Aligning Biodiversity Compensation and REDD+

A primer on integrating private sector conservation financing schemes in the tropics and sub-tropics

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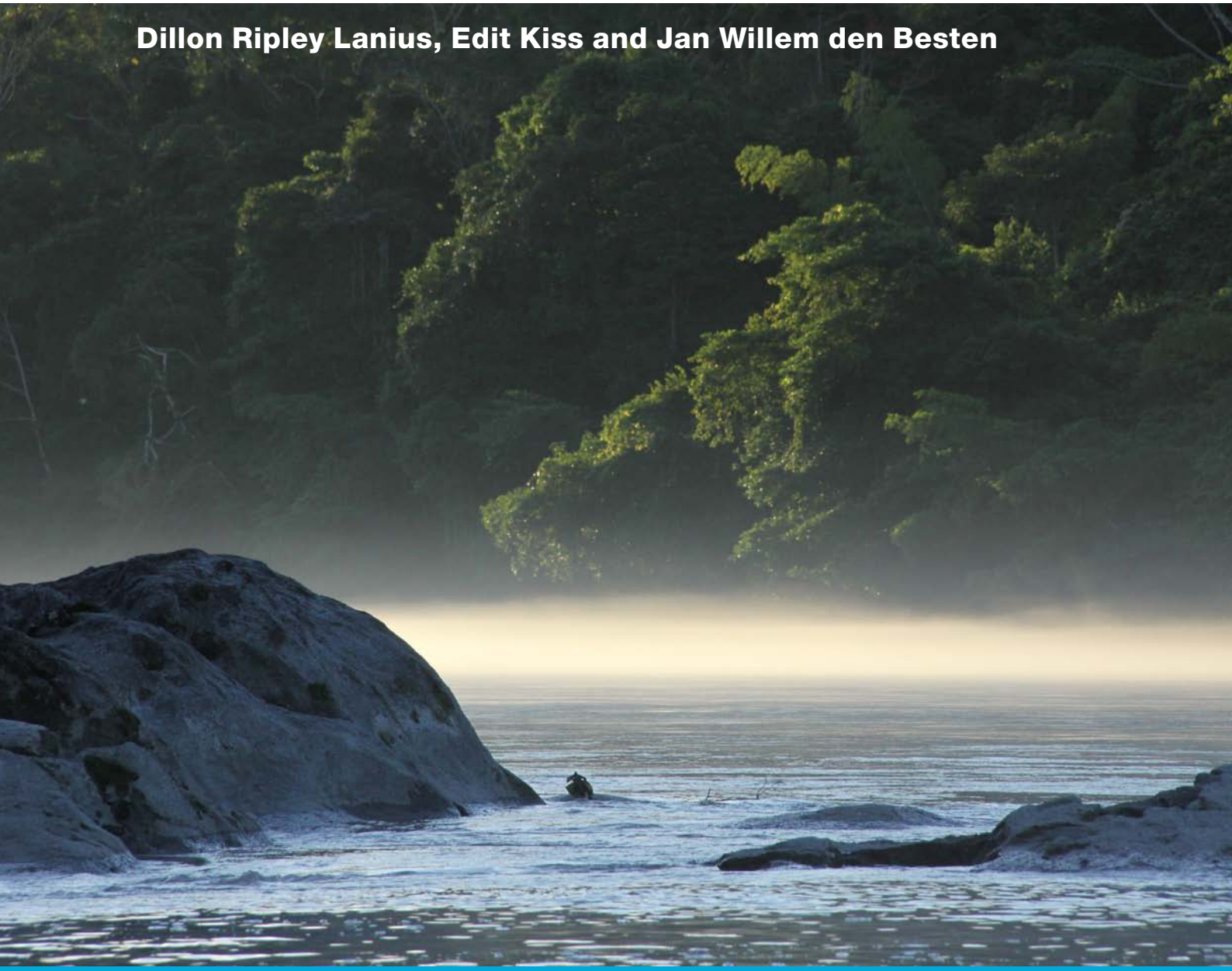

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Contents

Glossary of terms and abbreviations

Additionality: notional measurement of an intervention (i.e. doing something) when the intervention is compared to a baseline, status quo metric (i.e. doing nothing) [1]

Biodiversity compensation: conservation activities, which are designed to provide biodiversity conservation to remunerate for biodiversity damages, impacts, and/or losses

BBOP: Business and Biodiversity Offset Programme

Bundling: refers to merging multiple ecosystem services from a land area under a single unit of transaction or credit type

CCBA: Climate, Community, and Biodiversity Alliance

CCBS: Climate, Community, and Biodiversity Standard

CBD: Convention on Biological Diversity

COP: Conference of Parties

Ecosystem services: the processes and resources from ecological and natural systems which human society uses

EPFI: Equator Principle Financial Institution

IFC: International Finance Corporation

Jurisdictional and nested REDD+: accounting frameworks for the integrated crediting of REDD+ projects, policies, and programs across states, provinces, and nations

Leakage: refers to the transfer of degradation, deforestation, or habitat conversion activities from the project area to another site

Mitigation hierarchy: a multistep process for considering environmental impacts and taking steps to avoid, minimise, abate, remediate, rehabilitate, and compensate

No net loss: the point where biodiversity gains from targeted conservation activities match the losses of biodiversity due to the impacts of a specific development project, so that there is no net reduction overall in the type, amount, and condition (or quality) of biodiversity over space and time*

Net gain: a biodiversity gain that exceeds a specific set of losses **

NPI: Net Positive Impact, has broader and more flexible definition of gain and loss when compared to other evaluations and categorization of impacts

Permanence: the state or quality of lasting indefinitely

PS6: IFC Performance Standard 6, *Biodiversity Conservation and the Sustainable Management of Living Natural Resources*

REDD+: Reducing Emissions from Deforestation and Forest Degradation in Developing Countries; and the role of Conservation, Sustainable Management of Forests and Enhancement of Forest Carbon Stocks (REDD+)

Stacking: refers to independently selling different types of ecosystem services from a land area through multiple tranches or units of sale e.g. biodiversity credits, carbon credits, and water credits

UNFCCC: United Nations Framework Convention on Climate Change

VCS: Verified Carbon Standard

VER: Verified Emission Reduction

* BBOP definitions
** BBOP definitions

Executive Summary

REDD+ undertaken through the voluntary carbon market and biodiversity compensation actions undertaken by no net loss commitments are two leading private sector initiatives that protect species and their habitat.
To date these complex networks of practitioners, corporates, conservation organizations, and policy makers, driven by different agendas, have setup evolving processes to catalyse private sector engagement and financing for biodiversity conservation. These promising approaches present new visions for achieving reductions in the rate of biodiversity and habitat loss. Yet there is no symbiosis.

New conversations and pathways for mutual collaboration and cooperation between these two systems must be catalysed for the benefit of conserving life on earth. Aligning biodiversity compensation actions and REDD+ inaugurates the potential for synergies in design, financing, implementation, management, monitoring, and verification of private sector biodiversity conservation systems. While the different methodologies and processes used by REDD+ projects and biodiversity compensation actions presents technical issues that have to be addressed in linking the two, these obstacles are not insurmountable.

This paper presents a conceptual framework to begin integrating biodiversity compensation and REDD+ at project-level. The most important technical consideration reviewed in this paper is the additionality assessment from linking project-level conservation areas. This issue is covered at length in the paper and we argue that this issue is resolvable, on a project-by-project basis through a joint additionality assessment.
Coordinating stakeholders working on both fields to collaborate on harmonizing approaches is also shown to be an inevitable requirement of national and jurisdictional REDD+ frameworks, and policies. As project-level scenarios have already provided analogous guidance and best practices for the singular implementation of biodiversity compensation actions and REDD+, this paper argues that new pilot projects can take the first steps forward to linking these innovative approaches to private sector financed conservation in the tropics and sub-tropics.
The authors hope that this paper serves as a primer for discussions on future initiatives to explore pilot projects, policies, and programs that can support the integration of biodiversity compensation actions and REDD+ in conserving the complexity of life on Earth.

