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US EXPERIENCE ON RESULTS- BASED FINANCE

FOREST CARBON, MARKETS AND COMMUNITIES (FCMC)
PROGRAM

OCTOBER 2013

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The US Agency for International Development (USAID) has launched the Forest Carbon, Markets and Communities (FCMC) Program to provide its missions, partner governments, local and international stakeholders with assistance in developing and implementing REDD+ initiatives. FCMC services include analysis, evaluation, tools and guidance for program design support; training materials; and meeting and workshop development and facilitation that support US Government contributions to international REDD+ architecture.

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DISCLAIMER

This paper was prepared by FCMC to support the “Workshop on Results-Based Payments for REDD+” held in London on September 9, 2013. The paper does not represent an official US Government position and the analysis and any views expressed herein do not necessarily represent the views of the US government.

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ACRONYMS AND ABBREVIATIONS

AB 32	California Assembly Bill 32
CFC	Chloroflouorocarbon
CRP	Conservation Reserve Program
CSP	Conservation Stewardship Program
DCA	USAID’s Development Credit Authority
FARA	Fixed Amount Reimbursement Agreement
FCMC	USAID’s Forest Carbon, Markets and Communities Program
GHG	Greenhouse gas
LEAF	USAID’s Lowering Emissions in Asia’s Forests Program
MOHSW	Liberia’s Ministry of Health and Social Welfare
NGOs	Non-governmental organizations
NO _x	Nitrous oxides
OPIC	Overseas Private Investment Corporation
REDD+	Reducing emissions from deforestation and forest degradation, conservation of forest carbon stocks, sustainable management of forest, and enhancement of forest carbon stocks
RFA	Request for Application
RGGI	Regional Greenhouse Gas Initiative
SO ₂	Sulfur dioxide
TFCA	Tropical Forest Conservation Act
TGC	Terra Global Capital
UNFCCC	United Nations Framework Convention on Climate Change
USAID	United States Agency for International Development
USDA	US Department of Agriculture

EXECUTIVE SUMMARY

Successful implementation of actions to reduce emissions from deforestation and forest degradation, conservation of forest carbon stocks, sustainable management of forest, and enhancement of forest carbon stocks (REDD+) will help mitigate climate change and can produce additional benefits, such as aiding adaptation, poverty alleviation, and biodiversity conservation among others. Many countries view results-based payments as the principle mechanism that will provide “positive incentives” for REDD+ results-based actions. This report summarizes some of the US Government’s experience with results-based finance domestically and in foreign aid, drawing lessons for REDD+. It also summarizes the US Government’s experiences with results-based finance for REDD+ and concludes by identifying some challenges to the US Government providing additional support for results-based finance for REDD+ abroad.

The US Government has long been a pioneer of market mechanisms and results-based finance to address environmental issues. Results-based finance is also a prominent feature of current programming in the United States Agency for International Development (USAID) in the health and education sectors. Guidance for designing and implementing results-based finance programs in the health sector along with lessons learned from other USAID programs and domestic experiences are useful to consider when designing results-based finance for REDD+.

With the exception of the State Department’s contribution to the Forest Carbon Partnership Facility’s Carbon Fund, all other US Government funding for REDD+ to date has focused on REDD+ readiness and support to (but not direct ex-post payments for) demonstration activities. This includes testing novel risk mitigation products such as political risk insurance and a loan commitment for a REDD+ project and fund (made by the Overseas Private Investment Corporation) and a new loan guarantee product that will cover 50 percent of an investor’s net loss if it lends money to a REDD+ project (or portfolio of projects) that does not generate a return. This new loan guarantee under development by USAID’s Development Credit Authority (DCA) with support from the Forest Carbon Markets and Communities (FCMC) program. A number of challenges exist, however, to the US Government scaling up results-based funding for REDD+.

I.0 INTRODUCTION

Successful implementation of actions to reduce emissions from deforestation and forest degradation, conservation of forest carbon stocks, sustainable management of forest, and enhancement of forest carbon stocks (REDD+) will help mitigate climate change and can produce additional benefits, such as aiding adaptation, poverty alleviation, and biodiversity conservation among others. Many countries view results-based payments as the principle mechanism that will provide “positive incentives” for REDD+ results-based actions. Payments, however, cannot be made indefinitely – and therefore such mechanisms need to consider how payments can be used as transitional finance, and be integrated into broader low emissions development pathways that include forest conservation and enhancement. That said, results-based finance can catalyze actions that help developing countries grow their economies in a way that is robust and sustainable – and eventually not dependent on international payments to ensure forest protection.

The expectation of results-based finance has driven much of the activity on REDD+ to date, including governments’ support for national and sub-national readiness and private and civil society development of voluntary projects that engage local communities and indigenous peoples. Without sufficient finance and advancement of REDD+, there is a real risk that governments will disengage in the REDD+ process, local communities will stop participating in forest conservation efforts, and nascent private sector interest in the sector and forest carbon markets will disappear. Like the loss of forest, each of these lost avenues of engagement and commitment to REDD+ cannot be easily restored.

Results-based payments have been used in different forms for a number of years outside the United Nations Framework Convention on Climate Change (UNFCCC). In the broadest sense many bilateral agreements and government contracts are based on delivery of results or performance. It can also be found in many forms of domestic policy – for example in education (the US “no child left behind” program ties federal funding to the achievement of specified performance indicators) and energy (feed-in tariff subsidies for renewables). Results-based frameworks are standard in development assistance to ensure program performance – this, however, is distinct from programs that provide results-based payments focused on ex-post rewards for achieving specific outcomes, such as Output-based Aid and Conditional Cash Transfers.

A number of UNFCCC decisions deal with some aspects of results-based finance for REDD+, while a number of other aspects are still under discussion, resulting in ambiguity over the future of results-based finance for REDD+. To help frame further discussions, the various aspects of results-based finance under the UNFCCC can be organized into the following six categories: i) types of results-based financing mechanisms (market and non-market based approaches); ii) sources of results-based finance (public, private, innovative/alternative, etc.); iii) what results are financed/paid for; iv) conditions to receive finance (having a national plan, reference [emission] level, monitoring and reporting, safeguards, etc.); v) governance (who manages what aspects); and vi) enabling conditions (what is needed for it to work in practice). For a more detailed explanation of the six categories and references, see Annex 1.

The objective of this paper is to summarize US experiences with results-based finance to date and the legal, institutional and other hurdles the US faces when applying results-based finance to REDD+. The six aspects of results-based finance for REDD+ identified above are used as a framework to help analyze US experiences and draw lessons for REDD+.

2.0 US GOVERNMENT PRECEDENTS FOR RESULTS-BASED FINANCE

2.1 INTRODUCTION

Examples of results-based finance can be found in a number of sectors within the US, including education¹, health, energy², defense, and the environment, and it has been part of general government procurement practices for over 30 years.³ This report focuses on domestic examples of environment-related results-based finance and international examples as available, where results are rewarded or paid for after they have been created.

2.2 DOMESTIC EXAMPLES

The US has been a pioneer in market mechanisms to address environmental issues. Federal examples stretch back to the phase-down of lead in gasoline in the 1980's through a permit system that allowed both averaging lead across refineries (a form of early trading) and banking.⁴ This was the pre-cursor to chloroflourocarbon (CFC) allowance trading⁵ and sulfur dioxide (SO₂) and nitrous oxides (NO_x) cap-and-trade⁶ programs in the 1990s. More recently, state level cap-and-trade programs have been applied to climate change in the Regional Greenhouse Gas Initiative (RGGI) in North Eastern states and Assembly Bill 32 (AB 32) in California. These emission trading schemes are not reviewed in detail in this paper, but a brief summary is provided in Annex 2.

