RFF REPORT

US Forest–Climate Assistance

An Assessment

Michael Wolosin

SEPTEMBER 2012





Table of Contents

Executive Summary	1
Introduction	
Part I. Evolving US Engagement in International Forest Conservation	5
From Forestry to Conservation	5
The Forest–Climate Track	6
Part II. US Forest-Climate Assistance Scope and Strategy	
Scope	9
Strategy	
Meeting Objectives with Existing Agency Capacity	
Geographic Focus	
Part III. Program Assessment	12
Overall Size and Growth of US Forest-Climate Assistance	
Do Programs Meet the Strategic Objectives?	
Geographic Focus	
Part IV. Recommendations	
A Changed Strategic Landscape for REDD	23
Toward a More Effective US REDD+ Program	25
Conclusion	
Appendices	

© 2012 Resources for the Future and Climate Advisers. Resources for the Future is an independent, nonpartisan think tank that, through its social science research, enables policymakers and stakeholders to make better, more informed decisions about energy, environmental, and natural resource issues. Located in Washington, DC, its research scope comprises programs in nations around the world.

US FOREST-CLIMATE ASSISTANCE: AN ASSESSMENT

Michael Wolosin*

Executive Summary

Almost three years ago, the United States launched a major effort to help tropical forest nations dramatically reduce deforestation, one of the primary sources of climate pollution. This report assesses the progress made implementing this program and offers concrete recommendations for reform.

By and large, the United States has done a good job getting the new REDD+ program (reducing emissions from deforestation and forest degradation) off the ground. The US government has significantly ramped up funding and will come close to meeting its international commitments in this area. It is helping to create the institutions, standards, knowledge, and new practices necessary for large-scale deforestation reductions. It is also making important contributions to several forested developing countries as they build national-level forest policies and capacity for better forest and land management.

A few gaps between the program's objectives and their implementation can and should be corrected, most notably that:

- reducing deforestation is not yet a major consideration for other US development assistance programs, such as those related to food security and agriculture, and it should be;
- U.S. efforts have been limited to foreign assistance and diplomacy, with little contribution from trade, agriculture, finance, and commerce agencies, even though global trade in agricultural commodities is the biggest cause of deforestation; and
- despite progress planning and building capacity for *later* reductions in deforestation, too little investment has been made in large-scale partnerships with top deforesting nations to reverse deforestation *now*.

For further information, please contact wolosin@climateadvisers.com.

^{*} Michael Wolosin is director of research and policy at Climate Advisers and is a visiting scholar at Resources for the Future. The author would like to thank Douglas Boucher, Lisa Handy, Eric Haxthausen, Kristen Hite, Glenn Hurowitz, Donna Lee, Diana Movius, Nigel Purvis, and Dan Zarin for their helpful input; staff at the US Agency for International Development, the US Department of State, the US Department of the Treasury, the Millennium Challenge Corporation, the Overseas Private Investment Corporation, and other agencies for sharing information and insight; and Alex Stark for research assistance. All opinions and errors are of course those of the author. This work was supported by the Climate and Land Use Alliance.

The author individually, and Climate Advisers collectively, have had a longstanding goal of drawing attention in the United States to the need for strong and effective policies and programs to reduce emissions from deforestation; in fact, we have played a role in shaping the existing programs and strategies from the beginning. Our strong interest and engagement continue, providing as close to an insider view as possible from the outside, but potentially introducing some biases as well. This assessment is thus intended to take a close and critical look at US forest-climate programs, providing additional clarity and identifying both strengths and weaknesses, with an eye toward making this important effort as effective as possible.

Although the US program is off to a good start, national and international political and economic conditions have changed profoundly since its inception. In 2009, a global climate agreement seemed within reach, and the United States seemed on the verge of adopting comprehensive climate legislation; taken together, this would have created a multibillion dollar annual market for REDD+ credits. Today, a new global climate treaty remains a distant prospect, and Congress seems unlikely to adopt major climate laws. These changes in circumstance are fundamental and warrant major changes to the US program.

First, the United States should reorient its REDD+ program to reduce the expansion of agriculture into forests—a trend that is driven by global commodities markets.

On the production side, the United States should help mobilize private sector investment in restoring degraded lands to productivity and improving the yields and efficiency of existing agricultural lands in forest nations—if and only if these investments are tied to strong forest protection policies and measures. On the consumption side, the US REDD+ program should also do more to support efforts by the private sector and nongovernmental organizations to eliminate deforestation from commodity supply chains. For example, the US government should (1) work toward credible and globally harmonized sustainability standards and labeling schemes; (2) pursue bilateral trade agreements that provide incentives to supply sustainable products; (3) lead by setting a goal of zero-deforestation procurement for key commodities; and (4) fully fund and support the Lacey Act's legality provisions that keep the products of illegal logging out of US markets.

Second, the United States should support a growing trend in developing countries to pursue REDD+ policies and actions that accelerate economic growth even without carbon-based incentive payments.

In particular, the United States should start to consider and pursue deforestation reduction as a secondary goal for all relevant foreign assistance programs. For example, existing investments in rural economic growth through improved agricultural yields could be leveraged to conserve forests by including land-use planning and land tenure components. The United States should also focus large-scale economic assistance packages for forested developing countries on the pursuit of new economic growth pathways that avoid damage to forests and the environment. Many developing countries have begun planning for these types of "green growth" or "low-emissions growth" pathways, and need smart foreign assistance and direct foreign investment to pursue them. Foreign assistance programs supporting economic growth are spread across a range of agencies and programs; for forested developing countries, these should be stacked and coordinated to create large-scale green growth partnerships.

If the United States pursues these few mid-course corrections to, and strategic expansions of, its forest–climate program, it will substantially increase its impact on global deforestation emissions.

US FOREST-CLIMATE ASSISTANCE: AN ASSESSMENT

Michael Wolosin

Introduction

The United States is almost three years into a substantially increased and reoriented forest conservation strategy directed toward reducing climate emissions from deforestation in developing countries. Now is a good time to step back and assess the progress and strategy of this US forest–climate assistance, and identify any necessary course corrections. The 2010–2012 period of so-called "fast start" climate finance commitments by developed countries to developing countries is coming quickly to a close; at the same time, funding for the first year of new programs has been completely programmed after the recent closing of a two-year budget cycle. The 2011 United Nations Climate Conference in Durban, South Africa¹ also added certainty that an international climate agreement is at best years off—substantially lengthening what had been envisioned as an interim period of capacity-building support from the United States and other donor countries.

A widely held view in much of the world assumes that the United States has been at a standstill or is even moving backward—on climate policy. In fact, since taking office, President Obama and his administration have made progress on climate change policy, even in the face of difficult domestic politics and a lack of public consensus on climate action. Particularly in the realm of foreign policy, the administration has made climate change a priority—for example when the president intervened personally in the 2009 Copenhagen climate negotiations to resolve remaining disagreements. And although diplomatic progress in the context of the United Nations Framework Convention on Climate Change (UNFCCC) has been slow and incremental at best, the Obama administration has made substantial progress domestically in elevating climate change as a strategic priority for US foreign assistance. For example, the first Quadrennial Defense and Diplomacy Review (QDDR) completed by the administration elevated climate and energy issues both strategically and organizationally. At around the same time, the first ever Presidential Policy Directive (PPD) on Global Development elevated development as a core pillar of American power, identifying climate as one of three high-level development priorities and creating a Global Climate Change Initiative (GCCI) to deliver US development assistance related to climate change. A Democratic Congress responded to the administration's prioritization of climate by more than tripling assistance for core climate programs from fiscal years (FY) 2009 to 2010.²

Deforestation and land degradation in forested developing countries is the source of more greenhouse gas emissions than the entire global transportation sector. Reducing emissions from

¹ The United Nations Climate Change Conference, Durban 2011, includes the 17th session of the Conference of the Parties (COP 17) to the United Nations Framework Convention on Climate Change (UNFCCC) and the 7th session of the Conference of the Parties serving as the meeting of the Parties (CMP 7) to the Kyoto Protocol.

² The FY2011 Interagency Climate Narrative estimated FY2009 core climate assistance at \$315 million and FY2010 at \$1.007 billion. Although this core climate appropriation has declined somewhat since FY2010, to about \$820 million in FY2011 and \$770 million in FY2012 and in the Obama administration's request for FY2013, it remains more than twice the pre-Obama level, and has been supplemented by the administration's prioritization of climate-smart investments by other foreign assistance agencies, such as the Millennium Challenge Corporation (MCC) and the Overseas Private Investment Corporation (OPIC).

deforestation and forest degradation (REDD+³) is, for very good reasons, one of the areas of strongest climate action by the Obama administration. From a mitigation standpoint, it is clear that the world cannot meet climate goals without addressing land-use and forest emissions. In terms of climate diplomacy, the United States will be in a much stronger position in future negotiations if it meets its existing climate finance commitments—and REDD+ is one of the few areas where a clearly quantified commitment has been pledged.⁴ From a practical standpoint, general agreement among countries has been reached on many of the structural components of a global REDD+ program, and momentum continues to build with progress on the ground in many countries, so there is no need to wait for slow or stalled-out global climate negotiations. Politically, forest conservation is a nonpartisan issue in the United States with broad public and congressional support independent of currently controversial climate policies. Finally, the United States is well placed to make a transformative difference in the global REDD+ endeavor. It has a long history of foreign assistance to improve forest management and to conserve forests; a significant capacity to contribute technically (e.g., through satellite monitoring) and intellectually (e.g., with economic modeling); and a concentration of civil society, private sector, and subnational early actors involved in REDD+ activities globally.

This year represents the first opportunity to assess US REDD+ programs. Until now, a real assessment was not possible because 2010 saw rapid growth in US funding for international forests, and US Agency for International Development (USAID) bilateral programs take two full years to work through a funding cycle. Uncertainty from the elongated FY2011 budget process and delays to the FY2012 budget cycle also delayed the programming of funds. But by now, funding streams for the fast start period of FY2010 through FY2012 are largely set, with overall support and the patterns of investment by strategy and geography becoming clear. Administration sources that catalogue the programming of FY2010 REDD+ funding allow for a detailed quantitative analysis of this first year of substantially increased budgets for international forests. At the same time, the Obama administration has asked Congress to continue substantial funding for FY2013, and external assessments of US REDD+ finance are needed to help guide congressional response. As the first post-fast start commitment year, budgeting for FY2013 may well set the trajectory of US forest-climate assistance for the next few years and help determine whether the United States makes a major contribution to reaching global deforestation reduction goals.

Assessing the REDD+ program has become essential because the policy context in the United States and internationally has shifted since the Obama administration first made a commitment to provide \$1 billion in fast start REDD+ finance and defined a strategy for REDD+ foreign assistance. When the program was developed, Congress was debating comprehensive climate legislation and many observers were concerned that, without large capacity-building investments, the supply of REDD+ offset tons—which is critical to keeping down the costs of a US cap-and-trade program, according to economic models—would fail to materialize. Some also hoped, in the run-up to Copenhagen, that an international agreement was on its way. Now, three years later, the United States is reducing emissions only through small regulatory bites, fuel switching, and a sluggish economy; large-scale US carbon markets are either years away or never coming; and a global pay-forperformance system for REDD+ as part of an international agreement could be at least eight years

³ REDD, or "reducing emissions from deforestation and forest degradation," was introduced into the UNFCCC negotiations in 2005 by Papua New Guinea and other rainforest nations. It morphed into "REDD+" two years later in Bali when the clause "and the role of conservation, sustainable management of forests and enhancement of forest carbon stocks in developing countries" was appended in the Bali Action Plan. FCCC/CP/2007/6/Add.1, Decision 1/CP.13.

⁴ In Copenhagen, in December 2009, the United States pledged to provide \$1 billion in so-called "fast start" finance for REDD+ from 2010 to 2012.

away. Now is the time to (1) assess whether the existing US REDD+ strategy, and the portfolio of new and existing programs designed to achieve its objectives, are still aimed correctly given this changed landscape and (2) suggest course corrections as needed for the next phase of US investment.