Source: Code REDD

Preface

Reducing Emissions from Deforestation and Forest Degradation (REDD+) * is a global mechanism that is being negotiated by parties to the United Nations Framework Convention on Climate Change (UNFCCC). The REDD+ mechanism is being primarily designed to incentivise reductions in the causes and impacts of climate change from forested lands and facilitate low-carbon pathways towards sustainable development. However, since forests are the home for up to 80% of the world's terrestrial biodiversity [2] there are a number of initiatives underway to ensure REDD+ also makes important contributions to the protection of biodiversity across the tropics and sub-tropics.

Despite historical efforts to preserve biodiversity and reduce the persistent pressures on biodiversity from habitat loss and degradation, climate change, over-exploitation, unsustainable use, invasive alien species, and other forms of pollution, biodiversity loss continues at alarming rates.[3] More effective actions and international efforts are needed to support and expand biodiversity conservation schemes internationally.

One of the newer topics attempting to redress the loss is biodiversity compensation, which is undertaken by the private sector voluntarily or under regulatory requirements to recompense for biodiversity impacts. Over the last couple decades, beginning in the United States and spreading across the world, governments and companies have increasingly engaged in efforts to assess their impacts on ecosystems, develop new practices to avoid environmental degradation, and conserve commiserate habitat, land, and/or species as a proxy for unavoidable impacts. Most recently new project finance lending standards from the International Finance Corporation (IFC), adopted by Equator Principle financial institutions are setting transnational legal obligations for private sector borrowers and investees that attempts to ensure that any disturbance of critical and natural habitat results in no net loss, net gains, or net positive impact on biodiversity. The IFC Performance Standard 6 (PS 6) requirements enshrine biodiversity compensation actions as a tool to establish proxy biodiversity conservation areas as restitution for unavoidable impacts from private sector activity.

In light of these on-going efforts to establish proxy biodiversity conservation areas as biodiversity compensation, this paper promotes the possibility of harmonising REDD+ and these biodiversity compensation approaches across the tropics and sub-tropics. To date there have been no formal dialogues, forums, policies, programs, or projects that aim at such integration. In fact, the different actors such as academia, field biologists, conservation organizations, environmental consultancies, financial institutions, governments, multilateral institutions and the private sector hold divergent views on if and how such integration may be achieved. This paper uses literature review and expert interviews to explain how biodiversity compensation actions and the biodiversity conservation and management systems from REDD+ projects align in theory and could support each other in practice. The paper concentrates on how the effectiveness of project-level REDD+ conservation efforts, which are proliferating across Asia, Africa, and Latin America and demonstrate successful biodiversity conservation outcomes, could be connected to biodiversity compensation schemes. The paper also aims to spark discussions on how biodiversity compensation schemes and REDD+ can support each other in achieving long-term, verifiable, and landscape level conservation outcomes, to ensure the permanence of biodiversity conservation efforts. Finally the paper also introduces next steps for collaboration, further research and development on the integration of biodiversity compensation schemes and REDD+.

The authors recognise that many contentious governance, policy, and technical challenges exist in both the biodiversity compensation and REDD+ arena. The paper therefore does not attempt to provide a comprehensive solution, but rather aims to demonstrate the opportunity for collaboration. The authors believe that such integration can play an important role in addressing the complex challenges and financing gaps that biodiversity conservation is facing in the tropics and sub-tropics.

* Reducing Emissions from Deforestation and Forest Degradation in Developing Countries; and the role of Conservation, Sustainable Management of Forests and Enhancement of Forest Carbon Stocks (REDD+) in line with part 1 (b) iii of the Bali Action Plan.

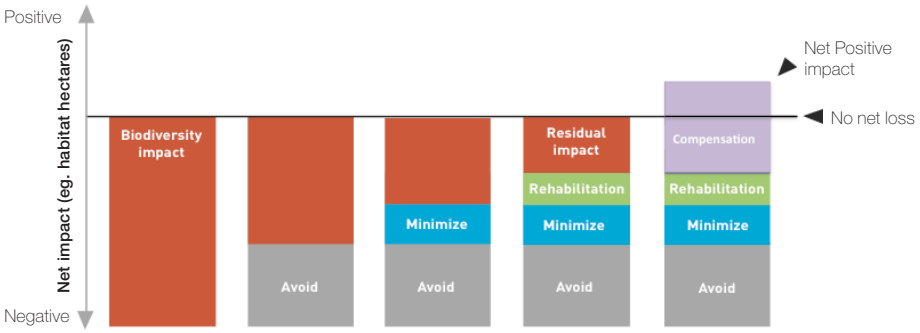
The document is structured the following way:

Section 1 introduces the context for biodiversity compensation
Section 2 describes the state of the emerging REDD+ mechanism and its relationship to biodiversity conservation
Section 3 discusses linking biodiversity compensation and REDD+
Section 4 points out critical issues and questions
Section 5 provides conclusion and discusses next steps

Section 1:
Context and Background on Biodiversity Compensation

According to the United Nations Convention on Biological Diversity (CBD), biodiversity is "the variability among living organisms from all sources including, inter alia, terrestrial, marine and other aquatic ecosystems and the ecological complexes of which they are part; this includes diversity within species, between species and of ecosystems" (UN 1992, art.2, para1.).[4] The importance of biodiversity is generally accepted, especially because biodiversity plays a key role in providing ecosystem services that are vital to our welfare and well-being. In view of the on-going global decline in biodiversity, with an estimated 1,000-50,000 species going extinct every year[5] due to biologically destructive impacts from development activities, Environmental Impact Assessments (EIAs) or Environmental and Social Impact Assessments (ESIAs) have become commonly required to qualitatively and quantitatively define the cost of development on biodiversity and its environment. EIAs and ESIAs for development projects financed under the direct or indirect guidance of the IFC Performance Standards generally follow the mitigation hierarchy as a multistep process for considering adverse environmental impacts. If a project is financed and moves forward to implementation, the mitigation hierarchy is used to determine which impacts are to be avoided, minimised, abated at site, remediated, and compensated. As such the mitigation hierarchy is the foundation on which biodiversity compensation measures are built.

Figure 1: The Mitigation Hierarchy



This version of the mitigation hierarchy was modified by the authors and is used by the mining industry
Source: ICMM IUCN (2012)

There are currently over 45 countries with legislation and another 27 considering the development of legislation that requires the use of EIAs, ESIAs and compensation for biodiversity impacts from development projects.[6] Although most of the tropical and sub-tropical nations are in early stages of investigation, in Latin America, for example Peru, Colombia or Chile are already enacting no net loss policies and currently designing biodiversity compensation schemes.

Currently voluntary actions and measures under the direct or indirect guidance of the IFC PS 6 are the key driving force behind biodiversity compensation actions. One of the most recognised initiatives to codify best practices for legitimately applying the mitigation hierarchy and establishing biodiversity compensation across countries is the international collaboration of the Business and Biodiversity Offset Programme (BBOP). BBOP establishes a set of principles, criteria, and indicators that can form a standard to follow when justifying decisions made in applying the mitigation hierarchy and defining biodiversity compensation approaches.[7] BBOP has been recognised by the IFC as a best practice for managing the biodiversity risks and impacts for its clients. Corporate sustainability goals of companies such as Rio Tinto's 'Net Positive Impact'* [8] also endorse the mitigation hierarchy and biodiversity compensation actions as balancing the pursuit of business and development goals with environmental costs, and the intrinsic right of all species to exist on Earth.