¹ For example, the *No Child Left Behind Act of 2001* provides federal education funding to states based on student performance on standardized exams set by the states.

² For example, performance based incentives linked to energy efficiency are found in California and Minnesota.

³ See the White House Office of Management and Budget webpage "Office of Federal Procurement Policy Performance-Based Service Acquisition": http://www.whitehouse.gov/omb/procurement_index_pbsa. See also *Federal Acquisition Register, Subpart 32.10—Performance-Based Payments* which sets out rules for performance based payments. Section 32.1001 Policy states in paragraph (a): "Performance-based payments are the preferred Government financing method when the contracting officer finds them practical, and the contractor agrees to their use."

⁴ Newell R., and Rogers K., *The Market-based Lead Phasedown*, Resources for the Future Discussion Paper 03-37, November 2003.

⁵ See Stavins R., *Market-Based Environmental Policies* Resources for the Future Discussion Paper 98-2, March 1998. See also information available on the EPA website: <http://www.epa.gov/ozone/title6/phaseout/hcfcallowallcat.html>.

⁶ Dallas Burtraw D., and Szambelan S., *US Emissions Trading Markets for SO₂ and NO_x*, Resources for the Future Discussion Paper 09-40, October 2009.

In addition to these programs that were based on legislation banning or limiting the use of a particular pollutant over time, there are a number of examples of payments for ecosystem services (PES) schemes. The earliest PES system in the US for forest-based ecosystem services is the Conservation Reserve Program (CRP) established in 1985 under the Farm Bill. Examples of other PES schemes and market mechanisms include conservation banks which permanently protect lands for endangered species to offset losses elsewhere;⁷ wetland mitigation banks which operate in the same way with a focus on wetlands;⁸ and water banking, which allows trading of various types of surface, groundwater, and storage entitlements.⁹ The 2008 Farm Bill established the Office of Environmental Markets within the US Department of Agriculture (USDA) to facilitate the development of environmental markets and to ensure the participation of America's farmers, ranchers and forest landowners. Specifically, it is tasked with developing methods to measure environmental services benefits, a protocol to report benefits, a registry to collect and maintain benefits measured and a process to verify benefits registered.¹⁰ There are currently at least 14 different federal PES schemes for forest-based ecosystem services and a host of state level programs, and 10 (mostly federal) payments for watershed services programs. The total value of all forest-based ecosystem services payments in the US was estimated to be \$1.9 billion per year between 2005 and 2007,¹¹ with higher total payments for all ecosystem services. However, a number of these PES schemes do not rely on payments for ex-post results, but rather involve upfront payments, subsidies, or licenses (e.g., hunting or fishing licenses).

An interesting reversal of results-based finance can be found in the 1986 Amendment to the Safe Drinking Water Act of 1974 together with the 1989 Surface Water Treatment Rule. Under the Surface Water Treatment Rule, if the water quality within a given watershed meets a certain standard, a permit can be issued which exempts the watershed from filtration requirements. Since 1989, six major cities in the US have received such permits, including New York City, and more than 60 smaller systems are reported to not have filtration as part of their treatment regime for drinking water.¹²

Two non-market based programs that rely on results-based finance – the CRP and the Conservation Stewardship Program (CSP) – are briefly reviewed below, with longer summaries included in Annex 3. For comparison, a third program that relies on upfront purchases of easements – the Wetland Reserve Program – is only included in Annex 3, as this program does not rely on ex-post payments for results.

2.2.1 Conservation Reserve Program

The CRP was enacted in 1985 and is the largest private-lands conservation program in the US that removes farmland from productivity. There are currently approximately 27 million acres (10.9 million hectares) enrolled in the program with total annual rental payments to farmers of \$1.6 billion as of July 2013,¹³ and

⁷ Conservation banks are managed by the US Fish and Wildlife Service. See <http://www.fws.gov/endangered/landowners/conservation-banking.html>.

⁸ Wetland mitigation banks are managed by the US Environmental Protection Agency. See <http://water.epa.gov/lawsregs/guidance/wetlands/mitbanking.cfm>.

⁹ For an example of water banking in the State of Washington, see the Washington State Department of Ecology website on water banking: <http://www.ecy.wa.gov/programs/wr/market/waterbank.html>.

¹⁰ See Section 2709 of the Conservation Title in the 2008 Farm Bill.

¹¹ Mercer D. E., Cooley D., and Hamilton K., 2011, *Taking Stock: Payments for Forest Ecosystem Services in the United States*, Ecosystem Marketplace and US Forest Service.

¹² Stanton, T.; Echavarría, M.; Hamilton, K.; and Ott, C., 2010, *State of Watershed Payments: An Emerging Marketplace*, Ecosystem Marketplace. Available at: http://www.foresttrends.org/documents/files/doc_2438.pdf.

¹³ See the Conservation Reserve Program Monthly Summary for July 2013, available at: http://www.fsa.usda.gov/Internet/FSA_File/julysummary13.pdf. Total program costs are estimated at approximately \$2 billion

spending between 1995 – 2012 amounting to \$31.5 billion.¹⁴ Enrolled farmers receive a yearly per acre rental payment in exchange for replacing crops on highly erodible and environmentally sensitive land¹⁵ with long-term, resource-conserving covers. The CRP sequesters more carbon dioxide than any other conservation program in the country and reduces both fuel and fertilizer use.¹⁶ The CRP is funded through USDA and Congress authorizes a specified acreage enrollment level each year.

Participants must abide by the provisions of their Conservation Plan, including requirements on: the vegetative or water cover to be established; a tree planting plan, if applicable; level of environmental benefits to be attained, and protection of acreage during primary nesting season for wildlife amongst others. If participants comply with their conservation plan they receive an annual rental payment, based on the number of acres enrolled in the program, which includes an incentive payment and cost-share assistance. Restrictions are placed on tree or other cover on the land. Breach of contract results in a refund of payments received plus interest due, and may also include payment of liquidated damages in some situations. See Annex 3 for more information, including on eligibility criteria and administration.

2.2.2 Conservation Stewardship Program

The CSP was created in the 2008 Farm Bill and provides financial and technical assistance to agricultural and forestry producers to conserve and enhance soil, water, air, energy, plant and related natural resources on tribal and private working lands. The CSP pays for conservation performance – the higher the performance, the higher the payment. This differs from the CRP where payments are based on a per acre rental rate. In the first four enrollment years for the CSP (2009-2012), 50 million acres (20.2 million hectares) of farm and ranch land were enrolled under five-year, renewable CSP conservation contracts. For those enrollment classes, annual CSP payments are currently \$680 million per year.¹⁷ The program is funded through the USDA and Congress authorizes the CSP at a specified acreage enrollment level each year. Each state is then allotted a share of total annual CSP acres.

Participants receive annual payments for installing new conservation activities and maintaining existing practice (with an emphasis placed on new activities). They may also receive supplemental payments if resource-conserving crop rotations are adopted. Annual payments are calculated by first determining a baseline level of conservation and determining the environmental benefits of new and existing activities. The CSP has penalties for default, including refunding payments and paying liquidated damages equal to 10 percent of the total financial assistance obligated. See Annex 3 for more information, including on eligibility criteria and administration.

2.3 FOREIGN AID

US foreign assistance is implemented by a variety of agencies, including the US Treasury, US State Department, the Millennium Challenge Corporation, the Overseas Private Investment Corporation (OPIC)

per year. See Stubbs M., 2013, *Conservation Reserve Program (CRP): Status and Issues*, Congressional Research Service 7-5700, R42783, available at: <http://www.nationalaglawcenter.org/assets/crs/R42783.pdf>.

