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# REDD+ AND BIODIVERSITY CONSERVATION: APPROACHES, EXPERIENCES AND OPPORTUNITIES FOR IMPROVED OUTCOMES

FOREST CARBON, MARKETS AND COMMUNITIES (FCMC)  
PROGRAM

APRIL 2014

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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**

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# ACRONYMS AND ABBREVIATIONS

A/R	Afforestation/Reforestation
AHTEG	Ad-Hoc Technical Expert Group
BeRT	Benefits and Risks Tool
CBD	Convention on Biological Diversity
CCB	Climate, Community and Biodiversity Standards
COP	Conference of the Parties
DRC	Democratic Republic of the Congo
ER-PIN	Emissions Reductions Program Idea Note
ESMF	Environmental and Social Management Framework
FCPF	Forest Carbon Partnership Facility
GEF	Global Environmental Facility
IFC	International Finance Corporation
IUCN	International Union for Conservation of Nature
MRV	Measurement, Reporting and Verification
NBSAPs	National Biodiversity Strategies and Action Plans
NGOs	Non-governmental organizations
OPs	World Bank Operational Policies
PS	Performance Standards
R-PP	Readiness Preparation Proposal
REDD	Reducing emissions from deforestation and forest degradation
REDD+	Reducing emissions from deforestation and forest degradation, plus the role of conservation, sustainable management of forests and enhancement of forest carbon stocks
REDD+ SES	REDD+ Social and Environmental Standards Initiative
SBSTA	Subsidiary Body on Scientific and Technical Advice
SEPC	Social and Environmental Principles and Criteria
SESA	Strategic Environmental and Social Assessment

UN-REDD	United Nations REDD+ Programme
UNEP-WCMC	United Nations Environment Program – World Conservation Monitoring Centre
UNFCCC	United Nations Framework Convention on Climate Change
UNFF	United Nations Forum on Forests
USAID	United States Agency for International Development
VCS	Verified Carbon Standard

# EXECUTIVE SUMMARY

Reducing emissions from deforestation and forest degradation (REDD+, the plus referring to the role of conservation, sustainable management of forests and enhancement of forest carbon stocks) has the potential to deliver significant benefits to biodiversity by protecting and restoring large areas of tropical forests worldwide. Whether or not REDD+ will deliver biodiversity benefits (and avoid any potential risks to biodiversity), however, will depend on the policies that guide the design and implementation of REDD+ activities, and how these policies are applied in practice. Since experiences with REDD+ are still relatively new and guidance from the United Nations Framework Convention on Climate Change (UNFCCC) on REDD+ is still evolving, it is too early to critically assess what the long-term biodiversity impacts of REDD+ will be. However, there is now a rapidly growing body of early experiences with REDD+, including the development of REDD+ safeguard frameworks, national REDD+ programs and forest carbon projects, which can provide preliminary insights into what the potential biodiversity impacts of REDD+ could be. **This report reviews how biodiversity issues are currently being addressed in existing safeguard policies and frameworks, national programs and forest carbon project activities, and provides recommendations on how to ensure positive biodiversity impacts in emerging REDD+ initiatives.**

**There is already a diverse array of international policies, voluntary REDD+ guidelines and standards, and funder requirements that are being applied to REDD+ and are shaping the way in which biodiversity issues are addressed.** The UNFCCC safeguards, for example, stipulate that REDD+ should not only avoid harm, but also incentivize benefits for biodiversity, and also include provisions to avoid the conversion of natural forest and to incentivize the protection and conservation of natural forest. The UNFCCC safeguards provide important, high-level guidance on how biodiversity should be addressed, but include little detail on how safeguards should be implemented. Additional, more detailed guidance on how to generate positive biodiversity impacts is provided by voluntary safeguard frameworks, such as the United Nations REDD+ Programme (UN-REDD) Social and Environmental Principles and Criteria (SEPC), the REDD+ Social and Environmental Standards (SES), and multiple-benefit standards designed for forest carbon projects. The Convention on Biological Diversity (CBD) is another important source of guidance for the biodiversity aspects of REDD+, including in national reporting under the CBD. The policies of organizations that fund REDD+ activities (such as the World Bank, International Finance Corporation [IFC], United States Agency for International Development [USAID]) are also influencing how REDD+ is implemented on the ground. However, despite the considerable guidance on REDD+ safeguards for biodiversity, there is still relatively limited application of these safeguard frameworks in REDD+ activities on the ground. It is therefore premature to judge whether the guidance provided by the various safeguard frameworks is sufficient to ensure positive biodiversity outcomes.

**Early efforts to develop national REDD+ programs show some signs that countries are designing their programs to deliver positive biodiversity impacts from REDD+.** For example, seven of the 14 Readiness Preparation Proposals (R-PP) and UN-REDD national program documents reviewed for this report described biodiversity as an important consideration for the development of national REDD+ strategies. In addition, 11 countries are voluntarily applying or adapting the REDD+ SES in the development of their national REDD+ programs. However, since most national REDD+ programs are still at the early stages of development, many still lack details about their biodiversity goals, specific biodiversity conservation actions, or monitoring plans. The degree to which biodiversity will actually be emphasized in national REDD+ strategy can only be assessed later, once the programs are fully developed and operational. However, it is encouraging to see that two of the countries (Costa Rica and the Democratic Republic of the Congo [DRC]) that are most advanced in their REDD+ planning have more specific information on the biodiversity objectives and the actions that will be used to achieve and monitor these objectives. Comprehensive and

long-term monitoring of the biodiversity within existing REDD+ projects and programs will be needed, however, to rigorously assess the net impact of REDD+ on biodiversity in different countries and regions.

**Many of the experiences with forest carbon projects also suggest that REDD+ has the potential to deliver significant biodiversity benefits, especially if these projects identify clear biodiversity goals and the appropriate actions and monitoring systems to achieve these goals.** Forest carbon projects are an important source of information for how REDD+ may work because dozens of projects around the world are in full operation and many have already developed plans for biodiversity monitoring. All of the 17 projects reviewed for this report (six projects that seek to avoid deforestation and degradation and 11 afforestation/reforestation projects) have been designed to achieve specific biodiversity goals, such as the conservation or restoration of large areas of biologically diverse forest, the enhancement of forest connectivity, or the establishment of tree plantations on degraded lands. In addition, many REDD<sup>1</sup> projects are located in areas that are of high conservation value and seek to protect populations of vulnerable or endangered species. However, many projects provide little detail of how they will achieve their biodiversity goals and what specific actions they will take to address threats to biodiversity within the project area. Projects also vary greatly in the quality and detail of their monitoring plans, so it is difficult to assess whether or not the projects will be able to deliver the biodiversity benefits they seek. More rigorous and detailed biodiversity monitoring would allow better assessment of the impacts of the forest carbon projects and would facilitate adaptive management to improve biodiversity performance over time.

**While existing policies, safeguards and field activities suggest REDD+ has the potential to deliver significant biodiversity benefits, it will only be possible to really understand the scope of these benefits after REDD+ has been fully operational for several years. However, certain approaches will improve the likelihood that REDD+ delivers positive outcomes.** Key aspects include considering biodiversity issues throughout the whole design and implementation of REDD+ (rather than as an add-on activity), developing specific, measurable goals for REDD+ activities, clarifying which activities will be needed to achieve these goals, developing a comprehensive and rigorous monitoring system that allows the impacts of REDD+ on biodiversity to be detected, and establishing a systematic process that makes use of the monitoring results to continuously improve management practices. To this end, synergies between the UNFCCC and the CBD on biodiversity aspects of REDD+ should continue to be developed and enhanced.



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<sup>1</sup> REDD (without the plus) is used here to refer to projects that seek to avoid emissions only by reducing deforestation and/or forest degradation.

# I.0 INTRODUCTION

There is significant debate about the extent to which reducing emissions from deforestation and forest degradation (REDD+, the plus referring to the role of conservation, sustainable management of forests and enhancement of forest carbon stocks) will benefit or harm biodiversity. On the one hand, REDD+ has been strongly supported by biodiversity conservationists based on the expectation that the protection and restoration of forest for climate change mitigation will also provide significant biodiversity benefits (Harvey *et al.* 2010, CBD 2011). Potential positive impacts could include, for example, the protection of large tracts of forest, the reforestation of degraded lands, improved management of both production forests and protected areas and increased connectivity of forested landscapes (Harvey *et al.* 2010, CBD 2011). Other potential benefits to biodiversity from REDD+ include improved forest governance for more sustainable management of tropical forests, reduced levels of illegal logging and hunting (Dickson and Kapos 2012) and increased finance going towards forest conservation (Busch 2013).

On the other hand, there are also potential risks from REDD+ to biodiversity. One frequently cited concern is that REDD+ could incentivize the replacement of low-carbon, highly biodiverse habitats with high-carbon, low-biodiversity plantations (Harvey *et al.* 2010). Another risk is that the protection of high-carbon forest in one area could lead to the displacement of threats to more biodiverse forests in other areas (Harvey *et al.* 2010, Harrison *et al.* 2012). Similarly, the protection of high carbon forests could lead to the conversion of other habitats like grasslands or savannas with high biodiversity value (Harvey *et al.* 2010, Christophersen 2010). Incentives for new forest or biofuel plantations could lead to afforestation of non-forested lands (Christophersen 2010, Gardner *et al.* 2012), and, depending on their design and management, forest plantations could lead to the introduction of exotic species or negatively impact key ecosystem functions, such as fire or hydrological regulation (Lindenmayer *et al.* 2012).

The degree to which the biodiversity impacts of REDD+ are positive or negative is expected to depend on a variety of factors, including how REDD+ policies will be designed and implemented (Parrotta *et al.* 2012). For example, decisions about which of the five REDD+ activities (reduced deforestation, reduced forest degradation, forest carbon stock enhancement, sustainable management of forests or conservation of standing forests) are implemented and what types of interventions are implemented, will determine both potential risks and opportunities for biodiversity conservation (Dickson and Kapos 2012). Similarly, decisions about where REDD+ is implemented will be of critical importance for biodiversity conservation - as biodiversity is unevenly distributed among forests some forests are of greater biodiversity significance than others (Harvey *et al.* 2010, Strasburg *et al.* 2012).

However, the question of how REDD+ will impact biodiversity is still largely theoretical, as the experiences with the implementation of REDD+ are still relatively new and limited in scope. REDD+ is currently only being implemented on the ground at small scales (e.g., at the project or subnational level) and a limited number of sites, and few REDD+ initiatives are fully operational. The full impacts of REDD+ on biodiversity will likely not be evident for another decade or more, in part because REDD+ implementation is not yet fully operational and in part because changes to biodiversity are often difficult and slow to detect.

However, the rapidly growing body of experience with the implementation of REDD+ activities provides useful preliminary insights into the possible impacts of REDD+ on biodiversity and potential best practices for ensuring positive outcomes for biodiversity. These include experiences in three key areas: 1) the safeguard frameworks that guide the biodiversity aspects of REDD+; 2) the development of national REDD+ programs; and 3) the development and implementation of numerous forest carbon projects worldwide. Taken together, the experiences in these three areas of REDD+ implementation can provide important insights into

the potential long-term impacts of REDD+ on biodiversity conservation and also help highlight opportunities for improving REDD+ implementation so that better biodiversity impacts can be achieved.

## I.I OBJECTIVE

The overall objective of this report is to summarize how biodiversity issues are being addressed in existing REDD+ activities and to provide recommendations of how REDD+ activities could be designed and managed to enhance biodiversity impacts of future REDD+ activities. Specifically, the report focuses on three key areas of experience related to REDD+ and biodiversity: 1) how existing safeguard frameworks and funder policies related to REDD+ address biodiversity issues; 2) how emerging national-level REDD+ programs are considering biodiversity issues; and 3) how forest carbon projects are being designed and managed to achieve biodiversity benefits.

The report focuses on the following questions:

1. REDD+ Safeguard frameworks and biodiversity:
  - What guidance does the UNFCCC provide on how REDD+ should address biodiversity?
  - What additional guidance on REDD Safeguards does the CBD provide?
  - What other safeguard frameworks provide guidance for REDD+?
  - What funder policies are informing how REDD+ programs or projects address biodiversity issues?
2. National REDD+ programs and biodiversity:
  - What types of biodiversity benefits do national REDD+ programs seek to provide?
  - Are biodiversity-friendly policies and measures being considered in national REDD+ programs?
  - Do national REDD+ programs link to national biodiversity objectives, and do the national biodiversity documents indicate coordination with the REDD+ program?
  - Are biodiversity monitoring methods described, and are these coordinated with other national monitoring programs?
  - If a nested system is planned, is a system described in which sub-national activities contribute to national biodiversity goals and monitoring?
3. Forest Carbon projects and biodiversity:
  - What are the biodiversity objectives of forest carbon projects? And what actions are projects taking to enhance biodiversity conservation?
  - Are forest carbon projects contributing to national biodiversity objectives?
  - How are forest carbon projects monitoring their impacts on biodiversity?
  - Are forest carbon projects benefiting biodiversity?

In addition to providing a synthesis of existing experiences of addressing biodiversity issues through REDD+ safeguards, national REDD+ programs and pilot forest carbon projects, the report also provides recommendations for how future REDD+ activities can provide improved outcomes for biodiversity. During 2014, the UNFCCC will consider whether and how to provide additional guidance about how countries should implement information systems for safeguards for REDD+, and will debate this topic during the

Conference of Parties (COP 20) in Lima. Meanwhile, REDD+ countries continue to develop their national REDD+ strategies, which can include explicit descriptions of biodiversity goals, conservation actions, and monitoring plans. Many REDD+ countries are simultaneously revising their National Biodiversity Strategies and Action Plans (NBSAPs) for CBD. With several potential synergies between REDD+ and the CBD, there is an important opportunity for coordination and for incorporating strong biodiversity conservation practices into the REDD+ programs. At the project scale, new projects continue to be designed and implemented, and existing projects have opportunities to improve their biodiversity practice. This review of how initial REDD+ experiences are addressing biodiversity issues should therefore help inform all of these ongoing processes.

## 1.2 METHODS

This report is based on a desk review of publicly available documents related to the implementation of REDD+ safeguards, REDD+ national programs and forest carbon projects. The documents reviewed for the assessment of how safeguard frameworks are addressing biodiversity issues include the decisions on REDD+ safeguards from the UNFCCC and CBD, as well as voluntary REDD+ guidelines/standards developed for government-led REDD programs (UN REDD SEPC, and the REDD+ SES) and for forest carbon projects (Climate, Community and Biodiversity Standards and Plan Vivo standards). In addition, the review includes guidelines, policies, standards and supporting documents that have been published by funding agencies (including USAID, the Global Environment Facility [GEF], IFC, and the World Bank) that support REDD+ activities.

To understand how national level, government-led REDD+ programs are addressing biodiversity issues, the review includes publicly available documents from a sample of 14 countries (out of the approximately 50 countries that are in the process of developing national level REDD+ programs). The sample of the 14 countries was selected to include representative countries from three regions (Africa, Asia and Latin America) that are being supported by the Forest Carbon Partnership Facility (FCPF) and/or the UN-REDD program. The pool of countries was further narrowed on the basis of (a) including a range of country sizes in each region, and (b) including a suite of countries that together are using all of the major safeguards or standards frameworks that can be applied to national REDD+ programs. The countries reviewed include: DRC, Kenya, Republic of Congo and Tanzania in Africa; Cambodia, Indonesia, Nepal and Vietnam in Asia, and Colombia, Costa Rica, Ecuador, Guatemala, Mexico and Peru in Latin America (**Appendix 1**).

For each of the countries participating in the FCPF, the most recent publicly available version of the R-PP was reviewed. This document describes the approach that the country will take in developing a national REDD+ strategy, including social and environmental performance. Where available, other FCPF program documents were also reviewed, such as the Emission Reduction Program Idea Note (ER-PIN), a document presented by countries seeking to be compensated for emissions reductions through the FCPF Carbon Fund. The ER-PINs provide a more specific description of the REDD+ activities planned for part or all of the country than the R-PP. For countries participating in UN-REDD, the most recent version of the national program document was reviewed. This document provides an initial description of the country's approach to safeguards. In addition, to understand linkages between national REDD+ programs and ongoing biodiversity conservation programs the most recent NBSAPs and National Reports to the CBD were reviewed for each of the 14 countries in the sample.

Finally, to assess how existing forest carbon projects are addressing biodiversity issues a sample of 17 of the most advanced forest carbon projects (11 afforestation/reforestation (A/R) projects and six REDD projects) which have been operational for 2-15 years is reviewed. This includes projects in Kenya, Uganda, India, Colombia, Peru, DRC, and Bolivia (**Appendix 2**). For each of these projects, the review included publicly available project design documents and other reports that describe the results of project implementation.

# 2.0 SAFEGUARDS FOR BIODIVERSITY IN REDD+

The design and implementation of REDD+ activities - whether at a subnational or national scale - is done to meet a range of safeguards policies, internationally recognized guidelines, funder requirements, and standards<sup>2</sup>. An understanding of these safeguard frameworks is essential for understanding the way in which REDD+ activities are designed and implemented, and for assessing REDD+'s long-term impacts.

