of a national decision-making process.
- A relatively swift opportunity for transition from Phase 2 to a compliance instrument in Phase 3, which is based on quantified GHG emission reductions and enhancements of removals:
- The transition opportunity should allow for flexible timing of REDD country entry, to accommodate the development of compliance-grade MRV.
- REDD units could be issued ex post after the environmental benefits have accrued, and been measured and verified (*sectoral baseline and credit*). Alternatively, REDD units could be issued ex ante based on an agreed reference level, wherein a country could sell REDD units to raise funds or allocate units to subnational actors. At the end of the crediting period the country would be liable to match emissions from the forest sector with REDD units (*sectoral cap and trade*).

Options for Setting Reference Levels:³ GHG-based compensation of REDD requires an agreement on country-specific emission reference levels, which have

³ This chapter focuses primarily on the deforestation component of REDD, for which methods are more advanced. Nonetheless, most of the principles discussed apply broadly to emissions and removals associated with changes in forest area and/or carbon density.

profound implications for the climate effectiveness, cost efficiency, and distribution of REDD funds among countries. The setting of reference levels involves tradeoffs between different interests and objectives, as illustrated by the equation:

Total REDD funds = Net benefits to REDD countries (REDD rent) + real costs of REDD (opportunity + transaction costs).

Ambitious reference levels help to ensure that REDD rent is minimized and that REDD funds are used primarily to offset the opportunity costs of emission reductions, thereby maximizing global climate benefit. But because REDD rent represents the financial incentive for REDD countries to participate in the voluntary, international REDD mechanism, overly ambitious reference levels would discourage participation. We suggest:

- Procedures for setting reference levels that are based on agreed criteria across countries to avoid opportunistic establishment of national REDD reference levels.
- Adherence to a principle of global additionality that strives to ensure that REDD is contributing to a reduction in overall forest-related emissions relative to business as usual across countries.
- Using historical deforestation rates as a point of departure for setting reference levels, with attentiveness to national circumstances including forest transition stage (forest cover) and income level (GDP per capita).
- Final determination of reference levels for REDD countries should be decided upon using a process analogous to that used for AFOLU reference levels for industrialized countries.

A quantitative analysis was employed to examine the climate effectiveness (overall emission reductions) and distributional implications of reference levels, giving different weights to historical national deforestation, forest cover, per capita GDP, and a global additionality scaling factor. In general,

weighting of reference levels away from historical national deforestation and toward forest cover and per capita GDP criteria tends to reduce their climate effectiveness. A scaling factor that reduces the global reference level can increase climate effectiveness, particularly for high volumes of REDD funding.

Options for Monitoring, Reporting, and Verification:

A GHG-based instrument that rewards REDD on the basis of quantified emission reductions and/or removal enhancements requires agreement on standards for MRV. Most REDD countries will need enhanced capabilities in both current and evolving technologies in remote sensing and in methods for measuring and estimating carbon stocks in key pools. We suggest:

- Employing the Kyoto Protocol (Marrakech Accord) definition of forest and the IPCC framework for GHG inventories and Good Practice Guidance (GPG) for defining all eligible REDD activities included within the scope of the Bali Action Plan:
 - Requiring at least Tier 2-level monitoring to estimate net emissions from gross deforestation;
 - Promoting Tier 3 reporting along with increasing access to the necessary financial resources and technical capabilities needed for national monitoring systems;
- Flexibility and consistency with respect to the inclusion of diverse forest carbon pools in MRV⁴;
- Future reviewing of IPCC GPG methodologies to ensure applicability in response to the future REDD policy framework, including further development of internationally acceptable methods, guidance, and standards; and
- Adoption of the same verification process as used for reviewing annual GHG inventories of countries with an emission-reduction commitment.

⁴ Consistent with the approaches for determining inclusion or exclusion of approved carbon pools in emission factor calculations in the land use, land-use change, and forestry (LULUCF) sector for Annex 1 countries, and for afforestation/reforestation in the CDM.

Monitoring of forests remaining as forests (i.e., degradation, conservation, sustainable management of forests) is more challenging than monitoring deforestation. For some activities, the climate benefit is small relative to the cost of monitoring. The framework for accounting for the category “forests remaining as forests” is already outlined in IPCC 1996 Guidelines and 2003 GPG, and estimates net emissions or removals as the product of the area affected and the net change in C density. However, the existing methodologies do not cover all major aspects of C losses and gains associated with REDD. Overall, emission factors for activities associated with reducing emissions from degradation generally result in low climate benefits, are difficult to monitor in most cases, require high levels of local capacity, and currently have high monitoring costs. The application of new satellite techniques could help reduce these costs. Future review of IPCC GPG methodologies will be needed to ensure applicability in response to a future REDD policy framework, including further development of internationally acceptable methods, guidance, and standards.

Options for Promoting Effective Participation of Indigenous Peoples (IPs) and Local Communities (LCs): The effective participation of IPs and LCs in a REDD mechanism and actions will influence environmental effectiveness. However, adopting strong provisions to promote participation in a Copenhagen agreement will be challenging. Within the UNFCCC, stringent rules on the recognition of the rights of IPs and LCs could be seen to be at odds with the national sovereignty rights of Parties.

The risks and opportunities that REDD may raise for IPs and LCs include, on the one hand, potential loss of access to land and other natural resources, and on the other hand, potentially increased resource flows to poor rural areas and improved forest governance. Effective participation of IPs and

LCs in REDD implementation would increase the likelihood that their risks will be mitigated and their opportunities enhanced.