The IFC, through its sustainability framework and Performance Standard 6 (PS 6): "*Biodiversity Conservation and the Sustainable Management of Living Natural*

* This means minimizing the impacts of [Rio Tinto's] business and contributing to biodiversity conservation to ensure a region ultimately benefits as a result of [Rio Tinto's] presence.

Resources",[9] requires the mitigation hierarchy for biodiversity to be followed for projects over $10 million in financing that disturb land classified as critical or natural habitat, to achieve no net loss and/or net gain in biodiversity values. As of June 4, 2013, all financial institutions that are signatories to the Equator Principles have adopted the IFC Performance Standards and PS 6.[10] This is a significant step forward toward mandated or compulsory biodiversity conservation given the fact that these institutions historically represent the majority of large-scale project financing in developing countries.[11]

Currently there are important issues under consideration globally regarding the use of the mitigation hierarchy, limits on acceptable biodiversity impacts, and the appropriateness of biodiversity compensation design. These are regularly considered, contested, and debated in academia, peer-reviewed journals, and will affect the ability for biodiversity compensation actions to declare success. BBOP, for example, categorises biodiversity compensation that follows the rigorous BBOP approach as a biodiversity offset while arguing that biodiversity compensation that does not follow the BBOP approach cannot be considered a biodiversity offset. BBOP defines biodiversity offsets as "*measurable conservation outcomes of actions designed to compensate for significant residual adverse biodiversity impacts arising from project development after appropriate prevention and mitigation measures have been taken*".* The goal and vision of biodiversity compensation generally is to remunerate for unavoidable biodiversity impacts through no net loss measures and/or compensate for biodiversity impacts so that a net gain in biodiversity is achieved on the ground with respect to species composition, habitat structure, ecosystem function and people's use and cultural values associated with biodiversity.[12] Biodiversity compensation requires expert evaluation and interpretation to ensure that the mitigation hierarchy and compensation actions are credibly designed and undertaken to balance biodiversity losses against biodiversity gains so that a no net loss or net gain target can be endorsed. However, the trialling of biodiversity compensation theory and BBOP in the field to create biodiversity compensation actions has neither irrefutably demonstrated successful achievement of no net loss, net gains, or net positive impacts to biodiversity nor led to its widespread adoption. The capacity to meticulously apply the IFC Performance Standards among Equator Principle Financial Institutions (EPFIs) also varies and is challenged by the fact that there are no independent agencies that validate and verify EPFI client performance. EPFIs and clients instead go through private review processes to determine successful adherence to PS 6. The impact of IFC PS 6, biodiversity compensation, and influence of BBOP will depend on the establishment of successful, verifiable biodiversity compensation schemes with proven conservation gains.

While there are multiple biodiversity

* While BBOP's definition of biodiversity offsets explicitly refers to biodiversity compensation that follows the BBOP Standard, the paper assumes

compensation sites currently under consideration, development and implementation under BBOP or endorsed by the IFC and other approaches, the results are unclear. Early schemes to institute the mitigation hierarchy and biodiversity compensation such as the United States Wetland Mitigation Banking system have been regularly criticised for their opaqueness and their ability to demonstrate biodiversity conservation outcomes that are superior to the initial disturbed and impacted sites.[13] BBOP associated projects and the IFC PS 6 mandated biodiversity compensation actions have yet to produce definitive success under the approaches BBOP and IFC PS 6 have defined. While Rio Tinto's recent Qit Madagascar Minerals (QMM) is forecasted to be a success, due to the design of the biodiversity compensation actions there is a significant time -lag associated with proving a net positive impact from the conservation project.[14] There is dedication to developing robust biodiversity compensation initiatives that can demonstrate no net loss, net gain, or net positive impact from development projects but so far there are no clear, peer-reviewed, successes.

Section 2:
REDD+: An emerging global mechanism to reduce deforestation

REDD+ has been under development since the Bali session of the UNFCCC COP in 2007 and is being designed to incentivise reductions in emissions from forested areas through a pay-for-performance model. Currently more than 78 * countries party to the UNFCCC are in the process of supporting national REDD+ strategies that outline cross-ministerial government initiatives, policies, programs, and projects that tackle the drivers of deforestation. These complex efforts are incentivised through the voluntary carbon markets and over $7.3 billion in financing commitments towards REDD+[15] that require independent verification of results before disbursement. Multilateral funding for these initiatives include the World Bank's Forest Carbon Partnership Facility (FCPF) and Forest Investment Programme (FIP), the United Nations REDD Programme (UN-REDD), the Global Environment Facility (GEF), the International Tropical Timber Organization (ITTO) and the REDD+ Partnership. The private sector is also generating considerable finance through voluntary projects, many through the working of the voluntary carbon market. Countries are also making considerable amounts of funds available through Official Development Assistance (ODA) budgets and a large number of NGOs are putting resources into REDD+.

At a national level the REDD+ process engages a diverse range of stakeholders in dialogues around development priorities, land-use planning, and sustainable growth opportunities. Through national and jurisdictional REDD+ frameworks that engage government agencies, civil society, and the private sector, REDD+ policies, programs and projects that ensure forest conservation priorities can be decided alongside sustainable development goals. The development of targeted REDD+ initiatives to effectively stop deforestation and degradation can deliver improvements for in-situ conservation by reinforcing existing protected areas, associated wildlife corridors, and biodiversity conservation priorities with development planning.[16] Since REDD+ is being designed to incentivise reductions in emissions from forested areas through pay-for-performance systems, REDD+ initiatives that demonstrate reductions in deforestation/degradation and consequentially emissions, are subject to third-party verification. While in theory this REDD+ accounting only evaluates carbon outcomes, in practice successful REDD+ initiatives preserve the myriad of biodiversity values and ecosystem services that standing forests provide.

* This figure includes the UN-REDD and World Bank Forest Carbon Partnership Facility partner and donor countries

BREAKOUT BOX 1

Climate, Community, and Biodiversity Alliance (CCBA)

The CCBA is an international collaboration of leading international NGOs that ensures land-based carbon activities such as REDD+ not only mitigate climate change but also alleviate poverty and conserve biodiversity. Members of the CCBA include CARE, Conservation International, The Nature Conservancy, Rainforest Alliance and Wildlife Conservation Society. The CCBA Standard includes fourteen mandatory performance criteria and three optional "Gold Level" measures that assess project implementation activities using best practices in Social and Biodiversity Impact Assessment (SBIA) through multiple reviews by independent third-party agencies. SBIA guidelines used by REDD+ projects that implement a participatory theory of change approach to project activities and impacts produce a targeted monitoring plan that results in rigorous habitat and species assessments. This transparent and inclusive participatory process brings together diverse stakeholders in evaluating the outcomes from REDD+ projects to ensure that only projects which demonstrate net positive impacts (NPIs) for climate, biodiversity, and communities are validated and verified as meeting the CCB Standard.

2.1 Opportunities and challenges for biodiversity through REDD+

However despite the fact that forests are the home for up to 80% of the world's terrestrial biodiversity[17] REDD+ as a programmatic solution to achieve biodiversity conversation goals is not guaranteed. Initially there was a risk that anthropocentric climate mitigation and adaptation concerns could produce negative impacts on biodiversity if the focus on high carbon storage excludes consideration of biodiversity and other forest ecosystem services. For example, this could have had the unfortunate consequence of prioritization of plantation forests over the conservation of primary forests. This potential conflict was recognised early on. As a result, parties have initiated discussions on how to ensure that REDD+ actions do not run counter to the objectives of the CBD, but rather support the implementation of the CBD Programme of work on forest biodiversity, and ensure REDD+ provides biodiversity benefits[18] and parties since then have agreed on important social and environmental safeguards for REDD+.