This section provides an overview of some of the key safeguard frameworks that are influencing the biodiversity aspects of REDD+ design and implementation. The first part reviews UNFCCC safeguards for REDD+ and the advice provided by the CBD regarding REDD+ and biodiversity. This is followed by a review of some of the leading safeguard frameworks that were created to ensure that REDD+ provides both environmental and social benefits. These include REDD+ standards designed for government-led REDD+ programs (e.g., the UN REDD SEPC and the REDD+SES), as well as standards for site-scale forest carbon projects, such as the Climate, Community and Biodiversity Standards and the Plan Vivo Standards. The section concludes with an overview of safeguards requirements of some of the key funders and funding mechanisms that support REDD+ activities. These include USAID, IFC, GEF, and the World Bank.

## 2.1 WHAT GUIDANCE DOES THE UNFCCC PROVIDE ON HOW REDD+ SHOULD ADDRESS BIODIVERSITY?

The UNFCCC is the single most influential forum for REDD+ policy. This is because the agreements that are reached under the UNFCCC represent a global consensus view on how REDD+ activities should be implemented and because of the potential scale of REDD+ under the UNFCCC (which would be open to virtually every developing country). UNFCCC decisions influence funders who seek to fund activities that support the development of UNFCCC REDD+ and countries that are developing REDD+ programs do so with a view of maintaining consistency with the UNFCCC. At the project scale, investors and project developers also track UNFCCC decisions and adapt project designs and investments accordingly. Consequently, the UNFCCC decisions related to biodiversity safeguards are key for guiding REDD+ activities globally and are of significant importance for biodiversity outcomes.

Parties to the UNFCCC have made several decisions on REDD+ which have direct implications for biodiversity. These decisions relate to the environmental safeguards that should be applied to REDD+ and the systems that need to be set up to report on safeguard implementation. These include the Cancun Agreement (2010), the Durban Outcome (2011), and the Warsaw REDD+ package (2013; **Table 1**).

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<sup>2</sup> For simplicity, these mechanisms will be collectively referred to as safeguard frameworks in this report.

**Table 1: Elements of the UNFCCC Cancun Agreement, the Durban Outcome and the Warsaw Package decisions that directly relate to biodiversity. See Appendices 3-5 for additional interpretation**

	<b>Section</b>	<b>Specific UNFCCC text that is relevant for biodiversity</b>
<b>Cancun Agreement</b>	(UNFCCC I/CP.16) Paragraph 71	REQUESTS DEVELOPING COUNTRIES TO DEVELOP: D) A SYSTEM FOR PROVIDING INFORMATION ON HOW THE SAFEGUARDS ARE BEING ADDRESSED AND RESPECTED
	Appendix I	<p>Guidance and Safeguards</p> <p>I. REDD+ Activities should:</p> <ul style="list-style-type: none"> <li>(d) ... take into account the multiple functions of forests and other ecosystems;</li> <li>(e) Be undertaken in accordance with national development priorities...</li> <li>(f) Be consistent with Parties' national sustainable development needs and goals;</li> <li>(h) Be consistent with the adaptation needs of the country</li> <li>(k) Promote sustainable management of forests;</li> </ul> <p>2. Actions that should be promoted and supported:</p> <ul style="list-style-type: none"> <li>(a) That actions complement or are consistent with the objectives of national forest programs and relevant international conventions and agreements;</li> <li>(e) That actions are consistent with the conservation of natural forests and biological diversity, ensuring that the actions referred to in paragraph 70 of this decision are not used for the conversion of natural forests, but are instead used to incentivize the protection and conservation of natural forests and their ecosystem services, and to enhance other social and environmental benefits;</li> </ul>
<b>Durban Outcome</b>	(UNFCCC I2/CP.17): I. Guidance on systems for providing information on how safeguards are addressed and respected	<ol style="list-style-type: none"> <li>1. Notes that the implementation of the safeguards ... should support national strategies or action plans and be included in ... all phases of implementation</li> <li>2. The systems for providing information on how the safeguards ... are addressed and respected should: <ul style="list-style-type: none"> <li>b) Provide transparent and consistent information that is accessible by all relevant stakeholders and updated on a regular basis;</li> <li>(c) Be transparent and flexible to allow for improvements over time;</li> <li>(d) Provide information on how all of the safeguards [in Cancun agreement] are being addressed and respected;</li> <li>e) Be country-driven and implemented at the national level;</li> <li>(f) Build upon existing systems, as appropriate;</li> </ul> </li> <li>3. Agrees also that developing country Parties ... should provide a summary of information on how all of the safeguards referred to in decision I/CP.16, appendix I, are being addressed and respected throughout the implementation of the activities;</li> </ol>
<b>Warsaw REDD+ Framework</b>	<u>UNFCCC 9/CP.19</u>	<p>COP Work Program on Results Based Finance</p> <ol style="list-style-type: none"> <li>4. Agrees that developing countries ... should provide the most recent summary of information on how all of the safeguards ... have been addressed and respected before they can receive results-based payments;</li> <li>11. Decides that the information hub will contain...: <ul style="list-style-type: none"> <li>(c) The summary of information on how all of the safeguards ... are being addressed and respected...;</li> </ul> </li> </ol>
	<u>UNFCCC I2/CP.19</u>	<p>The timing and the frequency of presentations of the summary of information on how all the safeguards referred to in decision I/CP.16, appendix I, are being addressed and respected</p> <ol style="list-style-type: none"> <li>4. Decides that developing country Parties should start providing the summary of information ... in their national communication or communication channel ... after the start of the implementation of [REDD] activities</li> <li>5. Also decides that the frequency of subsequent presentations of the summary of information as referred to in paragraph 2 above should be consistent with the provisions for submissions of national communications from Parties not included in Annex I to the Convention and, on a voluntary basis, via the web platform on the UNFCCC website.</li> </ol>

The **Cancun Agreement**<sup>3</sup> in 2010 was the first UNFCCC decision regarding REDD+ safeguards and provided initial guidance about how safeguards should be applied. This decision states that REDD+ activities should not lead to the conversion of natural forest and that they should be consistent with the conservation

<sup>3</sup> [UNFCCC I/CP.16](#)

of biodiversity. Furthermore, the decision indicates that REDD+ should be used to incentivize the conservation of natural forest and ecosystem services and to enhance other environmental benefits. The Cancun Agreement therefore includes both the concepts of avoiding harm and also of generating positive impacts. The inclusion of a “safeguard” for positive impacts distinguishes the UNFCCC safeguards from several of the other safeguards policies that are described later in this section, which only seek to avoid negative impacts. The Cancun Agreement also indicated that REDD+ activities should be complementary to national forest programs and other relevant conventions, such as the CBD. Additional details on the interpretation of the elements of the Cancun agreement that are relevant to biodiversity are available in **Appendix 3**.

The **Durban Outcome**<sup>4</sup> in 2011 provided additional guidance on how countries should implement REDD+ safeguards. This decision focused on the systems for providing information on how safeguards are being addressed and respected (see **Appendix 4** for details). While reiterating the sovereignty of countries, the decision requires countries to provide information on how they address and respect all of the Cancun safeguards, throughout all phases of REDD+. The Durban Outcome also included statements to promote a high degree of participation and transparency.

The most recent decisions on REDD+ safeguards were provided in the **Warsaw REDD+ Framework** in November 2013. Decision 9<sup>5</sup> specifies that the summaries of information on how safeguards are being addressed and respected must be submitted before countries can receive results-based REDD+ payments. Decision 12<sup>6</sup> specifies the timing and frequency of the submission of the summaries of information. In most cases, countries will need to submit these summaries every four years, together with their national communications to the UNFCCC. Additional details on the interpretation of the elements of the Warsaw agreement that are relevant to biodiversity are available in **Appendix 5**.

To date, the UNFCCC decisions on safeguards provide a high-level framework that encourages countries to design and implement REDD+ activities that benefit biodiversity conservation. However, the UNFCCC decisions currently provide little practical or technical guidance to countries on how to develop and implement biodiversity safeguards or how to monitor the implementation of safeguards or the impacts of REDD+ on biodiversity.

It is possible that additional UNFCCC guidance on safeguards could be developed in 2014 or beyond. Two issues related to safeguards will be discussed at meetings in 2014. The issue of non-carbon benefits from REDD+ will be discussed during the Subsidiary Body meetings in June 2014 and in preparation for this, parties and observers have been invited to submit their views by March 2014 on how non-carbon benefits may be treated in the REDD+.

At the December 2014 Conference of the Parties (COP) in Lima, countries will also discuss whether additional guidance on safeguards will be provided by the UNFCCC. Prior to the COP, developing countries have been invited to submit information (by September 2014) from their experiences developing safeguards information systems, and all countries and observers were invited to submit views on the type of information on safeguards that would be helpful. Consequently, the UNFCCC guidance on safeguards and biodiversity benefits may further evolve over the upcoming year.

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<sup>4</sup> [UNFCCC 12/CP.17](#)

<sup>5</sup> [UNFCCC 9/CP.19](#)

<sup>6</sup> [UNFCCC 12/CP.19](#)

## 2.2 WHAT ADDITIONAL GUIDANCE ON REDD+ SAFEGUARDS DOES THE CONVENTION ON BIOLOGICAL DIVERSITY (CBD) PROVIDE?



REDD+ is being designed under the UNFCCC as a mechanism for climate change mitigation. Decisions about how REDD+ will be designed and implemented are therefore the mandate of the UNFCCC rather than the CBD. However, given the potential of REDD+ to conserve and restore tropical forest, there are important synergies with the CBD, which has the goals of conserving biological diversity and promoting its sustainable use, and the fair and equitable sharing of the benefits of genetic resources. Consequently, the CBD is keenly interested in how REDD+ will address biodiversity issues and how safeguards will be applied and has made a number of efforts to link progress on forest carbon and biodiversity standards. At the CBD COP 9 in 2008, the Convention adopted a decision<sup>7</sup> that considered the importance of forest ecosystems in preserving biodiversity, and urged parties to “ensure that possible actions for [REDD+] do not run counter to the objectives of the Convention on Biological Diversity...but provide benefits for forest

biodiversity.” At the following COP 10 in 2010, the CBD called<sup>8</sup> on its Secretariat to collaborate with the UN Forum on Forests (UNFF), the FCPF, UN-REDD and other related organizations to develop recommendations for REDD+ safeguards that help address the importance of preserving biodiversity in forest habitats. The Convention also adopted a decision<sup>9</sup> at COP 10 that more specifically addressed joint activities between the CBD and the UNFF, such as developing guidance on capacity building to incorporate forest biodiversity and climate change considerations into national forest policies.

Following on the requests for collaboration in 2010, at the CBD COP 11 in 2012, Parties adopted a decision<sup>10</sup> that provides advice on the application of safeguards for REDD+. The CBD advice on REDD+ includes conclusions from the Global Expert Workshop on Biodiversity Benefits from Reducing Emissions from Deforestation and Forest Degradation in Developing Countries that was held in Nairobi in 2010 and provides substantially more detail than is found in any of the UNFCCC REDD+ safeguards decisions. For example, the decision contains advice on prioritizing the use of native species in reforestation activities, and the use of strategic environmental assessments and environmental impact assessments when designing climate change mitigation activities. Though the CBD advice is outside of the UNFCCC, it has relevance in the context of paragraph 2(a) of the Cancun Safeguards, which states that REDD+ “actions complement or are consistent with the objectives of ... relevant international conventions and agreements.”

The CBD has shown dedication to continued collaboration with other forest-related climate change efforts, including at upcoming CBD negotiations in 2014. The annotated agenda for the 18<sup>th</sup> meeting of the CBD’s Subsidiary Body on Scientific and Technical Advice (SBSTA) includes an item on the application of biodiversity safeguards for REDD+.<sup>11</sup> The CBD SBSTA plans to review progress made by the CBD Executive Secretary on the aforementioned safeguards work and determine any gaps for further action before the CBD COP 12 in October 2014. Along with adopting any guidance from the CBD Executive Secretary and SBSTA, the CBD Parties plan<sup>12</sup> to discuss opportunities for joint mitigation and adaptation approaches for sustainable forest management.

<sup>7</sup> [CBD Decision IX/5](#): “Forest Biodiversity”

<sup>8</sup> [CBD Decision X/33](#): “Biodiversity and climate change”

<sup>9</sup> [CBD Decision X/36](#): “Forest biodiversity”

<sup>10</sup> [CBD Decision XI/19](#): “Biodiversity and climate change related issues...”

<sup>11</sup> [CBD SBSTA 18](#): Annotated Agenda Item 9.2

<sup>12</sup> [CBD COP 12](#): Annotated Agenda

## 2.3 WHAT OTHER SAFEGUARD FRAMEWORKS PROVIDE GUIDANCE ON REDD+?

In addition to the high-level guidance on REDD+ safeguards provided by the UNFCCC, several safeguard frameworks have been established specifically to help governments and project developers implement REDD+ activities that achieve strong social and environmental performance. The most widely used of these safeguard frameworks include the UN REDD SEPC, the REDD+ SES, the Climate, Community and Biodiversity (CCB) Standards and the Plan Vivo Standards (**Table 2**), each of which is explained in more detail below. All of these frameworks seek both to avoid potential negative impacts of REDD+ on biodiversity, and to promote positive benefits for biodiversity. Though they differ in scope, each of these REDD+-specific safeguard frameworks is applied voluntarily.

### 2.3.1 The UN-REDD Social and Environmental Principles and Criteria (SEPC)

The [UN-REDD SEPC](#) were developed as a framework to guide the development of the UN-REDD program and as an optional tool for countries to use in the development of their REDD+ programs. The SEPC are specifically designed to facilitate compliance with UNFCCC REDD+ safeguards. Consistent with the UNFCCC safeguards, the SEPC go beyond "no-harm" and are instead designed to promote positive impacts. The use of SEPC by UN-REDD countries is voluntary: the SEPC are not used to determine eligibility for receiving UN-REDD funding and they do not have a compliance component.

Several SEPC criteria are directly related to biodiversity. For example, SEPC Principle 5 includes criteria for the protection of natural forest from degradation and/or conversion. Principle 6 promotes maintaining and enhancing the conservation of biodiversity and the provision of ecosystem services and Principle 7 is designed to avoid harm to non-forest ecosystem services and biodiversity. In addition to providing a framework for safeguard implementation, UN-REDD has also developed an Excel-based decision support tool designed to facilitate the application of the SEPC ([Benefits and Risks Tool \[BeRT\]](#)).

### 2.3.2 The REDD+ Social and Environmental Standards

The [REDD+ SES](#) include a set of principles, criteria and a framework for indicators that may be voluntarily applied or adapted to government-led REDD+ program to promote and support positive social and environmental outcomes. These standards were developed through a multi-stakeholder process that includes members of civil society, governments, and the private sector, and has been facilitated by the Climate, Community and Biodiversity Alliance and CARE. The REDD+ SES Principle 5 states that "The REDD+ program maintains and enhances biodiversity and ecosystem services", and includes five criteria that support this principle, including requirements to identify, prioritize, and map biodiversity impacts of REDD+, and maintain and enhance biodiversity and ecosystem service priorities.

As of Jan 1, 2014, a total of 11 national and sub-national governments around the world are voluntarily using the REDD+ SES to build their safeguards systems. Other governments are developing their own social and environmental principles and criteria drawing on elements of the REDD+ SES and the guidance provided by the initiative for convening a multi-stakeholder process to develop a safeguards system.

### 2.3.3 The Climate, Community and Biodiversity Standards

The [CCB Standards](#), managed by the Climate, Community and Biodiversity Alliance, are specifically designed for use in the development and implementation of land-based carbon projects (including both reforestation and REDD+ projects). The CCB Standards are the most widely used standards for the social and environmental aspects of forest carbon projects, with more than 110 projects from around the world having

formally initiated the certification process<sup>13</sup>. As they were designed for the project-level, the CCB Standards do not apply to government-led REDD+ programs. The CCB Standards seek to avoid harm to biodiversity and also to produce positive impacts for biodiversity. Project proponents must describe biodiversity conditions at the project start as well as the likely conditions in the absence of project activities. They must then conduct monitoring of biodiversity and demonstrate that project activities result in improved biodiversity when compared to the without-project scenario. The CCB Standards are a certification scheme and require projects to be evaluated by an independent auditor at the design stage (validation) and periodically during implementation (verification). Successful validation and verification do not result in tradable emissions reductions certificates (“carbon credits”); consequently the majority of projects that use the CCB Standards apply them together with a carbon accounting standard like the Verified Carbon Standard (VCS)<sup>14</sup>.

### **2.3.4 Plan Vivo Standard**

The [Plan Vivo Standard](#), managed by the Plan Vivo Foundation, was one of the first standards for forest carbon projects and was designed to promote more sustainable land management in a way that delivers climate, livelihood and ecosystem benefits. It was designed specifically for project-scale use and on smallholder and community lands and is currently being used by at least 20 projects worldwide. The Plan Vivo standard requires farmers to develop land management plans (the “Plan Vivo”) using a participatory process. These plans and their implementation are evaluated by independent auditors to assess their conformance with the Plan Vivo Standard. The standard requires a description of biodiversity and major ecosystem services in and near the project intervention areas and a description of impacts of interventions on biodiversity as well as major ecosystem services. Similar to the CCB Standards, the Plan Vivo Standard requires third party validation and verification. A key difference from the CCB standards is that the Plan Vivo Standard leads to the issuance of emissions reduction certificates.

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<sup>13</sup> <http://www.climate-standards.org/category/projects/>, accessed February 21, 2014.