This report seeks to evaluate the program as it has developed and make recommendations for advancing the goals of the US climate forest program. Part I briefly reviews the history of US foreign assistance for international forest conservation and the US government's shifting priorities over time, with the current focus on climate mitigation. Part II summarizes the plans and strategies for US REDD+ assistance, and Part III assesses progress to date.⁵ The organization of these sections is similar, addressing first the administrative scope and planned scale of the program (i.e., which agencies will contribute how much through what mechanisms), then strategy (what are the objectives of the program, and how will the program meet them), and then geography (which regions and countries will be the target of US investment, and why). Finally, Part IV evaluates how the strategic landscape for REDD+ may have shifted in the past two years and provides a number of recommendations for increasing the impact of US forest–climate assistance.

Part I. Evolving US Engagement in International Forest Conservation

The new sustainable landscapes program⁶ has been built on top of an existing infrastructure of US government programs that engage with developing countries on the conservation and use of their forests. These programs have traditionally focused on forestry—the management of forests for the production of timber, fiber, nontimber forest products, and other benefits—as an economic and development engine and on biodiversity conservation in forested ecosystems. Only recently have US forest conservation efforts adopted climate objectives.

From Forestry to Conservation

U.S. forestry and forest management activities abroad have a history stretching as far back as 1939, when the US Department of Agriculture (USDA) Forest Service (USFS) first gained budget authority to provide international assistance for forestry. USFS' international activities increased throughout the middle of the century, leading eventually to a deputy-level Office of International Forestry in the early 1990s⁷, and then declined in size and organizational importance after the mid-1990s, when a broader effort to consolidate US foreign assistance under USAID led to congressional funding cuts and a reorganization. The USFS Office of International Programs has continued to pursue its mission of bringing US forestry expertise to developing countries, both through its own budget and by supplying technical assistance for programs supported by USAID, the US Department of State (henceforth, "State"), and other agencies.

⁵ This report has intentionally been subtitled an "assessment" rather than an "evaluation" to avoid the implication that I have undertaken a formal program evaluation. Such in-depth analysis of a federal program's cost, efficiency, impact, and logic model would be nearly impossible to undertake from outside the agency at this stage of the program's life.

⁶ This report uses "Sustainable Landscapes program" in uppercase to reference to the formal USAID bilateral program of that name, and "sustainable landscapes program(s)" in lowercase to reference to the broader set of programs that are funded through, or considered as making a contribution to, the GCCI.

⁷ Terry West, "USDA Forest Service Involvement in Post World War II International Forestry," in *Changing Tropical Forests: Historical Perspectives on Today's Challenges in Central and South America*, ed. H.K. Steen and R.P. Tucker (Durham, NC: Forest History Society, 1992), 277–291.

In 1986, Section 118 of the Foreign Assistance Act made forest management and conservation an important part of USAID's mission.⁸ Since then, USAID's direct foreign assistance for forests has never dropped below \$50 million. Much of the support in the early years was directed toward forestry and forest management as an economic development tool, but throughout the 1990s and into the new millennium, the emphasis has shifted to encompass multiple goals, including biodiversity conservation, sustainable management and production, and economic development. For example, in FY2009, almost 90 percent of USAID spending identified as "forestry" also had explicit biodiversity objectives, was geographically identified on the basis of threats to biodiversity, and monitored biodiversity indicators. The forestry program had largely become a forest biodiversity conservation program executed primarily through development-focused bilateral aid.

The new focus on forest conservation and biodiversity extended beyond USAID, with complementary bilateral biodiversity programs created in the US Department of the Interior's Fish and Wildlife Service (FWS) and in the National Park Service. The Tropical Forest Conservation Act (TFCA) of 1998 provided additional bilateral US assistance for debt-for-nature initiatives around the world, generating a new stream of support for tropical forests by reducing developing-country debt obligations to the US Department of the Treasury (henceforth, "Treasury") and redirecting repayments in the local currency to on-the-ground forest conservation projects in the debtor country. The United States has been an important participant in multilateral institutions, treaties, and facilities focused on the world's forests. The frame for these efforts has ranged from conservation (e.g., the Convention on International Trade in Endangered Species and the International Union for the Conservation of Nature), to international timber markets and trade (e.g., the International Tropical Timber Organization), to broader environmental efforts and funds (e.g., the Global Environment Facility, or GEF). Through these multilateral fora and through its oversight of USAID budgeting, the State Department has had an important role in the international forest policies of the United States.⁹

The Forest–Climate Track

In the international multilateral arena, a number of tracks launched at the 1992 United Nations Conference on Sustainable Development¹⁰ related to forests and forest conservation. In the last five years or so, the UNFCCC track has driven a significant part of the global dialogue on forest conservation, with deforestation and land-use change estimated to be responsible for about 15–17 percent of global greenhouse gas emissions.¹¹ At the 2007 UNFCCC Conference of the Parties (COP 13), the so-called "Bali Action Plan" reflected the growing consensus that a global climate deal should include support from developed countries to developing countries for adaptation and mitigation, including for REDD+. International climate policy could potentially provide orders of magnitude more funding than traditional sources of forest management and forest conservation assistance, leading the

⁸ USAID, *Biodiversity Conservation and Forestry Programs Annual Report* (Washington, DC: USAID, 2010).

⁹ The International Conservation Budgets for 2009–2011, produced collaboratively by Conservation International, the Pew Charitable Trusts, The Nature Conservancy, Wildlife Conservation Society, and World Wildlife Fund (together, the Alliance for Global Conservation), provided information for this paragraph.

¹⁰ Commonly called the Rio Summit, the Earth Summit, or the Rio Earth Summit.

¹¹ The Fourth Assessment Report of the Intergovernmental Panel on Climate Change, released in 2007, cited an estimate of 17%. Nabuurs, G.J., O. Masera, et al., "Forestry," in *Climate Change 2007: Mitigation. Contribution of Working Group III to the Fourth Assessment Report of the Intergovernmental Panel on Climate Change*, ed. B. Metz, O.R. Davidson, P.R. Bosch, R. Dave, and L.A. Meyer (Cambridge, United Kingdom and New York, NY: Cambridge University Press, 2007). More recently, it has been estimated at closer to 15%. Union of Concerned Scientists, "Scientists and NGOs: Deforestation and degradation responsible for approximately 15% of global warming emissions" (news release, November 6, 2009), http://www.ucsusa.org/news/press_release/scientists-and-ngos-0302.html.

UNFCCC to absorb an increasingly large share of the global diplomatic energy on forests, and making it a strong center of gravity for international forest conservation. Even outside of the UNFCCC context, the climate frame became more important in forest–related assistance. For example, the United States was an early and strong supporter of establishing a funding facility to help developing countries build capacity for REDD+ in parallel to the UNFCCC negotiations, leading to the establishment of the Forest Carbon Partnership Facility (FCPF), a trust fund under the World Bank. It has also been supportive of the Climate Investment Funds, also managed by the World Bank, including the Forest Investment Program (FIP) established in 2009.

On the domestic climate policy front, comprehensive legislation in the 110th US Congress included the direct allocation of funding to support developing-country efforts in the three key areas of clean energy, adaptation, and REDD.¹² Proposed cap-and-trade legislation of the period also allowed emissions reductions from outside the scope of the program to be used in lieu of credits by companies subject to the cap, and developing-country forests received particular attention as an important potential source of low-priced emissions reductions. Modeling showed that forest-based carbon credits could reduce US carbon prices substantially.¹³ However, it also became clear that such credits, and the reductions in overall program costs that they would allow, would not be forthcoming without extensive investments to build the capacity of developing countries to reduce their deforestation emissions.¹⁴ This gave Congress and the Obama administration ample justification to establish and fund programs to achieve such capacity building.

Soon after taking office in January 2009, the Obama administration released a budget proposal for FY2010—its first budget. The proposal, which reflected the growing consensus around international climate support in both domestic and international arenas, included funding requests for a newly consolidated GCCI that reflected the three major pillars of assistance to developing countries.¹⁵ The request more than tripled the total for all climate purposes from FY2009 to FY2010, and consolidating climate-related programs into a presidential initiative significantly raised their profile.

In December 2009, several months into FY2010, Congress passed a consolidated appropriations bill that included \$900 million for international climate support, coming close to meeting the president's overall request of \$1.1 billion. A new \$74.45 million "Sustainable Landscapes" line item was created for bilateral support through USAID within the climate and environment category, in addition to a \$200 million biodiversity earmark, of which a significant portion would contribute to global forest conservation. Confidence in the capacity of US agencies to significantly ramp up forest investments, combined with an apparent willingness on the part of Congress to appropriate funds for

 $Purvis_Stevenson_InvstmtTropForestConsv.pdf.$

¹² The Lieberman–Warner Climate Security Act of 2008 (S. 3036) included direct funding through allowance set-asides for all three pillars.

¹³ EPA (U.S. Environmental Protection Agency), *Analysis of the American Power Act in the 111th Congress* (Washington DC: EPA, June 14, 2010). Scenario 5a assessed the impact on allowance prices if no REDD+ offsets materialized, which increased costs by 25%.

¹⁴ Andrew Stevenson and Nigel Purvis, *The Economic Benefits of Public Investments in Tropical Forest Conservation* (Washington, DC: Resources for the Future, April 19, 2010), http://www.climateadvisers.com/pdf/RFF-

¹⁵ Budgets for clean energy and global climate change were not new in the Obama administration. The State and Foreign Operations Congressional Budget Justification for both FY2009 (under President Bush) and FY2010 (under Obama) include both clean energy and global climate change as key interest areas. However, FY2010 marks the real start of this program in a number of ways: in FY2010, the narrative justifying the development assistance (DA) request lists climate change as the second of four administration "principal strategic priorities for increases in DA funding in FY2010," and it references the GCCI by name as a target of appropriations for State's Office of Environment and Science Policy through the Economic Support Fund. In the fall of 2010, more official recognition of the GCCI as a presidential initiative came in the form of White House press releases and statements in the run-up to COP-16 in Cancun.

such an increase, allowed the administration to make significant pledges at COP-15 in Copenhagen to provide forest-related climate assistance to developing countries. The United States committed to providing \$1 billion of fast start financing for REDD+ from 2010 to 2012, which added to initial pledges from five other developed countries to total \$3.5 billion of finance providing new momentum for REDD+ and launching a new "REDD+ Partnership."¹⁶

With these developments in late 2009—a new presidential climate initiative, a new bilateral USAID Sustainable Landscapes program, new investments in multilateral finance mechanisms, and a new international pledge of support—the United States' support for international forest conservation and REDD+ entered a new phase of substantially increased investment over recent years (Figure 1). The next part of this report is a close examination of the administration's approach to this change.





Source: Climate Advisers analysis. FY2011 and FY2012 are estimates.

Part II. US Forest-Climate Assistance Scope and Strategy

Both the Obama administration and Congress have carefully defined the scope, strategy, and geographic focus of US climate-centered forest assistance. As one of three pillars of the presidential GCCI, the sustainable landscapes program is guided by the administration's policy regarding the GCCI, as indicated in sources such as annual budget requests, and fits into broader US foreign policy strategic platforms, such as the PPD and QDDR mentioned above. Congress has also provided guidance to the administration through appropriations legislation and accompanying report language.¹⁷

The administration added significant depth to these earlier sources when it developed and issued publicly an interagency strategic plan for US fast start financing for REDD+ in November 2010 (see

¹⁶ The REDD+ Partnership was established on the margins of COP-15 in Copenhagen in December 2009. When the formal partnership agreement was signed in May 2010, a total of \$4 billion had been pledged by Australia (\$120 million), Denmark (\$10 million [2010 only]), Finland (\$21 million), France (\$330 million), Germany (at least \$438 million), Japan (\$500 million), Norway (at least \$1,000 million), Slovenia (\$2.5 million), Spain (\$27 million), Sweden (\$63 million), United Kingdom (\$450 million), and the United States (\$1,000 million). *REDD+ Partnership Agreement* (adopted May 27, 2010), http://www.oslocfc2010.no/pop.cfm?FuseAction=Doc&pAction=View&p

DocumentId=25019.

