

REDD+ in the Post-Copenhagen World: Recommendations for Interim Public Finance¹

Executive Summary

REDD+ holds the potential to reduce greenhouse gas emissions, improve the livelihoods of forest-dependent people, and conserve biodiversity. The interim public funding announced during and since the COP15 could play a strategic role in helping to realize this potential. The overall goal of this funding should be to support progress towards REDD+ national programs that are “efficient, effective, and equitable”². In pursuit of this goal, such funding should also be structured to support, among other things, the development of “compliance-grade” REDD+ programs that could potentially link up with emerging regulatory markets and attract private investors. If focused in a strategic manner, interim funding could capitalize upon emerging opportunities to engage both the drivers of deforestation and forest-dependent peoples in REDD+ and facilitate low-emissions rural development. Drawing on lessons from Brazil and Indonesia, the Governors’ Climate & Forest (GCF) task force, and the agricultural commodity roundtable processes, we highlight several areas where interim funding could move nations and states down the path to compliance-grade REDD+, providing the basis for lasting improvements in the lives of forest-dependent people and favoring low-emission systems for producing food, fiber, fuel, and feed.

The six main lessons and funding opportunities we present are:

1. Important components of nation-wide REDD+ frameworks can be created in three years.

Opportunity for Interim Finance: Nations designing REDD+ programs require investments in stakeholder consultation, policy analysis and alignment, institutional re-structuring, development of MRV systems, and funding for civil society to convene, support, and participate. These investments can help nations “leap-frog” to national policy frameworks for REDD+ as they gradually build institutions, align policies across ministries, design MRV systems, and engage in meaningful stakeholder consultation. Positive financial signals, including support for building this capacity and the prospect of long-term carbon finance, are needed to secure and sustain political momentum.

2. States and provinces frequently have jurisdiction over important forest governance responsibilities, and several have taken important steps towards the design of “wall-to-wall” REDD+ programs. A large share of the world’s tropical forests lie within states and provinces that are developing REDD+ programs within the Governor’s Climate and Forest task force, a



¹ Authors are listed on last page.

² [Angelsen, A. \(ed.\). "Moving Ahead with Redd: Issues, Options and Implications." 172. Bogor Barat, Indonesia: Center for International Forestry Research, 2008](#)

unique sub-national collaboration among 14 states and provinces from Brazil, Indonesia, the United States, Mexico, and Nigeria that is seeking to develop workable REDD+ programs capable of meeting the requirements of emerging GHG compliance systems in the US and elsewhere.

Opportunity for Interim Finance: Building and sustaining sub-national programs provides a critical opportunity to test and refine key elements of REDD+ architecture to (a) provide a framework for “nesting” REDD+ pilot projects and (b) provide components of—and pathways to—programs at the national scale. However, these state and province-level programs (and projects nested within them) are currently receiving little or no financial support, and could easily lose momentum. Interim finance could go a long way in securing the momentum and progress made in developing state- and province-wide REDD+ programs.

3. Private investors, critical to the long-term success of REDD+, are interested but are not investing.

Opportunity for Interim Finance: Public funding could attract private investment into national and state/province-level REDD+ programs by lowering risk. While national and large-scale sub-national approaches in principle offer greater environmental integrity than stand-alone projects, companies and project developers are familiar with projects, and may view national and sub-national approaches as risky. Mechanisms to share risk are needed for national approaches to work. Interim finance could be allocated to public-private partnerships that would acquire rights on potential REDD+ payments, a portion of which could then be retired and used to create buffers against emission reduction reversals. Other mechanisms will also be needed to ensure environmental integrity in the transition to compliance grade programs. Public funding could support progress towards developing the policies, institutional capacity, and financial architecture that will be needed to link REDD+ programs with regulatory markets that are under development.

4. Market trends and the rapid expansion of agricultural and livestock production in many tropical forest regions will undo progress made on REDD+ program development unless these drivers of deforestation are effectively (and immediately) engaged in low-emissions rural development. And even after REDD+ programs have been developed, they will not succeed in the long term without complementary policies and programs to sustain low-emissions rural development.

Opportunity for Interim Finance: Commodity “roundtables” for palm oil, sugar/ethanol, and soy have developed international standards and criteria for the certification of supply chains that are attracting high levels of producer and industry participation. Certification criteria include a prohibition against production on recently-deforested lands and compliance with local laws. These certification systems are in jeopardy because of the high cost of compliance incurred by farmers and companies. An international fund for compensating the costs of compliance could go a long way towards channeling benefits to family farmers interested in certifying their farms, steering future agricultural expansion onto already-cleared lands, and transforming commodity markets to permanently exclude deforestation from the supply chain. Such a fund could prioritize small-scale farmers but also reach commercial producers, and could help maintain carbon-rich peat swamp forests in areas of oil palm expansion.

5. REDD+ program development will not succeed in the long term without lasting improvements in livelihoods of forest-maintaining indigenous and traditional people and other local communities (IPLCs), guardians of vast areas of the world's tropical forests.

Opportunity for Interim Finance: Donor nations can reinforce the need for institutional and policy reforms that are necessary to provide lasting, systemic improvements in the livelihoods of forest-dependent people. Progress towards recognizing, formalizing, and enforcing IPLC claims on their territories should receive strong positive signals. IPLCs should be supported at the level of both pilot projects and programs within national and sub-national REDD+ frameworks. Patience and agile funding will be needed to build capacity among widely-dispersed, culturally-diverse IPLCs to understand climate change, develop strategies for adapting to climate change, and decide on their preferred form of REDD+ benefits.