<sup>14</sup> The VCS does not include detailed requirements regarding biodiversity and does not require positive impacts on biodiversity. The VCS Agriculture Forestry and Other Land Use Requirements state that projects shall identify potential negative environmental impacts and take steps to mitigate them. The VCS does not allow projects that convert native ecosystems.

Table 2: An overview of social and environmental guidelines and standards developed specifically for REDD+ and forest carbon projects

	<b>UN-REDD SEPC</b>	<b>REDD+ SES</b>	<b>CCB Standards</b>	<b>Plan Vivo Standard</b>
<b>Key document (year)</b>	<a href="#">UN-REDD Programme Social and Environmental Principles and Criteria (2012)</a>	<a href="#">REDD+ Social and Environmental Standards Version 2 (2012)</a>	<a href="#">Climate, Community and Biodiversity Standards, Third Edition (2013)</a>	<a href="#">The Plan Vivo Standards (2013)</a>
<b>Guidance document</b>	<a href="#">UN-REDD Programme SEPC: Supporting Document and BeRT</a>	<a href="#">REDD+ SES Guidelines Version 2</a>	<a href="#">Rules for the Use of the CCB Standards; Social and Biodiversity Impact Assessment Manual (Richards and Panfil 2011)</a>	<a href="#">Plan Vivo Guidance Manual</a>
<b>Applicability</b>	National REDD+ Programs; applied voluntarily	Government-led REDD+ Programs; applied voluntarily	Forest (and other land-based) carbon projects; applied voluntarily for certification	Forest carbon projects; applied voluntarily for certification
<b>Biodiversity-related Objective</b>	"1) To address social and environmental issues in UN-REDD National Programs and other UN-REDD Program funded activities. 2) To support countries in developing their national approaches to REDD+ safeguards in line with the UNFCCC."	"Standards to support the design and implementation of government-led REDD+ programs that respect the rights of Indigenous Peoples and local communities and generate significant social and environmental benefits."	"Identify projects that simultaneously address climate change, support local communities and conserve biodiversity. Promote excellence and innovation in project design and implementation. Mitigate risk for investors and offset buyers and increase funding opportunities for project developers."	"Plan Vivo is a framework for supporting communities to manage their natural resources more sustainably, with a view to generating climate, livelihood and ecosystem benefits."
<b>Scale</b>	National REDD+ Program	National or jurisdictional REDD+ program	Project	Project
<b>Who demonstrates compliance?</b>	National government	National or jurisdictional government	Project proponent	Project proponent
<b>Who assesses compliance?</b>	No compliance mechanism	Stakeholders or independent third party	Third-party auditor	Third-party auditor
<b>Provisions for harmonization with other systems/ requirements</b>	Designed to be consistent with and help countries meet commitments to CBD and other conventions	Requires conformance with other applicable conventions, including CBD, and that REDD+ impacts on biodiversity priorities identified in NBSAPs are considered.	Requires compliance with applicable international treaties and agreements	Not included
<b>Transparency of reporting</b>	Includes criteria on transparency and active dissemination of information	Transparency and access to information are part of several criteria. Guidelines for the use of REDD+ SES at country level require assessment reports against REDD+ SES indicators to be reviewed by stakeholders and published.	Requires monitoring plans and reports to be made publically available	Transparency is a requirement, including documentation of community participation and annual reports published online.

## 2.4 WHAT FUNDER POLICIES ARE INFORMING HOW REDD+ PROGRAMS OR PROJECTS ADDRESS BIODIVERSITY ISSUES?

In addition to the official UNFCCC guidance on REDD+ safeguards and the REDD+ specific safeguard standards that have been developed, the implementation of REDD+ programs or projects is often shaped by the policies of funders. A variety of government agencies and multilateral mechanisms provide funding for REDD+. Each of these funders have their own safeguards policies, most of which predate REDD+ and are applicable to all of the funder's programs, including REDD+ activities and forest carbon project development. In this report some of the environmental requirements, standards and safeguards of the some key funders currently funding forest carbon and REDD+ activities are reviewed. These include USAID, IFC, GEF, and the World Bank (**Table 3**). It is important to note that while all of these funder policies have the goal of avoiding harm to biodiversity, none of them require that funded activities have positive impacts on biodiversity.

### 2.4.1 The United States Agency for International Development (USAID)

While USAID has an overall climate change strategy that includes REDD+<sup>15</sup>, USAID does not have an Agency policy specifically focused on REDD+. However, all USAID activities must comply with Title 22 of the Code of Federal Regulations, [Part 216 on Environmental Procedures](#) (22 CFR 216). 22 CFR 216 was approved in 1980 and was designed to avoid negative environmental impacts from USAID's activities. These procedures include provisions for different levels of environmental impact studies, depending on the scope of a project, including environmental assessments and more comprehensive environmental impact statements for projects with greater environmental risk. There are specific provisions for avoiding harm to endangered species and for promoting transparency in reporting. [USAID's Automated Directives System \(ADS\) 204](#) is the companion document that describes the way in which 22 CFR 216 must be applied.

In addition to 22 CFR 216, USAID has several policies that may guide its investments in REDD+ related activities. The majority of USAID's REDD+ funding currently comes from the Global Climate Change initiative and specifically from the Sustainable Landscapes pillar, which does not have specific biodiversity requirements. In some instances REDD+ activities may be co-financed with funds that are part of an earmark for biodiversity conservation. To qualify for biodiversity earmark funds, projects must meet the internal "Biodiversity Code"<sup>16</sup>. USAID recently released (March 2014) a new Biodiversity Policy that will orient future biodiversity related investments<sup>17</sup>; like the Biodiversity Code, it does not include specific provisions for REDD+.

USAID missions also conduct environmental analyses that seek to inform the strategic planning that is done at the mission level (ARD 2005). These analyses, which must be done to comply with the Foreign Assistance Act 118 and 119, describe the state of biodiversity and tropical forests and the extent to which USAID investments are addressing key threats. In some cases, REDD+ initiatives might be seen as a way to address the identified threats.

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<sup>15</sup> See USAID Climate Change and Development Strategy 2012 – 2016, available at [http://www.cgsdev.org/doc/Rethinking%20Aid/Climate\\_Change\\_&\\_Dev\\_Strategy.pdf](http://www.cgsdev.org/doc/Rethinking%20Aid/Climate_Change_&_Dev_Strategy.pdf)

<sup>16</sup> The Biodiversity Code includes for main requirements: 1) The program must have an explicit biodiversity objective (it isn't enough to have biodiversity conservation result as a positive externality from another program); 2) Activities must be identified based on an analysis of threats to biodiversity and a corresponding theory of change; 3) Site-based programs must have the intent to positively impact biodiversity in biologically significant areas; and 4) The program must monitor indicators associated with a stated theory of change for biodiversity conservation.

<sup>17</sup> See USAID Biodiversity Policy, March 2014, Washington DC, available at <http://www.usaid.gov/biodiversity/policy>

## 2.4.2 The Global Environment Facility (GEF)

The GEF similarly does not have a specific policy for REDD+ implementation, but instead has criteria that apply to the agencies that administer GEF funding and which would therefore apply to any agencies implementing REDD+ activities. GEF Agencies include multiple regional development banks, United Nations agencies, the World Bank, and a small number of civil society organizations. These agencies must have their own safeguards in place that are at least as strong as those described in the [Policy on Agency Minimum Standards on Environmental and Social Safeguards](#) (Updated September 12, 2013). The countries or civil society organizations that implement GEF-funded activities would therefore be bound not directly to the GEF safeguards but to the safeguards of the agency that administers the funding.

The Policy on Agency Minimum Standards on Environmental and Social Safeguards is based on five principles, including three with direct relevance for biodiversity. These include: “The GEF shall not finance activities that degrade or convert critical natural habitats;” “The GEF shall not finance the construction or rehabilitation of large or complex dams;” and “The GEF shall not finance the introduction or use of potentially invasive, non-indigenous species.” GEF agencies must meet eight criteria based on the five principles, and a set of more detailed minimum requirements specifies how the criteria must be met.



## 2.4.3 International Finance Corporation (IFC) Performance Standards

The [IFC Performance Standards on Environmental and Social Sustainability](#) (2012) are requirements for projects that receive IFC financing and must be met through the life of an investment by the IFC. There are eight Performance Standards (PS), with two being most directly relevant for the biodiversity aspects of REDD+ activities. These include: PS 1 on Assessment and Management of Environmental and Social Risks and Impacts; and PS 6 on Biodiversity Conservation and Sustainable

Management of Living Natural Resources. Like the other funder policies described here, the PS are designed to avoid harm and not to specifically generate positive impacts for biodiversity. Uniquely among the policies considered in this report, the PS includes provisions for ensuring no net loss of biodiversity in IFC-funded activities. The PS describe the use of a mitigation hierarchy which includes minimizing negative impacts and using biodiversity offsetting for impacts that cannot be avoided. With biodiversity offsetting, companies that cause the loss of biodiversity in one place may compensate for this negative impact by protecting or restoring biodiversity in another area (BBOP 2013). Biodiversity offsetting may be relevant for REDD+ as it could provide an additional source of funding that complements carbon payments (Lanius *et al.* 2013).

## 2.4.4 The World Bank Operational Policies

The [World Bank’s Operational Policies](#) (OP) are safeguards that apply to all of the Bank’s operations, and not exclusively to the Bank’s REDD+ activities. Similar to the other funder policies, the OPs are designed to avoid harm, and not to specifically promote biodiversity benefits. The OPs on Environmental Assessment (4.01), Natural Habitats (4.04), and Forests (4.36) are especially relevant to REDD+ and biodiversity. The policies are designed to identify, avoid, and mitigate negative impacts of Bank lending. The OPs have special importance for REDD+ because they apply to some of the most important funds that are supporting REDD+ activities. These include the FCPF, which is financially supporting the REDD+ readiness process in

20 countries and which will purchase emissions reductions from REDD+ programs through the Carbon Fund, the Forest Investment Program (FIP - which also supports REDD in developing countries), and the Biocarbon Fund, which funded a number of early forest carbon projects, and which recently announced a new tranche of funding during the Warsaw COP ([World Bank 2013](#)).

The FCPF has adopted a specific process for applying the World Bank safeguards to national REDD+ programs. This process includes a two tiered approach that includes a Strategic Social and Environmental Assessment (SESA) and an Environmental and Social Management Framework (ESMF). The SESA is applied to integrate social and environmental considerations (and OP compliance) into the design of a country's REDD+ strategy. The ESMF is then developed to guide management of social and environmental issues during the implementation of the strategy. The application of the ESMF leads to development of specific environmental management plans for how negative environmental impacts of the REDD+ program will be managed once site-specific activities are defined.

The [FCPF Methodological Framework](#) includes additional safeguards provisions that must be met for countries to be eligible for payments from the Carbon Fund. The Methodological Framework requires that countries meet the World Bank OPs and that countries also promote and support the safeguards included in UNFCCC guidance related to REDD+. A separate [FCPF document](#) (FCPF 2013) describes how the OPs relate to the UNFCCC safeguards. The Methodological Framework includes criteria and indicators for assessing safeguards compliance.

Table 3: An overview of funder safeguards policies that are relevant to the biodiversity aspects of REDD+. (Note: these policies were designed to apply broadly to the funder's activities and were not specifically designed to apply to REDD+.)

	<b>USAID</b>	<b>GEF</b>	<b>IFC</b>	<b>World Bank</b>
<b>Key document (year)</b>	<a href="#">22 CFR 216 Agency Environmental Procedures (1980)</a>	<a href="#">Policy on Agency Minimum Standards on Environmental and Social Safeguards (2013)</a>	<a href="#">IFC Performance Standards on Environmental and Social Sustainability (2012), especially PS1: Assessment and Management of Environmental and Social Risks and Impacts and PS 6: Biodiversity Conservation and Sustainable Management of Living Natural Resources</a>	<a href="#">Operational Policies, especially OP 4.01: Environmental Assessment (1999); OP 4.04: Natural Habitats (2001); OP 4.36: Forests (2002)</a>
<b>Guidance document</b>	<a href="#">ADS CHAPTER 204</a>	<a href="#">Guidelines on the Application of the GEF Environmental and Social Safeguard Standards Policy (GN/SD/03)</a>	<a href="#">Guidance Notes: Performance Standards on Environmental and Social Sustainability</a>	<a href="#">Environmental Assessment Sourcebook and Updates (for FCPF SESA and ESMF see also R-PP template and annexes)</a>
<b>Biodiversity- Objective</b>	Avoid negative impacts	Avoid negative impacts	Avoid negative impacts	Avoid negative impacts
<b>Scale</b>	All scales	All scales	Project scale	All scales
<b>Who demonstrates compliance?</b>	USAID staff, contractors and grantees	GEF Agencies, but they in turn require grant recipients to comply	IFC clients (Project implementers)	Recipient of WB financing/support
<b>Who assesses compliance?</b>	USAID staff	GEF Accreditation Panel	IFC financial intermediaries and IFC staff	World Bank staff
<b>Provisions for harmonization with other systems/ requirements</b>	Not specified	"Taking into account such evolution and the harmonization of environmental and social safeguards at the international level, the GEF will review and revise this Policy, as necessary, no later than end-2015."	Requirements "have been guided by the Convention on Biological Diversity"	Not directly part of WB OP's, however efforts have been made to show links with UNFCCC safeguards and to simplify joint compliance with FCPF and UN-REDD requirements (FCPF 2013). The Carbon Fund Methodological Framework explicitly requires that the UNFCCC REDD+ safeguards are promoted and supported.
<b>Transparency of reporting</b>	At time of environmental reviews (prior to funding), requires "Providing reasonable notification to the affected public and, as feasible, encouraging civil society public participation, review, and comment"	Agency systems must: "Disclose draft environmental and social impact assessments in a timely manner, before appraisal formally begins, in a place accessible to key stakeholders including project affected groups and CSOs in a form and language understandable to them."	"The client will provide Affected Communities with access to relevant information <sup>26</sup> on: (i) the purpose, nature, and scale of the project; (ii) the duration of proposed project activities; (iii) any risks to and potential impacts on such communities and relevant mitigation measures; (iv) the envisaged stakeholder engagement process; and (v) the grievance mechanism."	The FCPF indicates that the Environmental and Social Management Framework "should be publicly disclosed and subject to meaningful consultation". The Carbon Fund Methodological Framework also requires compliance with UNFCCC principles for transparency.

## 2.5 CONCLUSIONS – SAFEGUARD FRAMEWORKS AND BIODIVERSITY CONSERVATION IN REDD+

The decisions made in the UNFCCC are the central reference for REDD+ activities globally, and biodiversity conservation is directly addressed in UNFCCC decisions on safeguards. Notably, the UNFCCC concept of safeguards includes both the avoidance of harm and also incentivizing positive impacts. This represents an important opportunity for biodiversity conservation as REDD+ could stimulate new policies and measures and finance that have previously not been available for forest conservation. However, the UNFCCC requirements and guidance are presented at a high level, and do not provide details about the types of biodiversity goals, the conservation actions, or the monitoring methods that countries should use. Any additional guidance from the UNFCCC – e.g., on non-carbon benefits - is likely to remain broad.

The most detailed guidance for achieving biodiversity benefits from REDD+ comes from outside of the UNFCCC. UN-REDD and civil society initiatives like the REDD+ SES, CCB Standards and Plan Vivo Standards include guidelines and specific criteria that REDD+ programs and projects should meet to deliver strong biodiversity performance, meeting or exceeding the UNFCCC safeguards. These REDD+ specific safeguard frameworks are voluntary but provide much needed guidance and are being used widely. Another source of useful guidance comes from the CBD, including a decision with advice on biodiversity and REDD+ and technical reports.

The safeguards requirements of funding agencies are often not REDD+ specific, and frequently do not include a requirement to generate positive biodiversity impacts. Recipients of these funds must therefore satisfy the funder requirements and simultaneously consider ways to meet the goals of generating positive impacts as described in the UNFCCC safeguards and the REDD+ specific safeguard frameworks when applicable.

# 3.0 NATIONAL REDD+ PROGRAMS AND BIODIVERSITY CONSERVATION

The UNFCCC decisions in Bali (2007) indicated that REDD+ would be implemented at the national scale while subnational “early action” efforts were also encouraged to promote learning from real world experience. As of late 2013, more than 50 countries are in the process of developing national REDD+ programs. To comply with UNFCCC safeguards, these programs must consider the potential biodiversity impacts of REDD+ policies and measures at the scale of the whole country, and in light of other national priorities for biodiversity. The objective of this section is to provide an overview of the ways in which countries are addressing biodiversity conservation in the development of their national REDD+ strategies, based on the review of experiences in 14 countries (Figure 1. See **Appendix 1** for a list of the documents reviewed for each country).