The process of creating REDD+ safeguards for biodiversity conservation priorities through the UNFCCC was promoted by civil society and first agreed to at COP15 in Copenhagen before being adopted in Cancun at COP16 in 2010.

There are currently three distinct REDD+ safeguard frameworks under development to support countries in development and implementation of REDD+ programs that include biodiversity:

- The Social and Environmental Principles and Criteria (SEPC) of the UN-REDD Programme serve as guiding principles for REDD+ programs
- The Common Approach to Environmental and Social Safeguards for Multiple Delivery Partners, which includes the Environmental and Social Management Framework (ESMF) of the World Bank Forest Carbon Partnership Facility (FCPF) Readiness Fund, for multilateral managed REDD+ preparatory and pilot initiatives
- The Climate, Community, and Biodiversity (CCB) Standards for current voluntary carbon market REDD+ Projects and also the jurisdictional REDD+ Social and Environmental Standards (REDD+ SES) for government-led REDD+ programs both of which have been developed by the Climate Community & Biodiversity Alliance (CCBA).*

These REDD+ safeguards are helping ensure that REDD+ initiatives can support participatory alternate development pathways, and on a project-level prioritise high conservation value forested or high-carbon biomass habitat. Through these REDD+ safeguard processes biodiversity conservation values can be identified at a project-level and integrated into land-use planning across public-private development agendas, such as sustainable mining, greening of supply chains, or biodiversity compensation schemes and conservation banks. As REDD+ develops landscape level management systems to support the scaling of REDD+ initiatives, existing and future biodiversity assessments and conservation projects in forested or high-carbon biomass habitat should support and be nested into the REDD+ process.

As REDD+ national and jurisdictional frameworks are developed with robust performance and safeguard systems, REDD+ initiatives will ultimately push for

* For an overview of all the available safeguards refer to FCMC

general policy and governance alignment with development agendas and priorities, to address the drivers of deforestation and degradation and protect forests. REDD+ projects, incentivised by biodiversity conservation opportunities, are playing the important role of demonstrating forest conservation outcomes under REDD+. The best examples of this are the successful REDD+ projects that are independently validated and verified by third-parties under the Verified Carbon Standard (VCS) and Climate, Community, and Biodiversity (CCB) Standard to achieve forest conservation goals and can be nested into jurisdictional REDD+ programmes. Currently there are over 40+ REDD+ projects[19], many of which cover forests that have been classified as Key Biodiversity Areas (KBAs); Important Bird Areas (IBAs); Important Plant Areas; IUCN Category I, II, III, IV protected areas; Ramsar Sites; and World Heritage Sites. Close to 50% of all registered Verified Carbon Standard (VCS) REDD+ projects could earn the highest levels of certification for exceptional biodiversity co-benefits under the CCB.[20] The VCS and CCBA validation and verification systems allow REDD+ projects to irrefutably demonstrate biodiversity conservation outcomes overtime. However, despite creating a number of new biodiversity conservation projects and achieving large-scale conservation outcomes that is integrated into development pathways these REDD+ systems are not currently used to achieve biodiversity compensation goals.

REDD+ projects are a proven innovation in achieving biodiversity conservation results. International efforts to support verifiable outcomes on REDD+ through the proliferation of performance methodologies, safeguards, implementation service providers, project developers, reporting agencies , and independent standards are enabling these conservation projects to demonstrate success. Complex issues facing conservation projects everywhere such as project performance, leakage, permanence, stakeholder engagement, sustainable development, and the verification of conservation outcomes are being addressed through REDD+ systems.

2.2 Financing gaps for REDD+ projects

While the international REDD+ mechanism is being designed through the UNFCCC process and determined by future climate policies, existing REDD+ projects developed through the voluntary carbon markets under the VCS and CCB standards are being implemented and financed for the purposes of conserving biodiversity, forest habitat, and carbon, mostly by the private sector. Private sector actors and financing is recognizing biodiversity 'hot spots' with forest habitat and using REDD+ to create successful conservation outcomes. Since there are no compliance or regulatory requirements

BREAKOUT BOX 2

Verified Carbon Standard (VCS) Project and Jurisdictional Level

The Verified Carbon Standard was founded in 2005 by the Climate Group, the International Emissions Trading Association, the World Economic Forum, and the World Business Council for Sustainable Development with the aim to "provide a trusted, robust and user-friendly program that brings quality assurance to voluntary carbon markets. [21]" Since then it has become one of the world's most widely used voluntary carbon accounting standards. A growing number of REDD+ projects are using VCS Program to quantify carbon benefits. As of the end of August 2013, there were over a dozen of approved methodologies available in the Agriculture, Forestry, and other Land Use (AFOLU) sectors and there were 27 REDD+ projects in the VCS database.

At the same time, in order to assists governments that are establishing new policies and programs to mitigate GHG emissions across the forest sector, VCS has also developed the world's first Jurisdictional and Nested REDD+ (JNR) Framework for accounting and crediting REDD+ programs at the national and subnational scale. This framework also establishes a clear pathway for existing and new subnational jurisdictional activities and projects to be integrated (or "nested") within broader (higher-level) jurisdictional REDD+ programs.

BREAKOUT BOX 3

Biodiversity Conservation in The Kasigau Corridor REDD+ Project Phase I – Rukinga Sanctuary

Source: Code REDD

The Kasigau Corridor REDD+ Project Phase I – Rukinga Sanctuary covers 30,169 hectares and is part of the Eastern Arc Mountain Global Hot Spot as identified by Conservation International. Following the Climate, Community, and Biodiversity Alliance (CCBA) Social and Biodiversity Impact Assessment (SBIA) process the project developer and manager, Wildlife Works, is able to document species and the successful conservation and restoration of biodiversity values.

On May 23, 2013, CCBA and Environmental Services, Inc. published the latest independent, third-party verification of the net positive impact (NPI) results from Wildlife Works implementation and management of the Kasigau Corridor REDD+ Project Phase I – Rukinga Sanctuary. This document is available for review at the CCBA website (http://climate-standards.org) along with the Project Design Document (PDD), Monitoring Plan, Socio-Economic Impact Assessment, Project Implementation Reports, and historical independent third-party Validation and Verification Reports.

