REDD+ Safeguards Brief 5

Safeguarding Biodiversity in REDD+

Necessary but not sufficient to help slow global biodiversity loss

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Biodiversity safeguards were introduced into the REDD+ mechanism to avoid potential harm to biodiversity. However, for REDD+ to truly contribute to biodiversity conservation, initiatives must go much further.

READ THIS BRIEF IF...

- You are interested in the potential of REDD+ to contribute to biodiversity conservation in the tropics.
- You want to know how REDD+ could deliver biodiversity benefits beyond the safeguarded minimum.
- You are planning to design a REDD+ initiative that delivers biodiversity conservation benefits.

KEY MESSAGES

- REDD+ provides the opportunity to deliver biodiversity conservation in the tropics.
- Safeguards are vital, but alone do not guarantee delivery of biodiversity co-benefits in REDD+.
- The delivery of biodiversity co-benefits will require additional effort.
- A landscape approach will offer better opportunities for REDD+ to contribute to biodiversity conservation.

> "Biodiversity benefits from REDD+ must not be confined to isolated projects but integrated across larger areas."

OPPORTUNITIES AND RISKS FOR BIODIVERSITY IN REDD+

Land-use change and climate change are predicted to be the two most important drivers of biodiversity loss in the terrestrial realm in the 21st century (Pereira et al. 2010). REDD+ has the potential to tackle these two major challenges simultaneously. As deforestation and forest degradation directly affect natural habitats (Sangermano et al. 2012), then if REDD+ can slow deforestation and forest degradation, it should, in theory, benefit biodiversity conservation in tropical forests (Gardner et al. 2012). Future REDD+ financing could offer an opportunity to supplement the current shortfall in conservation funding (Waldron et al. 2013) or fund forest conservation at a scale that could potentially dwarf current investment (Busch et al. 2011; Venter et al. 2013).

However, if REDD+ is not properly planned, it could negatively affect biodiversity (Harvey et al. 2010). A key concern is that preferential targeting of REDD+ in high-carbon areas could lead to the displacement of land-use pressure (leakage) into high-biodiversity but low-carbon areas (Parr et al. 2014) or divert funds for conservation away from high-biodiversity areas with lower carbon (Phelps et al. 2012a; Venter et al. 2013). This is because carbon markets seeking low-cost REDD+ credits

would not incentivize the delivery of non-carbon benefits (Phelps et al. 2012b). The expanded scope of REDD+, which includes the conservation and enhancement of forest carbon stocks and sustainable management of forests, has also led to further concerns. Activities to enhance forest carbon stocks could encourage the expansion of carbon plantations at the expense of high-biodiversity non-forest ecosystems (Griscom and Cortez 2013; Parr et al. 2014). Furthermore, improved forest management, even if under principles of sustainable forest management, could compromise old-growth forest and pristine natural forests (Huettner 2012; Lindenmayer et al. 2012).

SAFEGUARDS FOR BIODIVERSITY AT THE INTERNATIONAL NEGOTIATIONS

In response to the concerns for biodiversity in the REDD+ mechanism, safeguards were introduced at the UNFCCC Conference of the Parties in Cancun to ensure that REDD+ does no unintended harm to biodiversity (Pistorius and Reineck 2013). The Cancun Agreement provided guidance for safeguarding biodiversity by requiring that REDD+ actions do not result in the conversion of natural forests to plantations, but instead be used to incentivize the conservation of natural forests and their ecosystem services, and enhance environmental benefits (UNFCCC 2011). Although a step in the right direction, the wording was considered too general and not operational (Gardner et al. 2012; Grussu et al. 2014). Despite the evolution of international safeguard discussions since Cancun, safeguards for biodiversity and other non-carbon benefits remain vague (Pistorius and Reinecke 2013). This is generally true of international standards, which need to be flexible and adaptable to different national and local contexts (Roe et al. 2013). It seems highly unlikely, however, that UNFCCC will set aside carbon payments for delivery of biodiversity benefits within the REDD+ mechanism (Busch 2013).

MOVING FROM SAFEGUARDS TO CO-BENEFITS

REDD+ biodiversity safeguards have been defined as the "minimum requirement for all countries participating in REDD+ in order to avoid perverse and unintended harm to forest biodiversity" (Phelps et al. 2012b). However, from early in the discussions about REDD+, there has been excitement that REDD+ could deliver additional benefits for biodiversity (known as 'co-benefits'). Biodiversity co-benefits can be defined as "ancillary benefits in addition to carbon benefits obtained through the improved state of biodiversity from an agreed upon baseline through the activities implemented under REDD+" (Phelps et al. 2012b). Based on these definitions and the way in which safeguards and co-benefits have been discussed in international negotiations, safeguards can be viewed at one end of the spectrum as a 'risk management approach' to protecting biodiversity, i.e. ensuring that REDD+ does no harm to biodiversity. At the other end of the spectrum, co-benefits can be viewed as an 'opportunity realization approach', i.e. REDD+ is designed to deliver additional benefits for biodiversity (Figure 1).