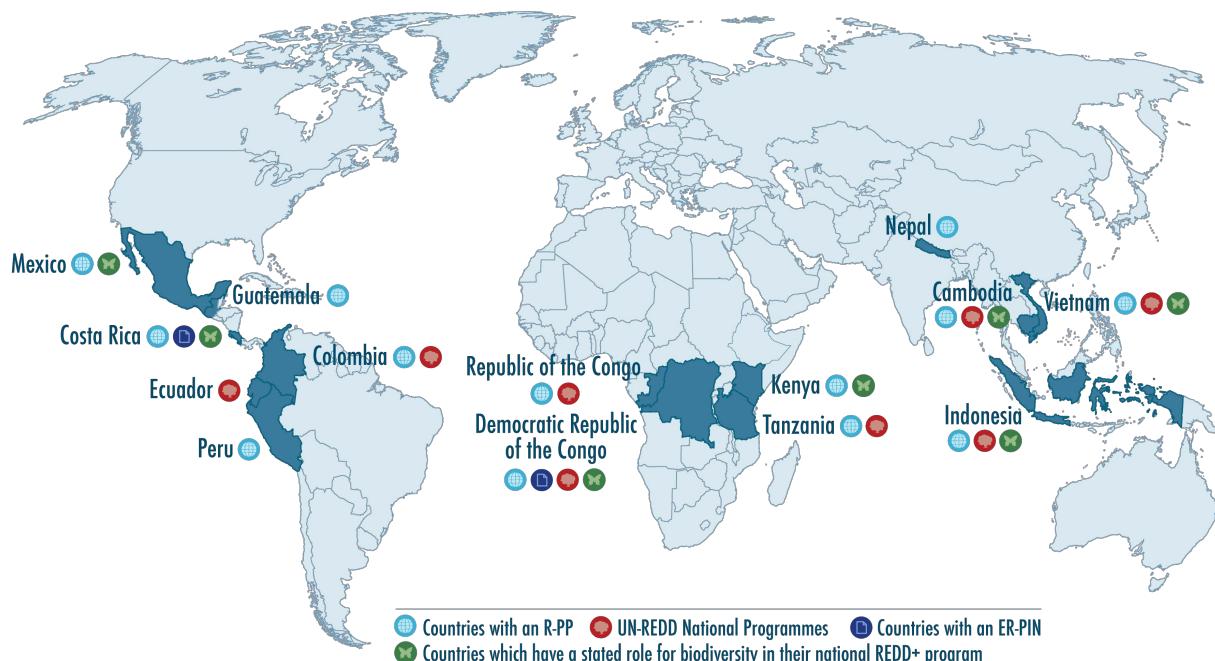


Figure 1. The countries reviewed for this study.

### 3.1 WHAT TYPES OF BIODIVERSITY BENEFITS DO NATIONAL REDD+ PROGRAMS SEEK TO PROVIDE?

None of the R-PP's or UN-REDD national program documents from the 14 reviewed national REDD+ programs identified specific targets for biodiversity conservation, such as targets for the number of hectares of primary forest to be conserved or numbers of threatened species whose populations will be sustained through REDD+ (**Table 5**). However, seven of the programs (Cambodia, DRC, Costa Rica, Indonesia, Kenya, Mexico, and Vietnam) made general statements that indicate that biodiversity conservation may have a prominent role in the development of the REDD+ program (**Table 4**). The other seven countries in the study sample (Colombia, Ecuador, Guatemala, Nepal, Peru, Republic of Congo Tanzania,) did not include statements that indicate that biodiversity conservation is a major objective of their REDD+ program, though they did indicate that their REDD+ programs will comply with REDD+ safeguards.

Of the 14 national REDD+ programs reviewed, Costa Rica and the DRC have progressed the furthest in defining their REDD+ programs and have both submitted ER-PIN's to the FCPF. These documents provide more details about the actions that will be taken to generate emissions reductions, and are a first step towards receiving payments from the FCPF Carbon Fund for verified emissions reductions. The Costa Rica ER-PIN describes activities to be taken across the country, while the DRC ER-PIN is for a sub-national initiative in the Mai Ndombe province, an area nearly 2.5 times the size of the country of Costa Rica. Costa Rica's ER-PIN estimates that the program could contribute to the "potential conservation of 35,000 hectares of high biodiversity value forests not included in the existing system of protected areas and improvement of connectivity in biological corridors." The DRC's ER-PIN indicates that biodiversity conservation is a part of the overall goal of the Mai Ndombe REDD initiative. It does not include a quantitative estimate of biodiversity benefits, but does indicate specific conservation targets, including the protection of important species, like forest elephant and bonobos, the protection landscape connectivity, and the reduction of overhunting.

Table 4: A summary of the stated role of national REDD+ programs in providing biodiversity benefits

Country	Stated role of biodiversity in national REDD+ program	Source
<b>Cambodia</b>	States that "implementation of REDD+ might be expected to lead to deliver significant benefits for biodiversity conservation and local livelihoods (called REDD+ 'co-benefits'), which should be promoted, helping Cambodia to meet its commitments under the CBD"	R-PP
<b>DRC</b>	"Conserve forest carbon stocks through protection of high biodiversity value forest and provision of environmental and cultural services (sacred forests)."	National REDD strategy, Version 3
<b>Costa Rica</b>	Describes the importance of evaluating the potential for REDD+ to be targeted to areas of high biodiversity value.	R-PP
<b>Indonesia</b>	States that the "Need for promotion of co-benefits, such as poverty alleviation, biodiversity conservation and water supply" is a criterion for the design of the program.	UN-REDD National Programme Document
<b>Kenya</b>	"All activities will be designed with a focus on co-benefits such as improving biodiversity and livelihoods of forest dependent peoples."	R-PP

<b>Mexico</b>	Lists three main aspirations for its REDD+ program, including “By 2020 Mexico will have maintained the biodiversity in its territory, strengthened the social capital of rural communities, and promoted economic development through sustainable rural development.”	R-PP
<b>Vietnam</b>	States that the program’s overall objective is to, “contribute to reducing emissions, enhancement of carbon stocks, biodiversity conservation, and at the same time improving the livelihoods and poverty alleviation, environment protection and promoting sustainable development in Vietnam” (Vietnam, 2012).	Prime Minister’s Approval of the national REDD+ program

The ways in which Costa Rica and the DRC planned to generate biodiversity benefits appear to be promising for biodiversity conservation. Costa Rica’s ER-PIN includes goals of expanding the effective size of protected areas by incentivizing the conservation of buffer zones around protected areas. DRC lists the protection of high conservation-value species and the reduction of hunting. If achieved, all of these goals would be important gains for biodiversity. As the first countries to submit ER-PINs, their emphasis on generating biodiversity benefits may set an important precedent for other countries.

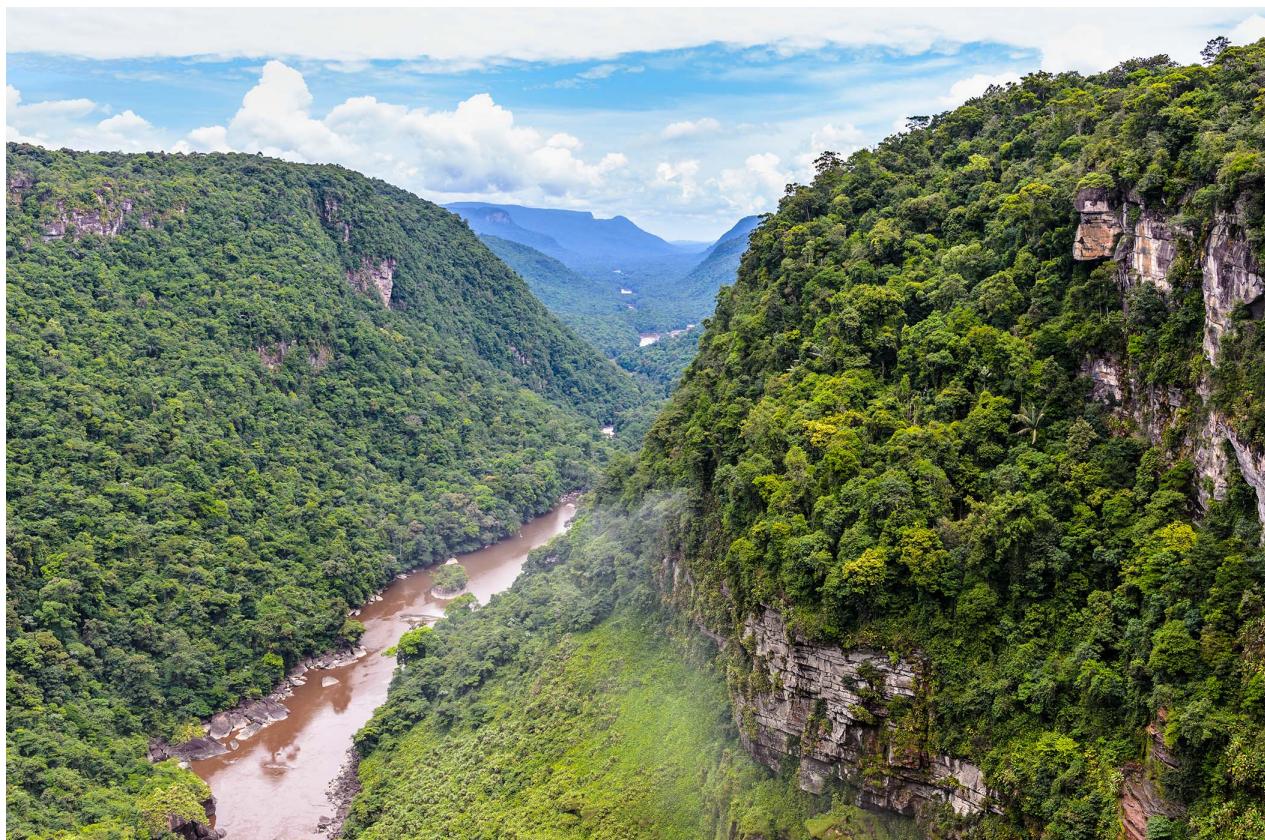


Table 5: An overview of the way in which 14 countries approach biodiversity conservation in the Readiness Preparation Proposal (R-PP) or UN-REDD national program document

		Main Biodiversity Goals	Risks to Biodiversity Identified	Link to National Biodiversity Strategy	Biodiversity monitoring protocol	Biodiversity monitoring linked to NBSAP or other monitoring program?
Africa	<a href="#">Democratic Republic of Congo</a>	To be determined during R-PP implementation.	To be identified during R-PP implementation.	Indicated that linkages will be made with DRC's CBD process.	Not specified. Planned to work with WCMC to develop biodiversity monitoring approach.	Not specified, but states that links with the CBD process is a criterion for policy options.
	<a href="#">Kenya</a>	Stated that a main objective of REDD+ is to reduce pressure on forests, and to improve biodiversity.	Not specified; Country planned to use SESA as required the FCPF.	Not specified.	Not specified. Indicated that discussions will be held with an ongoing biodiversity monitoring initiative (by Birdlife) and may base system on that.	Compliance with treaties, including CBD is listed as a key area of focus.
	<a href="#">Republic of Congo</a>	Not specified.	Not specified; Country planned to use SESA as required the FCPF.	Not specified.	Not specified. Planned to build on existing environmental monitoring systems as possible and identified the agency responsible for biodiversity monitoring.	Mentioned links to EU's Forest Law, Enforcement, Governance and Trade; mentioned CBD as a legal justification for doing biodiversity monitoring in the REDD+ program.
	<a href="#">Tanzania</a>	Draft National REDD+ Strategy and R-PP refer to existing national goals of conserving and enhancing biodiversity.	Not specified; Country planned to use SESA as required the FCPF.	Indicated intent for REDD program to contribute to national biodiversity conservation policies	Not specified. Biodiversity monitoring would be part of the Measurement, Reporting and Verification (MRV) system. "The monitoring system will be implemented at national, sub-national and local levels, involving government and state actors, civil society, NGOs, private sector entities, local government authorities including villages, women groups, the youth and teens and consumer groups."	Not explicitly linked to the NBSAP, though REDD+ is described as supporting other laws that have biodiversity goals.
Asia	<a href="#">Cambodia</a>	Stated that biodiversity should be promoted as a co-benefit of REDD+, helping Cambodia meet its commitments under the CBD.	Not specified; Country planned to use SESA as required the FCPF.	States that REDD+ is to be designed to contribute to country CBD goals.	Not specified. Monitoring of biodiversity would be included in MRV system, and would be based on existing biodiversity monitoring systems.	Indicated that REDD+ program would be designed to support CBD goals.
	<a href="#">Indonesia</a>	Identified a need for promoting co-benefits such as biodiversity, and stated that REDD+ should provide sustainability for biodiversity. For official pilot sites, there was a plan to overlay mapping of biodiversity and other context to optimize site selection.	Not specified; Country planned to use SESA as required the FCPF.	Not specified.	Not specified.	Not specified.
	<a href="#">Nepal</a>	Biodiversity conservation was listed as a criterion for defining strategic options for REDD+.	Not specified; Country will use SESA as required the FCPF and	Not specified.	Planned to use REDD+ SES process to select protocols.	Not specified.

		Main Biodiversity Goals	Risks to Biodiversity Identified	Link to National Biodiversity Strategy	Biodiversity monitoring protocol	Biodiversity monitoring linked to NBSAP or other monitoring program?
Latin America			REDD+ SES SESA.			
	<a href="#">Vietnam</a>	Conservation of biodiversity was listed as a main goal of the program, but no specific targets were listed.	Not specified; Country planned to use SESA as required the FCPF.	Not specified.	Biodiversity and ecosystem services standards and indicators were to be considered for integration into the carbon MRV system.	Not specified.
	<a href="#">Colombia</a>	No specific biodiversity goals in the R-PP, however it referred to other national strategies and priorities that have biodiversity objectives (National Development Plan and National Policy for Integrated Management of Biodiversity and Ecosystem Services).	Not specified; Country planned to use SESA as required the FCPF.	Yes- Described links with monitoring done by regional autonomous sustainable development corporations and links to various national biodiversity programs.	Not specified, but indicated that monitoring of major strategic impacts on ecosystems for mitigation and adaptation to climate change such as moors, swamps and other wetlands will be prioritized and that monitoring will negative and positive impacts, and will include methods for community based monitoring.	Indicated that links to other International Instruments, including CBD, are considered fundamental to REDD+. Stated that monitoring will be based on CBD indicators of forest biodiversity.
	<a href="#">Costa Rica</a>	Indicated that it is important to evaluate ways to apply funding for areas of high biological diversity value, and to use REDD+ to conserve forest in buffer zones of protected areas and for corridors	Yes- listed several risks, including lack of knowledge of conservation priorities with changing climate; Use of poor genetic stock for restoration; Increased fires risk; Inappropriate site selection.	REDD+ program designed to reinforce ongoing PES program which has biodiversity goals.	Yes- Planned to use the monitoring already in place for Proyecto Ecomercados; details not provided in R-PP.	REDD+ program was designed to reinforce ongoing PES program which has a biodiversity monitoring system.
	<a href="#">Ecuador</a>	Stated an explicit objective for REDD+ to deliver multiple social and environmental benefits. Specific biodiversity benefits were not described; there is a joint initiative with the United Nations Environment Programme – World Conservation Monitoring Center (UNEP-WCMC) to identify environmental benefits.	Not specified.	Not specified.	Not specified. Planned to develop a multiple-benefits monitoring system.	National Directorate of Biodiversity participates in the REDD+ process, but otherwise not specified.

		Main Biodiversity Goals	Risks to Biodiversity Identified	Link to National Biodiversity Strategy	Biodiversity monitoring protocol	Biodiversity monitoring linked to NBSAP or other monitoring program?
Latin America (continued)	<a href="#"><u>Guatemala</u></a>	Indicated that potential benefits of REDD+ include: maintenance of ecosystem services; strengthening of the management of the national protected areas system; strengthened conservation of strategic forest ecosystems.	Not specified. Indicated that the identification of risks would consider safeguards of both UNFCCC and CBD. Planned to also use SESA.	Planned to use the Forest and Climate Change Group to harmonize approaches to UNFCCC, CBD, and CCB	Not specified. Stated that stakeholders would define indicators through a participatory process.	National Reports to CBD were listed as a potential source of information for REDD+ safeguards monitoring; also referred to the Guatemalan Forestry Information System as a possible resource.
	<a href="#"><u>Mexico</u></a>	One of three REDD+ Strategy aspirations: "By 2020, Mexico will have maintained the biodiversity in its territory, strengthened the social capital of its rural communities, and promoted economic development through sustainable rural development."	Stated that there is risk in prioritizing carbon and that this could result in fewer resources to areas with biodiversity or social importance. Planned to use SESA.	Stated that integration with institutions responsible for biodiversity in Mexico is considered key. No explicit mention of national biodiversity strategy.	Not specified. Planned for MRV system to be developed to work at different scales, including nested, and be able to incorporate other types of information (incl. biodiversity). MRV system will evaluate fragmentation and connectivity. Stated that the system will promote monitoring by communities.	Indicated the need to coordinate with other processes, but no details were provided.
	<a href="#"><u>Peru</u></a>	Not specified, though REDD+ is part of the National Forest Conservation and Climate Change Program, which includes biodiversity conservation as a priority.	Not specified; Country planned to use SESA as required the FCPF.	R-PP referred to the CBD and recognized potential links with REDD+, but provided no details of how processes would be linked.	Not specified, but provided an extensive list of expected characteristics of the monitoring program: participatory selection of indicators, including indicators of negative impacts; use of data from multiple scales; links with MRV system; monitoring to begin with simple methods and increase in complexity as capacities develop.	Recognized the relevance of CBD to REDD+, but no description of specific links to monitoring for NBSAP.