¹⁷ The Foreign Assistance Act of 1961, as amended, has been considered sufficiently broad in scope as to authorize GCCI appropriations.

below).¹⁸ In January 2012, USAID released a comprehensive Climate Change and Development Strategy to guide the agency's climate assistance from 2012 to 2016; this document adopted the 2010 REDD+ strategy as the agency's strategy for the USAID Sustainable Landscapes program. Together, these various sources¹⁹ define the scope, strategy, and planned geographic focus for US climate forest assistance, summarized briefly in Table 1 and outlined more fully in the rest of this part.

Scope

The Obama administration planned to meet its new commitment to provide \$1 billion in financing for REDD+ over the FY2010 to FY2012 fast start period through several distinct pathways.

First, the administration requested significant funding from Congress for new bilateral programs and multilateral financing mechanisms focused on REDD+. In late 2009, congressional appropriators for the first time earmarked \$74.45 million of USAID's budget for sustainable landscapes programs in the FY2010 consolidated appropriations bill, including report language that detailed the scope and intent of the program. Notably, this report language contained the first reference to "REDD" in US budget documents, giving a clear signal that the sustainable landscapes pillar of the GCCI was being created as an umbrella for US contributions to REDD+. Also in this category were increased requests and increased appropriations for the multilateral FIP and FCPF, the REDD+ finance facilities managed by the World Bank.

Next, the administration drew on two closely related existing financing streams flowing through Treasury that had been established during the long history of US engagement in international forests. The GEF, which has long provided funding for sustainable forest management and forest conservation, has been shifting recently toward efforts related to REDD+ by, for example, creating a new incentive mechanism for REDD+ in 2010. A portion of US GEF contributions has thus been drawn under the umbrella of the sustainable landscapes pillar of the GCCI. Funding budgeted to Treasury for debt forgiveness through the TFCA has similarly been counted as climate assistance, and reasonably so: the most recent TFCA deal signed with Indonesia in September 2011 will generate more than \$28 million of funding for two large-scale REDD+ demonstration programs on the island of Borneo. Together, these first two pathways—funding for new bilateral and multilateral REDD+ programs through USAID and State, and existing funding streams through Treasury that are increasingly focused on REDD+have created what the administration has referred to as the "core" sustainable landscapes ("Core SL") program. Forest-related, but nonclimate, earmarked investments through USAID and the State Department have also been included as meeting the US fast start commitment. To date, only biodiversity programs have been identified as contributing through this "indirect" finance pathway, but with a recent prioritization by USAID of integrating climate into broader development objectives, this may change.

The Obama administration has also sought to marshal additional resources from across the US government in a *whole-of-government* approach to REDD+, with relevant agencies contributing according to their capabilities and resources, and strategy coordinated across organizational

¹⁸ USAID, *Strategic Choices for United States Fast Start Financing for REDD+* (Washington, DC: USAID, October 28, 2010), http://www.forestsclimatechange.org/fileadmin/downloads/redd_news/ United_States_REDD__Strategy.pdf.

¹⁹ These sources include the president's budget requests and public fact sheets, appropriations bills, and report language from FY2010 through FY2012; the *Strategic Choices* document mentioned above; the fast start fact sheets discussed in Appendix 3; the "Interagency US REDD+ Programs brochure" published in December 2010 for dissemination at UNFCCC meetings in Cancun (COP 15); Obama administration submissions to the Voluntary REDD+ Database (see Appendix 3); and USAID's Biodiversity Conservation and Forestry Programs Annual Reports, noted above.

boundaries. This has included participation from domestic agencies, such as the USFS, as well as foreign aid agencies beyond USAID, such as the Millennium Challenge Corporation (MCC). This type of approach also involves climate-related investments by development finance agencies, such as the Overseas Private Investment Corporation (OPIC) and the Export–Import Bank (Ex–Im), which typically have seen much greater investment related to energy than to forests.

The image of a bulls-eye can help one understand the administration's approach to these different types of climate finance, starting at the center with core financing budgeted specifically to the GCCI and not attributed to any other earmark, and progressing outward to indirect assistance for nonclimate programs that meet climate criteria, to additional climate-related contributions from other agencies, and finally to development finance and export credit through agencies such as OPIC (see Figure 2). All of these sources have been included within the scope of this assessment.



Figure 2. Agency Scope of US Forest-Climate Finance

Note: Figure is not drawn to scale.

Strategy

As of 2012, REDD+ as a global strategy for reducing deforestation is a vision for the future. Blueprints have been drawn up, but much work must be done before REDD+ can be realized as a coherent system for actually achieving reduced deforestation emissions through results-based actions. The Obama administration's 2010 REDD+ strategic plan, created by an ad hoc interagency working group²⁰ with input from external stakeholders, is designed to organize and shape the United States' contributions to building this new global system. It focuses on three long-term objectives.

²⁰ State has long sought input and involvement on its REDD+ policy positions from several other agencies through an ad hoc working group. EPA, USFS, USAID, and Treasury have at various times been members of the core REDD+ negotiation team as subject experts and partners. A second ad hoc working group, overlapping extensively with the first and emerging later in the process, engaged in strategy, planning, and coordination for the provision of REDD+ foreign assistance. USAID and State took the lead in this planning effort, with Treasury rounding out the inner circle. This group was originally convened when domestic climate legislation was before Congress, and it benefitted from additional coordination and policy inputs from the Executive Office of the President, the National Security Council, and the Council on Environmental Quality. The National Aeronautics and Space

First, the US plan contributes to **International REDD+ Architecture**—the goal of creating and supporting what has been variously described as "a coordinated international system" or a "coherent global approach" to help countries deliver REDD+ outcomes. This includes international REDD+ fora and finance mechanisms for channeling REDD+ support and payments, such as the REDD+ Partnership, FCPF, and FIP. It also includes forest monitoring data and capacity, standards for defining and measuring forest carbon, and methodologies for involving and protecting communities on the ground. These activities are intended not only to create concrete *things*—systems, institutions, and written and agreed-upon standards—but also to create a set of *norms* for what countries should do in pursuit of REDD+. For example, attention in global fora to building a clear system of safeguards for indigenous peoples and forest-dwelling communities creates an expectation that such safeguards are a critical piece of pursuing REDD+, thus embedding this objective into international REDD+ architecture.

The second objective is contributing to **National REDD+ Readiness**—helping countries become ready to participate in pay-for-performance programs and to adopt domestic policies and measures that reduce forest emissions with or without payments. Consensus has grown over the past few years that REDD+ systems will ultimately have to be implemented (or at least measured and compensated) at the national scale; building the capacity for forested developing nations to do so has thus become critical. Readiness investments by the United States are intended to emphasize national-scale capacity building, such as monitoring, reporting, and verification systems for REDD; national policy and landuse planning frameworks; and investments to build the capacity of governments, the private sector, and communities to participate in REDD+ programs. National readiness efforts are intended to be closely coordinated with efforts to help countries define low-emissions development strategies more broadly.

The third US objective, **REDD+ Demonstration**, can basically be described as creating REDD+ pilot programs that incorporate many or all of the critical pieces of REDD+ to demonstrate the viability of a results-based or pay-for-performance model of achieving sustainable emissions reductions from forests. These programs would not only achieve emissions reductions themselves, they would also demonstrate approaches that could be scaled up to achieve significant cost-effective and sustainable emissions reductions at the national scale. The plan is for the United States to focus on large-scale pilot activities that pursue both REDD+ and economic growth goals in developing countries, and on pay-forperformance pilots and funds.

Meeting Objectives with Existing Agency Capacity

Of course, the collection of programs and funding pathways within the scope of the REDD+ program exhibit different strengths and limitations by virtue of their home agencies. Agencies deploy funds at different speeds and in different ways, and have distinct missions and cultures. Meeting the strategic objectives of the REDD+ program has required pulling together efforts across agencies, but this process cannot be viewed as a simple accounting exercise. Rather, the institutional pathway for delivering REDD+ investments should be matched to the strategic objective.

For example, investments flowing through Treasury to multilateral funds help build global consensus on REDD+ through joint action and decision-making, thus supporting global architecture objectives while at the same time contributing to national readiness and demonstration projects. Bilateral assistance through USAID is programmed by in-country missions on a two-year funding

Administration, the US Geological Survey, and the US Department of the Interior have provided additional expertise and active partnership to both groups on a few specific REDD+ issues and foreign aid programs. Neither ad hoc working group is a standing body with funding or budgetary support.

cycle, with on-the-ground work delivered by partners and contractors and requiring well-defined program goals and criteria. The MCC has a very strict process for selecting just a few partner countries per year for large assistance packages as well as a country-driven and economic analysis-driven approach for selecting a limited number of projects and sectors for action. The unique strengths and limitations of each agency were explicit considerations in defining the scope and objectives of the US REDD+ strategy; they also set the stage for any assessment of the program.

Geographic Focus

The US REDD+ strategy also sets out specific criteria for the geographic focus of readiness and demonstration investments. Readiness investments are intended to be focused in countries with large near- to medium-term REDD+ market potential; high mitigation potential based on high forest-related emissions, expected future emissions, or capacity for increased sequestration; and demonstrated political will to address climate challenges. The United States sets out to focus on countries where it has a comparative advantage based on factors such as traditional emphasis, proximity, and strategic priority, with decisions coordinated and informed by other donors and multilateral investments. Demonstration investments are intended to be focused in areas where extensive REDD+ resources are already being invested, and with high potential for models developed under this program to be scaled up and deployed around the world. Bilateral funding is intended to be consolidated in a few strategic countries to achieve scale and impact on global emissions.

Size and	• \$1 billion fast start financing from 2010 to 2012 pledged for REDD+					
Scope	• A new sustainable landscapes program as umbrella for delivering pledge					
	• Bilateral and multilateral finance through USAID, State, and Treasury form the					
	core					
	 REDD+ integrated into other relevant programs and counted 					
	Additional agencies contribute in a whole-of-government approach					
Objectives	• International REDD+ Architecture: a coherent global approach to help countries					
	deliver REDD+					
	• National REDD+ Readiness: helping countries prepare for pay-for-performance					
	REDD+ programs; taking complementary domestic REDD+ actions					
	• REDD+ Demonstration: supporting large-scale programs that demonstrate					
	significant emissions reductions					
Geographic	Based on mitigation and market potential as well as country leadership on					
Focus	REDD+					
	• Over time, the United States would invest larger amounts in fewer countries					

Table 1. US REDD+ Strategy in Brief

Part III. Program Assessment

Many of the elements are in place for the United States to successfully meet its REDD+ objectives. The US government has a long history of support for international forestry and conservation, which has shifted to a greater emphasis on climate over the past few years. It has made an international commitment to provide substantial foreign aid to help build global REDD+ systems and developing-country capacity, and it has a well-defined strategy to meet that commitment. And now, with a few

years of funding in progress to deliver on this strategy, it is possible to assess how the United States is doing. Is the US REDD+ strategy proceeding as planned?

This part of the paper delves into these questions through an assessment of publicly available data sources and descriptions of individual programs (see Appendix 3, Data and Methods, for details). The first section assesses the scale and administrative scope of finance that the United States has identified as contributing to the global REDD+ effort. Findings suggest that, although this finance has significantly increased, it is likely to fall short of the Obama administration's commitments. The second section examines the strategic priorities of various programs and how the portfolio of programs is divided among the three top-level program objectives, finding somewhat of an overemphasis on investments in architecture and capacity building, and not enough on large-scale demonstration programs. The third section, which examines the geography of US REDD+ funding, finds a concentration of investments in high-priority countries but the remainder of funding spread too thinly across countries from a strategic perspective. In the final part of the paper below, the funding patterns identified in this assessment are placed in the broader strategic landscape for REDD+ to identify specific recommendations for the administration to increase its impact on the global effort to slow, halt, and reverse deforestation emissions.

Overall Size and Growth of US Forest–Climate Assistance

From FY2009 to FY2010, US climate-related forest assistance increased by \$100 million (67 percent). The program is on track for additional and possibly substantial growth from FY2010 to FY2011; some retraction is likely in FY2012 (Figure 3), and this may lead to a shortfall in meeting the administration's \$1 billion fast start REDD+ commitment.