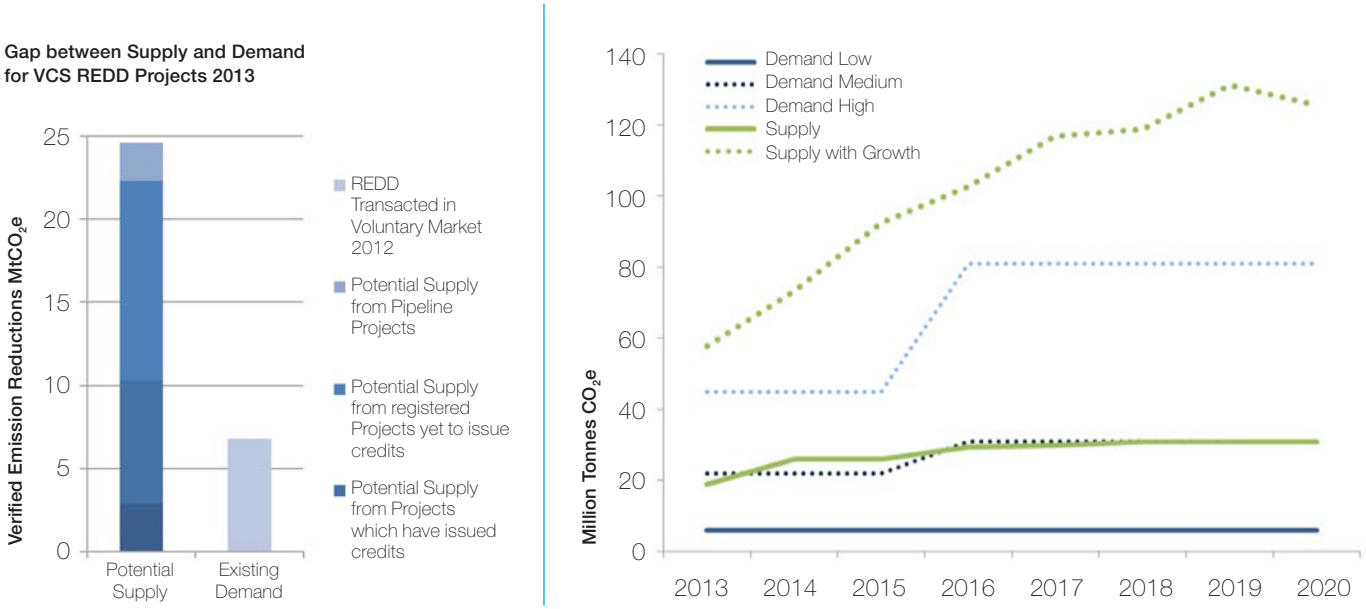
There are 34 animal and plant species categorised as vulnerable, endangered, or critically endangered by IUCN Red List Criteria present at Rukinga Sanctuary including a population of Grevy's Zebra (IUCN Red List – Endangered) that is believed to be at least 3% of the global population.

Source: Code REDD

to fund REDD+, REDD+ projects, to date, have been implemented on expectations that the voluntary carbon markets or multilateral funding could be used to provide financing. However, the scale of financing available is proving inadequate. The implementation of REDD+ projects is typically financed through grants, impact investors, debt/equity investors and/or the sale of options and/or forward contracts for verified emission reductions in the voluntary carbon market. Secure long-term financing is rarely available for REDD+ projects since the typical transaction for verified emission reductions in the voluntary carbon market occurs on the primary spot market once outcomes are proven and REDD+ credits are issued. Over the last eight years prices in the voluntary carbon markets have declined from a high of around $9.00/tCO2e to around $5.00/tCO2e or lower and the volume of unsold credits from registered REDD+ projects has been significantly increasing in the last couple of years.[22]

Figure 2 also illustrates that there is already more supply available from the registered projects than there is demand on the market, i.e. there is a clear oversupply on the market. The registration and issuance data also shows that more and more projects are being put on hold as project developers prefer to hold back issuances until a buyer is found for the credits. Due to the shortage in long-term financing as demonstrated by the below graphs, many REDD+ projects are under imminent threat of failure.

FIGURE 2: REDD+ supply and demand outlook



Source: Conservation International, "REDD+ Market: Sending Out an SOS", FCMC, "Emerging Compliance Markets for REDD+: An Assessment of Supply and Demand"

In sum, despite the significant progress being made on implementation of REDD+ projects, and the biodiversity conservation outcomes achieved, in the absence of a UNFCCC agreement, the demand for REDD+ credits is relatively weak and a lack of strong demand imperils the future of REDD+ projects.[23]

This crisis creates opportunity to utilise REDD+ systems for biodiversity compensation purposes. Since the biodiversity and forest conservation outcomes from REDD+ projects are created only by additional conservation activities, the unfunded management systems developed by REDD+ can be utilised by biodiversity compensation schemes to generate proven additional conservation outcomes that would not be achievable without the financing provided for biodiversity compensation purposes. Furthermore, these threatened REDD+ protected areas represent unfunded conservation management systems that have the science to model land-use change in the absence of project activities. The accounting and modelling for biodiversity and habitat loss required under biodiversity compensation schemes can be integrated into these REDD+ systems to demonstrate the additional biodiversity gains from implementing the protected area.

If these threatened REDD+ protected areas are not financed then the potential for biodiversity conservation gains will be lost.

Section 3:
Linking REDD+ and Biodiversity Compensation

Achieving significant reductions in the rate of biodiversity and habitat loss to the benefit of all life on earth requires opening new pathways for collaboration. Aligning biodiversity compensation actions and REDD+ requires stakeholders to acknowledge synergies in the design, implementation, management, monitoring, verification and goals of biodiversity conservation systems. Closer collaboration and coordination among stakeholders working on both fields is inevitable due to the scaling of national and jurisdictional REDD+ frameworks and forest management policies.

Studies show that when incomes and commodity demands rise through economic development [24], threat levels to forest habitat increase.[25] This has left many countries that have established national parks and/or land-use moratoriums unable to support protected areas.[26] Additional financing and implementation support is needed to address the gap between biodiversity conservation goals and the ability of countries to create meaningful sustainable development pathways for people. Harmonizing the current divergence between REDD+ and biodiversity compensation can help address these issues at both a policy and project level, leading to larger permanent conservation outcomes from private sector-led projects, and reconciling national and jurisdictional REDD+ frameworks with biodiversity conservation priorities across the tropics and sub-tropics.
The project-level REDD+ initiatives under the VCS and CCBS are designed in agreement with landowners and community stakeholders. These REDD+ projects are only set up when there is proven scientific evidence that the forested area is threatened. REDD+ projects stratify project areas to show how the threat levels and variance in carbon biomass overtime will create greenhouse gas emissions. During the REDD+ project design, participatory conservation management plans and agreements that promote biodiversity, species and habitat protection are reached with relevant stakeholders.

3.1 Finding pragmatic solutions to biodiversity conservation

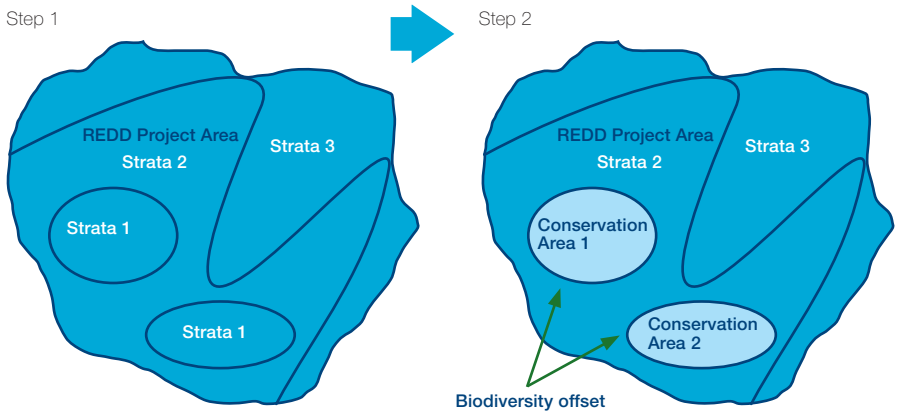
Companies engaged in biodiversity compensation assessments that are struggling to find solutions to financing, implementing, and successfully managing conservation areas in tropical and subtropical countries may find advantages through collaborating with the ecosystem of stakeholders involved in REDD+ projects. Secure long-term conservation outcomes through REDD+, may be cheaper for companies since the costs for biodiversity compensation actions will be shared by existing REDD+ governance systems, conservation infrastructure, and management plans. Since biodiversity compensation projects are typically smaller in scale than REDD+ projects, REDD+ financing through direct co-investment or additional VER buyers may also provide additional financing for larger conservation outcomes. REDD+ is connected to international and national sustainable development agendas through

the UNFCCC. Country progress on REDD+ issues through project implementation may support government aid programs and official development assistance, which can incentivise political decision-making to establish new REDD+ projects. These REDD+ projects represent additional revenue opportunities for governments, landowners and community stakeholders who are engaged in the process by REDD+ project developers. REDD+ project developers exist across Latin America, Africa, and Asia, and work through transparent and independently verifiable pay-for-performance conservation management systems to ensure results are accurate. Many REDD+ project developers also come from the private sector and are well versed with the business environment. REDD+ at an international, national, jurisdictional, and project level represents the culminating efforts and networks of community-based organizations, conservation groups, indigenous peoples, governments, and the private sector which can support the success of biodiversity conservation goals.