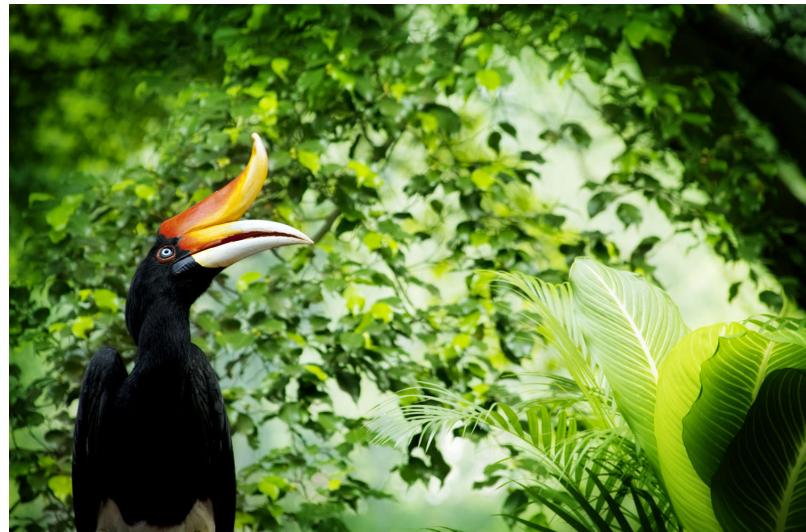
## 3.2 ARE BIODIVERSITY-FRIENDLY POLICIES AND MEASURES BEING CONSIDERED IN NATIONAL REDD+ PROGRAMS?

Most of the R-PP's or UN-REDD national program documents reviewed do not identify specific policies and measures to conserve biodiversity through REDD+, such as reducing hunting, or conserving areas that are important to key species. The two notable exceptions are national REDD programs in the DRC and Costa Rica, both of which provide specific detail on which areas will be prioritized for REDD+ implementation to ensure the delivery of biodiversity benefits, and what activities will be conducted to achieve biodiversity benefits.

The DRC National REDD+ Strategy, developed after the country's R-PP and national program documents, states that spatial planning is being done to prioritize areas for conservation and that the national network of protected areas is being remodeled and expanded as part of their REDD+ strategy. In addition, the strategy mentions a list of specific actions planned to achieve biodiversity benefits including: "environmental education and sensitization; local governance empowerment, specifically on natural resources management; capacity building on local biodiversity monitoring (hunting prize, hunting permits, etc.), completed by scientific support; anti-poaching and surveillance support for communities; and protein substitution and agricultural intensification programs to provide the community with viable, culturally welcome alternatives to bush meat." (DRC ER-PIN 2013).

Costa Rica's R-PP similarly provides information about how biodiversity benefits will be achieved through REDD. For example, the R-PP notes that areas in the buffer zones of existing protected areas will be prioritized for REDD+ implementation, as a way to expand the effective size of the protected areas. In addition, Costa Rica's ER-PIN states: "To maximize environmental co-benefits such as protection of the quality and availability of water and biodiversity, priority will be given to avoided deforestation in basins with water concessions for human consumption, irrigation, and hydroelectric power production; priority will also be given to under-represented habitats in the system of national parks and biological reserves considered as biodiversity hotspots".

In contrast to DRC and Costa Rica, the remaining 12 countries in the survey provided little detail on how the national level REDD+ program will deliver biodiversity benefits. This lack of detail probably reflects the preliminary nature of the R-PPs and national program documents, and the fact that many countries will have the opportunity during the implementation of the R-PP to design policies and measures for biodiversity conservation. For example, all of the countries that are receiving FCPF funding are required to implement a SESA that facilitates the ex-ante identification of social



and environmental impacts from the REDD+ program and enables social and environmental considerations, including biodiversity. The SESA is incorporated into the formulation of the REDD+ strategy, so it is likely that the specific policies and measures that the REDD+ programs will include to ensure biodiversity benefits will be developed when these countries begin the SESA process.

It is interesting to note that the seven countries in this study that have UN-REDD national programs have received direct support for the prioritization of REDD+ activities, with sophisticated spatial analyses of the distribution of carbon and biodiversity across each country, or in the case of Indonesia, for the province of Sulawesi. Such analyses have been conducted by the UNEP-WCMC for Sulawesi (Epple *et al.* 2012, Blyth *et al.* 2012), Vietnam (Mant *et al.* 2013), DRC (Musampa *et al.* 2012) and Ecuador (Bertzky *et al.* 2010). These studies were often done concurrently with the development of the R-PPs and national program documents but their results were not included in the R-PPs or program documents. Of the 7 UN REDD countries reviewed, only the DRC indicated that spatial planning would be part of the REDD+ design process. It is therefore unclear if and how most of the countries will make use of spatially explicit biodiversity data to prioritize REDD+ policies and measures.

### **3.3 DO NATIONAL REDD+ PROGRAMS LINK TO NATIONAL BIODIVERSITY OBJECTIVES, AND CONVERSELY, DO THE NATIONAL BIODIVERSITY DOCUMENTS INDICATE COORDINATION WITH THE REDD+ PROGRAM?**

REDD+ is being designed under the UNFCCC as a mechanism for climate change mitigation. However, given its potential for conserving or restoring biodiverse tropical forest, there are important synergies with the CBD which has the goals of conserving biological diversity and promoting its sustainable use, and the fair and equitable sharing of the benefits of genetic resources.<sup>18</sup> Nearly all of the countries that are party to the UNFCCC are also parties to the CBD (with the notable exception of the United States). In addition, the new CBD strategic plan for biodiversity, adopted at the CBD COP in 2010, is highly relevant to REDD+. Of the 20 Aichi targets which countries agreed to achieve by 2020, five targets have clear potential links to REDD+ (Miles *et al.* 2013; **Table 6**).

However, despite the apparent synergies between REDD+ and CBD goals, there is still significant scope for national REDD+ programs to more closely align with national biodiversity conservation efforts. Although all of the 14 countries reviewed are parties to the CBD, have developed a national biodiversity strategy, and have submitted multiple national reports on biodiversity to the CBD, only eight of the countries mentioned CBD commitments in their R-PPs or national REDD+ program documents and indicated that there will be coordination with national biodiversity conservation efforts. In addition, even among those countries that indicated a planned link to the national biodiversity commitments, no details were provided on how this will be achieved. Of the countries reviewed, Cambodia's R-PP included one of the most explicit statements of plans to link REDD+ the CBD process, indicating that REDD+ co-benefits should be promoted, helping Cambodia to meet its commitments under the CBD, however no information was provided on how this will be done.

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<sup>18</sup> In addition to the CBD, other international conservation-related agreements have relevant monitoring and reporting requirements that may be relevant for biodiversity monitoring under REDD+, such as the Ramsar Convention, which has adopted a specific resolution on the linkages with climate change and wetlands. See [Resolution XI/14: “Climate change and wetlands: implications for the Ramsar Convention on Wetlands”](#)

Table 6: The five Aichi Targets most directly relevant to REDD+

Aichi Target (CBD Decision X/2)	Indicative Indicators (CBD Decision XII/35)	Relevance for REDD+
<b>Target 5</b> By 2020, the rate of loss of all natural habitats, including forests, is at least halved and where feasible brought close to zero, and degradation and fragmentation is significantly reduced.	<ul style="list-style-type: none"> <li>Trends in condition and vulnerability of ecosystems</li> <li>Trends in the proportion of natural habitats converted</li> <li>Trends in primary productivity</li> </ul>	The financial incentives from REDD+ may lead to policies and measures that dramatically reduce deforestation and forest degradation. Reduced forest fragmentation is not explicitly addressed under the UNFCCC, but countries could choose to address fragmentation in the design of their REDD+ program.
<b>Target 7</b> By 2020, areas under agriculture, aquaculture and forestry are managed sustainably, ensuring conservation of biodiversity.	<ul style="list-style-type: none"> <li>Trends in the proportion of products derived from sustainable sources</li> </ul>	The goal of managing agricultural areas sustainably implies that agriculture would not drive deforestation and this is vital for the success of REDD+. Also, the sustainable management of forests relates directly to REDD+, and this is an activity that may be directly incentivized through REDD+.
<b>Target 11</b> By 2020, at least 17 percent of terrestrial and inland water, and 10 per cent of coastal and marine areas, especially areas of particular importance for biodiversity and ecosystem services, are conserved through effectively and equitably managed, ecologically representative and well-connected systems of protected areas and other effective area-based conservation measures, and integrated into the wider landscapes and seascapes.	<ul style="list-style-type: none"> <li>Trends in the delivery of ecosystem services and equitable benefits from protected areas</li> </ul>	Some forest carbon projects are already contributing to the expansion and improved management of protected areas (Section 2 of this report). At the national level, there is an opportunity for countries to use REDD+ to improve the management and/or expand the protected areas system.
<b>Target 14</b> By 2020, ecosystems that provide essential services, including services related to water, and contribute to health, livelihoods and well-being, are restored and safeguarded, taking into account the needs of women, indigenous and local communities, and the poor and vulnerable.	<ul style="list-style-type: none"> <li>Trends in emerging zoonotic diseases</li> <li>Trends in nutritional contribution of biodiversity</li> <li>Trends in natural resource conflicts</li> <li>Trends in the condition of selected ecosystem services</li> <li>Trends in biocapacity</li> </ul>	REDD+ provides incentives for maintaining and restoring forest, thereby providing carbon storage and sequestration and other ecosystem services, like water regulation and provision. REDD+ can be designed to maximize the provision of ecosystem services to local people.
<b>Target 15</b> By 2020, ecosystem resilience and the contribution of biodiversity to carbon stocks has been enhanced, through conservation and restoration, including restoration of at least 15 percent of degraded ecosystems, thereby contributing to climate change mitigation and adaptation and to combating desertification.	<ul style="list-style-type: none"> <li>Population trends of forest-dependent species in forests under restoration</li> </ul>	This target speaks directly to the role of forests as reservoirs of carbon. The '+' in REDD+ includes the conservation and enhancement of forest carbon stocks, making REDD+ a possible source of finance to support this target.

### 3.4 ARE BIODIVERSITY MONITORING METHODS DESCRIBED, AND ARE THESE COORDINATED WITH OTHER NATIONAL MONITORING PROGRAMS?

Shared monitoring of biodiversity for both REDD+ and NBSAPs is an obvious opportunity and could benefit both the safeguards information systems that are being developed for REDD+ and the monitoring that is done for the CBD. Parties to the CBD are required to submit national reports approximately every four years to describe their efforts to meet CBD objectives, which is similar to the frequency of national

communications to the UNFCCC. Understanding the monitoring and reporting structure of the CBD can provide useful lessons for biodiversity aspects of REDD+.

CBD COP 8 in Brazil in 2006 provided the foundation for monitoring progress on the Convention's biodiversity goals and targets. In its decision<sup>19</sup>, it laid out a series of provisional indicators to measure implementation of the CBD's strategic goals and objectives. The indicators were initially quite broad and open to interpretation, allowing for flexibility as the Strategic Plan itself was updated. At COP 10 in 2010, the Convention established the Strategic Plan for Biodiversity 2011-2020 and its associated Aichi Biodiversity Targets, which constituted a major overhaul of their monitoring and reporting process. As part of the framework, the CBD created the Ad Hoc Technical Expert Group (AHTEG) on Indicators for the Strategic Plan to provide recommendations on a more concrete and reliable set of indicators to be used for future national reporting. A review of the fourth national report (Bubb *et al.* 2011) was conducted to help the AHTEG. This review showed that 24 percent of countries reported no biodiversity indicators in their report and that only 36 percent of countries presented indicators with supporting data or figures. Using the provisional indicators from COP 8 as a starting point, the AHTEG generated a set of 12 'headline' indicators, each of which contain a number of more detailed 'operational' indicators. The final report<sup>20</sup> of the AHTEG's June 2011 meeting was eventually adopted by the Convention at COP 11 in 2012. The indicator framework generated by the AHTEG is to be used as a rubric for the fifth national report, due March 31, 2014. At COP 12 in Korea later this year, the CBD will use the fifth national reports, and the indicator framework used within them, to conduct a mid-term review of the Strategic Plan and the Aichi targets.

The operational indicators are conceptually divided into three broad categories: an A group that contains indicators with readily available data and peer-reviewed methodologies; a B group that requires development in order to be implemented at the national level, but will fill urgent gaps in the monitoring framework; and a C group that can be used at a national level, but would be difficult to use in global biodiversity monitoring, due to comparability issues. Indicators in the A group include extinction risk trends of habitat-dependent species, trends in total freshwater usage, and trends in extent of marine protected areas, all of which can be linked to readily available datasets on the national level. In contrast, the C group includes indicators such as trends in the condition of ecosystem services, guidelines and applications of economic appraisal tools, and trends in awareness and attitudes towards biodiversity, none of which have distinct datasets that can be compared across Parties' reporting. The AHTEG also provided broad recommendations about the indicators, including that the framework as a whole must be implemented in a flexible manner to conform to national circumstances. Many of these indicators that can be used for CBD national reports are also relevant for REDD+ (Tyrell and Alcorn, 2011), as can be seen in Table 6. Coordinated monitoring could lead to improved and expanded data collection at reduced cost compared to the implementation of parallel monitoring systems. While the indicators are not mandatory (and are not linked to any results-based funding as in REDD+), they provide a good starting point for the design of a biodiversity monitoring plan for REDD+ safeguards information systems.

Throughout the development of indicators for monitoring and reporting on CBD targets a number of analyses have generated recommendations for how the framework can be most effectively implemented. The CBD adopted<sup>21</sup> the indicator framework set out by the AHTEG as an annex to the decision, but noted that it should remain flexible to account for national circumstances. The Convention also agreed that the indicators require phased development for global use and that the Secretariat should provide assistance to developing countries in implementing indicator frameworks. Gaps in current approaches to biodiversity monitoring have been identified as a lack of a global baseline to measure biodiversity against, a wide range of value perceptions

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<sup>19</sup> [Decision VIII/15](#): "Framework for monitoring implementation of the 2010 target..."

<sup>20</sup> [Report of the AHTEG on Indicators for the Strategic Plan for Biodiversity 2011-2020](#)

<sup>21</sup> [CBD Decision XI/3](#): "Monitoring progress in implementation of the strategic plan..."

about among different disciplines, and insufficient geographic coverage of datasets.<sup>22</sup> As part of its decision<sup>23</sup> which laid out plans for implementing the Strategic Plan for 2011-2020, the CBD requested that its SBSTA work to develop “biodiversity metrics to be used to assess the status of biodiversity and its values.”

A number of further challenges were identified in a SBSTA report<sup>24</sup> produced on implementing the Strategic Plan for 2011-2020, which covered measures for monitoring the Aichi targets. This report identified challenges with existing monitoring capacity, as well as recommendations for effective monitoring systems. Some challenges raised included high cost of using on-site observation to track changes in biodiversity, frequent changes and advancements in observation technology that prevents comparability over the long-term, and lack of technical capacity for remote sensing in the national institutions responsible for biodiversity. To overcome some of these obstacles, the SBSTA proposed a number of actions on biodiversity monitoring, including: enhancing data sharing among Parties, especially between developed and developing countries; and creating policy frameworks that actively encourage development of biodiversity data. The report also identifies characteristics of indicators that will be the most effective, without implying that any one set will be sufficient for every implementing Party. These attributes include: policy-based indicators that measure results of discreet and concrete national political objectives; indicators that are associated with pre-existing datasets on a national and sub-national level; and indicators which use regional or global data that has a sufficient resolution to allow for national disaggregation (rather than developing new national data).

The SBSTA provided recommendations<sup>25</sup> based on the aforementioned reports, including: i) increased development of information and capacity; ii) improved access to remote sensing data; iii) more cost-effective collection of on-site observation; iv) improved methodologies for evaluating species growth trends; and v) better integration of science into national policy, particularly within institutions responsible for biodiversity.

The CBD itself has recognized the need for synergies between biodiversity and broader climate objectives, particularly at COP 11<sup>26</sup>, and encourages Parties to strengthen biodiversity monitoring in order to better evaluate climate change impacts. Despite the recognized opportunities and synergies on monitoring biodiversity, it appears that there is currently little coordination between monitoring methods that could be used for REDD+ and those developed under the CBD. Seven of the 14 countries (Kenya, Republic of Congo, Cambodia, Vietnam, Colombia, Costa Rica, Peru) indicated in their R-PP's or national program documents that biodiversity monitoring will make use of existing environmental monitoring systems, while the other seven did not indicate whether this will be done. However, with the exception of Guatemala, none of the R-PPs or national program documents explicitly indicated that the biodiversity monitoring for REDD+ will make use of monitoring done for the country's biodiversity strategy. Guatemala indicates in its R-PP that data collected for CBD may be useful for REDD+ monitoring, but does not specify what type of information that will include. A summary of the approaches to ideas for biodiversity monitoring is presented in **Table 7**.

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<sup>22</sup> [Report commissioned by CBD SBSTA](#): Group on Earth Observations Biodiversity Observation Network (GEO BON). 2011. Adequacy of Biodiversity Observation Systems to support the CBD 2020 Targets. Pretoria, South Africa. Available at:

<sup>23</sup> [CBD Decision X/2](#): “Strategic Plan for Biodiversity 2011-2020”

<sup>24</sup> [SBSTA Report 17/2](#)

<sup>25</sup> [SBSTA Recommendation XVII/1](#): “Scientific and technical needs related to the implementation of the Strategic Plan for Biodiversity 2011-2020”

<sup>26</sup> [CBD Decision XI/21](#): “Biodiversity and climate change...”