6. Progress in REDD+ program development has been fastest where strong civil society organizations have been involved in program design, development, and implementation. Most tropical nations have weak civil society organizations and limited institutional support for multi-stakeholder processes. For that reason, they will be severely encumbered in developing REDD+ programs.

Opportunity for Interim Finance: Strategic funding is needed to help create, sustain, and strengthen local and national non-governmental organizations that are innovative, objective, technically-competent, and that could provide important input to REDD+ program development and stakeholder consultation processes at multiple levels. Such support should also work to strengthen emerging stakeholder networks across jurisdictions in order to facilitate learning and collaboration and allow stakeholders to plug into the many REDD+ efforts underway in a coordinated manner.

Context: The central role of interim finance in post-Copenhagen REDD+

REDD+ funding commitments announced during and since the UN climate treaty's fifteenth conference of the parties in Copenhagen (COP15) represent a critical near-term mechanism for securing and advancing the momentum and progress made in designing and implementing REDD+ programs. The importance of these funds is heightened by the delays in passing a US Cap-and-Trade bill, and the failure at COP15 to achieve a binding climate agreement. It is likely that we face a 1-3 year delay in agreement on the international post-2012 climate treaty framework, including the definition of the architecture of REDD+ and its links to the compliance market. Uncertainty concerning the post-2012 regulatory architecture has increased since COP15. Due to this delay and uncertainty, the interim financing for REDD+ in the intervening time period will have an even greater influence than envisaged before the COP15 outcome. The interim phase has the potential to catalyze a transition from loosely coordinated nascent REDD activities to state and national programs that are capable of linking up with compliance markets. This opportunity could easily be lost, however, if interim REDD+ financing is poorly designed.

Interim funding should fit into the current REDD+ framework being proposed at the international level, building on a phased-approach³ that focuses initially on capacity building, moving to policy development and implementation of specific activities, and then finally to performance-based REDD+ programs⁴. Program design should also be sufficiently flexible to fit different possible regulatory scenarios, including a top-down, binding international agreement, a bottom-up agreement with various linked carbon markets, bilateral agreements, or state-to-state accords. Although identifying the different phases was a very important step towards articulating how REDD+ financing should be structured, little analysis exists on how the transition across phases should occur, and how these different phases may co-exist in the same country. What is needed now is a sustained effort to turn the phased approach into viable pathways based upon national and sub-national circumstances, and considering possible regulatory architectures. Although a range of possible REDD+ architectures could be developed to disburse interim financing effectively, only a select few will enable the transition out of public funding to a REDD+ regime that is positioned to provide sustained, long-term funding through linkage with the compliance carbon markets. We argue here that a REDD+ architecture must accommodate the different phases and scales of action and that progress already made in developing REDD+ programs provides lessons in how this can best be achieved.

Our analysis is strongly influenced by Brazil's progress in developing national and state-level REDD+ programs, in developing REDD projects, and by steps towards compliance-grade REDD+ program development that have been made with support from the Governors' Climate and Forest (GCF) task force. It is also influenced by important progress that has been made outside of REDD+ circles to develop international standards and criteria for producers of agricultural commodities.

Funding Entry Points: Nations, states/provinces, and nested projects

REDD+ success will depend upon the degree to which developing nations are able to re-direct rural development along forest-maintaining pathways. In its most powerful outcome, REDD+ will motivate

³ Meridian Institute. *Reducing Emissions from Deforestation and Forest Degradation (REDD): An Options Assessment Report*. 2009.

⁴ [AWG-LCA. Outcome of the work of the Ad Hoc Working Group on Long-term Cooperative Action under the Convention - Draft decision -/CP.15. Copenhagen: UNFCCC; 2009. FCCC/AWGLCA/2009/L.7/Add.6](#)

governments, civil society, and private sectors of developing nations to systematically build the investments, policy environment, institutional structures, and rural services (education, rule of law, health, technical assistance) that are necessary in order for forest-maintaining economies and livelihoods to displace forest-destroying activities. REDD must eventually result in dozens of nations developing programs in which emissions-reduction targets are achieved through closely-aligned policies and programs. Multiple, nation-wide REDD+ programs could (a) reduce the risk of emission leakage, (b) lower REDD+ transaction costs, (c) engage a broad range of forest stakeholders, (d) simplify monitoring, reporting, and verification (MRV), and (e) increase the likelihood that REDD+ will lead to global reductions in greenhouse gas emissions. It is this basic logic that underlies the convergence that has taken place among the UNFCCC negotiations and national and sub-national legislative processes (e.g. the US, California) on a REDD+ regime focused on national-scale REDD programs. Interim funding should be designed, first and foremost, to help move nations towards successful nation-wide REDD+ programs.⁵

Box 1: Defining “sub-national”.

The term *sub-national* is frequently used broadly to encompass various scales of REDD+ programs below the national level. For the purposes of this paper we use *sub-national* to refer to states, provinces, and other political and administrative units or jurisdictions that are found within nations. *Projects* refer to a set of spatially explicit activities by entities at a scale below the national, state, or provincial accounting jurisdiction.

The policy alignment and institutional innovation that will be needed to realize REDD+'s potential will require close coordination between national and state- or province-level processes because of differentiated responsibilities and roles in rural governance. In many tropical nations, including the two developing nations with the highest historical deforestation rates (Brazil and Indonesia), states and provinces hold important responsibilities in law enforcement, land-use zoning, the provision of rural services, and the titling of some lands. National REDD programs will not succeed in these countries (and others) without substantial engagement with state and provincial governments. State/province-level programs have many of the same advantages enumerated above for nation-wide REDD+ programs. As the Brazilian experience demonstrates, state-level REDD+ program development can inform the more complex national processes, setting the stage for advances in the development and implementation of national laws, policies, programs, and institutions that could eventually allow these programs to link with international offset markets or other carbon markets. The importance of these programs is demonstrated by the rapid progress that has been made in the “Governors’ Climate and Forest task force”⁶, which is connecting state- and province-level REDD programs in Brazil, Indonesia, Nigeria, and Mexico to the cap-and-trade policies of California and other US states.

