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ISSUE BRIEF: Nested Approaches to Reducing Emissions from Deforestation and Forest Degradation

This brief summarizes key reasons for taking a nested approach to reducing emissions from deforestation and forest degradation, conservation, sustainable management of forests, and enhancement of forest carbon (REDD+) and describes issues and options for policymakers.

Interest in reducing emissions from deforestation and degradation (REDD, or REDD+ with conservation, sustainable management of forests, and enhancement of forest carbon) remains high despite a lack of international regulatory certainty. A key question for policymakers at every level is how to transform current interest and funding into long-term revenue for ecosystem conservation and restoration. Effectively engaging the private sector is an important part of the answer.

Public funding represents a significant source of funds for scaling up REDD+ in the near term, with more than USD 4 billion promised in Official Development Assistance¹ in addition to existing and planned climate change funding. On the other hand, it will take an estimated US \$40 billion per year to cut deforestation rates in half by 2030.² Private finance is needed to bridge the gap and bring about substantial reductions in deforestation. For these reasons, providing viable opportunities for private investment is integral to the success of REDD+.

One promising way to do so is to "nest" project-based REDD+ within national-level accounting and regulatory frameworks in a way that allows private investors to directly invest at the project-level. In contrast to government programs, projects generally provide more appealing prospects for private investment because risks are often easier to assess and manage in the project context.

At the same time, unlike purely project-based approaches to REDD+, a nested approach³ incorporates national oversight and accounting, which are vital to ensuring the environmental integrity of the system, providing for transparency in the market and laying the foundation for effective benefit-sharing, among other things. Furthermore, nested REDD+ lends itself to phased implementation, led by REDD+ projects. As national systems and capacities are scaling-up, projects can continue to generate investment in forest ecosystems as well as valuable lessons learned.

¹ Voluntarily agreed by the REDD+ Partnership country participants at the Oslo Climate and Forest Conference on 27 May 2010. For more information, see the official statement of the REDD+ Partnership, available at: www.forestcarbonportal.com/resource/interim-redd-partnership-established-oslo.

² UNEP. 2011. Forests in a Green Economy: A Synthesis, p. 13. Geneva, Switzerland: UNEP.

³ Pedroni, L. et al. Creating incentives for avoiding further deforestation: the nested approach. Climate Policy, vol. 9, no. 2, pp. 207-220 (2009).

POTENTIAL BENEFITS OF TAKING A NESTED APPROACH

Private Investment in Carbon Projects

Carbon markets can help to address the discrepancy between existing and necessary funding to significantly reduce emissions from deforestation and forest degradation. In 2009, allowance markets, spot and secondary Kyoto offsets, and project-based transactions generated more than USD 140 billion in revenue. Given stronger regulations and additional markets, the size of the world carbon market is potentially much larger. With deforestation and forest degradation accounting for an estimated 12-17% of global GHG emissions, the forest sector has the potential to supply significant emission reductions and capture corresponding revenue.

Project-based approaches provide a more attractive entry point for most kinds of private investments than do government-run REDD+ programs because projects allow investors to assess and manage risks,⁷ and to leverage revenue streams from forest products and services besides carbon.

Early Action and Scaling Up

Another important advantage of nested approaches to REDD+ over purely national approaches relates to timing and momentum. While national-level approaches will ultimately be needed to redirect policy and provide the scale needed to significantly reduce emissions, most tropical countries will need some time to develop rigorous monitoring, reporting, and verification (MRV) capacity and to build legal and institutional infrastructure to support national REDD+. Meanwhile, REDD+ projects are underway and subnational programs are emerging around the world, leveraging public and private finance to protect threatened forests.

In 2010, 27 million tons of forest carbon (worth about USD 126 million) was transacted on the voluntary carbon market. National frameworks that build off on this activity, incorporating such project-based approaches rather than starting from scratch, allow for REDD+ investment to continue and even grow while comprehensive regulations are formulated.

Advocates of nesting generally describe a phased approach, where pilot projects play a key role as national and subnational regulatory frameworks are created. In such a phased approach, the national

⁴ Kossoy, A. & Ambrosi P. 2010. State and Trends of the Carbon Market 2010. Washington, DC: World Bank Carbon Finance Unit.

⁵ In 2008, Point Carbon estimated that if a proposed U.S. cap-and-trade program were enacted, global carbon markets could be worth almost 38 Gt CO₂e (worth about US \$3.1 trillion) per year in 2020. Point Carbon Press Release. 22 May 2008. Global Carbon Market Worth €2 trillion by 2020. Oslo: Point Carbon.

