



The Pros and Cons of Biodiversity Crediting



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Research Series

INTRODUCTION

A significant financial gap exists between the resources currently allocated to biodiversity conservation and the funding required to achieve the framework's ambitious objectives. Traditional sources of funding fall short of meeting the scale of investment needed to address the biodiversity crisis effectively. In response to this funding short-fall, there has been growing interest in exploring innovative financing mechanisms, such as biodiversity crediting. Biodiversity credits represent a novel approach to mobilising private sector investment for conservation efforts, offering a potential solution to bridge the financial gap and accelerate progress towards achieving the goals outlined in the 2022 Kunming-Montreal Global Biodiversity Framework (GBF). What are the pros and cons of biodiversity crediting in general? What are recommendations on how identified drawbacks can be mitigated?

SUSTAINABILITY RESEARCH PAPER

This research paper is part of a 12-month series published by the Al-Attiyah Foundation every year. Each in-depth research paper focuses on a current sustainability topic that is of interest to the Foundation's members and partners. The 12 technical papers are distributed to members, partners, and universities, as well as made available on the Foundation's website.



03 EXECUTIVE SUMMARY



- The 2022 Kunming-Montreal Global Biodiversity Framework (GBF) represents a significant milestone in global conservation efforts. Endorsed by 196 parties, the framework establishes specific and measurable targets aimed at addressing the pressing issues of biodiversity loss. These targets provide a clear roadmap for action and signify a collective commitment to halt and reverse the decline of nature. By endorsing the GBF, countries acknowledge the urgent need for coordinated efforts to preserve biodiversity and ensure the wellbeing of ecosystems and species worldwide.
- A significant financial gap exists between the resources currently allocated to biodiversity conservation and the funding required to achieve the framework's ambitious objectives. Traditional sources of funding – such as government budgets and philanthropic initiatives – fall short of meeting the scale of investment needed

to address the biodiversity crisis effectively. In response to this funding shortfall, there has been growing interest in exploring innovative financing mechanisms, such as biodiversity crediting. Biodiversity credits represent a novel approach to mobilising private sector investment for conservation efforts, offering a potential solution to bridge the financial gap and accelerate progress towards achieving the goals outlined in the GBF.

 Biodiversity credits offer several advantages that make them an attractive option for financing conservation efforts. One of the primary advantages is their ability to leverage private sector finance. By providing financial incentives for businesses to invest in conservation projects, biodiversity credits can unlock new sources of funding that complement traditional conservation financing mechanisms. Moreover, biodiversity credits build on lessons learned from the voluntary carbon market, which has pioneered the use of market-based mechanisms to address environmental challenges. By adapting and applying similar principles to biodiversity conservation, biodiversity credits have the potential to scale up investment in conservation efforts and deliver measurable results. Additionally, biodiversity credits offer a flexible and customisable approach to conservation finance, allowing for the development of tailored solutions that address specific conservation priorities and objectives. This flexibility enables stakeholders to design credit schemes that align with the unique characteristics of different ecosystems and species, maximising the effectiveness of conservation investments and ensuring the greatest possible impact.

While biodiversity credits hold promise as a means of mobilising private sector finance for conservation, they also present several challenges that need to be addressed. One of the primary challenges is the complexity of biodiversity measurement. Biodiversity is a multifaceted concept that encompasses a wide range of species, habitats, and ecosystems, making it difficult to develop standardised metrics for assessing biodiversity impacts accurately. This complexity contributes to high monitoring costs and poses challenges in verifying the effectiveness of conservation projects funded through biodiversity credits. Additionally, biodiversity credits face challenges related to the timeframes for achieving measurable outcomes.





Conservation efforts often take years or even decades to yield tangible results, making it challenging to demonstrate the immediate impact of investments in biodiversity conservation. Furthermore, concerns have been raised about the practice of stacking, where multiple types of credits are generated for the same conservation project. Stacking can lead to issues of additionality and double counting, undermining the integrity of biodiversity credit schemes and complicating efforts to assess their effectiveness.

 Addressing the challenges and realising the potential of biodiversity credits requires concerted efforts from stakeholders across sectors. Moving forward, it is essential to prioritise stakeholder engagement, transparency, and collaboration in the design and implementation of biodiversity credit schemes.

