

Lessons learned from REDD+ for national biodiversity credit schemes

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The implementation of the Global Biodiversity Framework (GBF) adopted in 2022 and the National Biodiversity Strategies and Action Plans (NBSAPs) that derive from it require substantial resources. Biodiversity credits are part of the innovative financial schemes cited by target 19 of the GBF as one of the tools to mobilize for this purpose. Their use has so far been mostly restricted to compliance mitigation schemes, but the development of a voluntary market is a concept that is being promoted by an increasing number of actors since 15.

The question then arises for States as to the framework that is required for these tools to effectively contribute to the objectives of their NBSAPs. From the point of view of international cooperation, the parallel can be drawn with the United Nations Framework Convention on Climate Change REDD+ mechanism. Though the forest carbon markets remain dominated by individual projects, multilateral funds involved in REDD+ favour jurisdictional approaches. This *Policy Brief* explores the conditions necessary to the deployment of biodiversity credits, on the basis of the lessons learned from REDD+.

KEY MESSAGES

In order to ensure the consistency and adequacy of biodiversity credits with the needs of a country or jurisdiction, it is crucial to first analyse existing expenditures, needs, and the institutional context. The establishment of national biodiversity financing plan will allow the relevant jurisdiction to determine whether or not biodiversity credits can represent an interesting solution.

As with carbon credits within the REDD+ framework, biodiversity credits can attract private investment in conservation and restoration projects. However, their success will depend on a robust framework to guarantee the quality of projects and reduce the risk of "leakage", or transfer of negative impacts outside the project area. As REDD+ has shown, jurisdictional approaches offer better environmental integrity and attract more investment than isolated projects by reducing risks.

Biodiversity credits should follow a similar logic, by elaborating a robust national framework for the market at a national or jurisdictional scale. This framework should not only regulate the conditions for supply, but also for demand, as well as the control and monitoring of credit quality, with clear certification standards and requirements in terms of ecological impact measurement, an independent and duly authorized audit process, and a national or jurisdictional biodiversity credit register.

The deployment of biodiversity credits must imperatively guarantee the active participation of indigenous populations and local communities, and the protection of their rights. Inspired by the REDD+ Cancun safeguards, these credits must ensure the equitable sharing of benefits and guarantee these communities' free and informed consent.

1. THE EMERGENCE OF CREDITS AS ONE OF THE SOLUTIONS TO FILL THE BIODIVERSITY FINANCING GAP

The term of biodiversity credit was first used to refer to units of restored surface issued by mitigation banks within compliance mechanisms (in the USA notably). These credits do not generate biodiversity impact offsets (i.e., a zero-sum game for biodiversity) due to the difficulty in attaining true ecological equivalence, but they can be used to finance the protection or restoration of ecosystems deemed critical for biodiversity. More recently, the notion of biodiversity credits or certificates as measurable units of voluntary contribution to biodiversity has emerged, and is promoted since CBD 15 by several international organisations, as well as by an increasing number of operators experimenting their feasibility all over the world. This enthusiasm is driven by the conviction that private companies have a role to play in the financing of biodiversity, whether as part of a compliance or of a voluntary approach. The motivation of these companies can be at the strategic level (e.g., reduce their impacts on biodiversity and risk exposure, as prescribed by target 15 of the GBF), or from their commitments to corporate social responsibility (CSR).

The question then arises for States as to the framework that is required for biodiversity credits to effectively contribute to the objectives of their NBSAPs. From the point of view of international cooperation, the parallel can be drawn with the REDD+ mechanism (Reduction of emissions from deforestation and forest degradation, sustainable management of forests and the conservation and enhancement of forest carbon stocks) elaborated within the United Nations Framework Convention on Climate Change (UNFCCC), and the resulting expansion of the voluntary forest carbon credit market (see box). Indeed, biodiversity credits present numerous conceptual similarities with carbon credits.

Although individual projects still make up the majority of forest carbon credits issued on the voluntary market, multilateral funds supporting REDD+ (such as the UN-REDD programme, the Forest Carbon Partnership Facility and the Central African Forest Initiative) now favour jurisdictional approaches.¹ Moreover, pursuant to the integrity crisis faced by avoided deforestation projects in 2021,² which led to a significant contraction of the forest carbon credit market, buyers are now more demanding in terms of the credit quality,³ especially when those are issued

BOX. FOREST CARBON CREDITS, BETWEEN THE REDD+ MECHANISM AND VOLUNTARY CARBON MARKETS

The "Clean Development Mechanism" (CDM) born from the Kyoto protocol (1997) allowed companies from developed countries to compensate part of their emissions by buying "carbon credits" issued by emissions reduction projects in developing countries. Forest credits represented less than 1% of CDM projects.