The bulk of the increase from FY2009 to FY2010 is the result of new and substantially increased funding streams for bilateral and multilateral core REDD+ programs. These include new funding for the bilateral USAID Sustainable Landscapes program (see Appendix 2); new funding to the FIP, which emphasizes large-scale REDD+ demonstration; and new bilateral, regional, and global programs supported by State's Bureau of Oceans and International Scientific and Environmental Affairs (OES), including an increased contribution to the World Bank's FCPF. At the same time, an apparent decrease in USAID biodiversity programming for international forests from FY2009 to FY2010 is the result of two factors. First, a more stringent filter was applied in FY2010 so as to include only programs with explicit climate criteria, whereas in FY2009 no such breakdown is available, so all forest biodiversity funding is included in the comparison. Second, a few former biodiversity programs were funded through the USAID Sustainable Landscapes program in FY2010.



Figure 3. US Forest-Climate Finance FY2009–FY2012

Note: USAID SL is the USAID Sustainable Landscapes program. OES is State's Bureau of Oceans and International Scientific and Environmental Affairs. Non-150 refers to any programs outside of the International Affairs budget. MCC-Indonesia is the Millennium Challenge Corporation's Indonesia Compact. See text for additional explanation. Source: Climate Advisers analysis. See Appendix 4 for data.

With FY2010 funding of \$250 million meeting only one-quarter of the Obama administration's three-year \$1 billion commitment, it was clear that the administration would need to significantly ramp up funding. The budget process for FY2011 was substantially delayed. After a series of legislative standoffs and continuing resolutions, the eventual result was a much-abbreviated full-year continuing appropriations bill basically level with FY2010. The abbreviated bill gave the administration an unusual level of discretion, which it used to substantially increase funds directed through bilateral USAID Sustainable Landscapes programs from \$77 to \$137 million (77 percent higher). Some of this increase may be the result of programs formerly funded through biodiversity shifting to the Sustainable Landscapes program, rather than new programs; if so, some of the increase will likely be offset by a decrease in biodiversity programming counted as indirect REDD+ finance.

As noted above, one of the administration's strategies for meeting its climate objectives is to identify climate-relevant funding streams earmarked for other programs and to increase the climate impact of such "indirect" programming when possible. USAID biodiversity programs have been the only identified source of indirect REDD+ fast start financing. No other bilateral foreign aid programming through USAID has been considered to contribute to forest–climate objectives. Substantial investments by the agency in agriculture and food security programs, which certainly could have impacts on developing-country land-use planning and land-based climate emissions, have not been counted—presumably because they do not include explicit climate or deforestation objectives or performance indicators.

Overall REDD+ funding for the FY2010–FY2012 fast start period is likely to fall well short of the \$1 billion that was pledged by the administration in Copenhagen in December 2009 (Figure 4). How far

short the administration falls remains to be seen, with a reasonable current estimate of about \$150 million.



Figure 4. Shortfall from \$1 billion US REDD+ Fast Start Commitment

Notes: FY2011 and FY2012 are estimates and may change. The MCC-Indonesia compact allows Green Prosperity funding to be used to support projects in the forest and land-use sectors, but does not allocate a specific amount of funding for forest-related interventions; therefore \$75 million is an initial estimate and may change.

The biggest "known unknown" in US REDD+ finance to date comes from an agency outside the core GCCI budget, the MCC. The MCC's compact with Indonesia, a five-year \$600 million package of assistance budgeted in FY2011, includes a \$332 million Green Prosperity program that will support poverty reduction and low-carbon economic growth through both the expansion of renewable energy and the sustainable management and use of natural resources, including forest and peat lands that are currently large sources of land-use emissions. Most Green Prosperity support will flow through a funding facility, and no target has been set for the scale of support for natural resource management versus renewable energy investments. Although it is thus impossible to predict with accuracy how much this compact will contribute to land-based climate mitigation objectives, it is likely to be about \$75 million, depending on the number and size of high-quality projects proposed to the Green Prosperity facility that meet both economic growth and land-use mitigation objectives.

Additional contributions to US REDD+ finance in FY2012 and beyond may come from development finance and export credit agencies. For the first time in FY2011, OPIC invested in forest conservation by providing \$1 million of political risk insurance for a US company's investment in a community-based avoided-deforestation project in Cambodia that will generate carbon credit revenue for rural communities. Although this REDD+ investment is dwarfed by the more than \$1.3 billion of development finance and export credit for renewable energy projects made available by OPIC and other trade and export agencies in FY2011, OPIC has shown an interest in expanding its forest-based work, and has extensive resources available for projects that meet its criteria.

Do Programs Meet the Strategic Objectives?

The US REDD+ strategy emphasizes three primary objectives: building international REDD+ architecture, helping countries build capacity to participate, and supporting pilot projects to demonstrate the REDD+ concept at scale. The strategic emphasis of the FY2010 bilateral program portfolio, broken down into these three categories,²¹ reveals that the bulk of investments are contributing to national readiness (including a number of investments through regional bureaus that support country readiness in the region), with a somewhat surprisingly large amount of bilateral programming contributing to international architecture, and an investment in large-scale demonstration projects that is too small and overly dependent on unpredictable funding streams. Overall, it appears that a little too much bilateral investment is going toward planning for the future of REDD+, and not enough toward actually "doing" REDD+.

The largest share of US core bilateral REDD+ funding (about \$48 million, or 40 percent) is focused primarily on national REDD+ readiness activities. These programs include almost all technical support from the USFS; large national programs in Indonesia, India, Peru, Cambodia, Brazil, and Zambia; large regional programs, such as the Andean Amazon REDD+ initiative; and many smaller programs in a range of countries. About 16 percent of program funding goes to a few large bilateral and regional programs with both national readiness and demonstration components in Indonesia, Brazil, Mexico, and Asian and West African regions. Another 13 percent of program funding has both national readiness and international architecture objectives, such as (1) technical support for forest carbon mapping methods and procedures through Silvacarbon and (2) the global Forest Carbon, Markets and Communities Program funded by USAID and designed as a technical resource to provide USAID missions and partner governments with assistance in developing and implementing integrated REDD+ initiatives.



Figure 5. Strategies

Note: Analysis of FY2010 core bilateral funding. Source: Climate Advisers analysis.

²¹ The descriptions of all bilateral programs supported in FY2010 were analyzed and coded to the three overall strategic objectives—international REDD+ architecture, national REDD+ readiness, and/or REDD+ demonstration. Specific key words and categories of activity were defined as one of the three categories, and programs could be coded to one or two categories.

About 9 percent of funding is in service of primarily international architecture objectives, including the SERVIR program with the National Aeronautics and Space Administration, the REDD+ partnership, and work with the US Environmental Protection Agency on forest carbon inventory standards. Finally, about 22 percent of funding (about \$27 million) is directed primarily toward demonstration objectives, with the bulk of this total the \$20 million debt-for-nature swap with Indonesia through the TFCA. The balance of demonstration investments, only \$7 million, is delivered through six programs of \$1–1.5 million each in Colombia, Panama, Tanzania, Kenya, Malawi, and the Asian region.

Importantly, a large portion of bilateral US REDD+ finance—\$76 million or about 30 percent in FY2010—is funding dedicated primarily to biodiversity objectives, with reduced climate emissions considered a co-benefit rather than a primary objective. The climate-focused and biodiversity-focused forest programs pursue somewhat different strategies. Biodiversity programs generally function at smaller spatial scales and are place-based and/or ecosystem-based, whereas REDD+ programs function at landscape scales and treat forests as political and economic systems first rather than as ecosystems first. As such, many investments in biodiversity-focused forest programs do not align closely with any one of the REDD+ strategic objectives. This is not to say that such investments are not important, or that their strategies should shift; rather, it is a reminder that although forest conservation is the ultimate objective of both biodiversity and climate programs, such programs are not duplicates or substitutes. They are complementary programs with different theories of change, different measures of success, and different ways of prioritizing investments.

U.S. contributions to global multilateral funds and processes (22 percent of forest-climate assistance in FY2010) are important additional pathways for achieving US strategic REDD+ objectives, with different mechanisms tilting toward different strategies. Of course, most of these investments contribute to building international architecture—both directly, through building institutions, standards, and mechanisms, and indirectly, by creating international norms for REDD+. The FCPF (\$10 million) is primarily focused on developing-country readiness, while the FIP (\$20 million) contributes to both readiness and demonstration. The United States includes \$16 million of GEF contributions as part of the REDD+ program; these contributions flow primarily to on-the-ground forest projects that undertake a range of strategies to reduce deforestation and desertification, many not explicitly linked to REDD+. It is difficult to assess how these multilateral investments, as this depends in part on the extent to which the FIP is able to distribute funding primarily to large-scale demonstration rather than to readiness.

Geographic Focus

U.S. REDD+ finance in FY2010 supported significant efforts in each of the three tropical forest regions of the world, with the bulk of funding (60 percent) directed to three countries (Indonesia, Brazil, and Peru) and two regions (the Andean Amazon and Central Africa, Figure 6). An analysis of funding by country²² finds a similar pattern, with over 60 percent of REDD+ investments going to five countries—Indonesia, Peru, Brazil, the Democratic Republic of Congo (DRC), and Colombia—each the target of more than \$10 million of funding (Figure 7). The next 20 percent of REDD+ investments goes to seven countries at levels of about \$3–5 million each: India, Kenya, Ecuador, Mexico, Guatemala,

²² Investments in regional programs were distributed to individual countries within the region according to their proportion of remaining forest area in the region.

Cambodia, and Liberia. A large number of smaller programs make up the balance, with a total of 23 country missions and 8 regional bureaus receiving fast start REDD+ finance.

The geographic focus of core sustainable landscapes investments, setting aside contributions from biodiversity programs, is slightly more concentrated but does not appear to be narrowing over time. Fourteen missions and five regional bureaus received core finance in FY2010, climbing slightly to fifteen countries and seven regional bureaus in the FY2012 request.

The United States is focusing the bulk of its REDD+ investments in the right places, but is spreading smaller amounts of funding widely in a mix of countries—some strategic, some perhaps not. The stated criteria for the geographic focus of US investments includes dimensions such as mitigation potential and market potential that have been extensively studied and modeled, as well as more subjective criteria such as leadership, demonstration potential, and US comparative advantage. To determine whether investments are meeting these criteria, this assessment compared the actual investments in FY2010 to a recently-published prioritization of countries for US public sector investment based on the stated priorities of the US REDD+ strategy (Figure 8).²³ The authors of this prioritization combined the results of two global economic models of forest carbon, OSIRIS²⁴ and the Forest Carbon Index,²⁵ to identify two high-priority groups of countries based on mitigation and market potential: those with high current deforestation, and those with lower rates of deforestation but large forest carbon stocks at risk of future deforestation.²⁶

The five largest targets of US investment are well-aligned with mitigation and market potential (Table 2), and investments in these areas should continue and evolve as needed. For example, Brazil's economy has grown dramatically in recent years while its deforestation rates have dropped substantially. US REDD+ engagement in Brazil should not be reduced because Brazil is still a large land-use emitter and any reversal of recent successes could be disastrous. However, US investments might need to shift away from development assistance and toward other mechanisms that can help Brazil maintain the policy and market conditions that have catalyzed the dramatic reduction in deforestation.

The lack of US REDD+ investment in several of the countries identified by the models as priorities (Malaysia, Honduras, Republic of Congo, and Angola) is not surprising for historical and geopolitical reasons. But a few of these countries should be monitored closely and considered for investments if conditions change—in other words, they should be put on the "radar screen" for possible future REDD+ investments.

²³ Daniel F. Morris, Jonah Busch, and Fred Boltz, *Geographically Prioritizing Appropriations for the Sustainable Landscapes Program* (Washington, DC: Resources for the Future, issue brief 11-01, January, 2011), http://www.rff.org/RFF/Documents/RFF-IB-11-01.pdf.

 ²⁴ J. Busch, B. Strassburg, A. Cattaneo, R. Lubowski, A. Bruner, R. Rice, A. Creed, R. Ashton, and F. Boltz, "Comparing Climate and Cost Impacts of Reference Levels for Reducing Emissions from Deforestation," *Environmental Research Letters* 4 (2009): 044006.
 ²⁵ A. Deveny, J. Nackoney, N. Purvis, R. Kopp, E. Myers, M. Macauley, M. Obersteiner, G. Kindermann, M. Gusti, and A. Stevenson, *Forest Carbon Index: The Geography of Forests in Climate Solutions* (Washington, DC: Resources for the Future and Climate Advisers, 2009).