By involving a diverse range of stakeholders, including governments, businesses, civil society organisations, and local communities, it is possible to develop inclusive and effective strategies for mobilising private sector finance for conservation. Moreover, it is crucial to establish alignment on metrics and safeguard requirements to ensure the credibility and integrity of biodiversity credit schemes. By adopting standardised approaches to biodiversity measurement and verification, stakeholders can enhance transparency and accountability, building trust in the effectiveness of biodiversity credit schemes. Ultimately, by addressing these challenges and capitalising on the advantages of biodiversity credits, it is possible to unlock new opportunities for conservation finance and accelerate progress towards achieving the objectives outlined in the GBF.

In recent years, there has been a growing global focus on the crisis of biodiversity loss, acknowledging the unprecedented risks it presents to both humanity and the worldwide economy. This momentum led to the endorsement of the 2022 Kunming-Montreal Global Biodiversity Framework (GBF). A total of 196 parties signed this historic framework, establishing a universally agreed-upon objective with corresponding targets and measures to halt and reverse the decline of nature. To achieve these targets, many changes will be needed, such as policy reforms, shifts to more sustainable production and consumption as well as the creation of equitable benefit sharing mechanisms. Moreover, a considerable financial disparity exists between the current funding directed towards biodiversity conservation and the funds required to achieve this ambitious goal. Despite nature's intrinsic value, public funding for biodiversity is marginal compared to public funding to address climate change.ⁱ Hence, new financing schemes have to be developed. Target 19 of the GBF necessitates efforts to bridge the global biodiversity finance gap, aiming to mobilise USD 200 billion annually by 2030, partially through inventive financing schemes and increased inflows of private capital. Meanwhile, a growing number of global private investors and companies are recognising their impacts and interdependencies with nature. Therefore, these stakeholders are actively taking measures to mitigate risks linked to biodiversity loss, while also exploring new opportunities to invest in its restoration.

One way to fund restoration and conservation of nature is biodiversity crediting. While the concept of biodiversity offsetting and crediting is not new, discussions on how to scale-up respective efforts have been emerging as a result of the recent momentum.

Biodiversity offsets refer to non-fungible, activity specific transactions. Biodiversity credits, on the other hand, refer to fungible units that only require a generic definition and providing a net positive contribution to biodiversity instead of counterbalancing a negative impact. Up until now, experience in biodiversity crediting was mostly focused on offsetting. This involves mandates for companies that destroy natural habitat at a geographic site to restore or conserve similar habitat elsewhere (e.g., the United States' Endangered Species Act (ESA), the European Union's Habitats Directive, and Australia's Environmental Protection and Biodiversity Conservation Act (EPBC Act)).



Table 1: Voluntary Biodiversity Credit Schemes and Initiatives Globally

Private sector-led programs

- GreenCollar, NaturePlus™ Credits (Australia)
- Terrain NRM, Cassowary Credits (Australia)
- South Pole, EcoAustralia™ (*Australia*)
- Wilderlands, Biological Diversity Units (Australia)
- Ekos, Sustainable Development Units (New Zealand)
- Plan Vivo, PV Nature Biodiversity Certificates (International)
- Wallacea Trust, Biodiversity Credits (International)
- VERRA, Verified Impact Standard (SD VISta) (International)
- Climate Trade/Terrasos, Biodiversity Credits (Colombia)
- Ecosulis CreditNature (United Kingdom)
- ValueNature Biodiversity Credits (South Africa)
- OpenEarth, Marine Ecosystem Credits (International)
- Organisation for Biodiversity Certificates (France)
- Recelio, Dynamic Biodiversity Tokens (Switzerland)
- Orsa Besparingsskog (Sweden)
- BioCarbon Registry (Colombia)
- CarbonZ (New Zealand)
- Credit Nature (Scotland)
- InvestConservation (International)
- Single Earth (International)
- South Pole (Colombia)
- Botanic Gardens Conservation (International)
- ERA Brazil (Brazil)
- New Atlantis Labs (International)
- Rebalance Earth (Africa)
- Savimbo (Colombia)