Delivering additional conservation benefits for biodiversity will require developing explicit 'biodiversity-friendly' methods, such as spatial targeting of REDD+ interventions (Jantz et al. 2014; Venter 2014), supplementary financing focused on biodiversity delivery (Phelps et al. 2012b; Dinerstein et al. 2013) or biodiversity-specific management strategies (Martin et al. 2013; Nghiem, 2014), because safeguards alone will not guarantee the delivery of biodiversity benefits.

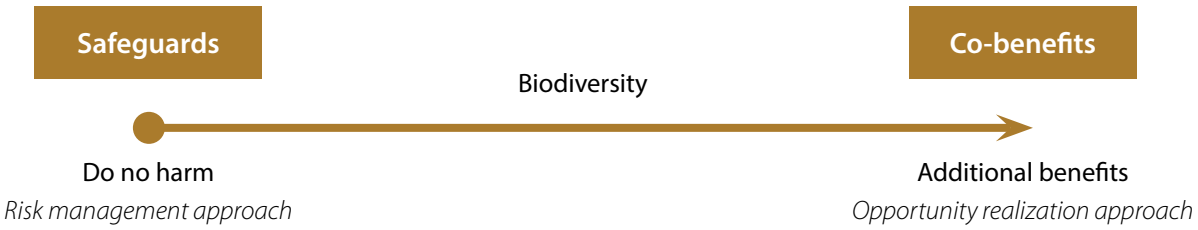

Figure 1. Biodiversity safeguards and co-benefits on the biodiversity spectrum

REALIZING THE DELIVERY OF BIODIVERSITY CO-BENEFITS IN REDD+

Spatial targeting has been increasingly recognized as an important strategy for achieving additional gains for biodiversity (Busch and Grantham 2013; Locatelli et al. 2013; Venter et al. 2013). Studies in Tanzania (Lin et al. 2014) and Brazil (De Barros et al. 2014) show evidence of REDD+ initiatives spatially targeting high-biodiversity areas instead of purely carbon-rich areas. There is also evidence that focusing REDD+ initiatives in high-biodiversity areas promotes more opportunities for bundling with other ecosystem services (e.g. biodiversity conservation, carbon storage, water regulation and scenic beauty) than when focusing on high-carbon areas alone (Locatelli et al. 2013).

REDD+ is a climate mechanism, and it is unlikely that a future regulatory mechanism would finance the delivery of non-

carbon benefits, because diverting carbon funds to projects or locations that are good for biodiversity can increase costs and overburden initiatives (Venter 2014). That said, analyses show that spatially targeting areas that are good for both carbon and biodiversity can provide additional biodiversity benefits with only marginal cost increases in most cases (Phelps et al. 2012a; Busch and Grantham 2013). REDD+ could achieve carbon and biodiversity synergies through separate add-on incentive mechanisms that promote the delivery of biodiversity benefits (Phelps et al. 2012b). Options for supplementary financing include wildlife premiums (Dinerstein et al. 2013) or conservation funds to cover opportunity costs (Crossman et al. 2011). Alternatively, Venter et al. (2013) argue from a strict biodiversity perspective that it would be most cost efficient to use biodiversity funds to protect areas neglected by REDD+.

REDD+ initiatives that protect existing forest carbon stocks will not automatically protect other forest values (Huettner 2012); if REDD+ is to go beyond doing no harm to actually realizing biodiversity conservation benefits, biodiversity-specific management will need to be incorporated in the planning, design and implementation of REDD+ on the ground. Martin et al. (2013) found that because carbon pools recover more quickly than biodiversity in degraded forests, REDD+ initiatives would need to carry out active restoration or reforestation in order to promote biodiversity conservation. If biodiversity conservation is factored into forest plantation design, a longer optimal rotation age will need to be applied compared to the period that maximizes the joint value from timber and carbon sequestration (Nghiem 2014). Persistent threats to biodiversity loss (such as hunting) could still take place in REDD+ protected forests if specific enforcement and monitoring activities (e.g. patrolling) are not put in place to address direct threats to biodiversity. Lastly, we emphasize the importance of a landscape approach to REDD+ planning, designing and implementation that ensures that biodiversity benefits from REDD+ are not confined to isolated REDD+ projects but instead are integrated across larger areas.

CONCLUSION

Safeguards to ensure that REDD+ does no harm to biodiversity are vital. However, additional planning at the landscape level, including other payment mechanisms such as markets for biodiversity, will be required to realize the potential of REDD+ to contribute to biodiversity conservation.

> “Planning at the landscape level is needed to realize REDD+’s potential for biodiversity conservation.”

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RESEARCH PROGRAM ON Forests, Trees and Agroforestry

This research was carried out by CIFOR as part of the CGIAR Research Program on Forests, Trees and Agroforestry (CRP-FTA). This collaborative program aims to enhance the management and use of forests, agroforestry and tree genetic resources across the landscape from forests to farms. CIFOR leads CRP-FTA in partnership with Bioversity International, CATIE, CIRAD, the International Center for Tropical Agriculture and the World Agroforestry Centre.

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