Specific suggestions for promoting effective participation of IPs and LCs in REDD include:

- Promotion of the participation of IPs and LCs in an international REDD mechanism, *inter alia*, via:
 - Broad and inclusive reference to IPs and LCs;
 - Establishment of rights to be consulted, heard, and informed for those affected by international and national REDD actions, including access to an international review system that gives non-state actors the opportunity of recourse to an appeals body;
 - Provision of adequate resources to establish effective accountability systems and help overcome financial barriers to participation;
 - Representation of IPs and LCs on the governing body of a global REDD finance facility (Phase 2).
- Strengthening the national implementation of REDD, *inter alia*, via:
 - Formulation of guidelines to promote participation nationally; and
 - Support for key areas of national implementation, including land tenure reform, strengthening civil society organizations, involvement of local governments, and participation of IPs and LCs in MRV systems.

A sustainable outcome for REDD requires a global partnership, with REDD country leadership needed for successful implementation, including participation of IPs and LCs, and industrialized country leadership provided through deep domestic emission reductions and support for REDD actions.

Authors

Arild Angelsen

Professor
Dept. of Economics & Resource Management
Norwegian University of Life Sciences
& Senior Associate
Center for International Forestry Research

Sandra Brown

Director & Chief Scientist
Ecosystem Services Unit
Winrock International

Cyril Loisel

Coordinator
Energy and climate program
Institut du développement durable et des
relations internationales (Iddri)
& Senior Advisor
ONF International

Leo Peskett

Research Fellow
Climate Change, Environment and Forestry
Programme
Overseas Development Institute

Charlotte Streck

Director
Climate Focus

Daniel Zarin (Coordinating Author)

Professor
School of Forest Resources & Conservation
University of Florida
& Senior Advisor
Tropical Forest Carbon Strategy
The David and Lucile Packard Foundation

About Meridian Institute

The Meridian Institute is a not-for-profit organization whose mission is to help people solve problems, make informed decisions, and find solutions to some of society's most complex and controversial problems. Meridian's mission is accomplished through applying collaborative problem-solving approaches including facilitation, mediation, and other strategic consultation services. Meridian works at the local, national, and international levels and focuses on a wide range of issues related to natural resources and environment, science and technology, agriculture and food security, sustainability, global stability, and health. For more information, please visit <http://www.merid.org>.

Meridian Institute

1920 L Street NW, Suite 500
Washington, DC 20036 USA
Phone: +1 202-354-6450
Fax: +1 202-354-6441
<http://www.merid.org>



Meridian Institute

Connecting People to Solve Problems

Reducing Emissions from Deforestation and Forest Degradation (REDD): An Options Assessment Report

Prepared for
The Government of Norway

Climate change mitigation will be neither cheap nor easy. But the costs and complexities of the mitigation challenge pale in comparison with the risks and costs that are likely to accompany failure to take decisive action. Because deforestation accounts for about 18 percent of global greenhouse gas emissions—larger than the entire global transportation sector—reducing emissions from deforestation and forest degradation (REDD) must be part of the Copenhagen agreement of the Conference of the Parties to the United Nations Framework Convention on Climate Change (UNFCCC). Without REDD, the widely endorsed goal of climate stabilization at a maximum 2°C temperature increase will not be reached.

To capture the mitigation potential of the forest sector, this Options Assessment Report suggests a flexible, three-phase approach to policy measures and positive incentives in order to accommodate (i) the diverse capabilities and circumstances of REDD countries; (ii) an expanded scope of REDD to include conservation, sustainable management of forests, and enhancement of forest carbon stocks; and (iii) the near-term constraints of the current global financial crisis.

Phase 1, already initiated in many countries, includes the development of national REDD strategies, encompassing national dialogue, institutional strengthening, and demonstration activities. Phase 2 involves a fund-based approach to support the implementation of the policies and measures proposed in those national REDD strategies, administered on the basis of pre-agreed performance measures. To make substantial progress toward a 2020 goal of halving global deforestation, Phase 2, starting in 2010, should include internationally binding financial commitments from industrialized countries at a suggested level of USD 2 billion per year, increasing to USD 10 billion per year in 2014. Phase 3 would bring in elements of a future regime with a compliance instrument based on quantified greenhouse gas emission reductions and removal enhancements.

The transition from Phase 2 to Phase 3 requires attention to the setting of reference levels and the monitoring, reporting, and verification (MRV) of emissions and removals. National historic deforestation is the best near-term predictor of deforestation and could be used as a point of departure for reference level setting, but diverse national circumstances argue for consideration of additional variables, including forest cover and income level. Reference level setting should also (i) reflect adherence to a principle of reducing forest sector emissions globally, and (ii) follow a process that is compatible with future incorporation into a broader agriculture, forests, and other land uses (AFOLU) sectoral reporting framework. MRV should also follow relevant UNFCCC precedents and Intergovernmental Panel on Climate Change (IPCC) methodologies.

Furthermore, REDD policies and their implementation should promote the effective participation of indigenous peoples and local communities both internationally and nationally. This report examines a range of approaches both within and outside of the UNFCCC process, including procedural mechanisms, careful design of financial and MRV systems, and clarification of rights to land and natural resources.

A sustainable outcome for REDD will require a global partnership, with REDD country leadership needed for successful implementation, including participation of indigenous peoples and local communities, and industrialized country leadership provided through deep domestic emission reductions and support for REDD actions.