3.2 Existing REDD+ projects need financing to protect species and habitat

Companies engaged in assessing biodiversity compensation options can examine the biodiversity and conservation values maintained by REDD+ projects for eligibility. Existing REDD+ projects may already be involved in conserving relevant landscapes and/or species of interest. In

Figure 3: Integrating biodiversity compensation with existing REDD+ projects

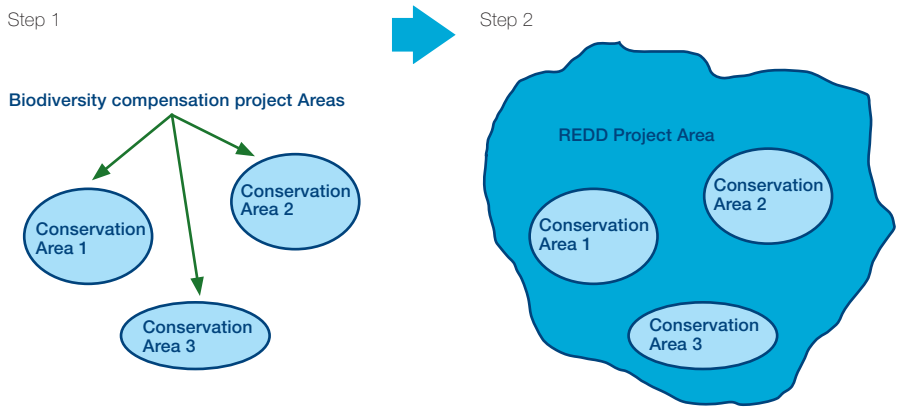


REDD+ project area that includes biodiversity and ecosystem values relevant to biodiversity compensation targets; Source: Authors

such projects, the REDD+ conservation management systems could be further enhanced, beyond what would be already implemented by the REDD+ project, to support the specific biodiversity values under consideration by companies engaged in biodiversity compensation. If so, additional financing may be required to ensure that the conservation management systems designed by the REDD+ project will achieve their conservation goals. When additional financing is needed, which is typically the case for REDD+ projects that have not sold all their carbon credits, a transaction can then be arranged through investment in the REDD+ project or through the purchase of REDD+ verified emission reductions (VERs). This transaction can help ensure the REDD+ project can achieve and maintain its conservation goals throughout the project's lifetime.

A biodiversity compensation action to finance a REDD+ project could be considered additional if the REDD+ project is not be able to continue without additional financing. This can be evaluated on a project-by-project basis and is a similar scenario to evaluating other types of protected areas, where conservation management plans, infrastructure, and activities are already in place but lack adequate financing. This has been acknowledged as an additional action by both biodiversity compensation schemes and REDD+ projects.

Figure 4: Designing biodiversity compensation as part of new REDD+ projects



REDD+ project area established to protect specific biodiversity and ecosystem values relevant to biodiversity compensation targets; Source: Authors

3.3 New REDD+ projects can protect target species and habitat

REDD+ project developers or other REDD+ stakeholders may also be planning to design or implement REDD+ projects that could protect species and habitat relevant to biodiversity compensation targets. These early-stage REDD+ projects without established conservation management plans may be enhanced or modified to reflect specific characteristics and criteria to meet biodiversity compensation requirements. Biodiversity targets could then be nested into REDD+ projects from the beginning.

The consideration of additionality for a newly designed integrated REDD+ biodiversity compensation project is to determine whether or not the business-as-usual scenario would have resulted in conservation, e.g. if the integrated REDD+ biodiversity compensation project was not implemented would the forest habitat be degraded and/or result in deforestation and biodiversity loss. This assessment considers "what would happen if nothing was done" and if the newly designed integrated REDD+ biodiversity compensation project, that builds on both the carbon and the biodiversity finance revenue streams, was not implemented. Again this must be done on a project-by-project basis. Designing a new conservation project that integrates biodiversity compensation and REDD+ may present opportunities for larger conservation outcomes than would otherwise be able to be achieved from a single biodiversity compensation action or REDD+ project. This integrated approach could also be structured like a conservation bank to consolidate additional financing from other biodiversity compensation actions or REDD+ VER buyers.

3.4 Transacting biodiversity compensation through VERs

The assessment of biodiversity compensation actions allows companies to review and structure multiple options for demonstrating conservation commitments. REDD+ projects present potential conservation outcomes that are verified on a carbon basis.

VERs are issued after an independent third-party verification agent reviews a REDD+ project's activities, forest habitat, and determines that the forest conservation goals have been reached over a specific time period. Absolute volumes of forest biomass are determined through this verification process and general biodiversity and community attributes are documented.

Companies evaluating REDD+ on a biodiversity basis could use experts to develop proxy values for VER volumes that represent the targeted species and habitat. This could occur on a project-by-project basis involving experts who are assessing biodiversity compensation options and experts involved in the REDD+ project such as the REDD+ project developer. Thus, one possibility to

integrated biodiversity compensation and REDD+ would be to use VERs as a unit of transaction. VERs represent spatially explicit avoided greenhouse gas emissions from the avoided conversion of high-carbon biomass and hence could serve as a proxy for specific biodiversity conservation outcomes. Successfully protecting threatened habitat generates VERs, which if not sold endangers the implementation of future conservation activities and the ability of the REDD+ project to ensure on-going conservation outcomes. By purchasing VERs, buyers are financing the conservation achievements of a REDD+ project. Companies engaged in biodiversity compensation can ensure that the REDD+ project is successful through helping provide the financing through investment or purchase agreements for VERs. Long-term VER purchase agreements can help ensure that biodiversity and habitat values are protected on a time scale relevant to the buyer and support forecasts of biodiversity gains when demonstrating no net loss or net gain commitments.

Since species cannot be separated from habitat especially in avoided deforestation projects, VERs from these combined REDD+ biodiversity compensation projects would be considered bundled credits* for carbon and biodiversity ecosystem services. On the other hand, REDD+ projects that are enhancing carbon stock, such as through planting native timber species in restoration processes for example, would be more

* "Bundling" refers to merging multiple ecosystem services from a land area under a single unit of transaction or credit type.

suitable for using a stacking* approach with separate financing arrangements since the timescale and VERs generated could be possibly separated from the biodiversity outcomes. Furthermore, it has to be noted that a company's investment in REDD+ through direct equity financing or purchase of VERs for securing regulatory or voluntary biodiversity conservation outcomes should not enable it to resell those bundled VERs since the REDD+ outcomes are contracted for a specific biodiversity commitment. The volume of VERs, representing emission reductions achieved and biodiversity values conserved, determined by experts to match a company's biodiversity liability must be retired by the company. However, additional VERs that are generated in excess to biodiversity compensation commitments and liabilities could be used for other voluntary commitments such as a company's carbon neutrality, or be traded in the voluntary carbon market. While this paper suggests a financing method through REDD+ VER purchase agreements or direct project investment the authors believe that a variety of financial arrangements can be made.

Further technical guidance would be required, however, for such approach, which could be available through CCBS. CCBS is interested in developing additional technically appropriate systems to define biodiversity and habitat values within a REDD+ project that can serve the evaluation needs of biodiversity compensation buyers.

* "Stacking" refers to independently selling different types of ecosystem services from a land area through multiple tranches or units of sale e.g. biodiversity credits, carbon credits, and water credits.