The dynamic created by the CDM also led to the rise of voluntary carbon credits as positive impact certificates not related to the UNFCCC's official mechanisms such as the European ETS or the Kyoto protocol. On the voluntary market, companies can acquire carbon credits as part of their CSR efforts beyond their regulatory obligations such as emissions quotas.

The adoption of the "Reducing Emissions from Deforestation and Forest Degradation" framework at the UNFCCC COP19 in Warsaw in 2013 has encouraged countries to structure their action on forest ecosystems. REDD is a results-based payment mechanism aimed at countries that succeed in reducing their emissions due to forest degradation. As of today, the payments mostly come from multilateral funds (Green Climate fund, BioCarbon Fund, etc.). REDD has become REDD+ to incorporate the role of sustainable forest management, conservation and enhancement of forest carbon stocks.

This recognition of the role of forests in climate action, and the structuring of criteria at the international level led to an important increase in the volume of forest credits on voluntary carbon markets (VCM). These credits have been calling themselves REDD+ despite not being associated with the government-level action targeted by the mechanism negotiated within the UNFCCC. Forest carbon credits now represent almost half of all carbon credits issued on VCMs. They are generated by projects or programs certified by private standards, the main one (Verra) certifying both individual projects and projects nested in jurisdictional programs.

¹ Boyd, W. *et al.* (2018). "Jurisdictional Approaches to REDD+ and Low Emissions Development: Progress and Prospects." Working Paper. Washington, DC: World Resources Institute. Available online at wri.org/ending-tropical-deforestation.

² As revealed by the investigation published by *The Guardian* in 2023, based on scientific studies published since 2020 : <https://www.theguardian.com/environment/2023/jan/18/revealed-forest-carbon-offsets-biggest-provider-worthless-verra-aoe>

³ These expectations not only concern climate integrity, but also the generation of environmental co-benefits, the financial additionality of the project compared with business as usual, the permanence of the impact and benefit sharing with local populations.

on the voluntary market. One important aspect consists in integrating these projects within the national inventory of greenhouse gas emissions, and showing their alignment with National Determined Contributions, as part of the country's long-term strategy as defined by the Paris Climate Agreement. Jurisdictional approaches appropriately address these requirements by guaranteeing the consistency of actions at a wider landscape scale, thereby reducing the risk of leakage (transfer of the deforestation outside the project area),⁴ and integrating consultative processes to ensure the protection of the rights and interests of local populations. These elements are likely to improve their capacity to attract private investment.

The evolutions observed within the REDD+ mechanism should inspire international cooperation organizations (development banks, multilateral funds, conservation NGOs, etc.) which are approached by their partners in developing countries to support the development of biodiversity credits within their borders. Concretely, this consists in evaluating the relevance of credits to meet the financing needs of the NBSAP, and if appropriate, to support the elaboration of a robust framework to inspire buyer confidence and incite participation by project developers, while guaranteeing the integrity of these projects.

2. ELABORATING EVIDENCE-BASED BIODIVERSITY FINANCING PLANS

Several GBF targets set important milestones that are relevant to the implementation of biodiversity credits, as they are elements of a wider reflection on biodiversity finance plans. The analysis of the dependencies and pressures of the country's main economic sectors on biodiversity, necessary to attain targets 10 and 14 among others,⁵ should reinforce the mainstreaming of biodiversity in economic activities. This type of exercise, ideally performed before the elaboration of the biodiversity finance plan, can usefully sustain the public policy dialogue between the environment ministry, sectoral ministries such as agriculture, forest, fishing or tourism, and the finance ministry concerning national roadmaps and associated financing needs. Private companies should be involved in these dialogues in order to become actors of biodiversity protection through their value chains and landscape integration, as recommended by target 15. This approach allows the identification of the most vulnerable ecosystems which could be targeted by biodiversity credits.⁶