¹⁴ Environmental Working Group, Farm Subsidy Database, available at: http://farm.ewg.org/progdetail.php?fips=00000&progcode=total_cr

¹⁵ Environmentally sensitive land may include agricultural land prone to erosion, pasture or agricultural land that borders river or stream banks or field margins.

¹⁶ See <http://www.usda.gov/wps/portal/usda/usdahome?contentid=2013/07/0149.xml>.

¹⁷ *2013 Conservation Stewardship Program Sign Up Information Alert*, April 2013, available at <http://sustainableagriculture.net/wp-content/uploads/2013/04/CSP-info-alert-4-15-13-final.pdf>.

and Department of Defense, among others. For example, the US Treasury is responsible for most multilateral funding and has been supportive of, for example, the World Bank's Program-for-Results (P4R) program, stating that the "United States strongly supports the concept behind this new instrument: formally linking the Bank disbursements to the achievement of development results that are tangible, transparent, and verifiable."¹⁸

In this section, we focus on US bilateral development assistance, managed largely by the United States Agency for International Development (USAID). USAID currently supports conditional cash transfers, performance-based incentives, and performance based finance in the health, education, energy, and other sectors. All of these can be considered types of results-based finance.

2.3.1 Health sector

USAID has significant experience with results-based finance in the health sector, with at least 24 examples identified in 2011.¹⁹ USAID has produced guidance for planning, budgeting, contracting, implementing, and monitoring results-based finance programs in the health sector (referred to as performance-based finance or performance-based incentives).²⁰ The health sector has had success with different models, including with different target outcomes (increasing demand for health services and increased supply of health services) and different ways of structuring performance-based finance programs.

The source of funding for the programs has included USAID alone or in collaboration with other donors and developing country governments. Examples of support provided by USAID range from technical assistance, to development of performance-based mechanisms funded through other sources, to direct payments for results. Such payments also range from full payments made ex-post, to partial payments ex-ante plus additional payments ex-post, to the funding of pilot projects to test performance based systems before they are scaled up. Financing has also been given directly to governments, but also to non-governmental organizations (NGOs) to deliver services that are paid based on results.²¹

Results that have been paid for include completing project management/administrative tasks (e.g., completing work plans), training and outreach (to build capacity to deliver services and awareness of the services), and delivery of health services, which has been divided into targets for services demanded and services supplied. Health results have included targets such as proportion of women receiving prenatal care, vaccination levels, birth weight levels, HIV and TB testing. Some projects included both quantitative along with qualitative performance benchmarks to measure results.

Reporting and validation of results is often mentioned as a key component of performance-based payments in the health sector. Different approaches have been applied to determine results, including self-reporting followed by random audits, third party verification, computerized collection of data, and surveys, amongst

¹⁸ See *US Position on the World Bank's Program-for-Results (P4R)*, January 24, 2012, available at: http://www.treasury.gov/resource-center/international/development-banks/Documents/I_30_2012_P4R_US_Position%20Statement_Final.pdf.

¹⁹ See The AIDSTAR-Two Project, 2011, *The PBF Handbook: Designing and Implementing Effective Performance-Based Financing Programs*. Version 1.0. Cambridge: Management Sciences for Health), available at: http://pdf.usaid.gov/pdf_docs/pnadz370.pdf (hereinafter *PBF Handbook*). Annex II of the report includes a list of 24 example USAID projects in the health sector that include elements of performance-based finance.

²⁰ *Ibid.* See also USAID, *Performance-Based Incentives Primer for USAID Missions*, July 2010, available at: http://pdf.usaid.gov/pdf_docs/PNADX747.pdf (hereinafter *PBI Primer*).

²¹ Examples can be found in the *PBI Primer*, the Performance Based Governance Fund and *Fixed Amount Reimbursement Agreement (FARA) Frequently Asked Questions + Help Guide*, June 2012 available at <http://senegal.usaid.gov/sites/default/files/file/FARA%20FAQs%20and%20Help%20Guide.pdf> (hereinafter *FARA FAQ*).

others. Benchmarks to assess performance are used and agreed upon at the start of the program, typically through a consultative process.

USAID has worked directly with partner governments at the national (e.g., ministry of health) and subnational levels and used intermediaries and local civil society organizations to help manage and operate programs. Subnational governments have been used in large or highly decentralized/federal countries. The use of NGOs is used most often in countries with weak capacity within the government and low levels of government-provided health services.

Box 1: Haiti - Bilateral health project

In Haiti, a government scheme supported by USAID paid NGO health providers that agreed to reach certain targets, such as proportion of children fully immunized and pregnant women receiving prenatal care. In the seven years that the program has been operating, improvements in key health indicators have been achieved, including a remarkable 13 percent increase in full immunization coverage. NGOs now reach about one-third of the population, providing essential services in the complicated context of violence, poverty and limited government leadership. See Annex 3 for additional details.

2.3.2 The Performance Based Governance Fund

The Performance Based Governance Fund is an Afghanistan fund which aims to “(i) improve access to operational resources and funding for [Afghan] Governors to respond to provincial and citizen needs more effectively; (ii) provide provincial administrations with the means and incentives to improve planning, budgeting and auditing capacity; (iii) introduce new elements of the sub-national governance policy, including a bottom-up provincial planning process and a revised set of roles and responsibilities at the sub-national level; and (iv) form the basis of a long-term performance-based program for Provincial Governors.”²² The program is led by the Independent Directorate for Local Governance (IDLG), funded by the US and the United Kingdom, and governed by a Steering Committee chaired by the IDLG. It is implemented through the Asia Foundation and plans to introduce the Ministry of Finance as a full partner in the program.

Funds are disbursed monthly to all 34 Afghan Governors and there are clear rules on how the money can be spent, including a list of both eligible as well as ineligible expenditures that are differentiated based on Ministry of Finance categories of types of expenses. Performance is based on a scoring mechanism that consists of 20 indicators which measure three performance areas: i) quality of programming; ii) accountability and transparency; and iii) improved budget practices. The 20 indicators measure objective facts as well as gather the opinion of stakeholders at the provincial level.²³ Average performers (approximately two-thirds of Governors) receive a set amount of \$25,000, with top performers receiving 25 percent more and bottom performers receiving 25 percent less. All results are made available online. If abuse of the funds is discovered, that province is barred from receiving further funds until the misused funds have been repaid.

2.3.3 Fixed Amount Reimbursement Agreements

A Fixed Amount Reimbursement Agreement (FARA) is an agreement with a host government to achieve specific results for a fixed reimbursement amount after completion of agreed-upon milestones. A FARA

²² From the Cooperative Agreement between USAID and The Asia Foundation. See <http://www.pbgf.gov.af>.