Section 4: Critical Issues and Questions

The previous sections have discussed the context and synergies in aligning REDD+ and biodiversity compensation actions. This section introduces critical issues and questions that integrating REDD+ and biodiversity compensation entails.

One can reasonably ask oneself how a biodiversity compensation action can also be considered a REDD+ project and how a company can claim that a REDD+ project serves to meet a biodiversity compensation action and avoid emissions from deforestation and forest degradations at the same time.

Projects that conserve threatened biodiversity must also protect threatened land areas. Clearly REDD+ projects, when fully financed, produce conservation results in metrics and reports accounting for habitat conserved, biodiversity values present, community benefits, and avoided greenhouse gas emissions. Fundamentally these attributable outcomes from a REDD+ project are endangered and/or will not occur if the REDD+ project is not able to secure adequate financing. Comparing the status quo, i.e. doing nothing and having a REDD+ project fail to deliver results, against the funded REDD+ project, i.e. providing financing and having the REDD+ project fulfil expectations and produce conservation results, demonstrates that the financing for biodiversity compensation is additional. The evaluation to determine this additionality could be made by the companies involved in the biodiversity compensation assessment, the REDD+ project developer, and REDD+ project stakeholders.

Will integrating biodiversity compensation with REDD+ result in an easy way for companies to avoid their environmental responsibilities? Could such an approach allow private sector actors to claim contributions to biodiversity conservation and climate stabilization through the same effort, and thus take away their responsibility for action on biodiversity impacts and global warming?

In the current practice of companies following the mitigation hierarchy and engaging in biodiversity compensation there is no accounting for greenhouse gas emissions directly or indirectly caused by the development project. Integrating REDD+ and climate solutions would support discussions on further accountability and links between biodiversity impacts and global warming. Furthermore, private sector companies' best practices for carbon neutrality claims follow an analogous process to the mitigation hierarchy and take responsibility for avoiding and minimizing the impacts from their operations before compensating or offsetting. The integration of biodiversity compensation schemes and REDD+ reflects the fundamental reality that biodiversity, high-carbon biomass habitat, and species are interconnected. Inaction on avoiding deforestation is leading to losses in biodiversity. Hence, on the contrary, this is an opportunity to support more permanent and, robust, financing for biodiversity conservation and REDD+.

However, couldn't such an integrated approach result in consolidating private sector financing on a small number of conservation projects as opposed to encouraging financing to spread to as many different conservation projects as possible?

This is an important consideration, though it has to be noted that there is limited private sector capital available for conservation projects of any type. Small isolated conservation projects in developing regions present uncertain long-term conservation outcomes. This is especially apparent in comparison to well-funded large-scale contiguous conservation projects.[27] Economic booms and the development of infrastructure projects place more pressure on biodiversity habitat leading to fragmentation and ecosystem collapse.[28] The opportunity to align the disconnected biodiversity compensation and REDD+ attempts to finance conservation can assure larger conservation outcomes and ensure they are integrated into long-term land-use planning.

The question might also arise what would be the benefits for REDD+ project developers and community in such integrated approach.

As already discussed REDD+ projects are struggling to secure long-term financing

so an integrated approach resulting in additional demand for high quality REDD+ projects would help REDD+ project developers to survive and carry on with the implementation of their existing and future projects. Furthermore, the added perceived value from linking biodiversity compensation and REDD+ may result in higher prices for REDD+ VERs.

This would be similar to the proposals developed by the World Bank's Wildlife Premium Market Initiative to create additionally valued REDD+ credits that could protect specific species and habitat. [29] By linking biodiversity compensation actions and REDD+, participating companies and organizations would be fundamentally aligned with the concepts put forth by the World Bank's Wildlife Premium Market Initiative. While the concept of a wildlife premium to REDD+ conservation outcomes and linking biodiversity compensation to REDD+ is gaining traction, properly inking the two mechanisms requires further discussion and the creation of opportunities to develop pilots that can test theory.

However, it also has to be noted that such integrated approach does not represent a silver bullet or structural solution to neither the challenges of the biodiversity compensation schemes nor to the oversupply on the voluntary carbon markets. On the one hand, REDD+ represents a new tool that can be used to achieve biodiversity conservation outcomes and targets, but challenges still remain in the quantification of impacts and residual losses, which are key for designing the requirements for biodiversity compensation actions.

On the other hand, integrating biodiversity compensation actions into REDD+ projects would increase demand for REDD+ VERs, which would be very beneficial especially in the short to medium-term. However, for the long-term sustainability of the REDD+ framework it is still very necessary to substantially increase the existing demand for REDD+ through an increase in the climate mitigation and adaptation commitments of Parties to the UNFCCC and by securing a global agreement in which REDD+ emission reductions will be recognised as a compensation mechanism. Furthermore, there is no mandate through the UNFCCC for biodiversity conservation priorities to be met through REDD+. By encouraging the success of REDD+ projects that prioritise high conservation value areas, the REDD+ community will encourage the nesting of conservation goals into the REDD+ mechanism.

Finally, it is also important to discuss whether such an integrated approach would be future-proof and whether and how it can be integrated into future climate compliance systems under the UNFCCC.

Harmonizing global finance, trade and economic policies to stabilise global warming is challenging. The design of the UNFCCC and government policies is uncertain. What is certain is the important role biodiversity and forest habitat play in the biosphere and the need to include biodiversity conservation in climate policies. Over 78 governments are planning future climate mitigation and adaptation commitments that account for forest carbon and REDD+. Prioritizing biodiversity conservation through REDD+ by linking biodiversity compensation schemes can help drive government climate policies to support wildlife habitat.

Section 5: Conclusion

Coordinating stakeholders working on biodiversity compensation and REDD+ to harmonise approaches is possible through national and jurisdictional REDD+ frameworks, policies, and project-level scenarios. The design of effective REDD+ and biodiversity compensation projects and policies can support biodiversity conservation alongside development priorities and private sector business interests. Prescient companies, policy makers, and project developers can facilitate pilot projects to develop best practices, robust systems, and safeguards that support the integration of these two unique schemes to mobilise private sector financing for conservation. There are many potential benefits to be realised from linking biodiversity compensation actions and REDD+. Improved biodiversity compensation and REDD+ programs can facilitate a better integration of conservation priorities alongside economic development pathways and create better opportunities for strategic collaboration between governments civil society and private sector actors in REDD+ strategies, land-use planning discussions, and governance. Companies that are taking responsibility for their biodiversity impacts will be presented with more options and opportunities for achieving biodiversity conservation target of no net loss, net gain, and net positive impact. Furthermore, when biodiversity compensation and REDD+ are integrated, companies that otherwise have no regulatory obligation to mitigate global warming but have to compensate for biodiversity impacts, will be drawn into financing REDD+ and create additional demand for verified emission reductions and climate action.

Most importantly, biodiversity conservation projects will benefit from better-funded large-scale conservation areas that operate under robust monitoring, reporting, and verification systems.

The authors hope that this paper has served as a primer for conversation on future initiatives to explore pilot projects, policies, and programs that can support the integration of biodiversity compensation actions and REDD+ in conserving the complexity of life on Earth. The next step is to trial this integrated approach in the field. Companies, financial institutions, and policy makers involved in biodiversity compensation schemes may use this paper to engage in discussions with REDD+ projects developers and REDD+ stakeholders, while participants in the development of the REDD+ mechanism can use this paper to help further efforts to integrate biodiversity conservation into REDD+ policies and programs. Additional evaluation and thoughts on integrating REDD+ to biodiversity compensation actions under the BBOP Standard are included in the Appendix. The authors welcome further collaboration and discussion on how to reconcile the integration of biodiversity compensation schemes and REDD+.