Table 7: Possible approaches to monitoring biodiversity in national REDD+ programs, as indicated in R-PPs and national program documents

Country	Possible approaches to monitoring
Cambodia	Environmental monitoring, including for biodiversity, may be based on a scaled up implementation of the Management Information System (MIST-GIS) that was originally developed by GIZ in Uganda and has been used in Cambodia since 2004 for the management of protected areas. Cambodia also indicated an intent to make use of ongoing biodiversity monitoring programs being implemented by conservation non-governmental organizations (NGOs). The country listed several possible biodiversity indicators including forest cover and land-use change, species listed as globally threatened on the International Union for Conservation of Nature (IUCN)'s Red List, presence-absence and population assessments of key wildlife species.
Colombia	Environmental monitoring will be based on an existing program, such as the National System of Environmental Indicators. This program already includes the monitoring of the number of hectares of natural ecosystems, numbers of threatened species, fragmentation of forests, deforestation rates, and area affected by fires.
Costa Rica	The existing monitoring system that is used for the country's payment for ecosystem services program will be used for environmental monitoring in REDD+. The R-PP does not provide details about this system.
Kenya	An initiative was underway to standardize the approaches to biodiversity monitoring that is done by different NGOs, with funding from the Critical Ecosystems Partnership Facility. It included monitoring of species, sites and habitats and was designed to monitor the impact of ongoing conservation investments. Kenya's R-PP stated that the national REDD+ program will coordinate with this ongoing initiative to monitor biodiversity impacts of REDD+.
Peru	The National Forestry Inventory that is under development will include biodiversity data that can serve as a baseline for the REDD+ program. Specific indicators for the measurement of biodiversity impacts from REDD+ will be selected after the baseline is established.
Republic of Congo	The monitoring of non-carbon benefits and impacts, including biodiversity, will rely as much as possible on the existing regulatory framework and agencies responsible for assessing environmental impacts. However, no details were provided about the methods applied. The R-PP also mentioned ongoing biodiversity monitoring being performed by several NGOs as potential sources of information for the REDD+ program.
Vietnam	The R-PP described the potential for environmental monitoring for REDD+ to be integrated with the existing National Forest Inventory program, and the Forest Management Information System. It also stated that piloting of the integration of biodiversity and ecosystem services monitoring into an MRV system for Lam Dong province could provide a model for integration of other environmental monitoring into the national MRV system. However, the R-PP was presented in 2011 and Vietnam no longer plans to integrate these monitoring systems (S. Swan, pers. comm.).

### **3.5 DO COUNTRIES DESCRIBE HOW SUB-NATIONAL ACTIVITIES WILL CONTRIBUTE TO THE BIODIVERSITY GOALS AND MONITORING OF THE NATIONAL REDD+ PROGRAM?**

In all fourteen of the countries reviewed, there are existing REDD+ initiatives at the subnational or project scale. Most of these site-level REDD+ projects are using the CCB Standards which require projects to generate positive impacts on biodiversity and to do biodiversity monitoring. In some countries, REDD+ is also being designed at the scale of sub-national jurisdictions and are applying the REDD+ SES, which also requires positive biodiversity impacts and monitoring. Projects and sub-national jurisdictional REDD+ both represent opportunities for contributing to the biodiversity objectives of the national REDD+ program.

However, despite the prevalence of sub-national REDD+ initiatives in all 14 countries reviewed, few of the countries indicate whether and how the sub-national initiatives will contribute to a national REDD+ biodiversity monitoring system. A notable exception is Peru, where the national government is working with its sub-national governments to develop various aspects of the national REDD+ program, including safeguards, and is drawing on early REDD+ activities (sub-national jurisdictions) as a potential source of monitoring methods. For example, the department of San Martin is applying the REDD+ SES and the national government is drawing from this experience as it builds the national REDD+ program.

This apparent lack of integration of biodiversity monitoring efforts across scales in the other countries is an important missed opportunity. Experiences with biodiversity monitoring in subnational REDD+ initiatives could provide valuable insights into how to effectively monitor biodiversity and could help countries standardize their monitoring methods for all sub-national REDD+ initiatives, so that they provide data that is consistent and comparable and easily aggregated at the national scale.



### **3.6 NATIONAL REDD+ PROGRAMS – CONCLUSIONS**

Most national-level REDD+ programs are still being designed and therefore provide only preliminary (and high-level) information on how they will address biodiversity issues. In many cases the available documents (R-PPPs and national program documents) reflect only the initial plans for a country's REDD+ program, and detailed information on biodiversity is expected to be developed as the program evolves. Despite these limitations, some of the reviewed documents present some preliminary indications about how biodiversity will be approached in the REDD+ programs. In about half of the countries reviewed, biodiversity conservation is described as an important consideration in the design of the REDD+ program, though only the most advanced countries - Costa Rica and DRC - describe concrete biodiversity conservation goals.

There is also currently little information available on the specific policies and measures that countries will take to ensure REDD+ provides biodiversity benefits. Only the more advanced national documents developed in Costa Rica and the DRC include conservation-specific plans, for example prioritizing the protection of ecosystem services and improving governance. In addition to little specificity on biodiversity goals and

specific actions that will be undertaken to achieve these goals, there is currently very little information on how biodiversity will be monitored under national REDD+ programs. While some countries have indicated that they will use or adapt existing biodiversity monitoring initiatives for their REDD+ programs, others have not yet indicated what approach they will use. This also reflects some of the mixed reporting on biodiversity indicators seen under the CBD in countries' NBSAPs.

There are clear synergies between national-level REDD+, CBD monitoring and several of the CBD Aichi Targets, yet few countries indicate that they are taking advantage of these synergies. Only a handful of R-PP's specifically mention the ability of REDD+ to contribute to national biodiversity goals, and conversely, most of the NBSAPs do not explicitly mention links to REDD+. The most recent NBSAPs do describe links with REDD+ activities, and this suggests that the countries that have not submitted revised NBSAPs may still identify ways to coordinate their national biodiversity programs with their REDD+ programs.

While all of the countries reviewed describe sub-national activities as part of their REDD+ programs, none provide a detailed description of how they could make use of sub-national activities to contribute to national biodiversity goals or monitoring. This result is likely due in part to the preliminary nature of the R-PPs and national program documents. However, there may be important synergies from applying compatible monitoring methods at multiple scales, and countries should consider ways to do this.

# 4.0 BIODIVERSITY CONSERVATION IN FOREST CARBON PROJECTS

The first schemes to mitigate climate change through the conservation or restoration of forests emerged in the 1990's, long before REDD was formally introduced to the UNFCCC in 2005. Those early projects were designed to generate multiple benefits, including emissions reductions or removals as well as benefits for local communities and for biodiversity. The number of forest carbon projects grew slowly in the early 2000's and then rapidly in the last five years. Hundreds of forest carbon projects are now being designed or are in operation around the world (Peters-Stanley *et al.* 2013).

The rapidly growing body of smaller scale forest carbon projects provides important information that can be used to improve the outcomes of future projects, and also inform the development of national REDD+ programs. This section presents a review of 17 forest carbon projects (11 A/R projects and six REDD<sup>27</sup> projects) that have been operational for two to fifteen years (**Appendix 2**). The review identifies: 1) what types of biodiversity benefits forest carbon projects aim to provide and what project activities are being undertaken to achieve biodiversity goals; 2) how these goals relate to national biodiversity strategies; 3) what monitoring is being conducted to measure impacts on biodiversity; and 4) what early evidence exists that forest carbon projects are delivering biodiversity benefits.

## 4.1 WHAT ARE THE BIODIVERSITY OBJECTIVES OF FOREST CARBON PROJECTS? AND WHAT ACTIONS ARE THEY TAKING TO ENHANCE BIODIVERSITY CONSERVATION?

All of the 17 forest carbon projects reviewed have stated goals of conserving biodiversity (in addition to enhancing carbon sequestration or reducing GHG emissions). Most of the A/R projects aim to enhance biodiversity conservation by reforesting degraded areas with native trees, which are expected to provide habitat for native plants and animals and improve landscape connectivity (**Table 8**). These projects provide little information about which species are expected to benefit from the reforested areas. In contrast, the six REDD projects seek to enhance biodiversity by preventing forest (habitat) loss, reducing illegal logging, hunting and fishing, and, in one case, expanding the area under national park. In addition, six REDD projects reviewed and one of the A/R projects reviewed had explicit goals of conserving threatened species through the conservation of their habitat (**Table 9**).

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<sup>27</sup> REDD (without the plus) is used here to refer to projects that seek to avoid emissions only by reducing deforestation and/or forest degradation.

Table 8: Summary of the biodiversity goals of the A/R projects reviewed. Additional details are available in Appendix 2

	Biodiversity goals				Explicit goal of conserving Red List species <sup>28</sup>	Potential negative offsite biodiversity impacts expected?	% of trees planted that are native species <sup>29</sup>
Project name	Plant trees, including native species	Reduce pressure on natural forest or natural resources	Improve connectivity for wildlife	Restore habitat for other native species			
<b>TKEN1 Kenya</b>	x	x	x		No	No	8.1
<b>TKEN2 Kenya</b>	x	x	x		No	No	6.9
<b>TKEN3 Kenya</b>	x	x	x		No	No	12.6
<b>TKEN4 Kenya</b>	x	x	x		No	No	12.1
<b>TUGAI Uganda</b>	x	x	x		No	No	0.4
<b>TUGA2 Uganda</b>	x	x	x		No	No	0.3
<b>TINDI India</b>	x	x	x		No	No	91.2
<b>CACRAV Colombia</b>	x			x	No	No	97.2
<b>TGB Uganda</b>	x	x			No	(not described)	(N/A)
<b>UCHMAP Tanzania</b>		x			Yes	Yes	0
<b>CCHAT India</b>	x	x			No	No	100

Table 9: Summary of biodiversity goals of the REDD projects. Details on each of the projects are available in Appendix 2

Project	Biodiversity goals							Explicit goal of conserving CR, EN and VU species?	Potential negative offsite biodiversity impacts expected?
	Prevent habitat loss	Prevent forest degradation	Prevent illegal logging	Prevent illegal hunting and fishing	Protect a corridor for wildlife	Protect endangered species	Expand national park		
<b>CORAZU Peru</b>	x		x	x		x		Yes (4 CR, 4 EN, 13 VU)	No
<b>KASPH1 Kenya</b>	x			x	x	x		Yes-5 spp of mammals (2 EN, 3 VU)	No
<b>KASPH2 Kenya</b>	x			x	x	x		Yes- 5 spp of mammals (2 EN, 3 VU)	No
<b>MAINDO DRC</b>	x	x	x	x		x		Yes, 7 spp of plants (2 En, 5 VU); 1 mammal (EN)	No
<b>NKCAP Bolivia</b>	x	x				x	x	Yes, though a list of species by red list status not included	(Not described)
<b>ALTMAY Peru</b>	x		x	x		x		Yes- 1 spp of plants (5 VU); 12 mammals (1 CR, 2 EN, 9 VU); 9 spp birds (5 EN, 4 VU); 2 amphibians (1 CR, 1 EN)	Yes- risk of leakage of deforestation and illegal extraction of flora and fauna

<sup>28</sup> Species that have been identified by IUCN Red List as vulnerable, endangered, or critically endangered.

<sup>29</sup> The percentage of trees planted that are native species is based on the number of stems, with the exception of TUGA1 and TUGA2 which did not present this information in project documents. For these projects, the percentage reflects the number of hectares planted with native species, divided by the total number of hectares in the project.

## 4.2 ARE FOREST CARBON PROJECTS CONTRIBUTING TO NATIONAL BIODIVERSITY OBJECTIVES?

Forest carbon projects could play a key role in supporting national biodiversity goals and helping countries meet their CBD commitments. Nearly all of the UNFCCC countries are also parties to the CBD and have developed NBSAPs for implementing the convention at the national level. NBSAPs are currently being revised in many countries to show how countries will meet the Aichi Targets, which include multiple REDD+ relevant goals, like halving the rate of loss of natural habitat by 2020 (Miles *et al.* 2013) so the timing is ripe for achieving closer harmonization between the two Rio conventions. The selection of REDD+ biodiversity goals that are consistent with national biodiversity priorities is likely to increase support for a project within a country. This synergy could be increased if projects are also able to apply monitoring methods that are used nationally, and if they contribute monitoring data to a national monitoring system.

However, despite the potential contribution of forest carbon projects to national biodiversity goals, none of the 17 forest carbon projects reviewed explicitly described the contribution that the project will make to national biodiversity objectives. Six projects have been designed to support established national protected areas, but did not explicitly acknowledge the contribution of the project to national biodiversity goals. Since there are important potential synergies between forest carbon projects and biodiversity conservation, it is clear that there is scope for greater explicit consideration of national biodiversity goals during the project design phase.

Forest carbon projects also have important potential synergies with the national-level safeguards systems that countries are developing as part of their national REDD+ programs. The specific biodiversity goals and monitoring approaches for safeguards have not been developed in most countries, and there may be opportunities for projects to contribute methodologies or data to the safeguards systems. For projects with aspirations of being formally recognized as part of national REDD+ programs, it will be important that all aspects, including the approach to biodiversity conservation, are aligned with the national REDD+ program's requirements.

## 4.3 HOW ARE FOREST CARBON PROJECTS MONITORING THEIR IMPACTS ON BIODIVERSITY?

16 of the 17 forest carbon project documents included plans for monitoring aspects of biodiversity, but many of these plans are based on the number of trees established or the area of forest conserved. Field-based methods were predominantly used to assess the A/R projects, while all of the REDD projects used a combination of field-based and remote sensing methods. These methods to measure forest extent were often not accompanied by the measurement of indicators to assess impact on target species of conservation interest (**Table 10**). Among the 11 A/R projects, only two projects planned surveys or inventories of wildlife or vegetation. In addition, there was often a mismatch between the stated biodiversity goals of the A/R projects and the proposed monitoring activities. For example, although seven of the A/R projects indicated that one of their biodiversity goals was to create forest connectivity to facilitate wildlife movement, none of these projects included indicators of forest connectivity or animal movement. The REDD projects, in contrast, tended to have more detail (and more ambitious) biodiversity monitoring plans. All of the REDD projects with biodiversity monitoring plans (five out of six) included a mix of indicators of forest cover, wildlife sightings or surveys, and threats to biodiversity (such as hunting or fires). However, details on how these variables would be monitored, interpreted and used to inform project activities were not presented in the reviewed documents. It should be noted that version three of the CCB released in December 2013 now requires monitoring plans to be developed at the time of project validation. This was not the case in earlier versions of the standard.

Table 10: Characteristics of the biodiversity monitoring plans of the 11 afforestation/reforestation projects and six REDD projects reviewed, including information on how the without-project scenario was created, what types of methods are used, which indicators are monitored and whether monitoring requires experts

	Project	Type of without-project scenario for biodiversity	Remote sensing methods used?	Field-based methods used?	Biodiversity indicators monitored	Field monitoring requires experts?
A/R projects	<b>TKEN1 Kenya</b>	Qualitative	No	Yes	Total hectares planted; Number of trees planted by species; Number and area of native trees by species and age; Hectares planted with native trees in riparian areas	No
	<b>TKEN2 Kenya</b>	Qualitative	No	Yes	Total hectares of the project; Number of tree by species; Number and area of native trees by species; species and age; Hectares of improved riparian areas	No
	<b>TKEN3 Kenya</b>	Qualitative	No	Yes	Total hectares of the project; Number of tree by species; Number and area of native trees by species; species and age; Hectares of improved riparian areas	No
	<b>TKEN4 Kenya</b>	Qualitative	No	Yes	Total hectares of the project; Number of tree by species; Number and area of native trees by species; species and age; Hectares of improved riparian areas	No
	<b>TUGA1 Uganda</b>	Qualitative	No	Yes	Total hectares of the project; Number of tree by species; Number and area of native trees by species; species and age	No
	<b>TUGA2 Uganda</b>	Qualitative	No	Yes	Total hectares of the project; Number of tree by species; Number and area of native trees by species; species and age	No
	<b>TINDI India</b>	Qualitative	No	Yes	Total hectares of the project; Number of tree by species; Number and area of native trees by species; species and age	No
	<b>CACRAV Colombia</b>	Qualitative	Yes	Yes	Wildlife sightings; Forest cover, Plots for inventories of flora	Yes
	<b>TGB Uganda</b>	None	No	Yes	Tree establishment and growth	No
	<b>UCHMAP Tanzania</b>	Qualitative	Yes	Yes	Habitat cover, Flora and fauna surveys	Yes
REDD projects	<b>CHHAT India</b>	Qualitative	No	Yes	Canopy structure; Fire frequency	No
	<b>CORAZU Peru</b>	Qualitative	Yes	Yes	Habitat cover; Presence and abundance of hunted species; Numbers of introduced species; Numbers of illegal hunters and loggers	No
	<b>KASPH1 Kenya</b>	Qualitative	Yes	Yes	Wildlife observations; Number of poaching incidents observed during patrols; Area reforested; Number of native trees established	No
	<b>KASPH2 Kenya</b>	Qualitative	Yes	Yes	Wildlife observations; Number of poaching incidents; Area reforested; Number of native trees established	Yes
	<b>MAINDO DRC</b>	Qualitative	Yes	Yes	Area and status of native forest and/or natural vegetation in the project area; Population size of bonobos; Frequency or intensity of logging, hunting, agriculture conversion, fires	Yes
	<b>NKCAP Bolivia</b>	None	n/a*	n/a	n/a	
	<b>ALTMAY Peru</b>	Qualitative	Yes	Yes	Forest cover; fragmentation; Primate monitoring; Ha reforested with native spp.; Illegal extraction of spp.	Yes

## 4.4 ARE FOREST CARBON PROJECTS BENEFITING BIODIVERSITY?

Fourteen of the projects reviewed indicated that they had achieved biodiversity benefits in the first ten years of implementation (**Table 11**). These claims are based primarily on increases in the area reforested or in the forest conserved. While tree cover may be used as a proxy for biodiversity, it does not provide information about changes in vegetation composition or animal diversity so additional field data on the community composition or population sizes of key species of conservation concern is needed to substantiate the claimed biodiversity benefits. The few projects that did report on wildlife observations or on illegal hunting did not present comparisons with a counterfactual that would allow for a clear understanding of impacts, so additional data is needed to verify positive impacts.