²³ See the Performance Based Governance Fund website FAQ: <http://www.pbgf.gov.af/FAQs.html>.

focuses on outputs rather than inputs or actual cost, can be used in a range of sectors, and can lessen the dependence on traditional USAID partners allowing more funds to directly support host government capacity improvement. The amount of reimbursement is based on reasonable cost estimated in advance by USAID and milestones are based on completion of verifiable products. The grantee bears the financial risk if actual costs exceed the milestone payment amount.²⁴

An example of a FARA is the \$42 million, four year FARA USAID entered into with the Government of Liberia in September 2011. Under the agreement, USAID will reimburse the Ministry of Health and Social Welfare (MOHSW) for the cost of implementing performance-based contracting of NGOs to deliver health services in accordance with the National Health Plan. Reimbursement to the MOHSW is based on pre-determined amounts, irrespective of actual cost, and is contingent upon USAID verification and approval of each agreed deliverable. With some limitations, USAID largely accepts that reimbursable expenditure will be based on the MOHSW's systems for planning, procurement and financial management.²⁵ USAID Senegal has also used FARAs since 2007 to support sustainable school building.²⁶

2.4 LESSONS LEARNED

There are a number of lessons that can be gathered from the US Government's domestic and international experience with performance-based funding that are applicable to results-based funding for REDD+. These lessons are summarized following the six categories of issues identified in the introduction and explained further in Annex 1: i) types of results-based financing mechanisms; ii) sources of results-based finance; iii) what results are financed/paid for; iv) conditions to receive finance; v) governance; and vi) enabling conditions. An additional section on program sustainability after completion of a project is included at the end.

2.4.1 Types of results-based financing mechanisms

Permit trading mechanisms need to have appropriately set caps or targets enshrined in law to drive results. The stringency of the lead phase-down and CFC allowance trading eradicated both of these pollutants. RGGI, on the other hand, has had limited impact on emissions reductions because of the oversupply of credits. In contrast, the health sector does not have market-based funding approaches. There are, however, different models of, and experience with, results-based finance, including different ways of structuring payments and incentives (supply vs. demand focused) and contractual options for disbursing funds (discussed further under governance below). The literature reviewed for the health sector suggested the type of results-based finance mechanism used needs to be based on and tailored to the local context and be aligned with the intended results.

Lessons for REDD+: Both market and non-market based approaches can be effective. Market-based approaches require regulation adequate to drive change (i.e., in the case of REDD+, domestic regulation will need to drive sufficient demand and an adequate price for carbon). Without regulation, finance will need to come from the public sector—which allows a broader array of possible mechanisms to be employed and the choice likely depends on the local context.

²⁴ FARA FAQ.

²⁵ Hughes, J., Glassman, A. and Gwenigale, W. 2012. *Innovative Financing in Early Recovery: The Liberia Health Sector Pool Fund*, Center for Global Development Working Paper 288. Washington, DC, USA. Available at: <http://www.cgdev.org/content/publications/detail/1425944>.

²⁶ See FARA FAQ.

2.4.2 Sources of finance

Domestic programs such as the CRP and CSP rely on public funding authorized by Congress. Domestic trading mechanisms can tap private sector finance and impose a cost on covered entities but can also generate revenue for the government through, for example, auctioning allowances (e.g., AB 32 in California). Only public sources of finance were identified in the health sector for both domestic and international activities.

Lessons for REDD+: Results-based financing instruments should be “fit for purpose” including the types of finance it intends to mobilize. In particular, if the private sector is expected to play a critical role in future climate finance – while public funding is more prominent during an interim period – consideration should be given to creating rules and structures that will attract and engage future private sector finance for the long-term.

2.4.3 What results are financed/paid for

The CRP pays a flat rate per acre per year for land taken out of agricultural production. The CSP, on the other hand, pays increased amounts for increased conservation results, which has been seen by some as an improvement. Both programs have provisions for breach of contract, including liquidated damages.

The health sector recommends that the type and amount of incentive needs to be chosen carefully. The type of incentive (e.g., rewards for good performance vs. loss of payment for inadequate performance, incentivizing demand vs. incentivizing supply) needs to be appropriate to achieve the desired result. In one project²⁷ where benchmarks/indicators were primarily related to management and operations rather than health outputs or outcomes, it was found that this constrained full understanding of the program’s impact. Steps to avoid perverse incentives (e.g., loss of services not directly tied to results-based payment) also need to be taken into account. The amount of incentive paid needs to be accurately estimated. For the health sector this is done by attempting to estimate ex-ante the cost of delivering the desired result, and then reimbursing the delivery partner the estimated cost (potentially with an additional bonus) once the result has been achieved. If the payment is too small, there will be insufficient incentive, whereas overpaying was seen as a waste of resources. Contracts should specify the responsibilities of the recipient and purchaser, reasons for termination of the contract, payment formula, and how to resolve disputes.

Lessons for REDD+: Results-based payment systems should be designed carefully to ensure the ultimate objective is met – particularly if the objective is not directly correlated to the results being paid for. This is particularly relevant for REDD+, where some emerging demonstration activities are focused on proxy-based payments. The risk of perverse incentives has already been raised in REDD+, and the Cancun safeguards and consideration of non-carbon benefits may address such risks. Determining the amount of incentive paid for REDD+ results is still being tested. In an emissions trading mechanism, this is determined by market forces (i.e., the market determines the “value” of emission reductions, or price of carbon), and if costs to produce emission reductions exceed revenue generated, the REDD+ activities may fail. Options to pay for results, particularly with public funding, could range from setting an arbitrary price (the most common approach being tested to date) to tying payments to ex-ante estimates of implementation costs (or the incremental cost of changing practices). This may be particularly helpful in early stages of REDD+ finance as it would provide some assurance to host governments, civil society and others engaged in REDD+ activities that they would (at least) recoup their costs if their REDD+ activities were successful.

²⁷ See *PBI Primer* discussion of the Innovations in Family Planning Services project. This was an early “performance-based disbursement” project in India in 1992 where USAID and the Government of India signed a 10-year \$325 million agreement to reduce fertility in the state of Uttar Pradesh by expanding access and improving quality of family planning services.

2.4.4 Conditions to receive finance

The CRP, CSP, and Performance Based Governance Fund all use clearly defined criteria for estimating performance and payment: the CRP uses number of acres; the CSP uses standard tools to determine a baseline and calculate payment; and the Performance Based Governance Fund uses surveys and statistical methods. All literature reviewed on the health sector similarly emphasized the importance of setting verifiable targets or results that will trigger payment. It was often recommended that targets be clearly defined, specific, relevant, measurable, contain both quantitative and qualitative elements, and set transparently with reasonable timelines in collaboration with government counterparts and stakeholders. The use of baseline data to measure relative improvements (rather than absolute results) was also recommended. In some cases development, agreement, and approval of targets was found to be time consuming and repeated time extensions to achieve results may have undermined the results-based approach. Some discretion by the donor for making disbursements if the targets were sufficiently met was suggested in FARAs. Strong monitoring and evaluation (with information flowing in both directions at all levels), self-assessments with random audits and penalties for discrepancies, mandatory audits, data collection and verification systems were all recommended. Using and building capacity within local Health Information System and Health Management Information System was seen as beneficial.

Lessons for REDD+: Many of the lessons learned more generally in results-based payments systems are already integrated into emerging REDD+ approaches, including measurement, reporting and verification systems, transparent monitoring approaches, and use of baselines to ensure relative improvements.

2.4.5 Governance

USAID has experience collaborating directly with national and subnational governments, third party intermediaries, and reliance on steering committees to help oversee programs. One of the advantages noted for a FARA is that it can lessen the dependence on traditional USAID partners allowing more funds to directly support host government capacity improvement. There are examples of each of these models working successfully, though this is not always the case. Problems arose where the government did not appear to be sufficiently engaged or committed to the program, in which case high level incentives did not appear to trickle down to achieve local results.²⁸ Literature reviewed consistently recommended identifying all relevant actors in a results-based finance system and clearly defining and documenting their roles and responsibilities within the system, including how they interact with each other.

Lessons for REDD+: There is no one-size-fits all mechanism for management of finance within the host country, as existing institutions, capacity, and stakeholders vary country by country.