²⁶ Certainly the situation in some key countries has changed since 2009 when the modeling was done, but significant changes are noted when they impact the analysis. It is also important to note that even if carbon markets are delayed and/or smaller than once expected (as this paper argues below), the factors that assess market potential rather than just mitigation potential—such as good governance, the opportunity cost of land, REDD+ readiness, ease of doing business, and others—are probably important whether reduced emissions are achieved through pay-for-performance REDD+ systems or alternative approaches.



Figure 6. Investments by Program and Source Ranked by Total Amount

Note: USAID BD is the USAID Biodiversity program. USAID SL is the USAID Sustainable Landscapes program. CARPE is the Central African Regional Program for the Environment.



Figure 7. Investments by Country Ranked by Total Amount

Figure 8. Geographic Analysis

Figure 8a. US Investments





Three high-priority countries for reducing current deforestation are receiving US assistance but might warrant greater investment: Ecuador, Mexico, and Zambia. All three countries are of strategic importance to the United States. Ecuador, which has not always agreed on the US approach to REDD+, should nonetheless be the focus of more US REDD+ finance than just a few million dollars in biodiversity-focused aid: it is losing forests at rates of at least 1.5 percent per year, is a global biodiversity hotspot, is in a region (the Andean Amazon) receiving substantial US REDD+ investment, and has deforestation driven partly by the extraction of oil destined for the United States. Mexico, as a leader in the growing movement toward "green growth" and a US neighbor, is also a global REDD+ leader and is deserving of greater attention. And, although Mexico's advancing economy makes it a lower priority for substantial development assistance, other mechanisms of support should be explored. Finally, Zambia's strong governance, high land-use emissions, and strong bilateral relationship with the United States make it a good prospect for additional REDD+ investment—even if it has a somewhat crowded donor landscape for REDD+. In particular, a planned large-scale investment by the MCC in Zambia's water infrastructure may present the opportunity to partner across US agencies to support investments in protecting forested watersheds through mechanisms that complement Zambia's extensive existing REDD+ activities. A fourth country, Gabon, is identified by the models as a priority for reducing future deforestation, but receives REDD+ funding from the United States only through regional investments. As a recently selected partner in a US program designed to help developing countries design low-emissions development strategies, it might also be considered for future direct REDD+ investments to execute forest and land-use strategies that result from this process.

India, the sixth-largest target of FY2010 US REDD+ finance, does not appear to be in line with the primary geographic criteria for REDD+ investments, but may be strategic for other reasons. It has net forest sequestrations rather than emissions, and may in fact have substantial potential for additional carbon sequestration through reforestation. It is also a strong US ally and partner, with a substantial new high-level dialogue proceeding into its second year.

Kenya, Guatemala, Cambodia, and Liberia were not identified by the models as priorities, but are all receiving US fast start REDD+ investments; these investments appear to make sense based on a history of US foreign aid involvement in these countries, demonstration potential, and political will to participate in REDD+. While perhaps strategic from the standpoint of a building a diverse portfolio of countries with REDD+ capacity, these countries should probably not be priorities for substantial increases in investment in the future based on either mitigation or market potential.

	Country	Investmen t Rank	Assessment
Identified as Priority for Reducing Current Deforestation	Indonesia Brazil Ecuador Mexico Zambia Malaysia Honduras	1 3 8 9 17 30 34	Appropriate high-priority investments Appropriate high-priority investments Might warrant greater investment Might warrant greater investment Might warrant greater investment Not a US comparative advantage; keep on radar screen Recent political instability; keep on radar screen
ldentified as Priority for Avoiding Future Deforestation	Peru DRC Colombia Rep of Congo Gabon Angola	2 4 5 19 22 —	Appropriate high-priority investments Appropriate high-priority investments Appropriate high-priority investments Not a US comparative advantage; keep on radar screen Might warrant greater investment; keep on radar screen Forests are not a high priority in this failed state
Other Top US Investments	India Kenya Guatemala Cambodia Liberia	6 7 10 11 12	Models fail to account for reforestation potential U.S. comparative advantage and demonstration potential U.S. comparative advantage and demonstration potential U.S. comparative advantage and demonstration potential U.S. comparative advantage and demonstration potential

Table 2. US Investments for Countries Identified by Models as Geographic Priorities

Note: Geographic priority (far-left column) is from Morris et al. (2011). Investment Rank is from this report (see Figure 7).

Category	Strategic Goal	Grade	Analysis		
Size and	\$1 billion fast start	Fair	+ Significant ramp-up in REDD+ funding achieved		
Scope	pledge		- Total funding nonetheless likely to fall short of		
			pledge		
			+ Some of the gap may be filled by funding through		
			MCC-Indonesia, additional development finance, and		
			FY2012 agency discretion		
	New sustainable		+ Well-defined and coherent strategy in place		
	landscapes program		+ Program is 75% new		
	Increase direct core	Good	+ Core funding through USAID, State, and Treasury		
	funding		substantially increased through FY2011		
			- Drop-off in FY2012 funding is troubling		
	Integrate REDD+ into	Needs	+ Over \$74 million in biodiversity programs include		
	related programs	Work	REDD-related goals and performance criteria		
			- Only biodiversity programs integrated to date		
	Whole-of-government	Needs	+ Contributions from MCC and OPIC in FY2011		
	approach	Work	- Additional agricultural and demand-related		
			opportunities remain largely unexplored		
Objectives	International REDD+	Good	+ US contributing to global REDD+ through		
	Architecture		knowledge and institutional support, especially on		
			safeguards and monitoring		
	National REDD+	Good	+ USAID supporting substantial national-level		
	Readiness		readiness efforts through missions and regional		
			programs		
	REDD+ Demonstration	Needs	- Without TFCA-Indonesia, large-scale demonstration		
		Work	investments low		
			- No national-level demonstration programs being		
			funded to date		
Geographic	Meeting Selection	Good	+ Majority of funding is targeted to a few high-impact		
Focus	Criteria		countries and regions		
	Narrowing Focus over	Needs	- Number of country and regional programs is		
	Time	Work	increasing rather than decreasing over time		

Table 3. Assessment Summary

Part IV. Recommendations

As Table 3 makes clear, the Obama administration's efforts to support reduced emissions from deforestation in developing countries are proceeding largely according to plan, with a few notable gaps: total financing is falling somewhat short of commitments; forest–climate objectives have not yet been integrated into development programs other than biodiversity; efforts are largely confined to foreign assistance rather than a whole-of-government approach; some underinvestment in large-scale demonstration programs is apparent; and bilateral REDD+ assistance is still spread over too many geographies. This part of the report seeks to identify opportunities for increasing the US contribution to the REDD+ endeavor—not necessarily in dollars, but in impact—by asking two questions. First, how has the strategic landscape shifted in the years since the REDD+ strategy was defined? And second,

how can the United States fill gaps in the existing strategy and adapt to shifts in the strategic landscape?

A Changed Strategic Landscape for REDD

The United States' growing commitment to REDD+ finance and its strategy for delivering that finance evolved over a period of stark changes in the global and domestic climate policy landscape. Through late 2009, many observers hoped that the US Congress would pass comprehensive climate legislation, including provisions to provide significant direct financing to global efforts to reduce deforestation—both by setting aside some of the proceeds from sales of pollution allowances for direct forest assistance, and by creating a carbon market that would allow companies to meet their pollution reduction commitments in part by reducing deforestation in developing countries. Some also hoped that global climate negotiations in December 2009 in Copenhagen would produce a global climate deal including a well-defined REDD+ mechanism for developed countries to support emissions reductions in forested developing countries through carbon markets and through direct payments for reduced deforestation. The world looks somewhat different in 2012.

First, large-scale forest carbon markets now appear unlikely to arrive before the end of the decade. Existing REDD+ strategies, such as that of the United States—and even Norway, the global leader in REDD+ finance—were designed to bridge what was expected to be a temporary capacity-building phase before the arrival of large-scale performance-based incentives through a global REDD+ mechanism. The US REDD+ strategy's objective of building developing-country readiness for pay-forperformance REDD+, which is the largest target of actual US REDD+ finance to date, indicates at least some overreliance on an eventual carbon market, and should be reevaluated or at least de-emphasized in coming years.

The Durban Platform generated in December 2011 has made it clear that a global climate deal, if it can be reached at all, will not take effect until 2020 at the soonest. A global economic recession has continued, with developed countries especially focused on addressing continued sluggish growth. Although the economic downturn has slowed the growth of fossil fuel emissions from the developed world, and may have contributed to slowing deforestation rates through depressed commodity demand,²⁷ emissions trends are expected to pick back up with an economic recovery that is already underway in developing countries. In the United States, the Obama administration continues to move forward on climate policy through small domestic regulatory steps and in its foreign policy, but the prospect of a national-scale US carbon market creating massive demand for international emissions reductions seems even more distant now than it did in 2010, with further political polarization on the climate issue and a 2012 election likely to continue divided-party rule and congressional stalemate on climate policy. Certainly there has been a positive shift toward including forest carbon in new markets—contrast the exclusion of REDD from the Kyoto Protocol's Clean Development Mechanism and the European Union's Emissions Trading System to the new carbon markets under development in California and Australia. However, this positive trend for REDD+ in these new but small carbon markets is swamped by the uncertainty of future carbon markets more generally. Taken together,

²⁷ One recent economic analysis of the causes of decreased deforestation in the Amazon attributed slightly more than half of the reduction to policy changes, and also found a significant predictive relationship between crop and cattle commodity prices and deforestation rates. Juliano Assunção, Clarissa C. e Gandour, and Rudi Rocha, *Deforestation Slowdown in the Legal Amazon: Prices or Policies?* (Rio de Janeiro, Brazil: Climate Policy Institute, 2012). Others have argued that the trend of reduced deforestation has continued even in the face of increasing global demand for commodities, as evidenced by rising international commodity prices during the period of decline. Doug Boucher, Sarah Roquemore, and Estrallita Fitzhugh, "Brazil's Success in Reducing Deforestation" (manuscript in review by *Tropical Conservation Science*).

these changes add up to increased uncertainty about the timing and extent of global market-based demand for forest carbon emissions reductions and sequestrations—a demand that has been considered a critical cornerstone in the foundation of REDD+.

Second, several developing nations, such as Mexico and Indonesia, have come to understand that some of the policies and actions needed to achieve REDD+ outcomes will accelerate their economic growth and thus need not be dependent on carbon markets. Greater understanding is needed to make the case convincingly about which REDD+ interventions make sense now from a purely economic standpoint. US REDD+ programs should help fill this gap in understanding through the demonstration of so-called green growth.

These REDD+ policies and actions contribute to economic growth, public health, social justice, and stability in their own right, and do not require international carbon-based payments as incentives. In many cases environmental stewardship and growth are not trade-offs, but mutually reinforcing. For example, a recent analysis of emissions abatement in the province of Central Kalimantan, Indonesia, identified reform in the palm oil sector and fire prevention in peatlands as the two biggest opportunities for reductions.²⁸ Better enforcement of spatial planning, including revoking illegal licenses for converting forests to palm oil plantations and shifting new plantations to vast areas of degraded land, was identified as the primary lever available for achieving these reductions—this strategy will contribute to positive economic growth without REDD+ payments. Smoke from peatland fires, many of which are set intentionally and illegally to prepare land for development, results in costs—in increased health-care cost and lost productivity—that are far greater than the economic benefits of developing peatlands for other uses. This argues strongly not only for making fire prevention a critical component of green growth, but also for creating policies that redirect development (and hence fire-based clearing) away from peatlands in the first place.

A new emphasis on green growth promotes increased attention to the economic returns and benefits to developing countries for maintaining their forests. It means quantifying and recognizing the economic value—the natural capital—embedded in forests and other high-carbon landscapes, and ensuring that investments by developing countries to maintain that capital generate sufficient returns compared to other uses. It means integrating low-emissions natural resource management and land-use planning considerations into the full array of economic assistance—and economic activity more generally, such as foreign direct investment—that is flowing to forest regions.