Source: Pollination (2023)iv

Recent discussions around biodiversity credits foresee a new pathway, away from offsetting, wherein these credits could instead contribute to various nature-related objectives, thereby providing the means of cost-efficient support in reaching climate net zero targets as well as overarching GBF targets. Moreover, they have the potential to play a role in implementing and reaching the objectives outlined in biodiversity National Biodiversity Strategies and Action Plans (NBSAPs) as well as climate Nationally Determined Contributions (NDCs), and land restoration Land Degradation Neutrality (LDN) targets.ⁱⁱ

Within the voluntary carbon market (VCM), biodiversity co-benefits for nature-based solutions (NbS) are contested. Debates over trade-offs – such as whether monocultures provide higher carbon benefits than highly diverse ecosystems – have created uncertainty

Government-led programs

- Proposed Nature Repair Market (Australia)
- Ocean Conservation Credits (Niue)
- Biodiversity credit system (Gabon)
- Green Credit Programme (draft rules introduced) (*India*)
 Biodiversity Credit System (under consultation) (*New Zealand*)

Governance/integrity initiatives

- World Economic Forum Biodiversity Credits Working
 Group (International)
- Biodiversity Credits Alliance (International)
- Taskforce for Nature Markets (International)
- IUCN Global Standard for Nature Based Solutions (International)

University-led programs

• Queen Mary University (United Kingdom)

Independent standards

- VERRA (International)
- Plan Vivo Foundation (United Kingdom)

around the possibilities and limitations of combining carbon increase with biodiversity conservation or restoration efforts.^{III} This leaves space for the creation of new programmes, primarily focusing on biodiversity benefits. Currently, there are multiple programmes for tradable biodiversity credits that have evolved from 2022 onwards, including recent examples from Plan Vivo (i.e., the Plan Vivo Nature Framework) and Verra's SD Nature Framework, which is still under development (see Table 1). Both aim to issue credits that cannot be used as offsets.

This paper aims to identify the advantages and drawbacks of biodiversity credits in general and when compared to carbon credits with biodiversity co-benefits. Finally, it seeks to provide recommendations on how to mitigate the identified drawbacks and how to create a high-integrity market.



Biodiversity credit markets offer numerous advantages for both the planet and market participants. They provide a means to harness targeted finance from the private sector, which is crucial due to the lack of public funding. Private investors and companies are increasingly acknowledging their impact on and interdependencies with nature. This has led to a strong interest in identifying measures to mitigate biodiversity loss and options to invest in restoration and conservation measures. Therefore, an increased credit demand can be expected due to more acute perception of biodiversity crisis by the private sector. Companies can use tools to set targets for reducing their impact on biodiversity, such as the Science Based Targets Network (SBTN). The SBTN framework offers businesses the opportunity to measure their impact on biodiversity and set science-based targets to mitigate it.

Meanwhile, Target 15 of the GBF invites countries to take legal, administrative as well as policy measures that encourage companies to evaluate and disclose their risks to biodiversity as well as their dependencies and impacts on it.^v The GBF considers the private sector to be the key driver for biodiversity loss. Hence, the pressure on business is growing to demonstrate how they limit their negative impacts on biodiversity and contribute to the enhancement of biodiversity. Ideally, the credits issued by biodiversity credit schemes can provide the private sector with credible, non-offset driven, nature positive claims.^{vi}

Another significant advantage for the biodiversity credit market is that it can build on VCM experience and build on the lessons learned to establish a high-integrity market. Key lessons to be drawn from the VCM include the need for high-integrity and fair benefit-sharing, as well as the importance of involving indigenous peoples (IPs) and local



communities (LCs) in an equitable, transparent, and culturally appropriate manner in order to mobilise credits. If the biodiversity credit market does not properly incorporate them, it risks weak demand, low quality and insufficient supply as well as lagging uptake, high costs and eventually market failure.