Both national and state/province-level REDD+ programs require time to design properly, and only a few are likely to reach fruition by the end of 2012. Interim funding must be poised to quickly respond to opportunities to strengthen nascent national and state/province-level programs, such as those described below for Brazil and Indonesia. Perhaps the single most important ingredient of successful REDD programs is effective stakeholder participation, for which there are no shortcuts (and which, historically, few governments have been effective in leading). Both nations and states will also need to create institutional capacity for developing and administering REDD programs, build MRV capabilities,

⁵ [AWG-LCA. Outcome of the work of the Ad Hoc Working Group on Long-term Cooperative Action under the Convention - Draft decision -/CP.15. Copenhagen: UNFCCC; 2009. FCCC/AWGLCA/2009/L.7/Add.6.](#)

⁶ <http://www.gcftaskforce.org/>

and thoroughly analyze and align policies and programs within and outside of the forest sector to favor low-emission rural development.

Box 2. Nations, states, projects and stakeholder benefits.

During this crucial interim period of 2010-2012, as nations design programs and begin to integrate REDD+ goals into broader land use planning processes, effective and adequate stakeholder engagement will be key for advancing in planning and implementation. For many stakeholders, signs that tangible benefits will be sufficient and reliable enough to change behavior will be key in establishing the necessary buy-in for early program momentum. However, national stakeholder engagement plans will take time to design and implement, and the resulting benefit distribution mechanisms will take additional time to put in place. Projects may help to engage stakeholders in a quicker but more limited fashion to familiarize certain stakeholders with the options and potential of REDD+ activities. However, projects cannot reach all stakeholders with benefits. During this period of transition from a project-only approach to coherent national programs, states and provinces can provide a “missing link” for stakeholders. They can move more quickly than the incipient national programs to identify, engage and reward stakeholders. They can also reach a broader range of stakeholders with a more diverse array of incentives and benefits than individual projects, all the while supporting the national process by designing mechanisms to nest within the national program.

REDD+ projects may provide important opportunities to efficiently channel REDD benefits to forest stakeholders and to test approaches to REDD program development while broader national and sub-national capacities are being built (Box 2). Projects can quickly send the signal to forest stakeholders that REDD+ could provide tangible benefits to those who conserve and re-establish forests. Projects also appear to be particularly attractive to private finance inasmuch as they offer discrete investment opportunities that may be bundled with other assets and revenue streams with a greater degree of control over delivery and implementation risks.

However, projects also have the potential to impede the progress of national and state/province-level REDD+ program development for the very reason that they are simpler and quicker to implement. By operating relatively unencumbered from governmental policies and institutions and by moving quickly to the establishment of cash payments to forest stakeholders, projects have the potential to draw attention away from the sector-level program development, policy alignment, and institutional innovation that are the necessary long-term foundations of REDD+. Projects that are not connected to state- or national-level REDD+ program development can also lead to a proliferation of competing carbon accounting methodologies, lowering the potential for convergence on a small set of inter-comparable approaches.

There are several possible “entry points” for interim funding to support REDD program development (Figure 1). Each country will require a different balance in funding the different entry points. However, as a general rule, coordination among levels of action should increase as a country advances in the development of its REDD+ framework.

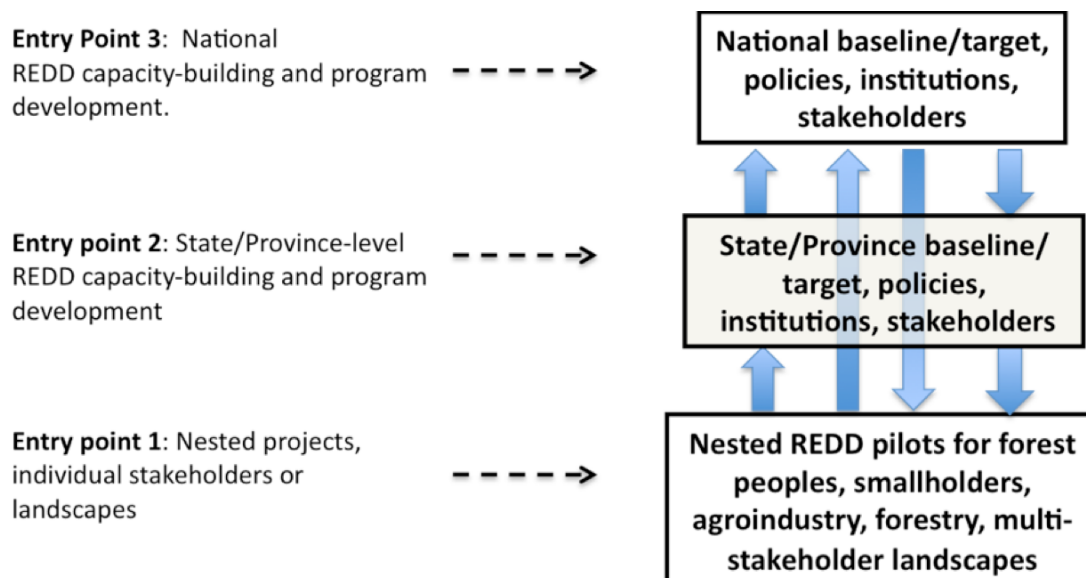


Figure 1. Funding is needed for those activities that will support the advancement of national and state/province REDD program development that aligns policies, fosters institutional innovation, engages stakeholders, and that scales up the lessons of successful projects to support expansion to broader governance levels