A reflection should also be carried out to meet target 18, which consists in identifying harmful subsidies to progressively reduce them by 2030. If this exercise is not performed, the costs

associated with harmful subsidies could add up with the costs incurred by the implementation of biodiversity credits while generating counter-productive effects. This is why each country should examine all available financing solutions (including taxes, subsidies, conservation trust funds, etc.) in order to identify the ones that most closely match the needs of its different biodiversity measures, keeping in mind that the development of innovative financial mechanisms such as biodiversity credits can be long and costly. It is thus necessary to clarify what is expected from each instrument, and the articulation of the different instruments with each other. The United Nations Development Programme initiative BIOFIN was designed to assist developing countries with this process.⁷

Generally speaking, the production and consolidation of spatial data on ecosystems are an essential component of NBSAPs, which will then become useful to jurisdictional approaches.⁸ South Africa's *National Biodiversity Assessment*⁹ is a convincing example in the matter. This approach is similar to defining forest carbon emission levels as required by the REDD+ mechanism. The implementation of an ecological accounting system at the national or jurisdictional level can also inform such an approach, by providing tools to quantify and monitor the evolution of natural capital over time. For this purpose, the evaluation methods described in the IPBES Assessment on the multiple values of nature can prove useful.¹⁰ This knowledge of ecosystem condition and needs in terms of protection and restoration can enable the allocation of biodiversity credits to the actions and landscapes where they are most needed.

More generally, international donors can contribute to the production of data and knowledge, and to the elaboration of biodiversity financing plans by providing technical assistance and expertise.

3. SETTING UP A NATIONAL GOVERNANCE FRAMEWORK FOR A MARKET IN SUPPORT OF PUBLIC POLICY

If biodiversity credits are retained as a financing instrument to support NBSAPs, the following elements constitute the essential components of the governance framework required to ensure the performance and the integrity of these tools. Compensation

4 Wunder, S., Duchelle, A.E., Sassi, C.d., Sills, E.O., Simonet, G., & Sunderlin, W.D. (2020). REDD+ in Theory and Practice: How Lessons From Local Projects Can Inform Jurisdictional Approaches. *Frontiers in Forests and Global Change*, 3(11).

5 Target 10 concerns the sustainable management of areas under agriculture, aquaculture, fisheries and forestry; target 14 deals with the mainstreaming of biodiversity into all policies and land use planning.

6 See for example the BioDev2030 project, which consists in fostering a multi-actor dialogue around a scientific diagnosis of priority sectors for biodiversity and economic development: www.biodev2030.org

7 Diagnoses already performed in 41 countries; financing from the Global Environment Fund (GEF) will enable the financing of diagnoses in 91 additional countries over the next 3 years: <https://www.biofin.org/news-and-media/new-era-national-biodiversity-finance-plans-emerges>

8 See Ducros, A. and Steele, P. (2022). Biocredits to finance nature and people: emerging lessons. IIED, London.

9 See SANBI & UNEP-WCMC (2016). Mapping biodiversity priorities: A practical, science-based approach to national biodiversity assessment and prioritisation to inform strategy and action planning. UNEP-WCMC, Cambridge, UK.

10 IPBES (2022). Summary for Policymakers of the Methodological Assessment Report on the Diverse Values and Valuation of Nature of the Intergovernmental Science-Policy Platform on Biodiversity and Ecosystem Services. <https://doi.org/10.5281/zenodo.6522392>

markets are relevant at the national level to attain no-net-loss targets (by mitigating destruction with a corresponding restoration action), even though true ecological equivalence is almost always impossible. In the case of a voluntary contribution market, the governance framework should also be designed at the national level to address the country's specific biodiversity issues and financing needs.

It should be noted that some countries have chosen to combine the supply of credits generated by regulatory obligations as part of environmental impact studies on one hand, with voluntary contributions on the other hand. This is the case with the Biodiversity Net Gain mechanism recently implemented in the United Kingdom, Colombia's *Bancos de habitat*, or the natural sites for compensation, restoration and renaturation (SNCRR) recently introduced in France by its Green Industry Law. However, compensation requiring equivalence between the destroyed and restored ecosystems, it should be regulated by a specific regulatory framework, notably with regards to the geographical proximity with the project area concerned by the environmental impact study, and the applicable ratios between the impacted and restoration sites. This is the object of the Combo+ Program for example, which assists several countries with the elaboration of such a framework, that also relies on the production of spatial biodiversity data.