2.4.6 Enabling conditions

Lessons for REDD+: A number of themes were identified in the health sector which can be described as enabling conditions for successful results-based payment mechanisms that are applicable to REDD+. These include ensuring i) the interests of both parties are aligned and have the same objectives; ii) strong local ownership and commitment at relevant levels (national, subnational, local); iii) commitment by donors; iv) the relevant government ministry is engaged where the target is improving the whole health system (though working with local NGOs can also help strengthen the whole system); v) local context is taken into account, which includes considering “real-world factors such as political and social realities, the timeliness and quality of information systems, the ability to transfer money securely through banks, and restrictions imposed by donors, governments, and NGO management”²⁹; vi) agents whose behavior needs to change and barriers to

²⁸ *Ibid*

²⁹ *PBI Primer*, p. 11

changing behavior are identified and addressed in the results-based payment system; vii) sources of funding within the system are understood, which will help direct funding to where it is needed, avoid double payment, and inform the likely impact of a results-based finance mechanism; viii) the “building blocks” of the health system are understood, so that specific areas can be targeted for improvement which will help deliver specific goals.

2.4.7 Program sustainability

The CRP and CSP are only sustainable if Congress continues to authorize new funding. The Wetland Reserve Program, on the other hand, locks in conservation benefits either for 30 years or in perpetuity by making upfront purchases of legally enforceable easements which are not dependent on annual payments.

Some literature on the health sector suggests that performance-based funding can create a positive system-wide effect. This includes: i) promoting good governance, transparency, and accountability; ii) strengthening capacity; and iii) positively impacting financing (collection and use), organization of a health care system, incentive structures within the system, regulation, people and organizations in the sector (promoting innovation and changing behavior), institutional architecture, and the direct and underlying causes of problems in the sector.³⁰ These effects indicate results-based payments can help support transformational changes. However, the literature reviewed cautioned that there is insufficient data on medium and long-term effects, in particular on whether any intrinsic behavior changes are durable. Ongoing funding after completion of a project was also not adequately addressed, other than cautioning that continued services and incentive programs need to be maintained and suggesting to hold “a stakeholder conference six months to a year before the project end to explore transition issues” (or earlier).³¹

Lessons for REDD+: REDD+ strategies must anticipate how to sustain results in the absence of continued funding. Reliance on international transfers is unrealistic, so the program must envision a transition to domestic finance and/or be sustainable after some period of time as a result of durable domestic reforms which support ongoing forest protection, based on economic development that does not lead to deforestation.

³⁰ *RBF Handbook*, p. 12

³¹ *RBF Handbook*, p. 39

3.0 US GOVERNMENT SUPPORT FOR REDD+ RESULTS-BASED FINANCE TO DATE

3.1 POLICY ON SUSTAINABLE LANDSCAPES – STRATEGIC CHOICES FOR FAST START FINANCE AND REDD+

Funding for REDD+ is one of three “pillars” of US climate finance and falls under “Sustainable Landscapes” in the US budgeting process (the other two pillars being Clean Energy and Adaptation). Sustainable Landscapes funding is primarily implemented by three agencies: USAID, the US Treasury, and the US Department of State. Other funds and agencies, such as USAID’s biodiversity funding, the Millennium Challenge Corporation and OPIC, may also support the goals of the Sustainable Landscapes program, or REDD+ more generally, and if they meet certain conditions are counted by the US as contributing to its international REDD+ commitments, but are not specifically designated as part of US climate change funding. Funding for REDD+ is expected to continue near current levels for the next few years, although a final determination of amounts will be made by Congress.

Table 1: US Appropriated climate change finance: Sustainable Landscapes (all funds in million US\$)

Agency	Description of funds	FY10	FY11	FY12
USAID	Largely for support to bilateral and regional missions	75	137.4	115
US Treasury	Forest Investment Program, Global Environment Facility, Tropical Forest Conservation Act	57	61.4	69.5
US State Department	Forest Carbon Partnership Facility, Andean Amazon program, REDD+ Partnership and other programs	35.9	17	22
Mostly USAID	REDD+ related funding not specifically part of climate change budget	81.1	145.7	69.7
	TOTAL (Sustainable Landscapes)	249	361.5	276.2
	Total Climate Change budget enacted by Congress	945.2	818.9	858.9
	amount requested by Administration	1,239.0	1,390.5	1,327.6

3.1.1 The United States' Sustainable Landscapes strategy

The Sustainable Landscapes strategy was developed in early 2010. At the same time, climate change legislation that included a domestic cap-and-trade mechanism and would recognize REDD+ credits as compliance grade offsets was being considered by Congress. Many in the US Government were aware of the uncertain nature of US legislation and the strategy was created to withstand multiple domestic outcomes. The strategy also took strong account of the international progress and direction on REDD+. However, the domestic context did provide a forward-leaning atmosphere and interest in ensuring a supply of REDD+ credits for a potential domestic carbon market that does not exist today. The Sustainable Landscapes strategy has three objectives, which support all phases of REDD+, including results-based finance: Building an international REDD+ architecture; support for REDD+ readiness; and REDD+ demonstration, which includes both support for small and large-scale pilot activities, and pay-for-performance pilot projects and funds including “ex-post payments for reduction of emissions.”³²

3.2 EXAMPLES OF US-FUNDED PROGRAMS SUPPORTING “DEMONSTRATION ACTIVITIES”

3.2.1 Direct payments for results for REDD+

Currently, the only example where the United States is providing funding to directly pay for verified emission reductions or removals from REDD+ is through its contribution to the Forest Carbon Partnership Facility's Carbon Fund. To date, the US has contributed \$14 million, or 3.5 percent of the current value of the Carbon Fund. Along with Australia, BP, CDC Climat, and the Nature Conservancy, it has chosen to invest in “Tranche A,” which does not restrict usage of emission reductions purchased (i.e., does not require retirement of the emission reductions). This is the only case where US funding is invested to directly purchase verified emissions reductions from REDD+ activities. Other programs described below support the “supply side” of REDD+.

3.2.2 Other direct support for results-based REDD+ actions

OPIC: Project Finance and Political Risk Insurance for REDD+

OPIC is the US Government's development finance institution and has an objective to mobilize private capital to help solve critical development challenges in support of US foreign policy.

OPIC's Investment Funds Program serves to support privately-owned and managed investment funds. Since 1987, OPIC has committed \$4.4 billion to 63 private equity and investment funds that are making direct equity and equity-related investments in emerging markets. In 2011, OPIC's Board approved a commitment of up to \$40 million to the \$100 million Terra Bella Forest and Land-Use Carbon Fund. Terra Bella will be managed by Terra Global Capital (TGC, a private sector project developer) to provide early-stage project finance capital to make pre-payments for emissions reduction credits/offsets from a diversified portfolio of forest emissions reductions project and program investments. OPIC's investment is made with the objective to both provide a return to OPIC as an investor in the Fund and to deliver social and environmental benefits through investments made by the Fund. Once finalized, OPIC's commitment will be provided as a senior secured loan to the Fund. OPIC provides a guaranty of repayment of the certificates of participation in the

³² *Strategic Choices for United States Fast Start Financing for REDD+*, October 28, 2010, Executive Summary, p. 7

Fund backed by the full faith and credit of the United States. OPIC is self-funded through capital markets and generates a net profit.³³

In 2011, OPIC separately underwrote a political risk insurance contract on the investment made by TGC in the “Reduced Emissions from Deforestation and Degradation in Community Forests in Oddar Meanchey, Cambodia” project. This is an example of the US Government providing risk mitigation for a private sector investment that is dependent on delivery of emission reductions (i.e. performance-based). The terms of TGC’s contract with the government of Cambodia were 100 percent results-based, meaning that none of TGC’s investment was recovered without the production and sale of verified emission reductions from the Oddar Meanchey project. The risk covered under the OPIC contract was a government breach of their agreement with TGC, which may cause the project to fail to produce and sell the expected verified emission reductions, which in turn would have prevented TGC from recouping their investment. The insurance also covered “political violence,” which included the risk that war or civil conflict might cause all or part of the project’s forest to be destroyed, thus damaging the project’s ability to produce and sell verified emission reductions.