Third, while it has always been clear that successful forest conservation depends on addressing the local causes (or *drivers*) of deforestation, the primary global driver of deforestation—massive and growing demand for food, feed, and fiber—has not been a focus of the US REDD+ strategy, but it should be.

Most deforestation in the 20th century is the result of expanding industrial-scale agricultural production destined for global commodities markets,²⁹ so addressing the drivers of deforestation requires interfacing with these markets and market players. This means greater attention to creating and supporting deforestation-free supply chains from both the supply and demand side—buying more from countries that produce sustainably, and financing efforts by deforesting countries to change the

²⁸ "Green Growth in Central Kalimantan: An Early Assessment of Green Growth Opportunities," a collaborative product supported by the Provincial Governor, the Global Green Growth Initiative, the Climate and Land Use Alliance, and the Climate Policy Institute (draft for circulation and comment released December, 2011, in Durban).

²⁹ D. Boucher, P. Elias, K. Lininger, C. May-Tobin, S. Roquemore, and E. Saxon, *The Root of the Problem. What's Driving Tropical Deforestation Today?* (Cambridge, MA: Tropical Forest and Climate Initiative of the Union of Concerned Scientists, 2011).

way they increase production. It means exploring pro-forest trade policies. It means addressing landuse issues head-on in food security assistance programs.

What do these three key developments mean for the global REDD+ endeavor, over the near and medium term? With the basic theory of change undergirding a global REDD+ mechanism—paying forest countries to keep their forests standing—facing another decade of delay, what can replace it in the near to medium term, while keeping the original structure standing in case the world catches up? And how should US programs shift in response?

When global carbon markets seemed near, the source of large-scale private sector financing for forest conservation was clear. But with added uncertainty in the timing and arrival of carbon market demand, we are left with a program that overemphasizes the building of institutions and technical capacity in developing countries to deliver pay-for-performance deforestation reductions (through the perfectly reasonable strategies of building global REDD+ architecture, national REDD+ readiness, and large-scale pilot projects) but underemphasizes the chance that plan A for providing those payments—massive global carbon market demand—might fall through. The existing foreign assistance package is an incredibly strong start on building capacity for REDD+ as a global system with ready country actors and working examples, and it is in the strong interests of the United States to maintain this program.

However, the existing plan does not meet the current need to create plan B pathways (not reliant on carbon markets) to reach the scale of financial incentives that will be necessary to lead developing countries to take advantage of this capacity.³⁰ A new focus by the United States on green growth and on the drivers of deforestation in pursuit of deforestation reduction objectives can and should help create these financial incentives—through economic returns available in win–win REDD+ solutions in the first case, and by redirecting and refocusing commodities markets in the second case. The recommendations below could help move the US REDD+ program in this direction.

Toward a More Effective US REDD+ Program

This assessment suggests that US foreign assistance aimed at reducing emissions from developingcountry forests is largely, though not entirely, proceeding according to the existing plan. It identifies a few gaps in delivering on that plan that can and should be corrected, including a shortfall in pledged funding, slow integration of land-use emissions into broader development priorities, and a need for more large-scale demonstration projects in fewer countries. The assessment also identifies a key shift in the strategic landscape for REDD+—an increased uncertainty in the timing and scope of eventual carbon markets—that suggests some rebalancing of funds among the existing strategic objectives and portfolio of programs.

But even more critical is the need to allocate additional time, energy, and funding to *extend* the US REDD+ strategy in response to changing conditions for REDD+—making it more resilient to uncertainties in future climate policy, more sensitive to the drivers of deforestation, and more responsive to the economic needs of developing countries. Developing countries are starting to define and pursue low-deforestation economic development (green growth) as an alternative future, and the US government should support these efforts. Private sector-led solutions to deforestation have the potential to realign local production methods and global commodity market demand to reduce the

³⁰ Mechanisms such as Norway's Amazon fund and the multilateral funds (the FCPF, FIP, and the new Green Climate Fund) are considered by some to be alternatives to carbon markets for financing REDD, but they all rely on voluntary developed-country contributions that are unlikely to generate the scale needed.

primary drivers of deforestation; US government policies and programs should facilitate these solutions.

The following three mid-course corrections would make the US REDD+ program more effective and more comprehensive. If pursued, these reforms could significantly increase the impact of US forest–climate engagement, helping to slow and reverse the loss of invaluable forests worldwide.

1. Support the Private Sector to Reduce Deforestation

It has long been clear that government development assistance alone will not reach the scale needed to slow and reverse deforestation. Delays in the arrival of global carbon markets severely limit a major potential source of financing for REDD+, creating a large gap between the financing needs and availability and threatening the near-term success of the global REDD+ endeavor. On the other hand, financial flows related to the primary global driver of deforestation—the production and trade of agricultural commodities—dwarf the level of investment needed to slow and reverse deforestation. This suggests that redirecting even some of this global agricultural finance away from deforestationintensive activities and toward deforestation-reducing activities could dramatically reduce global deforestation. Such deforestation-reducing approaches to agriculture investment exist, but the private sector does not currently have the incentives to identify and pursue them. The United States should lead a new global effort to support agricultural producers and commodities companies in efforts to reduce deforestation at both ends of the supply chain: on the production side, by mobilizing and redirecting private sector investments away from forests and toward increased productivity on nonforested lands; and on the consumption side, by supporting legal, institutional, and information systems that facilitate the trade of and demand for zero-deforestation products.

Mobilize and Redirect Private Sector Investment in Agricultural Production

About \$118 billion per year of investment in developing-country primary crop and livestock production is needed between now and 2050 to meet expected food needs.³¹ Most of this investment will come from the private sector. The United States should lead a new global effort to mobilize these private capital flows for REDD+ through economically productive agricultural investments that are strongly coupled with business practices and government policies that reduce deforestation.

Just as a windmill or solar power plant can deflect investment away from higher-emissions fossil generation, efforts to increase the agricultural output of existing farms and pastures and to channel the expansion of agriculture toward low-value lands can deflect investment away from intact forests. From FY2010 to FY2011, for example, OPIC and Ex–Im increased loans, loan guarantees, insurance, and grants for clean energy production in developing countries from around \$400 million to over \$1.3 billion. In contrast, US export credit agencies invested only \$1 million in projects with explicit REDD+ objectives in FY2010. Much more could be done by the US government to leverage private sector investment in REDD+ if it approached this goal through investments in zero-deforestation agricultural production—perhaps even reaching a scale similar to the existing clean energy portfolio.

Two types of direct investments in agricultural production can produce decreases in deforestation if they are strongly coupled with explicit REDD+ strategies. Given that forests are cleared in response to global demand for agricultural commodities, deforestation could be reduced by meeting increases in demand with increased production on (1) existing agricultural lands or (2) other nonforested lands.

³¹ J. Schmidhuber, J. Bruinsma, and G. Boedeker, "Capital Requirements for Agriculture in Developing Countries to 2050" (paper presented at the FAO Expert Meeting on How to Feed the World in 2050, 24–26 June 2009).

The first approach can be risky because, at least in the case of yield increases from existing agricultural lands, evidence suggests that such investments can actually increase deforestation locally.³² But some models couple large-scale private investments in intensification with REDD+ policies and enforcement; together, these actions can produce large-scale emissions reductions.³³ The second option, increasing production on nonforested lands, shows great promise in areas with large amounts of degraded and unproductive land. For example, in Indonesia new efforts are underway to engage in so-called "land swaps," whereby landholders with government-issued rights to convert forests to plantations are induced to give up these concessions in exchange for degraded lands. In fact, some degraded lands can be more productive than converted forested land, and some of the barriers for shifting production are policy- and information-based.³⁴ The US government should work with partner countries to remove these barriers, should invest directly in the development of business models that take advantage of these opportunities, and should support the private sector in pursuit of these opportunities by de-risking private capital or providing concessional finance.

For example, OPIC should actively seek out opportunities to help de-risk private capital through businesses and business models that (1) restore degraded lands to productivity in forest countries, (2) exchange development concessions from native forests to degraded lands, and (3) increase productivity of existing agricultural lands in tandem with forest protection efforts. OPIC should make support of zero-deforestation agricultural projects a major priority, creating a structure similar to its Renewable Energy and Sustainable Energy Finance Group. Ex–Im and OPIC both could work to ensure that no projects in their lending portfolios contribute to deforestation, and both could create awareness among private and multilateral financial institutions of the criteria and standards they use to achieve such zero-deforestation lending portfolios.

Transform Markets through Demand for Legal, Zero-Deforestation Products

Increasingly, corporate leaders are recognizing the key role global commodity markets play in driving deforestation and the responsibility of companies and consumers to help promote forest conservation. Some consumers are also beginning to show preferences for environmentally sustainable products. Groups like the Consumer Goods Forum have supported these trends, recently announcing efforts to work toward zero deforestation in their supply chains by 2020, meaning that they will support their members in efforts to ensure that the raw materials they purchase are not produced on recently deforested lands.

The US government should expand its REDD+ strategy to include actions that facilitate the creation of zero-deforestation supply chains in global commodities markets and the adoption of cleaner sources by US companies and consumers. More specifically, the United States should partner with the private sector and civil society to ensure that sustainability standards and labeling schemes are credible and globally harmonized—something akin to the USDA organic labeling scheme, or to the Energy Star program. There is a role for government in assisting US firms as they seek certification

³² See, for a recent example, V. Gutiérrez-Vélez, R. DeFries, M. Pinedo-Vásquez, M. Uriarte, C. Padoch, W. Baethgen, K. Fernandes, and Y. Lim, "High-Yield Oil Palm Expansion Spares Land at the Expense of Forests in the Peruvian Amazon." *Environmental Research Letters* 6(2011): 044029.

³³ See, for example, G. Pinjuv, *Gigaton Analysis of the Livestock Industry: The Case for Adoption of a Moderate Intensification Model* (Washington, DC: Carbon War Room, 2011), http://www.carbonwarroom.com/sites/default/files/reports/Carbon War Room-Livestock Report_2.pdf.

³⁴ See, for example, T. Fairhurst, Moray McLeish, and Rauf Prasodjo, "Conditions Required by the Private Sector for Oil Palm Expansion on Degraded Land in Indonesia" (Wye, UK: Tropical Crop Consultants Limited, 2010), http://www.rainforestsos.org/wp-content/uploads/pdfs/TCCL-PRP-291110-updated.pdf.

under such standards to increase their global markets. US trade agencies could help disseminate information about supply-chain sustainability efforts by US firms—for example, by establishing webbased information exchanges. The United States should seek to include support for zero-deforestation supply chains in bilateral and multilateral free trade agreements like the Trans-Pacific Partnership, matching support for improved chain-of-custody tracking and information labels to preferential market access or reduced tariffs. Federal procurement rules should seek to encourage deforestationfree supply-chain standards by specifying a preference for such certified products by a certain date. As a first step, the Obama administration should launch a commission or interagency initiative to define and deploy a newly expanded strategy to catalyze and support deforestation-free agricultural supply chains. The initiative should include participants across trade, commerce, agriculture, environment, foreign policy, and foreign assistance agencies, and should seek formal input and participation from private sector and civil society stakeholders to generate a plan for action.

In addition to pursuing new strategies to transform markets to zero-deforestation supply chains, the US government should fully fund and support one of the tools already available: the Lacey Act. This law (see Appendix 1) has already substantially reduced global deforestation by transforming the private sector's approach to its supply chains for timber and wood products. By sending a strong market-based signal through the supply chain to illegal producers, this law has supported producer countries in their efforts to reduce illegal clearing and tree theft from remote, hard-to-patrol areas. Of course, not all forest clearing or forest degradation is illegal, so other tools are also needed. Furthermore, as currently formulated, Lacey applies neither to food crops like palm or soy, nor to livestock, even when these commodities are produced on illegally cleared land. It is thus not applicable to many of the products driving deforestation—even when illegal actions in their supply chains are blatant. Despite these limitations, the Lacey Act is one of the strongest policy tools now available to reduce current deforestation. The US government should make Lacey Act support a priority within its REDD+ strategy by investing the very modest sums needed to fully fund its implementation and enforcement (estimated by Lacey proponents to be only about \$13.5 million per year). In the context of a \$250 million per year investment in REDD+ efforts, this would be a very modest investment with a huge impact on reducing forest loss and forest emissions.