Appendix

Evaluation of the integrated biodiversity compensation and REDD+ projects against the BBOP Standard

This section will assess to what extent integrating biodiversity compensation actions and REDD+ projects satisfies the BBOP Standard. In this section, we consider the BBOP framework and its guiding principles as a valid benchmark to carry out this assessment. The following section provides a description of each guiding principle (text in blue taken from BBOP)[30] together with a subsequent evaluation on the compatibility with an integrated approach.

1. ***No net loss:*** *A biodiversity offset should be designed and implemented to achieve in situ, measurable conservation outcomes that can reasonably be expected to result in no net loss and preferably a net gain of biodiversity.*

   REDD+ projects through avoiding deforestation and forest degradation achieve in situ, measurable conservation outcomes. However, to achieve no net loss or net gains under BBOP, the biodiversity gains from REDD+ project implementation must be compared to biodiversity losses. Technical experts, potentially using CCBS to evaluate biodiversity gains, can determine the appropriate compensation levels required and carry out the reconciliation process similar to the case of standalone biodiversity compensation projects.

2. ***Additional conservation outcomes:*** *A biodiversity offset should achieve conservation outcomes above and beyond results that would have occurred if the offset had not taken place. Offset design and implementation should avoid displacing activities harmful to biodiversity to other locations.*

   A biodiversity compensation action to finance a REDD+ project could be considered additional if the REDD+ project is not able to continue without additional financing. This can be evaluated on a project-by-project basis and is a similar scenario to evaluating other types of protected areas, where conservation management plans, infrastructure, and activities are already in place but lack adequate financing. This has been acknowledged as an additional action by both biodiversity compensation schemes and REDD+ projects.

   Displacement or leakage is already considered and quantified during the design and management process for REDD+ projects. Assessing leakage accurately is part of the knowledge base and peer-reviewed scientific literature used in REDD+ systems.

   The consideration of additionality for a newly designed integrated biodiversity compensation/REDD+ project is to determine whether or not the business-as-usual scenario would have resulted in conservation, e.g. if the integrated biodiversity compensation/REDD+ project was not implemented would the forest habitat be degraded and/or result in deforestation and biodiversity loss. This assessment considers "what would happen if nothing was done" and if the newly designed integrated biodiversity compensation/REDD+ project was not implemented. Again, this must be done on a project-by-project basis. Designing a new conservation project that integrates biodiversity compensation and REDD+ may present opportunities for larger conservation outcomes then would otherwise be able to be achieved from a single biodiversity compensation action or REDD+ project. This integrated approach could also be structured like a conservation bank to utilise additional financing from other biodiversity compensation actions or REDD+ VER buyers.

3. ***Adherence to the mitigation hierarchy:*** *A biodiversity offset is a commitment to compensate for significant residual adverse impacts on biodiversity identified after appropriate avoidance, minimisation and on-site rehabilitation measures have been taken according to the mitigation hierarchy.*

   The mitigation hierarchy must be followed to avoid, minimise, abate, and remediate impacts on biodiversity before biodiversity compensation through REDD+ could occur. Only then can additional biodiversity

commitments to compensate for unavoidable and residual adverse impacts be credibly made. Similarly, companies that purchase REDD+ VERs for carbon neutrality and emission reduction purposes can do so credibly only after taking efforts to reduce operational greenhouse gas emissions.

4. ***Limits to what can be offset:*** *There are situations where residual impacts cannot be fully compensated or by a biodiversity offset because of the irreplaceability or vulnerability of the biodiversity affected.*

   This should be assessed by experts prior to any offset consideration and using REDD+ projects for biodiversity compensation will have to be aligned with such expert recommendations.

5. ***Landscape context:*** *A biodiversity offset should be designed and implemented in a landscape context to achieve the expected measurable conservation outcomes taking into account available information on the full range of biological, social and cultural values of biodiversity and supporting and ecosystem approach.*

   REDD+ projects under VCS and CCBS range in size from isolated 666 hectare conservation projects to landscape level, 1,351,964 hectare, management. Eventually all REDD+ projects will be embedded into national and subnational systems. This links the REDD+ project and its conservation activities to the government's cross-sectoral and inter-ministerial regional forest habit conservation programs, monitoring systems, and sustainable development initiatives.

6. ***Stakeholder participation:*** *In areas affected by the project and by the biodiversity offset, the effective participation of stakeholders should be ensured in decision-making about biodiversity offsets, including their evaluation, selection, design, implementation, and monitoring.*

   Community and stakeholder alignment and participation is at the core of any successful REDD+ project under the VCS and CCBS. Successful REDD+ project implementation results in participatory collaborations with forest-dependent communities that strengthens their livelihood capacities and facilitates sustainable and equitable development. REDD+ safeguards at a national, subnational and project-level recognise and respect the rights of indigenous peoples and local communities under the United Nations Declaration on the Rights of Indigenous Peoples (UNDRIP) and United Nations Human Rights Council (UNHRC). REDD+ project developers can ensure the proper execution of stakeholder consultation according to Free Prior Informed Consent (FPIC) principles and makes sure that there is a functional, accessible and transparent grievance procedure.

7. ***Equity:*** *A biodiversity offset should be designed and implemented in an equitable manner, which means the sharing among stakeholders of the rights and responsibilities, risks and rewards associated with a project and offset in a fair and balanced way, respecting legal and customary arrangements. Special consideration should be given to respecting both internationally and nationally recognised rights of indigenous peoples and local communities.*

   Again, participatory community engagement in the management of the REDD+ projects ensures that equitable benefit sharing is based in the design of successful REDD+ projects under the VCS and CCBS. REDD+ safeguards followed at a national, subnational, and project level can ensure equitable, transparent, participatory and coordinated project development and management.

8. ***Long-term outcomes:*** *The design and implementation of a biodiversity offset should be based on an adaptive management approach, incorporating monitoring and evaluation, with the objective of securing outcomes that last at least as long as the project's impacts and preferably in perpetuity.*

Permanence is a key concept in REDD+ as permanence determinations ensure the ability of REDD+ to deliver climate solutions. Permanence risks are assessed through REDD+ safeguards at a national and subnational level and VCS at a project-level. REDD+ projects can help ensure a company's biodiversity values of concern will be integrated into regional planning. This can help decrease leakage and risks of reversal threats to permanence. Leakage, non-permanence, and risks of reversal at a project-level are also assessed through the VCS. The VCS has developed a robust set of tools to evaluate these issues which are available for review on their website: http://v-c-s.org/.

9. ***Transparency:*** *The design and implementation of a biodiversity offset, and communication of its results to the public, should be undertaken in a transparent and timely manner.*

   All REDD+ projects implemented under the VCS and CCBS are open for public comment and discussion while under consideration for validation. All documents pertaining to validated REDD+ projects are made available to the public through VCS and CCBS databases.

10. ***Science and traditional knowledge:*** *The design and implementation of a biodiversity offset should be a documented process informed by sound science, including an appropriate consideration of traditional knowledge.*

    The criteria REDD+ is evaluated against and implemented by, reflects applied anthropological, biological, climate, and environmental science that incorporates political and socioeconomic views. REDD+ engages a diverse set of stakeholders that include traditional knowledge-holders to provide participatory guidance and support for REDD+ implementation.

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Code REDD is a nonprofit organization whose mission is to support and scale the REDD+ mechanism to realise its full potential to empower people, preserve forests, protect wildlife, and reduce emissions. We aim to create a world where the REDD+ mechanism is widely adopted within private sector practices, corporate business models, and regulatory frameworks to drastically reduce deforestation, value ecosystem services, promote low carbon development, and enable a transition to the green economy.
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