Successful interim REDD+ funding should be deployed within a strategy designed to support all three entry points for REDD program development. But this support must be provided in a way that will, ultimately, foster the development of robust national REDD+ programs. For both sub-national activities and projects to contribute to this goal they should:

- Be complementary to national-level REDD+ program and policy development;
- Be recognized (eventually) by national governments through appropriate approvals, registries and endorsements;
- Provide provisions for accounting integrity and consistency either through direct linkages with national-level reference scenarios, allocation and accounting systems (as is the system under discussion for the Brazilian Amazon states) or through transitional government endorsement for independently verified baselines and carbon accounting;
- Develop MRV capacity that contributes to consolidating national systems;
- Foster policy and programmatic linkages that address drivers of deforestation and leakage risks, through integrated approaches and/or financial transfers to build broader enabling environments;
- Contribute to strengthening of systems with adequate safeguards for the rights of indigenous peoples and local communities.

Lessons and Funding Opportunities

Lesson #1: Important components of nation-wide REDD+ frameworks can be created in three years.

Brazil provides the world's best example of the potential for REDD to advance rapidly at the national scale. This country was long opposed to any form of industrialized-nation emissions-linked compensation for reductions in deforestation in developing countries, arguing that developed nations bore the historical blame for climate change and should achieve their emissions reductions within their own economies. But signs that Brazil was beginning to take leadership in the REDD+ discussions appeared at the 12th COP, in Nairobi, when Minister Marina Silva, buoyed by declining Amazon deforestation rates that her Ministry's efforts had helped to achieve, announced plans to create a "tropical forest fund" that would attract donations to reward tropical nations that succeeded in slowing deforestation, a step toward bridging the gap between divided positions on the relationship between REDD+ finance and developed nation commitments to emission reduction. Although this plan was initially met with skepticism, Norway responded positively to a modified Brazilian proposal in 2008, committing one billion dollars to Brazil's "Amazon Fund", for which \$260 million has now been committed in recognition of Brazil's progress in lowering deforestation in the Amazon region⁷. In 2008, Brazil established a formal Amazon deforestation reduction target of 80% by the year 2020 (Figure 2). Then, in 2009, Brazil voted into law the "Politica Nacional de Mudancas Climaticas" (National Policy for Climate Change Plan—NPCC, Box 2), establishing a nation-wide greenhouse gas emission reduction target of 36 to 39% by 2020 (below the 1996-2005 baseline). Brazil is currently debating the possibility of establishing its own domestic cap-and-trade policy for greenhouse gas emissions.

Deforestation in the Brazilian Amazon: historical rates, baseline, and target
(thousands of square kilometers)

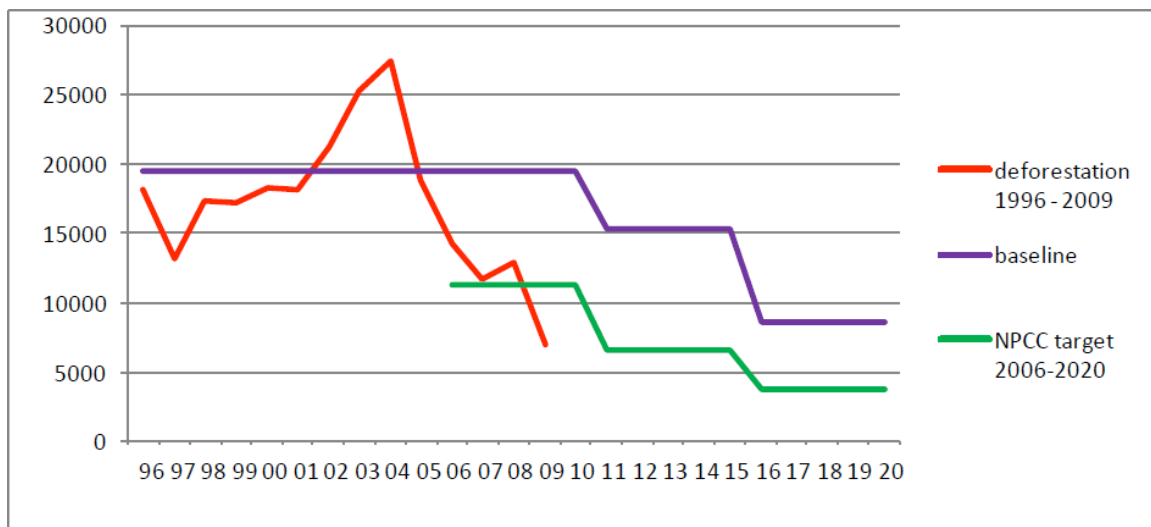


Figure 2. Brazil's remarkable decline in deforestation in the Brazilian Amazon through 2009 (annual historical deforestation), and the official deforestation baseline and target for

⁷ Nepstad D, Soares BS, Merry F, et al. The End of Deforestation in the Brazilian Amazon. *Science*. Dec 2009;326(5958):1350-1351.

deforestation formally adopted by Brazil through the National Policy on Climate Change (NPCC). In the one-year period ending in August 2009, forest clear-cutting in the Amazon region was 7,500 km², two-thirds (64%) less than its ten-year ('96-'05) average annual deforestation rate of 19,500 km²⁷.