⁶ Estimates vary widely due to scientific uncertainties regarding actual rates of deforestation, carbon content of forests, rate of carbon loss due to deforestation and forest degradation, and rate of recovery of deforested or degraded forest areas.

⁷ Cortez, R., Saines, R., Griscom, B., Martin, M., De Deo, D., Fishbein, G., Kerkering, J., and Marsh, D. 2010. *A Nested Approach to REDD+: Structuring effective and transparent incentive mechanisms for REDD+ implementation at multiple scales.* The Nature Conservancy and Baker & McKenzie, Washington, D.C.

⁸ Peters-Stanley, M., Hamilton, K., Marcello, T., Sjardin, M. 2011. *Back to the Future: State of the Voluntary Carbon Markets* 2011. Forest Trends/Ecosystem Marketplace and Bloomberg New Energy Finance, Washington, D.C.

REDD+ program that ultimately emerges should provide a clear pathway for bringing projects that satisfy minimum regulatory standards under national accounting and registry structures, and for approving future nested projects. Explicitly embracing such a phased approach, as countries like Peru have already done, provides the certainty for continued investment into pilot projects that potentially generate environmental, economic, and social benefits as well as important technical and policy lessons learned.

Effective Targeting of Incentives

The efficacy of REDD+ in terms of actually changing land uses, and thereby generating additional carbon sequestration, will depend upon incentives reaching the people responsible for land use and land-use change, whether they are landowners, communities, or local or national policy-makers.⁹ Nested REDD+ allows for projects and programs targeted to local circumstances to coexist alongside and within national and international policies. In this way, different types and levels of incentives may be provided at the various levels necessary, all within an integrated accounting system.

OPTIONS FOR NESTED REDD+

In practice, taking a nested approach to REDD+ requires a complex set of technical and policy decision-making around integrating national, subnational, and project-level activities. Key issues and options for nested REDD+ include:

- Creating enabling policy and regulatory frameworks, as well as institutional infrastructure;
- Developing guidelines for how incentives will be distributed to projects and programs;
- Managing risks at multiple levels; and
- Setting technical rules for reference levels, measurement, and monitoring, in order to accurately and consistently account for emission reductions. 10

Enabling Frameworks

Enabling regulatory and institutional frameworks provide the foundation for successful nested REDD+ implementation. Providing clear regulatory guidance for REDD+, either as part of comprehensive REDD+ regulation or otherwise, is particularly important to provide certainty for private investment. The regulatory framework will address aspects such as:

- Designating a responsible entity at the national level and potentially at the subnational level;
- Delegation of rule-making authority to the responsible entity or a subsidiary technical body;
- Harmonization of REDD+ regulations with existing frameworks on forestry, agriculture, infrastructure, etc.

Focus, Washington, D.C., available at: www.forest-trends.org/dir/nestedredd.

⁹ Cortez et al., supra note 7.

¹⁰ An extensive discussion of policy issues and options can be found in Chagas, T., Olander, J., Streck, C., O'Sullivan, R., and Seifert-Granzin, J. 2010. Nested Approaches to REDD+: An Overview of Issues and Options. Forest Trends and Climate

- Consultation requirements;
- National standards for project development and approval processes for programs and projects;
- Eligibility for REDD+ incentives, not only in terms of who may receive incentives, but also in terms of what activities are eligible or are specifically ineligible; and
- Establishment of a registry for tracking emission reductions and carbon sequestration from projects and programs.

The regulatory framework may outline these aspects in general terms, leaving substantial flexibility to subnational governments, or may provide more detailed guidance. If private investment is a priority, specific national rules are needed on key aspects, such as project approval criteria, eligibility for incentives, and registry set-up.

Incentive Type and Distribution

REDD+ incentives may take the form of tradable credits for emission reductions or removals (e.g., verified emission reductions – VERs), or results-based payments from public sources. These funding streams are not mutually exclusive. Rather, tradable credits/carbon markets and public funding may be used in different circumstances and may be combined to fund nested REDD+. For example, results-based payments from public sources could be used to support government policies and programs, while a carbon market is used to compensate project-based activities.¹¹

Regardless of the form of incentive used, there is the question of how incentives will be shared geographically, politically, and between eligible activities (e.g., policies versus projects). To the extent that REDD+ incentives come from the carbon market, the question of allocation can be left to the market. Market allocation can be expected to be efficient in terms of generating the greatest benefit for buyers and investors at least cost and risk to these parties. However, pure market forces are agnostic to other social and environmental aspects of forest carbon and may therefore lead to a market that generates profits for buyers, investors, and well-connected or well-organized sellers, while disadvantaging already marginalized groups. Minimum standards for allocation of incentives, along with policies that facilitate participation by marginalized groups, may be used to increase fairness.