2. Integrate REDD+ and Development

The United States should partner with forest nations to identify and pursue strategies for ensuring that "REDD+" is actually "rural economic development." Efforts to reduce deforestation will be successful only if they help people *and* forests. REDD+ should promote sustainable *development*. If it fails to promote economic growth, improved livelihoods, improved access to forests, strengthened governance, and an increased voice in decision-making (in other words, the development side of the equation), these higher priorities will dominate and forests will suffer. To succeed with its REDD+ objectives, the United States should pursue broader green growth strategies with key partners that include REDD+ components, and should mainstream land-use carbon mitigation objectives into food security and agriculture assistance.

Focus Strategies on Green Growth

Of course economic growth alone will not reduce deforestation; in fact, it has historically been accompanied by forest loss.³⁵ But the largest areas of mostly intact, high-carbon and high-biodiversity

³⁵ Forest transition theory suggests that, as a country gains wealth, forested area declines perhaps rapidly over a period, reaches a nadir, and slowly climbs as the nation shifts away from resource exploitation and toward higher-value economic activity. Green

forests are in tropical developing countries, and the first order of business for both political leaders and populations in these countries (and other countries too, one might note) is economic growth. Unless REDD+ policies present growth opportunities, they are unlikely to become a political priority. The United States is starting to understand that achieving climate goals is intimately intertwined with achieving economic growth goals. Through its Enhancing Capacity for Low-Emissions Development Strategies (EC-LEDS) program, the US government is helping developing countries to plan for sustainable, climate-resilient economic growth that also slows the growth of greenhouse gas emissions. This program is one step toward significant support for green growth by the United States. The United States should also consider providing assistance to developing-country natural resource, water, and forest agencies to help build their capabilities to develop valuations for the ecosystem services affected by their decision-making, and for factoring these valuations into planning and decisions.

The United States is also becoming a global leader in piloting green growth partnerships that pursue these multiple objectives. MCC-Indonesia's Green Prosperity program is an early example of such a program, providing large-scale funding that has the potential to drive the development of innovative new programs at the intersection of REDD+ and development. The United States should maximize the forest–climate benefits of the MCC-Indonesia program by (1) ensuring that a significant portion of the investment is directed toward natural resource management in high forest-cover provinces and districts; (2) designing investment criteria for the funding facility that properly account for the economic value of standing forests and the ecosystem services they provide; and (3) sharing lessons learned from this early green growth project with other REDD+ funders and with other forest countries.

The United States should also pursue additional green growth partnerships in other forest countries. Such partnerships could be financed through future MCC projects in countries like Ghana or Honduras, USAID's Partnership for Growth program, future TFCA debt-for-nature swaps, a new funding source, or a combination of funding streams. Green growth partnerships would be a natural extension or next step for a select set of partners in the current EC-LEDS program—to provide continued and stepped-up support as partner countries move from building capacity and defining strategies to execution.

Mainstream Land-Use Mitigation into Food Security and Agriculture Assistance

USAID should more actively seek opportunities to integrate sustainable landscapes objectives into its food security and agriculture portfolio. The stage is well-set. USAID's 2012 Climate Change and Development Strategy identified the mainstreaming of climate change into every development priority as a core objective for the agency. USAID has sponsored a series of discussions in the last year about integrating climate change and natural resource management into the Feed the Future Program, spawning useful dialogue and building ideas. USAID recently awarded \$8.5 million in FY2011 funds to seven missions for "integration pilot projects" that will make their existing programming more "climate smart."³⁶

Despite a broadly defined objective to integrate both climate mitigation and adaptation into USAID priorities, in each of the above examples, the integration of climate resilience and adaptation

growth is not about hastening developing-country progression through the forest transition curve by speeding growth; it is about identifying economic growth pathways that avoid large-scale forest loss during the early and middle stages of growth. ³⁶ USAID, *Integration Pilot Projects* (Washington, DC: USAID, 2012), http://transition.usaid.gov/our_work/ environment/climate/docs/Integration_Pilots_factsheet.pdf.

objectives has moved more quickly than has the integration of mitigation objectives related to land use and natural resource management; however, these new dialogues and venues open the door for more focused attention on the latter. USAID needs to walk through that open door by (1) creating and offering a new round of funding open to projects that integrate land-use mitigation into agriculture projects; (2) identifying a partner country for a large-scale land-use and agriculture mitigation pilot project;³⁷ and (3) ensuring that planning for agriculture-based initiatives includes an assessment of emissions mitigation opportunities, especially if they involve any land-use change or the areal expansion of agriculture.

3. Increase the Impact of Existing REDD+ Programs and Strategies

In addition to expanding the scope of US REDD+ programs, as suggested above, the US government also needs to tweak the emphasis and execution of the existing portfolio of REDD+ programs. The overall strategy is sound but should be adjusted over the next few years to pursue larger partnerships with fewer key strategic allies, to place more emphasis on "doing" REDD+ over "planning" for REDD+, and to improve data availability and undertake regular and rigorous evaluations of individual programs as well as the program as a whole.

Pursue Larger Strategic Partnerships with Fewer Countries

The Obama administration should begin to act on its stated priority of narrowing the geographic focus of its REDD+ investments over time, by increasing the scale of programs in high-impact geographies and assessing whether programs in some countries are strategic. The United States should aim toward providing 80 percent of its REDD+ finance to five or six countries with high mitigation potential, instead of the current 60 percent going to the top five in FY2010. The balance of US REDD+ finance should be directed toward readiness, followed by large-scale demonstration in a very few smaller countries—at most another five—that are important strategic allies.

In FY2010, about 40 percent of total bilateral US REDD+ finance was sprinkled across more than 20 countries and regional bureaus. Legitimate foreign policy objectives are, of course, served by distributing foreign assistance funding broadly. For example, the United States would like to avoid ceding global influence to rising developing powers by maintaining strategic engagement with a large number of countries. Distributing climate finance broadly might also facilitate climate-related cooperation among G-77 countries, leading toward a global climate deal more in line with US objectives. However, there are good reasons why the US REDD+ strategy has an objective of narrowing the geographic focus of investments over time. First and foremost, just a few countries make up the lion's share of global emissions from deforestation and forest degradation; success with REDD+ will be impossible without success in several of these countries, but will not necessarily depend on success with the smaller sources. Second, there are extensive fixed costs for both donor and recipient of pursuing REDD+ programs in any particular country; this requires interfacing with multiple government ministries, donor countries and multilateral organizations, in-country and global civil society organizations, and business interests at national, subnational, and local scales. The overhead of engagement can quickly overwhelm small program budgets and recipient capacity unless programs are very narrowly targeted. Third, learning-by-doing on the earlier stages of REDD+—particularly on the earliest stage of REDD+ readiness—is starting to generate some institutionalization of these efforts through multilateral facilities, such as the FCPF and UN-REDD. Thus the need for donor countries to

³⁷ Ghana might be an interesting focal country, as a Feed the Future priority country with rapid deforestation driven in part by the expansion of agricultural production (e.g., of cocoa) for global markets.

engage on readiness with a broad range of partners is starting to diminish, while there is a still a need to deliver bilateral support for large-scale pilots that can make similar progress with mid-stage and late-stage REDD+. Finally, geographic focus for US REDD+ investments makes sense in terms of overall efficiency – development scholars consider both geographic and sectoral concentration to be indicators of high-quality development assistance.³⁸

A substantial portion of the 40 percent of US bilateral funding that is currently spread thinly should be consolidated and directed instead toward additional investment in priority geographies. The top five countries—Indonesia, Peru, Brazil, DRC, and Colombia—should be considered for additional investment, along with a second tier of countries with high mitigation potential but currently low US investments, such as Mexico, Zambia, and Ecuador. Several other countries, including Malaysia, Honduras, the Republic of Congo, and Gabon, should be kept on the radar screen and considered for REDD+ investments in the future if the policy landscape shifts.³⁹

More Doing, Less Planning

In the face of added uncertainty about—or at least delays in the arrival of—both a global climate agreement and US carbon markets, the immediate importance of global architecture and national carbon market readiness investments has declined relative to the urgency of decreasing emissions sooner rather than later. Achieving significant emissions reductions in the near to medium term will require considerable resources and concentrated effort in a limited number of places, essentially large-scale demonstration programs.

The most significant source of US finance directed toward large demonstration projects in FY2010, the TFCA-Indonesia debt-for-nature swap, was a unique deal. TFCA may not continue to contribute demonstration funding at this scale in coming years for several reasons. The destination for TFCA funding depends on which countries are carrying eligible debt and where relevant civil society actors have the resources and on-the-ground capacity to undertake the laborious process of putting together a TFCA deal. Although Indonesia was a perfect nexus of these factors and a strong climate-forest objective, such a nexus cannot always be counted on. For some of the same reasons, TFCA has not always been able to use its full budget—and regrettably its budget is decreasing in FY2012 and may decrease again in FY2013. To ensure that this foreseeable hole in future US demonstration funding is plugged, the administration should direct sufficient bilateral foreign assistance through USAID and State toward these types of programs.

Improve Data Availability and Undertake Regular Program Evaluation

Although the Obama administration has done an admirable job of trying to articulate clear goals and strategies for climate-related forest aid, the United States should create additional outlets and pathways to share information about resource allocations, specific program objectives and criteria, program results, and program evaluation frameworks. For example, a second round of program design guidance was recently distributed to USAID missions for FY2012 funding programmed through the GCCI—even though the first round of guidance from FY2010 still has not been made public. Especially

³⁸ N. Birdsall, H. Kharas, A. Mahgoub, and R. Perakis, *Quality of Official Development Assistance Assessment* (Washington, DC: Centre for Global Development, 2010).

³⁹ In late-breaking developments, Myanmar (or Burma) may also belong in this last category. With extensive tropical forest cover that is being rapidly lost at around 1% per year, Myanmar has been among the top 5 or 10 forest carbon emitters for the last two decades. Market potential has been deemed low because of governance issues, and US foreign policy in the country has been dominated by other concerns. However, recent trends toward democratization may significantly improve the landscape for REDD+ investments in Myanmar, and it could become a high-priority area for investment in the next few years.

for a new program, such sharing is critical as much of the experience in program design for REDD+ resides in the community of civil society implementing organizations and other USAID partners; a dialogue about program criteria and performance metrics could lead to improvement of the program. It has also been difficult at times to match information made available in the international context (the fast start fact sheets that catalogue US climate efforts in each developing country) to administration and congressional budget tables and to program information at the level of individual agencies and missions. The administration should create a comprehensive database of programs that support its climate-forest commitments and objectives, with clear descriptions, budget sources, contact information for project leads, and links to additional information as available.

Finally, the administration should undertake rigorous and independent program evaluations of its REDD+ fast start program every three years or so, starting in fall 2012. By fall 2012, the two-year budget cycle for the programming of FY2011 funding through USAID will have come to a close, and the bulk of FY2012 funds will have been programmed. With access to internal program documents and with internal buy-in to ensure access to staff, an independent review would be able to move away from an assessment of funding streams and toward an evaluation of impacts. Such a review should also (1) provide more fine-grained detail and summaries of the activities being supported by US REDD+ finance, rather than just the high-level program information now available; (2) assess individual country and regional programs for success in meeting their goals; and (3) seek to identify barriers to implementation and failures in order to learn and adapt.

Conclusion

An assessment of substantially increased US forest–climate assistance reveals a strong, welldefined program proceeding largely according to plan. The Obama administration has raised the profile and strategic priority of all climate change investments, with efforts to reduce deforestation one of the areas of strongest action. The administration coordinated across agencies to define a coherent strategy for REDD+ foreign assistance; marshaled substantial foreign assistance resources to significantly increase funding to support REDD+, even in a difficult budget environment; and created a new sustainable landscapes program with 75 percent of bilateral funding going to new programs in line with the strategy. The United States is playing to its strengths, with bilateral contributions to global architecture and national REDD+ readiness, including important contributions in the areas of knowledge and information, institutional support, forest management, and policy reform. And the United States is focusing the majority of its investments in high-priority and strategic countries and regions.