Box 3: Brazil's National Policy for Climate Change

The Brazilian government launched its National Policy for Climate Change (NPCC) and signed into law (L12.187/09) in 2009 establishing a quantitative national target for greenhouse gas emission reduction (36 to 39% by 2020, or 15 to 17% below 1990 levels). This target includes a goal of 80% reduction of Amazon deforestation, the major source of emissions in Brazil. The NPCC should be implemented by the end of 2010 and will be informed by the national emissions inventory that will be concluded by October 2010. Two policy instruments for implementing the NPCC are recognized in the law: the National Plan for Climate Change and the Climate Change Fund, which have also been signed into law. The NPCC will be implemented initially through five sectoral plans: (1) 80% deforestation reduction in the Amazon and (2) 40% deforestation reduction in Brazilian savannas (called *cerrado*), (3) energy sector (for example, improving electrical transmission efficiency and expanded use of biofuel), (4) agriculture and cattle ranching, and (5) in the metallurgical industry (substituting coal with charcoal in iron smelting). In a first phase (April-August 2010) these five plans will be elaborated and debated with the society through public hearings. Other plans, including one for the transportation sector, will be elaborated and implemented over 2011. The Brazilian government is predicting several decrees to regulate the different parts of the law.

Opportunity for Interim Finance: Nations designing REDD+ programs require investments in stakeholder consultation, policy analysis and alignment, institutional re-structuring, development of MRV systems, and funding for civil society to convene, support, and participate. These investments can help nations “leap-frog” to national policy frameworks for REDD+ as they gradually build institutions, align policies across ministries, design MRV systems, and engage in meaningful stakeholder consultation. Positive financial signals, including support for building this capacity and commitments to long-term carbon finance or market creation, are needed to secure political momentum.

Lesson #2: States and provinces frequently have jurisdiction over important forest governance responsibilities, and several have taken important steps towards the design of “wall-to-wall” REDD+ programs. Nearly half of the world’s tropical forests lie within states and provinces that are developing REDD+ programs within the Governor’s Climate and Forest task force

The greatest progress in the world in the development of REDD+ programs that could provide compliance-grade carbon credits is found in the states and provinces participating in the Governors’ Climate and Forest task force (GCF). Launched in November 2008 under a California initiative, the GCF includes five Brazilian Amazon states (Mato Grosso, Acre, Amazonas, Pará, Amapá), four Indonesian provinces (Aceh, Papua, East Kalimantan, West Kalimantan), three U.S. states (California, Illinois, and Wisconsin) and states in Mexico and Nigeria. The goal of the GCF is to facilitate the development of robust REDD+ programs in the tropical GCF states and provinces and develop the carbon accounting,

finance, and regulatory architecture for linking these state- and province-level REDD+ programs with emerging GHG compliance systems in California, the US, and elsewhere. California is currently developing regulations for its cap-and-trade program and is contemplating provisions that would recognize credits from REDD+ programs and nested projects as eligible compliance units. It is hoped that the development of these state-level REDD+ programs with links to cap-and-trade instruments could help to inform the larger cap-and-trade debates underway in the US and European Community. The substantial progress that has been made by states in the Brazilian Amazon in the development of REDD+ programs is illustrated by the states of Acre and Mato Grosso (Box 3).

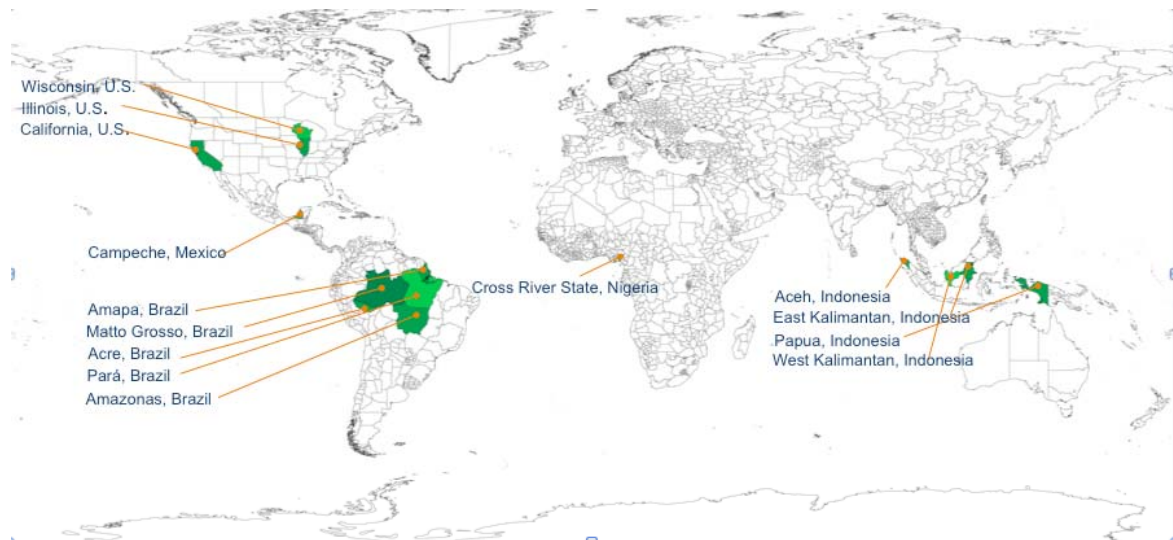


Figure 3. Fourteen states and provinces are now formal participants in the Governors’ Climate and Forest task force, working to interlink the cap-and-trade policies in California and other US states with REDD+ programs under development in the tropical states and provinces.