Insofar as incentives flow from, or are mediated by, a national or subnational program, an explicit policy decision on allocation must be made. Such decision is likely to be technically and politically challenging.

National or Subnational Performance and Risk Mitigation

A key issue for nested REDD+ policy to address is the question of whether distribution of REDD+ incentives to nested programs or projects is contingent on overall subnational or national performance in creating emission reductions or removals beyond the baseline. The argument in favor of making incentive payments contingent on government performance is that doing so controls for domestic emission leakage beyond program or project boundaries as well as for

¹¹ Chagas et al., supra note 10.

government policy failures, thereby protecting the integrity of the system.¹² However, as a practical matter, it may be necessary to decouple payments from government performance in order to attract private investment and encourage participation.¹³

A middle approach might be to make REDD+ incentive payments contingent on subnational or national emission reductions below the baseline, while at the same time providing payments to successful projects or programs within unsuccessful jurisdictions via a reserve account, insurance arrangement, or government guarantee. If such a system is used, care must be taken to disqualify programs or projects that simply displace carbon emissions, thereby contributing to the national or subnational failure to meet emission reductions targets.

In general, nested accounting for REDD+ should make it easier to account for leakage, or the displacement of carbon emissions beyond project or program boundaries, because claimed emission reductions must be trued up at the national (and potentially subnational) level. Yet, leakage still poses risks that must be adequately addressed. Potential options at the project level include:

- Improved project design to minimize and accurately account for leakage;
- Mandatory payments into reserve accounts, which may be pooled across a number of programs or projects to better manage risks at lower cost;
- Provision of government guarantees to reduce investment risks and stimulate investment;
- Use of formal insurance mechanisms, insofar as they are available;
- And penalties for sanctioned deforestation.¹⁴

At the national or subnational level, the government may choose to apply a discount rate to account for leakage risks or enact a leakage tax that can be used to fund a reserve account, government guarantee program, or other government-operated risk mitigation mechanisms.¹⁵

Technical Rules

To support national accounting, nested REDD+ requires basic technical rules that ensure consistent, uniform measurement and reporting on forest cover, condition, and carbon stocks. Accurately accounting for nested REDD+ involves, among other things:

- Setting national, and potentially subnational reference levels or baselines;
- Defining eligible ecosystem types and their characteristics;
- Establishing which activities are eligible to receive incentives at which scales;
- Specifying accounting periods; and

¹³ Pedroni L., Estrada, M., and Cenamo, M.C. 2010. "A 'Nested Approach' to REDD+: How Could It be Implemented?" In *Pathways for Implementing REDD+*, eds. X. Zhu, L.R. Møller, T. De Lopez, M. Zaballa Romero. UNEP Risø Centre, Geneva.

¹² Cortez et al., supra note 7.

¹⁴ O'Sullivan, R., Streck, C., Pearson, T., Brown, S., and Gilbert, A. 2010. *Engaging the Private Sector in the Potential Generation of Carbon Credits from REDD+*. Report to the UK Department for International Development (DFID). ¹⁵ Chagas et al., supra note 10.

• Setting up rules for "grandfathering" of REDD+ activities that occurred prior to the first accounting period, if applicable.

Each of these decisions involves trade-offs and is therefore likely to be politically-charged. Setting national reference levels, in particular, has already become a controversial issue in international climate change negotiations. For example, nations with declining relative carbon emissions prefer that baselines be set according to historical average emissions, while nations with increasing relative carbon emissions prefer that baselines take into account projected emissions increases. In nested REDD+ systems, the challenges are compounded because subnational reference must add up under the national baseline.

Reference levels may be developed from the bottom up, by knitting together project and program-level baselines, or from the top down. The bottom-up approach can be deployed immediately (with VCS methodologies), but creates a serious risk that the reference levels will not add up correctly. The top-down approach will take more time, as it relies on accurate modeling of the rate, location, and timing of changes in forest condition, ¹⁶ as well as a process of negotiation and consultation with stakeholders.

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¹⁶ Chagas et al., supra note 10.