However, a few notable gaps between strategy and execution can and should be addressed. While marshaling substantial new resources for REDD+, the administration will fall short of its Copenhagen pledge to provide \$1 billion in fast start REDD+ finance. USAID, though appropriately making the integration of climate objectives in other program areas a priority, has in fact been slow to integrate land-use mitigation objectives into programs other than biodiversity—and the opportunity is there, especially in areas of agriculture and food security. There is likely an underinvestment in large-scale demonstration programs across the portfolio, and the geographic scope of the program seems to be increasing slightly over time rather than focusing in on high-priority areas as planned.

Importantly, the strategic landscape for reducing deforestation has shifted somewhat since the US REDD+ strategy was defined, leading to new ways of thinking about and achieving reductions in deforestation. Uncertainty in the timing and ability of future carbon markets to drive forest

investments has increased, and this has been accompanied by important new models to move forward regardless. The most promising of these models include a greater focus on green growth—the pursuit of activities that deliver environmental and climate outcomes while generating economic returns, and a focus on reducing the demand-side drivers of deforestation—particularly the global trade of commodities produced through deforestation.

The United States can and should adjust its strategy and engagement on REDD+ to address these existing gaps and to take advantage of new thinking and new strategic approaches. Specifically, the United States should focus a greater portion of its resources in fewer countries through large strategic partnerships in countries with high mitigation potential. It should reorient its REDD+ strategies further toward green growth, approaching REDD+ more as "rural economic development" and less as forest conservation. The US government should focus more on action, particularly large-scale demonstration, and less on planning for a global REDD+ architecture that may never materialize. Additional government engagement is especially needed to mobilize private sector investments in reducing deforestation—in particular, by de-risking private capital investments in zero-deforestation agriculture in developing countries. At the same time, the United States should bring its substantial resources dedicated to trade, commerce, and agriculture to bear through efforts to empower consumers and companies in their pursuit of zero-deforestation supply chains. Although USAID has built substantial capacity to integrate climate objectives into other agency priorities, the agency needs to fully use this new capacity by integrating land-use mitigation objectives into food security and agriculture programs. Finally, additional transparency and data sharing are always beneficial, and should include a critical internal evaluation of the program that includes input from a broad range of stakeholders.

By pursuing these recommendations, the United States can build on the strong start it has made in supporting a new, more sustainable, climate-smart approach to managing the critical productive landscapes of the world.

Appendices

Appendix 1. The Lacey Act

In 2008, a set of amendments to the 110-year-old Lacey Act made the trade of illegally sourced plants and plant products illegal (including wild and endangered plants as well as all wood products).⁴⁰ These amendments, which were the culmination of several years of efforts by the George W. Bush administration to fight illegal logging, were passed with bipartisan support from Congress as well as engagement by stakeholders, including the US forest products industry, labor, and the conservation community.⁴¹ The amendments require importers to fill out a declaration form that provides basic information about the source and species of regulated plant products to enable the monitoring and enforcement of the law, and establishes civil and criminal penalties for violations.

Despite being in effect for just four years, and despite modest investments of just \$2 million per year of additional funding, the Lacey Act amendments have already proven to be an important, high-impact tool for the US government to combat illegal logging. Lacey is also an important tool in efforts to reduce climate emissions. Policies such as Lacey, combined with the improved local governance that Lacey-type laws encourage, were estimated to have prevented between 1.2 billion and 14.6 billion tons of carbon dioxide emissions at a cost of less than \$2.50 per ton.⁴² In fact, the 2008 Lacey amendments have been so successful that they have become a model for similar legislation in countries around the world and, in 2011, were recognized by the World Future Policy Council and the United Nations as one of the top three most important and effective forest conservation policies in the world.

The 2008 Lacey amendments have achieved these outcomes even though they were passed with no additional budget for implementation. The USDA's Animal and Plant Health Inspection Service (APHIS) is responsible for processing import declarations and shares responsibility for identifying violations with the FWS law enforcement team. The US Department of Homeland Security's Customs and Border Protection staff, the US Department of Justice, State, USAID, and the USFS International Program also assist with implementation. A small amount of biodiversity funding, about \$2 million, was budgeted to the State Department for global Lacey outreach and education in developing countries, and in FY2012, a new \$775,000 line item in the USDA budget provided additional funds for APHIS.

Funding for Lacey has not been included as contributing to US climate or REDD+ commitments, most likely because the outreach and education program for Lacey would not include explicit climatebased goals and performance indicators. Furthermore, domestic tracking, education, and enforcement operations cannot be supported by foreign assistance funding, as they certainly do not flow directly to developing countries. As such, the modest funding described above has not been included within the scope of this assessment. However, it is quite clear that the Lacey Act contributes significantly to reducing emissions from deforestation. If the whole-of-government approach discussed in the strategy

⁴⁰ The Lacey Act (16 U.S.C. §§ 3371–3378) was amended in the 2008 Farm Bill to include wood products. For a version of the legislation with amendments tracked, see: USDA, "Amendments to the Lacey Act from H.R.2419, Sec. 8204,"

http://www.aphis.usda.gov/plant_health/lacey_act/downloads/background--redlinedLaceyamndmnt--forests--may08.pdf. ⁴¹ Statement by Lynn Scarlett, former Deputy Secretary, US Department of the Interior submitted to the House Natural Resources Committee, Subcommittee on Fisheries, Wildlife, Oceans and Insular Affairs on the topic of The Lacey Act (May 8, 2012).

⁴² S. Lawson and L. McFaul, *Illegal Logging and Related Trade: A Global Response* (London, UK: Chatham House, 2010).

is to mean anything, then the US government should be able to find room to support Lacey in pursuit of REDD+.

Appendix 2. Are Programs Supported by US REDD+ Finance New?

Developed countries committed in Copenhagen to provide "new and additional resources" to finance climate mitigation and adaptation in developing countries, and there has since been extensive analysis of what this phrase might mean for developed-country climate commitments.⁴³ Historically, both within the UNFCCC and in other multilateral fora, the US government has taken a somewhat expansive view of "new and additional," generally considering any future funding subject to congressional appropriations to be, when it is eventually appropriated, "new and additional." As such, the United States will probably deem that all of its fast start climate finance passes this very low definitional hurdle.

However, it remains interesting to ask whether the substantial increase in budget from FY2009 to FY2010 went to new programs, or whether existing programs and budget streams just shifted around and increased. An analysis of the US REDD+ portfolio⁴⁴ reveals that about three-quarters of funding for programs in the core sustainable landscapes pillar appears to be directed to truly new programs, with about one-fifth going to programs that are probably continuations of existing programs (Figure B1). The pattern is reversed for biodiversity programs counted as contributing to the fast start REDD+ commitment—about 80 percent of funding is flowing to continuing or largely similar programs, and only 15 percent to new programs. Overall, the portfolio of bilateral REDD+ investments by the United States in FY2010 appears to be split, with about half going to truly new programs, and half to existing programs. This seems to be an appropriate balance for the first year of the program—building off of a strong portfolio of existing forest conservation- and biodiversity-focused efforts while directing the bulk of new funding to new programs that have closer alignment with REDD+ strategies.



Figure A1. "Newness" of Programs

⁴³ See, for example, Felix Fallasch and Laetitia De Marez, "New and Additional? A Discussion Paper on Fast-Start Finance Commitments of the Copenhagen Accord" (Berlin, Germany: Climate Analytics, 2010), accessed at climateanalytics.org.

⁴⁴ The budget and detailed description of each bilateral program through State and USAID counted toward the US REDD+ fast start commitment were compared to budgets and descriptions of FY2009 biodiversity and forestry programs in the same geography. Each program was coded as new, continued, substantially similar, or uncertain.

Appendix 3. Data and Methods

This assessment is based primarily on an analysis of data reported by the Obama administration about programs and funding streams that are delivering on the US fast start commitment to REDD, and on budget data for the sustainable landscapes pillar of the GCCI and for biodiversity. A series of "Fast Start Fact Sheets" presented by the administration at COP-16 in Cancun provided a list of FY2010 climate programs supported by US foreign assistance in every developing country; a second series released in Durban at COP-17 presented similar data for FY2011.⁴⁵ Though extensive, these fast start fact sheets were necessarily incomplete: they were prepared before the end of USAID's two-year funding cycle for each fiscal year, and therefore not every budgeted dollar was programmed; at the time of reporting, many programs were in the early stages of being defined, with minimal descriptions at best; for some programs, procurement laws and sensitivities required additional discretion or withholding of data; and some programs listed in these fact sheets is the core data set used for this analysis.⁴⁶ This data set was supplemented by information submitted by the administration for FY2010 to the Voluntary REDD+ Database, a REDD+ fast start finance tracking program run by the REDD+ Partnership secretariat and supported by the US State Department.⁴⁷

The compiled program-level data were then compared to budget data sources to identify the source funding for each program and to identify possible gaps or errors. Budget requests by the administration, specifically for the State Department and USAID through the GCCI sustainable landscapes pillar, broken down by source account and operating unit (the mission, regional bureau, or headquarters office), are available for FY2010–FY2013 in the Foreign Operations Congressional Budget Justifications.⁴⁸ Actual appropriated budgets for the program are available for FY2010 and FY2011 from the Foreign Assistance Dashboard,⁴⁹ a new effort by the administration to increase the transparency of US foreign aid programs.

USAID's Biodiversity Conservation and Forestry Programs annual reports provided critical background information on programs that were supported in FY2009 and before; in particular, they provided additional details about the objectives of such programs (biodiversity, forestry, or both) and their budgeting. Finally, personal communications with staff from State, USAID, and Treasury provided extensive additional information and insight into programs and their budgets.

Together, these data sources provide a very complete picture of US climate-forest finance for FY2010, making this year the focus of many of the detailed analyses here. Information for FY2011 is incomplete, with some USAID funding for Sustainable Landscapes still unprogrammed and no public data on actual FY2011 biodiversity budgets. For FY2012 and FY2013, only the administration's requests are available. When data from these years are presented in the report, assumptions and sources are noted.

⁴⁵ US Department of State, "U.S. Climate Finance: Meeting the Fast Start Commitment," http://www.state.gov/e/ oes/climate/faststart/index.htm.

 ⁴⁶ This data set and others used in this report are available online at http://climateadvisers.com/resources/sl-assessment-data.xlsx.
 ⁴⁷ REDD+ Partnership, The Voluntary REDD+ Database (managed by the Food and Agriculture Organization, Rome, and the U.N.

Environment Programme World Conservation Monitoring Centre, Cambridge, UK, 2011), downloaded 18 March 2012.

⁴⁸ U.S. Department of State, "Foreign Assistance Budget Releases," http://www.state.gov/f/releases/iab/.

⁴⁹ Foreign Assistance Dashboard, home page, foreignassistance.gov.

				FY2012	FY2013
	FY2009	FY2010	FY2011	Estimate	Request
USAID	103.7	163.4	187.4	171.0	168.5
Sustainable Landscapes program	0.0	84.6	137.4	121.0	118.5
USAID Biodiversity considered indirect SL	103.7	78.8	50.0	50.0	50.0
USAID Biodiversity (total)	204.5	205.0	205.4	200.0	100.1
Department of State	13.0	35.9	17.0	17.0	12.0
World Bank FCPF	5.0	10.0	10.0	10.0	10.0
Other State/OES	8.0	25.9	7.0	7.0	2.0
Department of the Treasury	34.8	56.0	71.2	58.1	55.4
GEF–forest programs	14.8	16.0	21.2	21.1	30.4
GEF (total)	80.0	86.5	90.0	89.8	129.4
World Bank-managed FIP	0.0	20.0	30.0	25.0	25.0
TFCA	20.0	20.0	20.0	12.0	0.0
Non-International Affairs Programs	0.0	4.5	1.2	0.0	0.0
USFS-International Programs and USGS-GEO		4.5	1.2	0.0	0.0
Total Sustainable Landscapes Program	151.5	259.8	276.8	246.1	235.9
Fast Start Period Total			782.6		

Appendix 4. Forest–Climate Budget across Multiple Years

Note: USGS support to the international Group on Earth Observations (GEO) for its Forest Carbon Tracking task is included.