USAID’s Development Credit Authority Loan Guarantee

The Development Credit Authority (DCA) uses partial credit guarantees to mobilize local financing in developing countries. \$3.1 billion in credit has been mobilized as a result of DCA guarantees between 1999 and 2013. DCA is financed through fees it charges for its guarantees, and as of 2013 had received \$12.7 million in fees and paid out \$10.9 million in claims, with an overall default rate of 1.85 percent.

With help from USAID’s Forest Carbon, Markets and Communities (FCMC) Program, DCA is structuring a new loan guarantee product for REDD+ projects. Such a product would help reduce the risk of investing in REDD+ activities that generate trade-able emission reduction/removal credits.

3.2.3 Indirect support for results-based finance systems and demonstration activities

The Tropical Forest Conservation Act (TFCA)

The Tropical Forest Conservation Act (TFCA) provides for debt-for-nature swaps whereby the US Government offers debt relief to a developing country in exchange for the host country generating funds in local currency to support tropical forest conservation. Only partner countries with existing debt to the United States are therefore eligible for the TFCA program. To date, the US Government has negotiated 19 debt swap agreements in 14 different countries under the TFCA.

For each debt swap, a funding instrument is created into which the host government pays local currency (e.g., the interest and/or principal owed to the United States), sometimes joined by additional partner contributions. A local Board or local Oversight Committee is normally established, and in some cases a separate administrator is chosen to administer the funds and award grants to local NGOs and, in exceptional circumstances, to government entities. The program has historically funded more traditional forest conservation programs, but recently (2011) supported a \$28.5 million REDD+-focused program in Indonesia. While the TFCA is not intended to be a results-based payments instrument, it still offers useful experiences for results-based finance in general, and lessons for REDD+, as contained in Box 2 below.

³³ *OPIC 2011/2 Annual Report*, available at http://www.opic.gov/sites/default/files/files/OPIC_2012_Final.pdf.

Box 2: Lessons learned from the Tropical Forest Conservation Act

- Flexibility is required to set up funding instruments. Situations on the ground and legal requirements differ by country, and there is no “one size fits all” approach. Creation of institutional arrangements requires significant legal resources.
- Time and resources must be budgeted to create institutional structures. Operating procedures must ensure that funding is properly accounted for and monitored. Hiring and training new staff, creating operational procedures and manuals, and developing strategic plans by the program board takes a significant amount of time – often two to three years.
- Lack of local capacity can be a challenge. Capacity to implement programs may need to be built, particularly when working in remote areas. International partners may need to provide assistance to both funding administrators and recipients of money, for example, providing assistance on how to write proposals, how to present an idea, and how to manage the money.
- Counting carbon can be an overly abstract idea. Concepts around carbon stock measurements, emission reductions, reference levels, etc. are difficult to understand and can seem too abstract. It is much easier to discuss issues and performance around concession management or specific actions that can be taken to protect forests. Such “proxies” resonate more strongly, at least in early stages.
- Multiparty negotiations can take time. In the case of the TFCA II in Indonesia, signatories included the US and Indonesian Governments, World Wildlife Fund (both the local and global offices) and The Nature Conservancy. Agreement on the structure, substance, governance and requirements on how funds would be used was a complex negotiation.
- It is possible to use performance as an incentive, even in a grants-based program. In TFCA II, an initial allocation of funds was agreed for three districts; however, there was a proviso in the agreement that the allocation could change based on performance, which is monitored by the Oversight Committee with authority to change such allocations.
- Larger landscape approaches are harder. Agreements that support larger landscape programs have more requirements and are more complex to negotiate and implement. Such programs intend to go beyond a collection of disparate, small grants to ensure coherence into a broader, coherent landscape-level strategy. This requires higher capacity and coordination in both the planning and implementation stages.

USAID Support for REDD+ Programs and Readiness Activities

USAID plays a major role in the implementation of the US Government’s REDD+ Strategy, primarily through support of developing country readiness activities under its Sustainable Landscapes funding. A selection of USAID programs that support readiness towards participating in result-based finance is summarized below.

The Lowering Emissions in Asia's Forests (LEAF) program supports REDD+ Readiness in six countries (Cambodia, Lao PDR, Thailand, Vietnam, Papua New Guinea and Malaysia). LEAF functions as a regional information and learning hub, designed around seven key issues, including REDD+ Financing and Carbon Market Development.³⁴ The BIOREDD+ Program in Colombia is developing a portfolio of Climate, Community and Biodiversity Alliance compliant REDD+ projects along the Pacific Coast, to be registered under the Verified Carbon Standard and backed by the DCA.³⁵ These projects are being developed in coordination with local communities, with the objective of generating revenues in exchange for conservation activities. To facilitate this, BIOREDD+ is developing social and economic assessments to determine income sources, social investment needs and profitable productive activities to deter logging (many of these productive activities are also piloted through the program). FCMC is a global program designed to support US Government contributions to the international REDD+ architecture, as well as to contribute to REDD+ readiness by enabling countries to access pay-for-performance finance and by identifying sustainable development options that represent "no-regrets" investments in climate change mitigation and adaptation.³⁶

USAID recently issued two new Requests for Applications (RFA) that include linking REDD+ to emission markets and incorporating payment for performance elements more broadly as their expected results. The Accelerating Inclusion and Mitigating Emissions Program RFA³⁷ in Latin America includes providing support to increase participation of marginalized, forest-based communities in REDD+ deals. The primary focus of the RFA is supporting community's participation in market mechanisms. The other RFA is for a sub-national program in the Eastern Province in Zambia³⁸. This RFA aims to catalyze the commencement of a long-term REDD+ program whereby the recipient will partner with communities, traditional authorities, government entities, and other key stakeholders to implement pay-for-performance programs utilizing the measuring, reporting, and verification process in order for all parties to benefit from generated revenues from the sale of carbon credits and/or other ecosystem services. Both these RFAs use traditional USAID concessional funding to build supply of REDD+ emission reductions that are expected to generate income from sales in the voluntary (and possibly emerging compliance) markets. But the success of these programs, including delivering long-term REDD+ mitigation and livelihoods benefits, hinges on the presence of demand in the form of emission reductions markets. A number of other programs not included here also include the potential for supporting REDD+ pilot projects to help inform national REDD+ readiness efforts.

³⁴ See the LEAF website: <http://www.leafasia.org/about-us>.

³⁵ See the BIOREDD+ website: <http://bioredd.org/projects>.

³⁶ See the FCMC website: <http://www.fcmsglobal.org/>.

³⁷ USAID RFA-#-SOL-OAA-13-000092.

³⁸ "The Community-based Forest-management Program in Zambia" USAID RFA-611-13-000003.