Aceh is at the forefront of efforts to create a low carbon economy at a provincial level in Indonesia. Other provinces such as East and West Kalimantan have followed suit. The government initiated the “Aceh Green” strategy, a zoning system that calls for the establishment of conservation, light agricultural and industrial zones around key conservation reserves such as the Leuser Ecosystem and the Ulu Massen region which jointly cover half of the Aceh province, or ~2.5 million hectares of natural, biodiversity rich forests. Such commitment to conservation is unprecedented in the region. The Governor has imposed a logging ban on natural forest. Therefore the deforestation rate has not followed the historical rates of the rest of Sumatra (~2%) but has remained at a 0.5-0.75% rate. In as much these efforts are on the right track, the province has not managed to attract industrial scale investment in the industrial plantation or renewable power sectors, despite there being a willingness for cooperation from the local authorities. Private investors have expressed interest to participate but the lack amongst other of large-scale debt and equity financing has kept large-scale projects from materializing. The Aceh Government has adopted a PPP structure to develop its low carbon economy Redd+ Leuser project in a manner consistent with some of the suggested mechanisms later in this paper designed to mitigate risk for the private sector by providing access to revenue streams from associated low emission activities as well as pools of future offsets serving as collateral.

In Cross River State, Nigeria, the governor has worked closely with a broad range of stakeholders to accomplish dramatic reductions in logging. Since mid-2008, Cross River State has:

- Held a statewide stakeholder conference to propose recommendations to state government. This conference recommended a two-year moratorium on logging. It was suggested the two-year logging moratorium's extension be contingent on adequate international carbon finance.
 - Implemented the logging moratorium through vigorous enforcement (including arrest of illegal loggers and impoundment of logging lorries)
 - Funded and provided security for an active Illegal Logging Taskforce
 - Restructured the state Forestry Commission, placing dedicated conservationist in leadership positions
 - Removed all revenue targets for the forestry commission that were based on logging
 - Re-written the state forestry law to favor conservation and payments for ecosystem services over extraction, while allowing REDD+ programs to emerge
 - Actively encouraged federal authorities to have Nigeria join the UN REDD program, the World Bank Forest Carbon Partnership Facility and Forest Investment Program
 - Been the first African state to join the Governors' Forests and Climate Taskforce
 - Helped Nigerian federal agencies develop a REDD+ strategy and position and engage REDD+ negotiations in Copenhagen.
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- ***Opportunity for Interim Finance:*** Nations designing REDD+ programs require investments in stakeholder consultation, policy analysis and alignment, institutional re-structuring, development of MRV systems, and funding for civil society to convene, support, and participate. These investments can help nations "leap-frog" to national policy frameworks for REDD+ as they gradually build institutions, align policies across ministries, design MRV systems, and engage in meaningful stakeholder consultation. Positive financial signals, including support for building this capacity and commitments to long-term carbon finance or market creation, are needed to secure political momentum.

Lesson #3: Private investors, critical to the long-term success of REDD+, are interested but are not investing.

REDD+ has the opportunity to attract a much larger and broader pool of private sector capital than has traditionally been anticipated and can extend beyond the carbon offset market if regulatory frameworks are structured properly. International carbon offsets can play a significant role, given that emerging regulation, particularly in the United States (both Federal proposed climate bills and the California AB32 draft regulations) include clear provisions for inclusion of REDD+ offset credits and robust crediting standards and protocols are being developed and tested. However, carbon finance strategies can also include government policies that create incentive structures to facilitate private sector direct investment (debt and equity) to address drivers of deforestation. These policies can attract investments in sustainable forestry, agro forestry, and low-emissions agricultural technologies, including increases in crop and livestock productivity. REDD+ payments or rights either in the form of rights to which can be traded within international cap and trade or domestic allowance schemes or rights to payments or user rights from a National or sub-national REDD program should be based on verified performance based activities.

Box 4: Brazilian State REDD+ Case Studies: Acre, Mato Grosso, and Amazonas.

These states represent contrasting political, economic, and conservation conditions. Acre state, 164,000 km² in size (three times the size of Costa Rica), has been governed by political leaders committed to forest conservation for 12 years, and has developed several innovative policies and programs for fostering sustainable forest-based economic development. For example, the Chico Mendes Law establishes a floor on the price of naturally-harvested rubber. Public-private partnerships have created industries for processing and adding value to forest products, including a condom factory (supplied with natural rubber), furniture and flooring factories, and Brazil nut processing plants. Acre's state-wide land-use zoning plan, approved by the state assembly, modifies the national forest code to define the percentage of private landholdings that must be kept in forest within each geographic zone. This zoning plan is supported by a state-run registry of private properties and communities that tracks forest cover and compliance with zoning scheme. Like three other Brazilian Amazon states, Acre announced its formal commitment to reduce deforestation 81% by 2020. Acre is finalizing its REDD legislation that mandates the development of a carbon registry and further development of its MRV system.

Mato Grosso is a much larger state, covering 900,000 km², and providing 7% of Brazilian GDP through its powerful agro-industrial sector. Mato Grosso is the biggest agricultural state in a nation that is the emerging agricultural superpower globally. Its average annual deforestation rate of 8,000 km² per year in 1996-2005 makes Mato Grosso the world's 3rd or 4th biggest deforester (if it were a nation). And, yet, 60% of the reduction in Brazil's deforestation achieved since 2006 has taken place in Mato Grosso. The government of Mato Grosso has launched a program (MT Legal) for facilitating landholder compliance with the national forest code (that requires 80% forest cover on private lands in the Amazon forest biome), has announced a deforestation reduction target (89% reduction by 2020), and has created policies and incentives for reducing expansion of the area of cattle pasture, which occupies 90% of all cleared land in the state at a very low stocking density. The state's attempts to approve the land-use zoning plan were recently thwarted in an important set-back to the REDD+ program development. Like Acre, Mato Grosso is actively seeking public and private investor partners to help implement its low-deforestation development plan.