Despite benefits of biodiversity credits are making a strong case, there are also many drawbacks hampering the market uptake. One of the key disadvantages of biodiversity crediting is the high complexity of biodiversity measurement. Biodiversity is a highly interconnected, abstract and context specific ecological concept. Since there is no universally agreed approach, current biodiversity crediting schemes are using a variety of indicators to calculate impacts. These include granular-level indicators like species (e.g., population, variety, keystone species, risk), high-level indicators such as habitat (e.g., condition, significance, connectivity, structure) or ecosystem (e.g., ecosystem functioning, condition, connectivity, risk) (see Figure 1), as well as other factors such as management, productivity or social engagement.vii Three indicators that are used by almost all schemes to determine the impact and number of credits to be issued are project area, duration and project type. In addition to indicators, metrics used by existing schemes also differ widely, making a comparison between the schemes extremely challenging.viii The complex measurements needed for the indicators are leading to high monitoring, reporting and verification (MRV) as well as transaction costs.^{ix} Based on current discussions, metrics will arguably remain one of the most critical challenges for biodiversity credit markets. Moreover, it is unclear to what degree an international market of comparable credits is actually possible or if fragmentation is simply inevitable.



Figure 1: Biodiversity Credit Schemes Categorisation Between Species, Habitat and Ecosystem Levels

Source: Gradeckas, Simas (2023)x

Another key issue for biodiversity crediting is the long timeframe until biodiversity outcomes materialise. Efforts to conserve biodiversity often take multiple years or even decades to yield tangible results, posing a challenge for the demonstration of the immediate impact of investments in biodiversity conservation. This is especially relevant for outcome-based crediting schemes, to which this will likely pose a barrier to participation of the supply-side.^{xi} Alternatively, activity-based schemes offer the incentivisation of activities rather than results. However, most schemes currently use an outcome-based approach.^{xii} A relatively new challenge faced by biodiversity credits is stacking, which refers to the existence of multiple types of credits for the same project area (e.g., carbon credits, biodiversity credits and water credits). This is in contrast to another possible option to certify multiple types of outcomes for one project areas (bundling). Bundling does not create individual units for each outcome type but bundles them into one credit. Since some carbon credit projects already provide biodiversity co-benefits, interest to either bundle or stack biodiversity and carbon credits, is likely to increase.



Given the interlinkages between the two targets - carbon sequestration and biodiversity conservation and/or restoration - this could increase efficiency of such projects and maximise outcomes, which would also help scale demand.xiii For a market as nascent – and at the same time as ambitious with regard to impact as the biodiversity credit market - it is vital to find ways to scale demand. However, when stacking credits there is a risk for nonadditionality (i.e., a scenario in which benefits resulting from the project would have occurred without credit revenue) and double counting (i.e., a scenario in which the same benefit resulting from a specific project is counted twice).

Additionality needs to be demonstrated for each credit separately to avoid outcomes being funded twice.^{xiv} Only when project proponents can demonstrate that the revenue from biodiversity credits is needed to achieve the biodiversity benefits in the project area and that carbon revenue alone is insufficient to fund the respective conservation and/or restoration activities, additionality can be proven. Further, only when outcomes can be clearly linked with respective additional activities, double counting can be avoided. When compared to carbon credits, various differences can be identified for biodiversity credits, ranging from the overarching goal, unit of measurement and purpose to locality and MRV (see Figure 2). While carbon credits are calculated on the basis of tCO2e, biodiversity credits usually focus on multiple or individual measurement units such as species, habitat and ecosystem integrity. In this context, it is vital to note that carbon removed or reduced is not tight to a specific location in order to offset an emission, since carbon accumulates in the atmosphere. Hence, the planetary impact remains the same. In contrast, biodiversity in one spot of the globe is not comparable to biodiversity in another area. For biodiversity in one spot to be comparable to another, they need to be in close proximity.^{xv} Due to the dependence on locality for equivalence, biodiversity credits are less tradable and create less liquidity (see Figure 2). However, newer schemes, such as PV Nature or Verra's SD VISta Nature Framework (currently under development) aim for a broader applicability.