It is still too early to determine whether the existing monitoring methods used by the forest carbon projects will be sufficient to capture any impacts of REDD+ projects on biodiversity. Changes to community composition or populations of key species take time and the reviewed projects have been operating for a relatively short time (range 1 to 10 years). In several cases, the biodiversity monitoring did not begin until after the project start, making trends even more difficult to detect. Nevertheless, repeated monitoring will be needed in the future to provide specific information about the conservation impacts of the projects. More frequent and detailed monitoring implies greater cost, and project developers will need to assess the added value of this more comprehensive information. It is likely, however, that the six REDD projects will indeed have significant positive outcomes from biodiversity due to the large areas of native forest (range of 30,166 to 1,351,963 hectares) they will protect, as long as actions to reduce specific threats to biodiversity and the displacement of threats are addressed. However, quantitative data to demonstrate these benefits are lacking, and it is unclear whether the proposed monitoring plans are sufficient to demonstrate these benefits over the long-term.



The biodiversity benefits of the reforested areas are much less evident, and likely to vary greatly across the 11 projects studied, due to the variation in the types of plantations established (in particular, their use of native tree species), the size of the plantation and its location within the broader landscape. More detailed and comprehensive monitoring of plant and animal species using the reforested areas are necessary to gauge the extent to which these projects will deliver biodiversity benefits.

Table 11: A summary of the biodiversity monitoring results of the 17 forest carbon projects surveyed, as described in project documents

	Project	Does the project report describe positive impacts on biodiversity?	Years of implementation (until the report date)	Main biodiversity results of project implementation
A/R Projects	TKEN1 Kenya	Yes	7	185 ha of native trees established, comprised of 63,000 individual trees
	TKEN2 Kenya	Yes	7.5	322 ha of native trees established, comprised of 86,042 individual trees
	TKEN3 Kenya	Yes	8.5	1203 ha of native trees established, comprised of 300,970 individual trees
	TKEN4 Kenya	Yes	9	446 ha of native trees established, comprised of 91,577 individual trees
	TUGA1 Uganda	Yes	10	6.2 ha of native trees established, comprised of 4,540 individual trees
	TUGA2 Uganda	Yes	10	2.5 ha of native trees established, comprised of 1,134 individual trees
	TINDI India	Yes	9	589.1 ha of native trees established, comprised of 600,154 individual trees
	CACRAV Colombia	Yes	9	Number or hectares of native trees planted to replace pasture was not clearly indicated. Monitoring of other plant and animal species was done, but neither methods nor results are clearly presented.
	TGB Uganda	No	9	2,773.2 ha of forest using Plan Vivo management methods
	UCHMAP Tanzania	Yes	6	Remote sensing revealed no difference in forest cover in most areas managed for conservation compared to the starting conditions. In one area, there was increased forest cover and increased erosion. Surveys of plant and animals did not reveal changes in species compositions.
REDD Projects	CHHAT India	Yes	10	248 ha of native tree species planted on previously barren wasteland
	CORAZU Peru	Yes	4	Forest cover is similar from 2008 to 2012, and the number of infractions for illegal hunting, logging, fishing and the use of exotic species decreased.
	KASPHI Kenya	Yes	1	Native species were planted, Counts of the target mammal species conducted, but no trend data was presented.
	KASPH2 Kenya	Yes	1	Native species were planted, Counts of the target mammal species conducted, but no trend data was presented.
	MAINDO DRC	Yes	1.5	Logging concession converted to conservation concession; Flora and fauna transects completed; biodiversity training workshops held. Quantitative results not presented
	NKCAP Bolivia	n/a	8	Not presented in publicly available documents
	ALTMAY Peru	Yes	4	4,646 ha of avoided deforestation as compared to the baseline; quantitative results to show reduced fragmentation compared to projected deforestation patterns; 51.2 ha reforested with native spp.; biodiversity trainings held; increased interception of illegal extraction of flora and fauna

## 4.5 FOREST CARBON PROJECTS - CONCLUSIONS

All of the projects reviewed described biodiversity conservation goals, but the types of goals and level of specificity differed substantially across projects. Most of the A/R projects reviewed indicated that tree planting will result in greater biodiversity than is found in the highly degraded landscapes where the planting is being done. These projects frequently also indicated that tree planting will reduce pressures on native forest, and that the plantations can serve as corridors between forest fragments. In contrast, the REDD projects had habitat conservation as a primary goal, and also targeted the conservation of high conservation value species.

The biodiversity value of forest carbon projects may be highest when they specifically address recognized conservation priorities. None of the project documents reviewed discussed national biodiversity priorities, though six of the projects were designed to support the conservation of national protected areas.

The biodiversity monitoring methods being used in the projects varied substantially. In some cases, monitoring is based on the number or area of planted trees, and has limited ability to detect other changes in biodiversity. The monitoring methods described for the REDD projects were generally more comprehensive than in the A/R projects. The REDD projects included monitoring of threats to biodiversity, as well direct monitoring of populations of high conservation value species. Detailed monitoring plans that describe the methods used, sampling intensity, and other aspects of monitoring were not provided in the reviewed documents so it was not possible to assess the quality of the monitoring plans and their ability to detect any impacts from REDD+ on biodiversity.

All of the reviewed projects claimed that biodiversity benefits had been achieved. For many of the A/R projects, the establishment of trees, including native species, on degraded lands, was described as a biodiversity benefit. The number of native species planted ranged from 0.3 percent to 100 percent. In the projects with low use of native species, the biodiversity benefits would likely come from the establishment of other plants and animals within the plantation, or from reduced pressure on native forest, but these were not monitored. The REDD projects based their claims of biodiversity benefits primarily on the protection of native forest, and though they have plans for more monitoring other aspects of biodiversity, several of the projects did not yet have results of the detailed monitoring. Additional, long-term monitoring of biodiversity will be needed in each of these projects before it is possible to clearly identify the full extent of biodiversity impacts.

# 5.0 DISCUSSION AND RECOMMENDATIONS

As the details of how REDD+ will be designed and implemented are still being developed and tested, it is too early to determine what the long-term impacts of REDD+ will be on biodiversity conservation. However, early experiences with REDD+, including the development of safeguard frameworks that guide REDD+, the design of national REDD+ programs, and the implementation of forest carbon projects, are all setting important precedents that will shape the long-term impacts of REDD+. Achieving optimal biodiversity impacts will depend on learning from these early experiences and using these lessons to shape future practice.

## 5.1 ARE THE EXISTING REDD+ SAFEGUARD FRAMEWORKS SUFFICIENT TO ENSURE BIODIVERSITY BENEFITS?

Our review suggests that there are significant, high-level policies on how biodiversity should be addressed in REDD+, as well as more detailed safeguard guidelines and standards that provide advice on how negative biodiversity impacts can be avoided and positive impacts promoted.

The UNFCCC REDD+ safeguards decisions, especially the Cancun Agreements, will be a central reference for REDD+ and forest carbon activities, both within and outside of the UNFCCC, for years to come. These decisions, including the provisions to avoid the conversion of natural forest and to incentivize the protection and conservation of natural forest, are significant in that they seek to not only avoid harm to biodiversity but also create positive impacts. A challenge with the UNFCCC safeguards, however, is that they provide little detail and could be interpreted in different ways. The provision to incentivize natural forest conservation and enhance other social and environmental benefits is particularly ambiguous as it is not clear what will constitute evidence that incentives have been provided, or if real benefits have been achieved. During 2014, Parties will discuss whether additional guidance should be provided by the UNFCCC regarding safeguards. Since some REDD+ countries are likely to resist prescriptive guidance and any decisions that are made are likely to allow for flexible interpretation, it is probable that the UNFCCC guidance REDD+ guidance will continue to remain high level.

The REDD+ specific safeguard frameworks can help address the lack of guidance provided by the UNFCCC, as they provide much more detail on how negative impacts on biodiversity could be avoided and positive impacts achieved. The UN-REDD SEPC was designed specifically around the UNFCCC safeguards, and provides a greater level of detail than is found in UNFCCC decisions. The REDD+ SES provides even more guidance that can be used to guide the design and implementation of a REDD+ program that delivers significant social and environmental performance, including compliance with the UNFCCC safeguards. Though not directly relevant for national level REDD+ programs, the CCB Standards, Plan Vivo Standard, and other multiple-benefit standards fill a similar niche at the project scale. In addition, many funders of REDD+ activities have their own safeguard policies and guidance for avoiding harm to biodiversity. There is therefore a substantial and growing body of information that can help guide both governments and project developers in conducting REDD+ activities that avoid harm to biodiversity and instead favor biodiversity conservation.

However, while there is considerable guidance on the safeguards that should be put in place, there is still relatively limited application of these safeguard frameworks in REDD+ activities on the ground, which makes

it difficult to evaluate whether or not the guidance provided is sufficient to deliver significant biodiversity benefits. While there are hundreds of forest carbon projects worldwide, only a small number are in full implementation, have provided detailed biodiversity monitoring information, and have been verified against a multiple-benefit standard, such as CCB or Plan Vivo. Similarly, of the 11 governments applying the detailed REDD+ SES framework, none have fully designed and implemented safeguard systems. It is therefore premature to judge whether the safeguard frameworks that already exist will ensure positive biodiversity outcomes. Comprehensive and long-term monitoring of the biodiversity within existing REDD+ projects and programs will be needed to rigorously assess the net impact of REDD+ on biodiversity in different countries and regions and to determine which safeguard approaches are most effective at delivering biodiversity conservation.

Beyond the frameworks for REDD+, the CBD represents an obvious opportunity for synergy with the biodiversity aspects of REDD+. The large-scale forest conservation and reforestation that REDD+ is meant to incentivize could help achieve at least five of the CBD Aichi Targets. There are similar potential synergies between the monitoring that countries do to assess their progress towards the Aichi Targets, and the monitoring that is needed for an effective safeguards information system for REDD+. In many countries, monitoring for the CBD is basic, however, and uses few quantitative indicators. There is an opportunity, therefore to simultaneously build a national biodiversity monitoring system that supports a country's commitments to the CBD and UNFCCC REDD+. The CBD has provided more detailed guidance on biodiversity monitoring than the UNFCCC, and this guidance can be a useful place to start building the national biodiversity monitoring system.

## **5.2 TO WHAT EXTENT DO EARLY EXPERIENCES WITH NATIONAL-LEVEL REDD+ PROGRAMS INDICATE THAT REDD+ WILL DELIVER BIODIVERSITY BENEFITS?**

The extent to which national-level REDD+ programs are being designed to deliver biodiversity benefits is unclear. All of the R-PPs and UN-REDD national program documents reviewed describe the very early stages of national REDD+ program design, and therefore do not yet include fully developed biodiversity goals, activities or monitoring plans. In about half of the countries reviewed, there are statements that suggest that achieving biodiversity benefits is a priority for the design of the REDD+ program, but these high-level statements must still be translated to specific biodiversity objectives and goals. In addition, most national REDD+ programs do not provide details on what actions will be taken to ensure biodiversity benefits or how monitoring will be conducted to document biodiversity impacts. Also, there is little information on whether countries plan to prioritize REDD+ in areas of particular biodiversity value (e.g., areas of high endemism or areas that are critical to biodiversity goals). As would be expected from a more advanced stage of planning, the reviewed ER-PINs (Costa Rica and DRC) show more clarity regarding biodiversity objectives, actions and initial ideas for monitoring. As the other countries advance with their REDD+ strategies, they may also develop clearer ideas about how to achieve biodiversity benefits through REDD+.

Despite the early stage of national REDD+ implementation, there are preliminary indications that some countries are committed to achieving significant positive impacts on biodiversity through REDD+. The fact that 11 governments are already voluntarily applying the REDD+ SES to the development of their REDD+ activities is promising. Similarly, the fact that some of the countries that are most advanced in their national REDD+ programs- such as Costa Rica- have explicit biodiversity objectives and describe activities to obtain these objectives also bodes well and sets a good precedent. Once REDD+ programs are fully operational at the national level, detailed studies of the biodiversity impacts of these programs should be possible and should also help elucidate which types of policies, measures and interventions are most effective at achieving positive biodiversity outcomes.

## **5.3 DO EXISTING EXPERIENCES WITH FOREST CARBON PROJECTS SUGGEST THAT REDD+ WILL DELIVER SIGNIFICANT BIODIVERSITY BENEFITS?**

Our review suggests that many of the REDD+ projects have the potential to deliver significant biodiversity benefits, especially those that are designed to protect large areas of diverse forest, restore connectivity within forested landscapes and avoid further forest degradation of biodiverse forests. In addition, a significant number of the REDD projects are located in areas that contain species of high conservation concern (such as endemics or International Union for Conservation of Nature Red Listed species). A few also occur within protected areas or in adjacent areas, indicating a potential contribution to national biodiversity objectives. Most of the REDD projects clearly identify the threats to biodiversity, though only a small number clearly indicate how they will address each of these threats.

A key limitation in the design of existing REDD projects, however, is that many of them do not have quantitative baselines that describe the likely conditions for biodiversity in the absence of project activities. This will make it difficult to precisely demonstrate that observed changes to biodiversity are due to project implementation. If the biodiversity objective of a project is to maintain or expand forest cover, then the same projection that is used for land use (i.e., the reference level) can also be used as a biodiversity indicator. For projects with goals of maintaining or expanding the populations of high conservation value species, more sophisticated population modeling would be required.

Many of the projects plan to monitor only a small number of biodiversity indicators and this also limits their ability to understand changes to biodiversity, both positive and negative. This is particularly true in the A/R projects, which focus their monitoring on the establishment of planted trees, many of which are exotic, and not on other biodiversity indicators, like connectivity or reduced pressure on natural forest. More rigorous and detailed biodiversity monitoring would allow better assessment of the impacts of the forest carbon projects and would facilitate adaptive design to improve biodiversity performance over time.

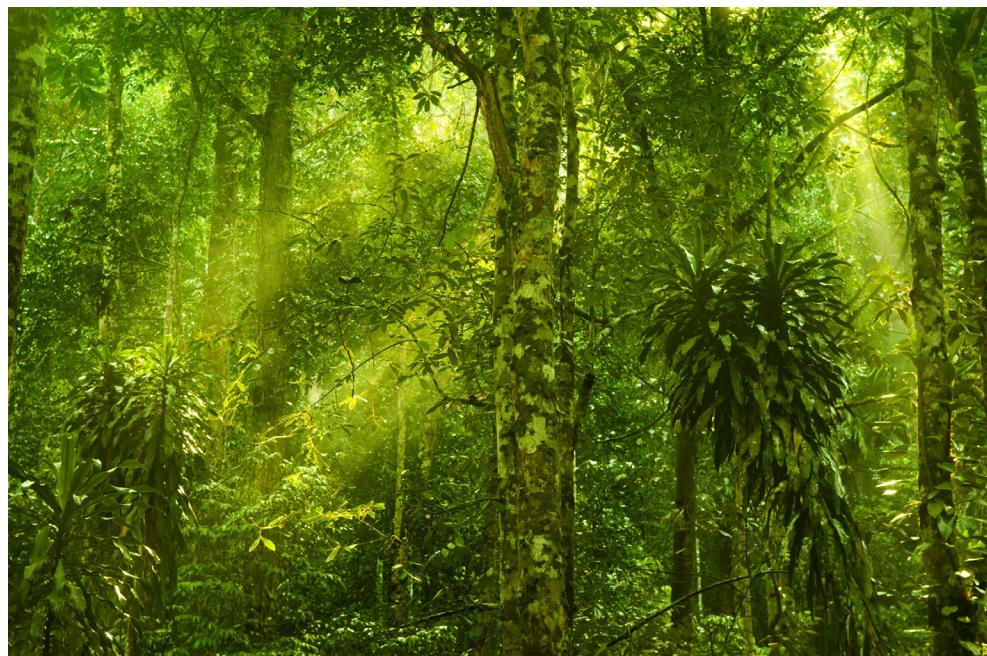
## **5.4 RECOMMENDATIONS FOR IMPROVING BIODIVERSITY OUTCOMES FROM REDD+**

Our review suggests that there are several key factors which could help ensure that REDD+ leads to positive biodiversity impacts.