The State of Amazonas is the largest Brazilian State (1.5 million km²), and still has 98% of its original forest cover. In response to increasing deforestation pressure, the State of Amazonas initiated in 2003 a broad strategy to halt deforestation and promote sustainable development. From 2003 to 2008 Amazonas created 100,000 km² of new protected areas. Through the State Policy on Climate Change Law and the State System of Protected Areas, Amazonas developed important REDD pilot projects, such as the "Juma" Project and the "Bolsa Floresta" Program of payments to forest people who forego deforestation.

Together, the states of the Amazon, unified through the GCF, have pushed the federal government to open up to the possibility of a national market-oriented REDD program. The states are more advanced than the federal government in designing their REDD programs, and are eager to define the benefit allocation scheme that Brazil will need to distribute potential REDD+ payments to states.

It is unlikely that there will be meaningful private sector participation in REDD during the interim finance period under current regulatory conditions without public sector financial support. According to the State of the Forest Carbon Markets Report⁸, the private sector, to date, has only invested \$50m in forestry and REDD carbon activities. There is too much regulatory risk for the development of meaningful pre-compliance interest from potential regulated entities in a post 2012 market, the US markets cap and trade policy faces too much uncertainty, and while California and the WCI are making substantial progress on regulatory design for international REDD, the demand from California during the interim finance period will be very limited. The voluntary market in the absence of a pre-compliant market will be important as catalytic investment but will be negligible in terms of funding requirements. However, there could be significant private sector participation during the interim financing phase and beyond if the public sector interim finance was structured to mitigate some of the risks faced by the private sector.

Such risks that could be mitigated include:

- Risks that international and domestic cap and trade legislation is not effective and cap and trade markets do not develop to support a reasonable minimum price of carbon
- Risks that emission reduction units (credits) generated are accounted for within developing nations' national accounting inventories and are therefore not available for private sector use
- Risks of changes in crediting baselines as early action initiatives become formalized within nested frameworks
- Risks that national and sub-national targets are not achieved despite successful nested activities, resulting in insufficient credits/payments available for successful nested activities
- Risks that nested activities receiving up-front funding do not successfully address drivers of deforestation and do not achieve expected emissions reductions
- Risks that mechanisms to address permanence such as insurance and buffers are accepted by the carbon markets as fungible credits and additional discounting is not required
- Risks of additional legal and contractual complexity for the private sector of entering into REDD agreements directly with sub-national and national counter parties

Opportunities for Interim Finance: *The private sector participation is very complementary to the public sector finance expected to be available during the interim financing period for REDD+. With appropriate risk mitigation structures in place the private sector could substantially exceed public sector funds for implementation activities during this period and could be more agile in its deployment. A portion of the interim finance for REDD+ should be structured to mitigate private sector capital risks and leverage private sector capital investments during the interim finance period and develop the architecture and capacity to ensure maximum and rapid private sector participation when regulatory frameworks are in place. In particular, interim finance could provide a buffer pool of emission reduction units (ERUs) that could be used at the national/sub-national level to facilitate pre-payments (up-front financing of projects that will create future climate reductions) by the private sector and to help build insurance pools against risks of emission reduction reversals (i.e., lack of permanence). Other risk-mitigation structures could include (1) principle repayment guarantees against regulatory failure, (2) ability of private sector to invest alongside public funding where private sector ERUs generated are senior to public sector interests and (3) balanced returns for the private sector from direct cash flow interest in the underlying low carbon land use activities and rights to potential future carbon revenues. In addition, direct investment by the private sector during the interim finance period will help*

⁸ <http://www.ecosystemmarketplace.com/>

ensure that demonstration activities are designed that can inform regulation and policies designed to maximize longer term private sector participation in REDD.

Lesson #4: Global market trends and the rapid expansion of agricultural and livestock production in many tropical forest regions will undo progress made on REDD+ program development unless these drivers of deforestation are effectively and immediately engaged in low-emissions rural development. And even after REDD+ programs have been developed and implemented, they will not succeed in the long term without complementary policies and programs to sustain low-carbon development.

The gains made in climate policy development since 2006 are vulnerable to market trends. The remarkable decline in deforestation in Brazil from 2006 to 2009 was possible because of increased governmental efforts to enforce the law in the Amazon region, and a 50% increase in the forest area under formal protection. But the decline was also the result of a retraction of the soy and beef industries—the main drivers of deforestation⁷. Falling soy and beef prices and a weakening dollar (relative to the Brazilian currency, the Real) beginning in 2005 led to a decline in profitability of soy and beef production, and a reduction in both the area under soy cultivation and the size of the Amazon cattle herd⁷. Additional market trends reinforced the retraction of these industries. In 2006, soy traders agreed to a two-year “moratorium” on the purchase of soy grown on fields that had been cleared of Amazon forest after July 2006. In 2009, a similar moratorium was imposed on the Amazon beef industry, with the (reluctant) cooperation of some major meatpacking plants⁷.

This window of opportunity for slowing deforestation in Brazil and progressing towards the targets of the NCCP may be closing. Brazil has the world’s greatest potential for agricultural expansion, and international investors are lining up billions of dollars to acquire land, improve highways, build grain storage facilities, and improve ports so that Brazil can double its soy production by 2020⁹. The Brazilian sugar industry is anticipating a 2.5 fold increase in production by 2020, while the cattle herd is expected to increase by half. The powerful agroindustry lobby in Brazil, meanwhile, has launched its most vigorous attack ever on the environmental legislation that controls the amount of private forest that landholders are allowed to clear.