The biodiversity credit market has the opportunity to take advantage of lessons learned from the VCM, e.g., regarding mobilisation of biodiversity co-benefits. As already mentioned, biodiversity co-benefits are not monetised separately in the VCM but take form of labels or claims. Except for the Climate, Community and Biodiversity Standard (CCBS), all other labels and claims refer to SDGs (e.g., SDG 15 "Life on Land") and SDG sub-targets (e.g., 15.5 "protect biodiversity and natural habitats"), usually leading to a varying price premium.xvi Biodiversity credits offer the possibility to buy credits, detached from carbon, that achieve a more holistic outcome for biodiversity, rather than focusing on the contribution to, for example, one specific SDG sub-target.

This is particularly relevant because of the inbuilt tendency for vegetation that rapidly sequesters carbon to have low biodiversity^{xvii} Therefore, the broader and more holistic outcome as well as the separate monetisation of biodiversity benefits could significantly increase demand, thereby improving funding focused on conservation and restoration activities. 12

The requirements for calculating, monitoring and certifying biodiversity co-benefits of carbon projects differ significantly among standards.xviii Hence, the biodiversity credit market should aim for a more aligned approach and should orient itself along the most robust requirements. This alignment is crucial not only for accurately measuring positive impact but also for implementing safeguards. The basis for a net-positive cobenefit claim is the adherence to safeguards, ensuring that no net-harm is created by a carbon project. These safeguards cover a variety of impacts, including the avoidance of water stress and the introduction of invasive species. They also encompass the respect for human, indigenous peoples, and labour rights, as well as gender equity. These safeguards are vital to prevent biodiversity credit projects from harming nature and causing negative impacts on IPs, LCs and other stakeholders. VCM standards stipulate requirements for the involvement of IPs and LCs to varying degrees. Error! Bookmark not defined. Most biodiversity schemes – especially those that have recently been developed - aim for a higher focus on communities (see Figure 3), their involvement and the sharing of benefits. As lands and waters belonging to IPs cover approximately 25% of the world's land surface and contain over 80% of its remaining biodiversity,^{xix} their role in biodiversity credit projects must be strengthened compared to the VCM.

	Biodiversity Credits	Carbon Credits
Goal	Biodiversity preservation & restoration	Carbon sequestration & emission avoidance
Unit of Measurement	SpeciesHabitatEcosystem integrity	tCO2e
Purpose of Use	Mostly contributions	Mostly offsetting
Community Focus	Higher	Lower
Locality	Higher	Lower
Tradability	Lower	Higher
Liquidity	Lower	Higher
MRV	More comprehensive	Less comprehensive
Implementation Costs	Higher	Lower

Figure 2: Brief Overview of Key Differences Between Biodiversity Credits and Carbon Credits

Source: Gradeckas, Simas (2023c)

There is strong consensus regarding the involvement of IPs and LCs not only as equitable partners but project leaders. For example, the biodiversity crediting standard Savimbo has been co-developed by IPs and LCs. It features a simplified monitoring approach to enable IPs to be in charge of the monitoring and makes use of traditional knowledge.

In addition, biodiversity crediting schemes can secure funding for project areas that do not provide attractive carbon revenue, i.e., have little to no potential for additional carbon sequestration. For example, current biodiversity crediting schemes take a high-level approach to additionality, leaving room for projects that would not be eligible under carbon markets, such as projects within so-called High Forest Cover Low Deforestation (HFLD) countries. Such projects are not deemed additional by carbon markets due to the low risk for deforestation. However, finance to conserve these forests might still be lacking, making the case for financial additionality. In their 2023 report, Pollination states that they anticipate a more flexible approach to additionality in the upcoming biodiversity credit market than in carbon markets. Regulatory requirements would not automatically lead to the exclusion of project areas based on exiting regulation for protection.^{xx}

Biodiversity crediting schemes are, however, facing multiple challenges. Similar to carbon credits, biodiversity credits need to align with the high environmental integrity criteria for additionality, baseline setting, project impact, permanence, leakage and double counting. While biodiversity credit schemes have the advantage to stipulate a more flexible approach to additionality compared to carbon credit standards, the accurate calculation of other environmental integrity criteria is more challenging. The baseline scenario, i.e., the most likely land or resource use scenario,^{xxi} is needed as a reference to estimate the impact created by the project. Due to the complexity of biodiversity and the currently vast variety of indicators. metrics and outcomes, baseline setting has proven to be challenging. Permanence, on the other hand, is a term primarily used in carbon markets to the durability of CO2 being removed or avoided. For biodiversity credits, this translates to the time biodiversity benefits created by the project are retained.^{xxii} Expert opinions on how long permanence should be ensured range between 100 and 1000 years for carbon.^{xxiiii} However, for biodiversity credits, there is no clear agreement on the necessary timeframe xxiv