A government can thus choose to define requirements in terms of ecological impact measurement that would also apply to the voluntary contributions market. This can take the form of a national standard to evaluate and certify eligible methodologies, or a selection of one or more existing standards based on the adequacy of their criteria with the objectives of the NBSAP. A national methodology can also be developed. The State can then define an approval process that project developers should follow, and whose requirements are designed to ensure that the proposed projects are compatible with the priorities defined in the NBSAP and translated into the relevant land use planning documents.

Another aspect that deserves to be duly regulated is the verification of results by independent auditors. The conflicts of interest between private auditors and the project developers paying them, as well as with the certification bodies issuing the credits, have contributed to the confidence crisis on voluntary forest carbon markets. In order to ensure the independence of auditors to guarantee the integrity of the credits issued, it could be useful to consider a national accreditation process, or even to create a state body of accredited professionals with dedicated training, after an initial capacity-building phase. The integration of the data collected into the national information system once verified should also be anticipated, in order to enrich the national state of knowledge on biodiversity for the public interest.

The creation of a national or jurisdictional register of the credits generated will complete the arsenal, both to steer the contribution of individual projects to the NBSAP, and to ensure the integrity of the market. Indeed, the role of a register is both to provide transparency on transactions by publishing all of the data related to certified projects (management plans, measures, etc.) and to ensure that credits are duly removed from the market

when associated claims have been made by the buyer. Requirements in terms of credit reserves, promoted by many standards to mitigate impact reversal risks, can also be operated through these registers.

One can cite here the instruments designed for Australia's Nature Repair Market (Biodiversity Integrity Standards, Biodiversity Assessment Instruments), whose definition has been delegated to an independent expert committee established by the minister of the environment, and the registration and audit process delegated to its national regulator, advised by a newly created Nature Repair Committee.

4. THE INCLUSION AND PROTECTION OF LOCAL POPULATIONS

The above recommendations were mostly aimed at ensuring the environmental integrity of biodiversity credit market. As with the Cancun safeguards, adopted at the UNFCCC COP16 in 2010 to prevent the risk of perverse effects associated with REDD+ programs, social guarantees are also necessary with biodiversity credits. As stated in target 22 of the GBF, the recognition of the rights of indigenous peoples and local communities is essential to protecting both human rights and biodiversity on the long term. These preoccupations are relevant to all actions of the NBSAP, including the generation of biodiversity credits.¹¹ Depending on the country's land tenure regime, this can take the form of property or land use rights, which should be formalized by legal or administrative mechanisms in order to prevent conflicts linked to natural resource extraction and access to ecosystem services, or land-grabbing by unscrupulous project developers attracted by potential profits in critical ecosystem areas. This type of problem is a major source of criticism on the voluntary forest carbon market, and addressing them is thus crucial to avoid reproducing the same mistakes.

Taking the rights of local populations into account with regards to their potential participation in projects designed to issue biodiversity credits requires mechanisms to ensure their free and informed consent, as well as access to the benefits generated by the projects. Indeed, some communities may wish to benefit from the additional source of revenues that these projects represent, but this requires for them to be adequately represented in the governance of these projects, and for the benefit-sharing conditions to be defined in advance in order to ensure fairness and transparency.¹² States should therefore define legal requirements for consent, governance and benefit-sharing processes related to credit issuance projects, and put grievance mechanisms in place. The participation of the concerned communities in the design of this legal framework is paramount to ensure that the stated goal of inclusion is truly met. Australia can once again be cited as an example, with its Indigenous Procurement Policy, which defines

¹¹ See Ducros A. and Steele, P. *Op. cit.*

¹² *Ibid.*

targets in terms of contracts to be awarded by public agencies to indigenous peoples, and indigenous participation thresholds in important contracts.

All of the recommendations presented here aim to ensure the environmental integrity of activities undertaken as part of a national biodiversity credits scheme. Its integration into a national governance framework, and the protection of the rights and interests of indigenous peoples and local communities are critical. It is also by creating a stable and understandable regulatory framework that governments will succeed in attracting

both private investors and project developers, both of which are seeking to reduce their risks.¹³ It is thereby by fully assuming their role of regulator that states can maximize the potential of these new markets to meet the objectives they have set for themselves when adopting the GBF.

¹³ Kedward, K., zu Ermgassen, S., Ryan-Collins, J. *et al.* (2003). Heavy reliance on private finance alone will not deliver conservation goals. *Nat Ecol Evol* 7, 1339–1342. <https://doi.org/10.1038/s41559-023-02098-6>

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