4.0 LEGAL, INSTITUTIONAL AND OTHER CHALLENGES

As mentioned in the US Sustainable Landscapes strategy, US funding intends to target all three phases of REDD+ to reduce tropical deforestation through a number of country-driven approaches. As many countries are still in the early stages of REDD+, the US remains focused on building up REDD+ strategies, creating or improving greenhouse gas (GHG) inventory and national forest monitoring systems, constructing reference levels, and designing safeguards implementation systems in partner countries to establish credible enabling conditions for REDD+. US Funding of REDD+ readiness activities are also strategically linked to USAID's Global Climate Change and Development Strategy (2012 – 2016),³⁹ which includes support of broader economy wide low emission development strategies⁴⁰ to ensure REDD+ is integrated into overall development objectives, and that economic sectors that may act as drivers of deforestation are also part of national strategies for reducing deforestation and emissions.

With regard to support for “phase 3 of REDD+” or the use of results-based payments, while there are examples of successful implementation of such finance mechanisms for environmental services domestically and in the health and education sectors internationally, the US Government faces some challenges to supporting results-based finance for REDD+ abroad. These challenges include:

A lack of legislation, or legal precedent, that would provide an underpinning for supporting new, scaled up finance for mitigation abroad. There remains no comprehensive climate legislation, e.g., a cap and trade system, that would generate new and/or scaled-up funding for emission reductions abroad. The scope of the National Environmental Policy Act has not yet been extended to include climate impacts (although draft text has been proposed and public comment received). While the Clean Air Act provides the authority for the Administration to regulate GHG emissions, to date the US Environmental Protection Agency has focused on domestic regulatory actions.

- The US recognizes the need for scaled up funding for REDD+ that engages the private sector. However, absent cap-and-trade legislation the US is considering multiple options and tools to mobilize private finance. One example is the Tropical Forest Alliance 2020⁴¹, which focuses on partnerships with the private sector to produce sustainable development and supply chain management. Another priority is the low emission development strategy program mentioned above.

The use of US foreign assistance precludes a pure “cash on delivery” system. Such funds fall under the Foreign Assistance Act and therefore have specific conditionality mandated in the use of the funds. It is only in rare cases that the US is willing to engage in direct budget support and to make cash transfers to governments.

³⁹ USAID Climate Change and Development Strategy, January 2012, available at: http://transition.usaid.gov/our_work/policy_planning_and_learning/documents/GCCS.pdf.

⁴⁰ For more information on USAID work on low emission development strategies, see: http://transition.usaid.gov/our_work/environment/climate/policies_prog/leds.html.

⁴¹ For more information, see www.tfa2020.com.

The US Government budget is under pressure. Similar to most developed countries, concerns over future fiscal health makes any significant increase in foreign aid extremely difficult.

It is extremely difficult for the US to pledge out-year funding. In the case of REDD+, the time lag between making a commitment to pay for results (to incentivize necessary policy change in host governments) and then implement policies (and in many countries the enabling conditions) to achieve results, and then verify results can be years. The US rarely makes out-year pledges and precedents for doing so are rare. When they occur they do not exceed several years.

ANNEX I: ELEMENTS OF RESULTS-BASED FINANCE UNDER THE UNFCCC

The discussion of results-based finance for REDD+ under the UNFCCC can be broken down into the following six elements:

- 1) *Types of results-based financing mechanisms*: Both market-based and non-market based approaches to results-based financing can be considered.⁴² There are different views on how each of these approaches may be interpreted and implemented. Market-based approaches can be viewed as emissions trading markets where REDD+ offsets are used to support domestic goals (e.g., the State of California) or by Parties to meet obligations under international agreements (e.g., the UNFCCC or Kyoto Protocol). Market-based approaches have also been interpreted to refer to other types of market mechanisms such as "non-offset" carbon markets and other markets such as financial or commodity markets amongst others. Non-market approaches have mostly focused on public sources of funding for verified emission reductions.⁴³
- 2) *Sources of results-based finance*: A wide variety of sources are possible, including public, private, bilateral, multilateral and alternative sources.⁴⁴ There are different views, however, on the make-up of these sources, including the role of the private sector, the balance between public and private finance, and how alternative (or innovative) sources of finance can be raised.⁴⁵
- 3) *What results are financed/paid for*: Results from implementing the five REDD+ activities can receive results-based finance.⁴⁶ A separate decision states that forest reference emission levels and/or forest reference levels, expressed in tons of carbon dioxide equivalent per year, are benchmarks to assess performance, but do not explicitly connect this to results-based finance.⁴⁷ Combining mitigation and adaptation results has also been raised.⁴⁸ Discussions are ongoing regarding payments for non-carbon

⁴² Decision 2/CP.17, paragraphs 66 and 67

⁴³ For more details on different views see FCCC/TP/2012/3, *Financing options for the full implementation of results-based actions relating to the activities referred to in decision 1/CP.16, paragraph 70, including related modalities and procedures*, Technical paper (26 July 2012); FCCC/AWGLCA/2012/INF.8, *Report on the workshop on financing options for the full implementation of results-based actions relating to REDD-plus, including modalities and procedures for financing these results-based actions*, Note by the chair of the workshop (17 October 2012)

⁴⁴ Decision 2/CP.17 paragraph 65

⁴⁵ *Ibid* note 43

⁴⁶ Decision 2/CP.17, paragraph 64

⁴⁷ Decision 12/CP.17, paragraph 7

⁴⁸ Decision 2/CP.17 paragraph 67 and *Ibid* note 43.

benefits⁴⁹ and the scale at which results must be achieved to receive results-based finance (national or subnational). It is also unclear whether some countries (e.g., emerging economies) will be expected to contribute their “own effort” before receiving international payments or compensation for mitigation efforts.

- 4) *Conditions to receive finance*: To obtain and receive results-based finance, results-based actions should be fully measured, reported, and verified. Developing country parties also need to have in place a national strategy or action plan; national reference (emissions) levels (or subnational as an interim measure); national forest monitoring and reporting system (or subnational as an interim measure); and a system for providing information on how the Cancun Safeguards are being addressed and respected.⁵⁰
- 5) *Governance*: The governance of REDD+ finance generally is a topic currently being discussed.⁵¹
- 6) *Enabling conditions*: Enabling conditions for results-based finance is being discussed. This includes financing and other options to help attract private investment, such as transparent governance and legal frameworks, different types of insurance, guarantees, and bonds.⁵²

⁴⁹ *Ibid* note 43

⁵⁰ Decision 1/CP.16 paragraph 73; Decision 2/CP.17 paragraph 64.

⁵¹ Decision 1/CP.18 paragraphs 34 and 35. See also related submissions from Parties on this point in FCCC/SB/2013/MISC.3, prepared for SBSTA 38, 3 – 14 June, 2013.

⁵² FCCC/AWGLCA/2012/INF.8, *Report on the workshop on financing options for the full implementation of results-based actions relating to REDD-plus, including modalities and procedures for financing these results-based actions*, Note by the chair of the workshop (17 October 2012) paragraphs 29-37 and 46-48.

ANNEX 2: SUMMARY OF DOMESTIC EMISSIONS TRADING SCHEMES

As many US states contemplate market-based mechanisms to reduce GHG emissions, lessons can be learned from early emissions trading schemes, particularly emissions trading for SO₂ and NO_x.⁵³

The Acid Rain Program, established under Title IV of the 1990 Clean Air Act Amendments, requires large-scale emission reductions of SO₂ and NO_x, the key components of acid rain. The centerpiece of the Acid Rain Program is a market-based cap-and-trade system for SO₂ emissions. Under this program, SO₂ emissions were reduced by 50 percent from 1980 levels by 2007,⁵⁴ and its significant progress garnered global attention. The success of the SO₂ program paved the way for the Ozone Transport Commission NO_x Budget Program, which became the first multilateral cap-and-trade system for emissions of air pollutants.⁵⁵ Ultimately, the NO_x Budget Program was incorporated into a larger federal system. The success of these early trading programs has, in part, inspired subsequent regional and sub-national programs, including:

- The RGGI is a collaboration among nine northeastern states to limit emissions from large power plants via a cap-and-trade program. Five credit types are allowable, including afforestation. All credits must be generated in RGGI member states, precluding the possibility of international REDD+ credits.