Opportunity for Interim Finance: Over the last six years, three commodity “roundtables” (for palm oil, sugar/ethanol, and soy) have developed international standards and criteria for the certification of the supply chain. These standards and criteria were developed with participation of elected representatives of civil society, producers, and industry/finance. The criteria for each roundtable include a prohibition against crop expansion onto recently-deforested lands and legal compliance, and are therefore closely aligned with the goals of REDD+. These certification systems differ from those developed for the forest sector in the speed and scale with which they are being adopted. Within the first 18 months of the Roundtable for Sustainable Palm Oil (RSPO) of certification, 4% of global production of palm oil came into certification and that may double by the end of 2010. The roundtables include 30% (Roundtable for Responsible Soy—RTRS), 50% (Roundtable for Sustainable Palm Oil—RSPO) and 28% (Better Sugar Initiative—BSI) of world

⁹ Lourenço JC. Agronegócio Brasileiro: Projeções De Crescimento E Entraves De Infra-Estrutura Logística. *Observatorio de la Economía Latinoamericana*. 2009;2009(119); MAPA - Ministério da Agricultura: Pecuária e Abastecimento - Assoria de Gestão de Estratégia. *Projeções do Agronegócio Brasil - 2008/09 a 2018/19* Brasília / DF: Ministério da Agricultura, Pecuária e Abastecimento; 2009; IBGE - Instituto Brasileiro de Geografia e Estatística. Censo agropecuário de 2006 <http://www.ibge.gov.br/english/>; CONAB – Companhia de Nacional de Abastecimento. Série Histórica de Produção. <http://www.conab.gov.br/>.

production of soy, palm oil, and sugar/ethanol, respectively, in their memberships. These certification systems are in jeopardy, however, because of the high cost of compliance incurred by many farmers and companies. An international fund for compensating these costs could go a long way towards steering future agricultural expansion on already-cleared lands. This fund could prioritize support for family farms and it could provide a mechanism for retiring the development rights of forest concessions, such as those held in Indonesian that are destined for oil palm plantations. If linked to pre-compliance national and sub-national REDD+ programs, the fund could become self-sustaining through the allocation of rights on future REDD+ payments.

Lesson #5: REDD+ program development will not succeed in the long term without lasting improvements in livelihoods of forest-maintaining indigenous and traditional people and other local communities (IPLC), who are guardians of vast areas of the world's tropical forests.

Forest-dependent indigenous peoples, traditional peoples, and other local communities (IPLC) are responsible for the conservation of vast areas of tropical forest. In the Brazilian Amazon, for example, there are 126 million hectares of formally recognized IPLC territories and reserves corresponding to two thirds of the protected areas in the region and one third of the region's forest carbon stocks⁹. IPLCs have a strong inhibitory effect on deforestation¹⁰. However, this forest guardian function is threatened by highways, hydroelectric dams, the expansion of agriculture and ranching, commercial logging, and mineral exploitation. REDD+ represents an important opportunity to increase the viability and quality of forest-based livelihoods—a potential that can be manifested in many ways. In addition to a fair share of the flow of REDD+ monetary benefits, IPLC's are vulnerable to land and forest grabbers and need legal recognition and demarcation of their territories. They need systemic improvements in social services (education, health care, water supplies, electrification), and enforcement of territorial boundaries against incursions. Well-designed national and sub-national REDD+ programs should provide the institutional capacity and policies to enable ILPCs to freely develop their forest-maintaining livelihoods.

Opportunity for Interim Finance: *Donor nations can reinforce the need for institutional and policy reforms that are necessary to provide lasting, systemic improvements in the livelihoods of forest-dependent people. Progress towards recognizing, formalizing, and enforcing IPLC claims on their rightful territories should receive strong positive signals. These programmatic approaches to IPLCs should be supported at the level of both pilot projects and programs within national and sub-national REDD+ frameworks. Patience and agile funding will be needed to build capacity among widely-dispersed, culturally-diverse IPLCs to understand climate change, develop strategies for adapting to climate change, and decide on their preferred form of REDD+ benefits.*

Lesson #6: Progress in REDD+ program development has been fastest where strong civil society organizations have been involved. Most tropical nations have weak civil society organizations and will be severely encumbered in developing REDD+ programs.

The progress that Brazil and other nations (e.g. Costa Rica) have made towards developing and implementing land-use policy that protects forests and ecosystem services can be traced to effective civil society organizations that produce or use reliable information, that are not strongly ideological in their orientation, that work well with a broad spectrum of stakeholders, and that are legitimate actors

¹⁰ Soares-Filho et al. In press. The role of Brazilian Amazon protected areas in climate change mitigation. *Proc. Natl. Acad. Sci*; Nepstad DC, Schwartzman S, Bamberger B, et al. Inhibition of Amazon deforestation and fire by parks and indigenous lands. *Conservation Biology*. 2006;20(1):65-73.

that effect change within the cultural and political contexts of the nations or regions that they work in. In most developing nations that could develop REDD+ programs, there is a critical shortage of these institutions, in part because of the critical shortage of funding that they face. Interim funding could help foster the growth and strengthening of civil society organizations in dozens of developing countries around the world with the task of supporting the development, implementation, and monitoring of REDD+ programs.

Opportunity for Interim Funding: *Strategic funding is needed to help create, sustain, and strengthen local and national non-governmental organizations that are innovative, objective, technically-competent, and that could provide important input to REDD+ program development and stakeholder consultation processes at multiple levels. Such support should also work to strengthen emerging stakeholder networks across jurisdictions in order to facilitate learning and collaboration and allow stakeholders to plug into the many REDD+ efforts underway in a coordinated manner. Donor nations could address this important need using their existing capacity to create bilateral funding programs through their development, science, technology, and other types of agencies.*

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