Specifically, we recommend that REDD+ programs and projects:

- Consider biodiversity issues throughout the design and implementation of REDD+ and include biodiversity as an integral component of REDD+;
- Develop very clear, specific and measurable biodiversity goals for REDD+ activities over both the short and long-term and over different spatial scales;
- Understand the key threats to biodiversity in their area;
- Identify and implement a clear set of activities that will enable biodiversity goals to be attained, including actions specifically aimed at addressing threats to biodiversity and providing biodiversity benefits;
- Explicitly consider potential biodiversity benefits when prioritizing sites for REDD+ activities, including selecting sites that have high biodiversity value (such as key biodiversity areas, areas of high endemism, areas with many vulnerable, threatened or endangered species, or critical biological corridors) and are aligned with national biodiversity priorities (e.g., in NBSAPs);

- Develop a detailed and comprehensive monitoring plan for biodiversity, including the establishment of a biodiversity baseline, clear biodiversity indicators, monitoring threats, and rigorous monitoring methods;
- Develop a national scale framework for biodiversity monitoring that addresses multiple objectives, include REDD+ safeguards, CBD, and donor requirements, and provides guidance to sub-national REDD+ initiatives for biodiversity monitoring. This national framework should build on the biodiversity indicators and monitoring required under the CBD to streamline biodiversity monitoring and reporting within a country as much as possible. This guidance would be designed to standardize monitoring methods between the CBD and UNFCCC, and domestically within a country. It should promote the assimilation of data collected by sub-national initiatives into the national system. Sub-national initiatives could benefit from the application of standardized methods and from data generated by the national system;
- Explicitly link the biodiversity goals of REDD+ to national biodiversity objectives, including commitments under the CBD, and seek potential synergies between monitoring systems established for REDD+ and those established under NBSAPS;
- Enhance synergies between the UNFCCC and the CBD, among other conservation-related international agreements, on biodiversity-related mitigation efforts including in particular REDD+; and
- Establish an explicit adaptive management process in which the results from biodiversity monitoring (whether at the project or program scale) are reviewed and used to modify REDD+ activities to meet biodiversity objectives. The timing of this review will depend on the frequency of biodiversity data collection, but could be combined with other reviews of emissions reductions data and social monitoring data so that project interventions can be adjusted in response to project impacts in each of these areas.



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# APPENDIX I

## THE COUNTRIES REVIEWED FOR THIS REPORT

REDD+ Programs Reviewed	FCPF participant	FCPF status & funding, as of October 2013	UN-REDD National Programme Country	UN-REDD Funding	Use of REDD+ SES
<b>Africa</b>					
<b>Democratic Republic of Congo (DRC)</b>	<input type="checkbox"/>	\$3.4M disbursing for R-PP Preparation Grant; Additional \$5M request approved; Submitted ER-PIN for FCPF Carbon Fund	<input type="checkbox"/>	\$5.5M	Nationally, for exchange and learning
<b>Kenya</b>	<input type="checkbox"/>	Readiness Preparation Grant in preparation	<input type="checkbox"/>		
<b>Republic of Congo</b>	<input type="checkbox"/>	\$3.4M disbursing for R-PP Preparation Grant	<input type="checkbox"/>	\$4M	
<b>Tanzania</b>	<input type="checkbox"/>	Not seeking FCPF funding. Readiness funding is from Norway (~\$17M)	<input type="checkbox"/>	\$4.3M	Nationally, for good practice guidance
<b>Asia</b>					
<b>Cambodia</b>	<input type="checkbox"/>	Readiness Preparation Grant in preparation	<input type="checkbox"/>	\$3M	
<b>Indonesia</b>	<input type="checkbox"/>	\$3.6M disbursing for R-PP Preparation Grant. Additional \$5M being requested	<input type="checkbox"/>	\$5.6M	In 2 provinces
<b>Nepal</b>	<input type="checkbox"/>	\$3.4M disbursing for R-PP Preparation Grant			Nationally
<b>Vietnam</b>	<input type="checkbox"/>	\$3.8M disbursing for R-PP Preparation Grant	<input type="checkbox"/>	Phase I: \$4.4M Phase II: \$30M	
<b>Latin America</b>					
<b>Colombia</b>	<input type="checkbox"/>	Readiness Preparation Grant approved	<input type="checkbox"/>	\$4M	
<b>Costa Rica</b>	<input type="checkbox"/>	\$3.6M disbursing for R-PP Preparation Grant; ER-PIN presented and Letter of Intent signed for sales of emissions reductions to the Carbon Fund			Nationally, for good practice guidance
<b>Ecuador</b>			<input type="checkbox"/>	\$4M	Nationally
<b>Guatemala</b>	<input type="checkbox"/>	Readiness Preparation Grant in preparation			Nationally
<b>Mexico</b>	<input type="checkbox"/>	Readiness Preparation Grant in preparation			Nationally
<b>Peru</b>	<input type="checkbox"/>	Readiness Preparation Grant in preparation			In 1 department

# APPENDIX 2

## CHARACTERISTICS OF THE 17 FOREST CARBON PROJECTS REVIEWED FOR THIS STUDY

Project Name	Short name	Start Year	Type	Project size (ha)	Carbon accounting methodology <sup>30</sup>	Status with carbon accounting standards	Status with multiple-benefit standards
TIST Program in Kenya	TKEN1	2004	A/R	1,565	CDM AR-AMS0001 Version 05	VCS registered, credits issued	Validation and Verification Approved – CCB Standards 2 <sup>nd</sup> Edition Gold Level for exceptional community benefits(Mar 9, 12)
TIST Program in Kenya CCB-002	TKEN2	2004	A/R	2,556	CDM AR-AMS0001	VCS registered, credits issued	Validation and Verification Approved - CCB Standards 2 <sup>nd</sup> Edition Gold Level for exceptional community benefits (Dec 16, 11)
TIST Program in Kenya CCB-003	TKEN3	2004	A/R	7,419	CDM AR-AMS0001 Version 06	VCS registered, credits issued	Validation and Verification Approved - CCB Standards 2 <sup>nd</sup> Edition Gold Level for exceptional community benefits (Sept 28, 12)
TIST Program in Kenya CCB-004	TKEN4	2004	A/R	2,724	CDM AR-AMS0001 Version 06	VCS registered, credits issued	Validation and Verification Approved - CCB Standards 2 <sup>nd</sup> Edition Gold Level for exceptional community benefits (Mar 11, 2013)
TIST Program in Uganda CCB-001	TUGA1	2003	A/R	1,488	CDM AR-AMS0001 Version 07	VCS registered, credits issued	Validation and Verification Approved - CCB Standards 2 <sup>nd</sup> Edition Gold Level for exceptional community benefits (May 11, 12)
TIST Program in Uganda CCB-002	TUGA2	2003	A/R	1,160	CDM AR-AMS0001 Version 06	VCS registered, credits issued	Validation and Verification Approved - CCB Standards 2 <sup>nd</sup> Edition Gold Level for exceptional community benefits (Mar 12, 2013)
TIST Program in India CCB-001	TINDI	2004	A/R	672	CDM AR-AMS0001, Version 06	VCS registered, credits issued	Validation and Verification Approved - CCB Standards 2 <sup>nd</sup> Edition (Mar 11, 2013)

<sup>30</sup> Carbon accounting methodologies that begin with CDM have been approved for use in the Clean Development Mechanism and are accepted by the Verified Carbon Standard (VCS); those that start with VCS have been developed for and approved by the VCS.

Project Name	Short name	Start Year	Type	Project size (ha)	Carbon accounting methodology <sup>30</sup>	Status with carbon accounting standards	Status with multiple-benefit standards
<b>Restoration of Degraded Areas and Reforestation in Cáceres and Cravo Norte, Colombia</b>	CACRAV	2002	A/R	10,870	CDM AR-AM0005	VCS registered, credits issued	Validation and Verification Approved - CCB Standards 2 <sup>nd</sup> Edition (Oct 25, 2011)
<b>Trees for Global Benefits, Uganda</b>	TGB	2003	A/R	5,000	Plan Vivo	Plan Vivo registered, credits issued	Plan Vivo Validated and Verified
<b>Reforestation in Grassland of Uchindile, Kilombero, Tanzania &amp; Mapanda, Mufindi, Tanzania</b>	UCHMAP	1997	A/R	12,905	CDM AR-AM0005, version 03	VCS registered, credits issued	Undergoing Validation and Verification CCB Standards 2 <sup>nd</sup> Edition; Validation Approved - CCB Standards First Edition Silver Level (Oct 16, 09)
<b>Reforestation of Degraded Land in Chhattisgarh, India</b>	CHHAT	2002	A/R	282	CDM AR-AM0001 version 02,	VCS registered, credits issued	Undergoing Validation and Verification CCB Standards 2 <sup>nd</sup> Edition; Validation Approved - CCB Standards First Edition Gold Level (Jun 23, 09)
<b>Cordillera Azul National Park REDD Project, Peru</b>	CORAZU	2008	REDD	1,351,964	VCS VM0007	VCS registered, credits issued	Validation Approved - CCB Standards 2 <sup>nd</sup> Edition Gold Level for exceptional biodiversity benefits (Feb 19, 2013); Undergoing Verification
<b>The Kasigau Corridor REDD Project Phase I – The Rukinga Sanctuary, Kenya</b>	KASPHI	2006	REDD	30,166	VCS VM0009	VCS registered, credits issued	Validation and Verification Approved - CCB Standards 2 <sup>nd</sup> Edition Gold Level for exceptional biodiversity benefits (Dec 05, 2012)
<b>The Kasigau Corridor REDD Project, Phase II, Kenya</b>	KASPH2	2010	REDD	169,741	VCS VM0009	VCS registered, credits issued	Validation and Verification Approved - CCB Standards 2 <sup>nd</sup> Edition Gold Level for exceptional biodiversity benefits (May 23, 2013)
<b>Mai Ndombe REDD+, Dem. Repub. Of Congo</b>	MAINDO	2011	REDD	299,645	VCS VM0009, version 2.0	VCS registered, credits issued	Validation and Verification Approved - CCB Standards 2 <sup>nd</sup> Edition Gold Level for exceptional biodiversity benefits (Dec 6, 2012)
<b>Noel Kempff Climate Action Project (NK-CAP), Bolivia</b>	NKCAP	1997	REDD	642,458	Project-specific methodology	Independently verified, no carbon accounting standard used	Emissions reductions independently verified, no multiple-benefit standard used
<b>Alto Mayo Conservation Initiative, Peru</b>	ALTMAY	2008	REDD	182,000	VCS VM0015	VCS registered, credits issued	Validation and Verification Approved - CCB Standards 2 <sup>nd</sup> Edition Gold Level for exception biodiversity benefits(Dec 12, 2012)

# APPENDIX 3

## INTERPRETATION OF THE ELEMENTS OF THE UNFCCC CANCUN AGREEMENT ON REDD+ THAT ARE DIRECTLY RELEVANT FOR BIODIVERSITY CONSERVATION

UNFCCC text from the Cancun Agreement (UNFCCC 1/CP.16)	Interpretation
<b>Paragraph 71, Requests developing countries to develop:</b>	
(d) A system for providing information on how the safeguards are being addressed and respected	This is a system for collecting and communicating information that shows that the country is meeting REDD+ safeguards. This language avoids the use of the word “reporting,” to distinguish the requirements for safeguards from the requirements for reporting on greenhouse gas emissions.
<b>Appendix-I Guidance and Safeguards; I. REDD+ Activities should:</b>	
(d) ... take into account the multiple functions of forests and other ecosystems;	This statement reflects the idea that REDD+ activities should consider aspects beyond carbon and greenhouse gas emissions. The biodiversity contained in forests is one example.
(e) Be undertaken in accordance with national development priorities...	This statement reflects the sovereignty of countries and right to prioritize different aspects of REDD+.
(f) Be consistent with Parties' national sustainable development needs and goals;	This statement emphasizes the need to be consistent with existing efforts and commitments towards sustainable development, including for example, commitments made under the CBD.
(h) Be consistent with the adaptation needs of the country;	This statement recognizes that there are opportunities for REDD+ to contribute to adaptation. For example, intact forests have important roles in regulating water flows and quality. Maintaining biodiversity is also important for ensuring the sustainability and resilience of forest in the face of climate change and other disturbances (CBD 2009, Christophersen 2010).
(k) Promote sustainable management of forests;	This statement refers to the role that REDD+ can play in making forest management for timber more sustainable. Biodiversity conservation is an important objective of sustainable forest management and measurements of changes in biodiversity are an important way to assess whether management is sustainable (Lindenmayer et al. 2000).
<b>Appendix-I Guidance and Safeguards; 2. Safeguards that should be promoted and supported:</b>	
(a) That actions complement or are consistent with the objectives of national forest programs and relevant international conventions and agreements;	This clause seeks to ensure consistency between the REDD+ safeguards and domestic policies and international agreements. The CBD is one of the most relevant international agreements for REDD+ and biodiversity.
(e) That actions are consistent with the conservation of natural forests and biological diversity, ensuring that the actions referred to in paragraph 70 of this decision are not used for the conversion of natural forests, but are instead used to incentivize the protection and conservation of natural forests and their ecosystem services, and to enhance other social and environmental benefits;	This safeguard includes two important concepts for biodiversity. The first is designed to prevent REDD+ activities from causing natural forest to be converted to plantations. This clause is specifically designed to avoid harm to forest biodiversity from REDD+. The second is that REDD+ activities should go beyond avoiding harm to generate positive impacts. The provision of a “safeguard” for positive impacts distinguishes the UNFCCC safeguards from several of the other safeguards policies that are described later in this section, which are limited to seeking to avoid negative impacts.

# APPENDIX 4

## INTERPRETATION OF THE ELEMENTS OF THE UNFCCC DURBAN DECISION ON REDD+ THAT ARE DIRECTLY RELEVANT FOR BIODIVERSITY CONSERVATION

UNFCCC text from the Durban Outcome ( <a href="#">UNFCCC 12/CP.17</a> )	Interpretation
<b>I. Guidance on systems for providing information on how safeguards are addressed and respected</b>	
<i>1. Notes that the implementation of the safeguards ... should support national strategies or action plans and be included in ... all phases of implementation</i>	This indicates that the implementation of safeguards must be done in a way that relates to each country's approach to REDD+, and that safeguards apply throughout the implementation of REDD+.
<b>2. The system for providing information on how the safeguards...are addressed and respected should</b>	
<i>Agrees also that developing country Parties ... should provide a summary of information on how all of the safeguards referred to in decision 1/CP.16, appendix I, are being addressed and respected throughout the implementation of the activities;</i>	This specifies that countries are only required to provide a summary of information on how they are addressing and respecting safeguards when undertaking REDD+ activities. The decision does not provide additional details about the contents of the summary.
<i>(b) Provide transparent and consistent information that is accessible by all relevant stakeholders and updated on a regular basis;</i>	This point introduces the requirements for transparency, consistency, and regular updates of information related to safeguards.
<i>(c) Be transparent and flexible to allow for improvements over time;</i>	This reiterates the need for transparency and promotes adaptive management. Allowing for improvements over time also implies that safeguards systems can be built with existing capacities, even if limited, and then improved as capacities increase.
<i>(d) Provide information on how all of the safeguards [in Cancun agreement] are being addressed and respected;</i>	This point mandates that all of the safeguards, including those relevant for biodiversity, must be addressed and respected.
<i>(e) Be country-driven and implemented at the national level;</i>	This point respects the sovereignty of countries to develop their own REDD+ programs. By providing information on safeguards at a national scale, there is reduced risk of the negative impacts of REDD+ being displaced within the country.
<i>(f) Build upon existing systems, as appropriate;</i>	Existing biodiversity conservation initiatives and monitoring systems may be used to build a safeguards system. This includes, for example, a country's NBSAP and protected areas system.

# APPENDIX 5

## INTERPRETATION OF THE ELEMENTS OF THE UNFCCC WARSAW REDD+ DECISIONS THAT ARE DIRECTLY RELEVANT FOR BIODIVERSITY CONSERVATION

UNFCCC text from the Warsaw REDD+ Package	Interpretation
<u><a href="#">The timing and the frequency of presentations of the summary of information on how all the safeguards referred to in decisions I/CP.16, appendix I, are being addressed and respected</a></u>	
4. Decides that developing country Parties should start providing the summary of information ... in their national communication or communication channel ... after the start of the implementation of [REDD+] activities	This links the presentation of safeguards summaries to a country's national communications to the UNFCCC. The national communications were already required of countries as a way to describe their activities related to the UNFCCC.
5. Also decides that the frequency of subsequent presentations of the summary of information as referred to in paragraph 2 above should be consistent with the provisions for submissions of national communications from Parties not included in Annex I to the Convention and, on a voluntary basis, via the web platform on the UNFCCC website.	This specifies the frequency for submitting summaries on safeguards, which should match the frequency of national communications. For non-annex I countries, this is generally every four years.
<u><a href="#">From the COP Work Programme on Results Based Finance</a></u>	
4. Agrees that developing countries ... should provide the most recent summary of information on how all of the safeguards ... have been addressed and respected before they can receive results-based payments;	This states that the countries must provide information on safeguards before they can receive payments for their emissions reductions or removals.
II. Decides that the information hub will contain...: (c) The summary of information on how all of the safeguards ... are being addressed and respected...;	The “information hub” is the central repository for submitting information about a country’s REDD+ performance, and this statement indicates that the hub will host the information on safeguards that countries voluntarily submit.

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