California's Global Warming Solutions Act of 2006, known locally as AB 32, requires GHG emissions to be reduced to 1990 levels by 2020. Regulations establishing a statewide cap-and-trade program were formally incorporated into the California Code of Regulations in 2012, and will cover 85 percent of the state's GHG emissions. The regulation commenced in January 2013. The California Air Resource Board has developed protocols supporting the creation of credits in US forests and urban environments, and is interested in expanding this program beyond US borders.⁵⁶

⁵³ Greenhouse Gas Emissions Trading in US States: Observations and Lessons from the OTC NO_x Budget Program (January 2005). World Resources Institute. Retrieved from <http://www.wri.org/publication/greenhouse-gas-emissions-trading-us-lessons-from-otc-nox>.

⁵⁴ "Acid Rain Program 2007 Progress Report". Clean Air Markets - Air & Radiation. US EPA. January 2009. Retrieved 2011-07-25.

⁵⁵ Greenhouse Gas Emissions Trading in US States: Observations and Lessons from the OTC NO_x Budget Program (January 2005). World Resources Institute. Retrieved from <http://www.wri.org/publication/greenhouse-gas-emissions-trading-us-lessons-from-otc-nox>.

⁵⁶ California Air Resources Board (October 2011). Compliance Credit Protocol US Forest Projects. p.8, available at <http://www.arb.ca.gov/regact/2010/capandtrade10/copusforest.pdf>. For a review of REDD+ in AB 32 see the FCMC publication at: http://www.fcmsglobal.org/documents/AB32_Report.pdf.

ANNEX 3: ADDITIONAL DETAILS ON US GOVERNMENT EXPERIENCE WITH RESULTS-BASED FINANCE

Name	Conservation Reserve Program (CRP)
Description of the mechanism	CRP was enacted in 1985 and is the largest private-lands conservation program in the US. Enrolled farmers receive a yearly per acre rental payment in exchange for replacing crops on highly erodible and environmentally sensitive land ⁵⁷ with long-term, resource conserving covers. There are two forms of enrollment: 1) Continuous CRP sign-up (focused on environmentally sensitive land and offers are not ranked against each other); and 2) General CRP sign-up (competitive and announced periodically by the Secretary of Agriculture). A landlord or operator must provide tenants with an opportunity to participate in program benefits. Contracts are 10-15 years in length.
Sources of finance	Publicly funded through the Department of Agriculture's (USDA) Commodity Credit Corporation as mandatory spending. Congress authorizes CRP at a specified acreage enrollment level each year.
What results are financed/paid for	Participants must abide by all provisions in their Conservation Plan, including requirements on: the vegetative or water cover to be established; a tree planting plan if applicable; level of environmental benefits to be attained; protection of acreage during primary nesting season for wildlife; etc. The landlord or operator must not harvest, sell or otherwise make use of trees or other cover on the CRP land. Breach of contract results in a refund of payments received plus interest due, plus liquidated damages depending on the nature of the breach. If participants comply with their conservation plan they receive an annual rental payment which includes an incentive payment and cost-share assistance.

⁵⁷ Environmentally sensitive land may include agricultural land prone to erosion, pasture or agricultural land that borders river or stream banks or field margins.

	Rental payments are based on the relative productivity of soils within each county and the average dryland cash rent. Participants who establish approved cover on eligible crop land receive cost-share assistance, not to exceed 50 percent. Cost-share assistance is paid out after a practice is successfully established.
Conditions to receive finance	To be eligible, a farmer must have owned or operated the land for at least 12 months prior to the close of the CRP sign-up period, with limited exceptions. Eligible land must be cropland planted for four of the past six crop years. Cropland must also meet one of the following: 1) have a weighted average erosion index of eight or higher; 2) be located in a national or state CRP conservation priority area; or 3) be enrolled in a CRP contract that expires September 30. When determining eligibility for Continuous CRP, the type of conservation practice is taken into account, including: buffers to wildlife habitats; wetlands buffers; riparian buffers; wetland restoration; etc. When determining eligibility for General CRP, applicants are ranked by the environmental benefits to result from proposed conservation practices. Each applicant is assigned an Environmental Benefits Index (EBI), depending on the environmental sensitivity of land and the type of conservation practices.
Governance	Administered by USDA’s Farm Service Agency with technical assistance from the Natural Resources Conservation Service (NRCS).
Enabling conditions	<i>None identified</i>
Name	Conservation Stewardship Program (CSP)
Description of the mechanism	The CSP was created in the 2008 Farm Bill, and replaced an earlier Conservation Security Program from the 2002 Farm Bill. The CSP provides financial and technical assistance to agricultural and forestry producers to conserve and enhance soil, water, air, energy, plant and related natural resources on tribal and private working lands. CSP pays for conservation performance — the higher the performance, the higher the payment, with five year contracts based on meeting or exceeding a “stewardship threshold.” ⁵⁸ This is different to the CRP where payments are based on a per acre rental rate.
Sources of finance	Publicly funded through the USDA Commodity Credit Corporation as mandatory spending. Congress authorizes CSP at a specified acreage enrollment level each year. Each state is then allotted a share of total annual CSP acres.
What results are financed/paid for	Participants receive 1) annual payments for i) installing new conservation activities and ii) maintaining existing practice (with an emphasis placed on new activities); and may receive 2) supplemental payments if resource-conserving crop rotations are adopted. Annual payments for new and existing practices are calculated as follows:

⁵⁸ A stewardship threshold is defined as the level of natural resource conservation and environmental management required, as determined by NRCS using conservation measurement tools, to conserve and improve the quality of a resource.

	<p><i>Annual Land Use Payments = Land Use Acres X Performance Points X Land Use Payment Rate</i></p> <p>Performance Points are calculated by first determining a baseline level of conservation and determining the environmental benefits of new and existing activities. This is done through applying a standardized Conservation Measurement Tool (CMT) Inventory and then CMT Scoring Process. The Payment Rate is published annually, with higher rates for new activities</p> <p>The supplemental payment rate is based on the differences in crop production costs between conventional and resource-conserving rotations</p>
<p>Conditions to receive finance</p>	<p>Applicants must meet applicant, land and Stewardship Threshold requirements to be eligible to participate. These requirements include having control the land for the term of the contract, being in compliance with highly erodible land and wetland conservation provisions, and meeting average adjusted gross income provisions. Applicants should also meet two or more requirements for specific land use (the Stewardship Threshold requirements). For nonindustrial private forest land,⁵⁹ these include green certification by a recognized program, and no apparent erosion on harvested or burned areas, roads, etc. Each state also has its own priority resource concerns, which impact applicant ranking. Once accepted, a participant agrees to several provisions, including: adopting at least one enhancement within the first fiscal year; maintaining at least the baseline level of conservation performance during the contract; and allowing access to the land by an NRCS representative to monitor progress. Penalties for default include refunding payments and paying liquidated damages equal to 10 percent of the total financial assistance obligated.</p>
<p>Governance</p>	<p>Administered by NRCS acting on behalf of the Secretary of Agriculture.</p>
<p>Enabling conditions</p>	<p><i>None identified</i></p>

⁵⁹ “Nonindustrial private forest land” is rural land with existing tree cover or is suitable for growing trees.

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