Leakage describes a scenario in which negative impacts of biodiversity occur outside of the project's boundary due to its implementation. ^{xxv} Multiple reasons for leakage in biodiversity credit projects can be identified, such as poaching or slash-and-burn agriculture moving from the project area to surrounding areas, thereby reducing, or even nulling the positive impact of the project. Just as in carbon projects, leakage is a wicked problem, and solutions often only mitigate the issue but cannot fully avoid it. Hence, the negative impact of leakage has to be deducted from the positive impact of biodiversity credit projects in order to account the project's benefits accurately.^{xxvi} With double counting, biodiversity credit projects are facing the same issue as carbon credits. The term refers to the scenario in which the same benefit resulting from a specific project is counted twice.

This can happen due to double issuance from the standard, overlapping project areas or two entities claiming the same credit(s). Respective risks between the two credit types are comparable and need to be avoided.

One of the most important issues, however, is the lack of consensus around how claims should be made. Ensuring credibility and wide acceptability of claims is vital for scaling up the market. Hence, guidance on this issue is clearly needed. The public sector or independent third parties could step into this gap and could consolidate around exiting efforts, e.g., SBTN or the Taskforce on Nature-related Financial Disclosures (TNFD), which developed a risk management and disclosure framework for entities launched in September 2023.



15 RECOMMENDATIONS TO MITIGATE DRAWBACKS AND CREATE A HIGH-INTEGRITY MARKET FOR BIODIVERSITY CREDITS



Biodiversity credit markets hold many advantages but are also facing multiple challenges. First and foremost, identifying appropriate metrics will be a key challenge. Recent scrutiny regarding the VCM, especially on REDD+ projects, showcases the need for biodiversity credits to quickly align on metrics that are based on science and yet feasible. Current VCM requirements for co-benefits vary significantly in their stringency, often leaving a lot of flexibility to project proponents.xxviii A study published by Pollination in 2023, analysed several biodiversity crediting schemes, and found that biodiversity standards also display many disparities regarding robustness of requirements. If biodiversity credit schemes do not step up their efforts, they risk losing credibility and market failure. Hence, very recent discussions are focusing on identifying an efficient, yet robust approach for measuring biodiversity, such as the Forest Landscape Integrity Index (FLII).

The index has been presented in a webinar early March 2024, organised by the Wildlife Conservation Society (WCS) and partners, and aims to provide a middle-way between the granular-level indicators like species and the high-level indicators like ecosystems. While this index only works for tropical forests, it can serve as an example of how to balance costefficiency and high integrity.

Alignment is also needed for additionality determination. Although a majority of recent publications hint towards a more flexible definition of additionality, a common set of requirements has not yet been defined. As one of the key environmental integrity criteria, additionality rules should be applied equally among all standards. This is especially important for credits eligible for stacking. To achieve greater alignment and consequently more trust in the market, transparency and sound governance are required at multiple levels (i.e., international, national, subnational). In order to facilitate common agreement on key requirements, regular public consultations should be held by biodiversity crediting schemes and initiatives and guidance by third parties needs to be developed. This does not only apply to integrity requirements but also to claims. Biodiversity credits should contribute to recognised international conservation priorities and should, where relevant, be aligned with conservation plans on local and regional levels. This enables them to advance efficient targeting of conservation finance. A focus must also be laid on consolidating efforts with already existing frameworks, such as TNFD and SBTN. Moreover, early engagement with all relevant stakeholders is needed to ensure an inclusive process that builds on existing knowledge and experience. Until agreement on key requirements is found, careful due diligence is required.

In general, biodiversity crediting schemes should draw from the numerous lessons learned from the VCM. For example, stakeholder consultations within projects should be held on a regular basis, be culturally inclusive and gender sensitive. Further, IPs and LCs should either lead projects or function as equal and active partners at every stage of the project's design and implementation. Their traditions and knowledge on biodiversity should be respected and integrated. Moreover, a fair, transparent and equitable benefitsharing mechanism needs to be applied across all schemes.

To enable IPs and LCs to closely engage in MRV, a simplified yet robust guidance should be developed. In addition, recent efforts to digitalise and automate MRV should be pushed and further developed. For example, new technologies aim to reduce these costs by using remote sensing, radar, light detection and ranging (LiDAR), biologging (geotagging species with sensors), multispectral imaging or eDNA. The latter uses genetic material to monitor species presence. Besides lowered costs, this technology provides a holistic measurement with minimal invasiveness and can even detect species which are difficult to track using other, more traditional methods. This could increase efficiency but also robustness. To mitigate leakage, landscape/ jurisdictional level approaches could be applied, similar to jurisdictional REDD+.^{xxxi}

As a solid basis, biodiversity crediting schemes should focus on setting best-practice safeguard requirements (e.g. human rights, gender equity, health and safety, labour rights, no pollution, non-discrimination) to ensure that projects do no harm to nature or communities.



17 CONCLUSION



In recent years, the escalating crisis of biodiversity loss has garnered increasing global attention, recognising the unprecedented risks it poses to humanity and the worldwide economy. This heightened awareness has culminated in the endorsement of the 2022 Kunming-Montreal Global Biodiversity Framework (GBF), signifying a landmark commitment by 196 parties to address the urgent need for biodiversity conservation and restoration.

Achieving the ambitious targets outlined in the GBF requires a multifaceted approach, including policy reforms, shifts towards more sustainable production and consumption patterns, and the establishment of equitable benefit-sharing mechanisms. However, one of the most pressing challenges is the significant financial disparity between the current funding directed towards biodiversity conservation and the funds required to meet the objectives of the GBF. Enter biodiversity credits – a promising avenue for funding nature restoration and conservation efforts. While the concept of biodiversity offsetting and crediting is not new, recent momentum has sparked discussions on scaling up these efforts. Unlike offsets, which involve specific, non-fungible transactions, biodiversity credits offer fungible units that contribute positively to biodiversity without the need to counterbalance negative impacts elsewhere. Moreover, recent discussions envision a shift away from offsetting towards credits that can contribute to various nature-related objectives.

However, the widespread adoption of biodiversity credits is not without challenges. One of the primary challenges is the complexity of biodiversity measurement. Biodiversity is a highly interconnected and context-specific concept, and there is no universally agreed-upon approach for measuring it. As a result, current biodiversity crediting schemes employ a variety of indicators and metrics, leading to high MRV costs. Despite efforts to reduce these costs through new technologies such as remote sensing and genetic monitoring, measuring biodiversity remains a critical challenge for biodiversity credit markets. Another challenge is the long timeframe until biodiversity outcomes materialise. This is particularly relevant for outcome-based crediting schemes, which require demonstrating positive biodiversity outcomes over time. Additionally, the issue of stacking – where multiple types of credits exist for the same project area – raises concerns about additionality and double counting.

Despite these challenges, biodiversity credits offer numerous advantages. First of all, they provide a means to harness targeted finance from the private sector, which is crucial given the lack of public funding for biodiversity conservation. Private investors and companies are increasingly recognising their impacts on nature and are actively seeking ways to mitigate biodiversity loss and invest in restoration efforts. Moreover, biodiversity credits can build on lessons learned from the VCM to establish a high-integrity market. This includes ensuring transparency, independence, aligning with best practices, and incorporating safeguards to protect biodiversity and local communities.

Moving forward, it is imperative to address the challenges facing biodiversity credits and capitalise on their potential to drive meaningful investment in biodiversity conservation and restoration. This requires stakeholder engagement, transparency, and inclusivity, with a focus on incorporating indigenous peoples and local communities as active partners. Additionally, alignment on metrics, additionality determination, and safeguard requirements is essential to establish credibility and wide acceptability of biodiversity credits. By addressing these challenges and leveraging the momentum generated by the GBF, biodiversity credits can play a pivotal role in advancing global biodiversity conservation efforts.



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