

Supporting the Implementation of the Kunming-Montreal Global Biodiversity Framework Through the Added Value of the IUCN Green List Standard



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Abstract

The IUCN Green List of Protected and Conserved Areas Standard provides an internationally recognized sustainability benchmark for assessing whether protected and conserved areas, including other effective area-based conservation measures (OECMs), are governed equitably, adequately designed and planned, effectively managed, and capable of delivering successful conservation outcomes. Comprising 17 criteria, the Green List Standard supports the implementation of the Kunming-Montreal Global Biodiversity Framework (KM-GBF) by establishing pathways for improvement, investment, and community participation aligned with KM-GBF targets. Sites that meet the Green List Standard contribute to Target 3 and can be reported by Parties as part of their National Biodiversity Strategies and Action Plans (NBSAPs). Furthermore, the Green List certification process directly enhances the planning, management, and conservation outcomes of candidate sites. This paper presents the IUCN Green List Standard as an evidence-based assurance mechanism, offering diagnostic tools and knowledge products to strengthen conservation efforts and bridge critical capacity gaps. By mapping the Green List criteria to KM-GBF targets, we demonstrate how the Standard contributes to achieving KM-GBF objectives, providing examples of supporting resources that offer scientifically validated management guidance for protected areas and OECMs.

Keywords: IUCN green list standard; Kunming-montreal global biodiversity framework; Protected areas; Other effective area-based conservation measures - OECM; Governance; Equity; Management effectiveness; 30x30 Target.

Introduction

The Kunming-Montreal Global Biodiversity Framework (KM-GBF), adopted at the fifteenth meeting of the Conference of the

Parties (COP15) to the Convention on Biological Diversity (CBD) sets ambitious targets for global biodiversity conservation,

including Target 3, for terrestrial, freshwater, and marine areas by 2030 [1]. Achieving these targets requires protected areas and other effective area-based conservation measures (OECMs), as well as Indigenous and traditional territories, to achieve and maintain good governance, ecological resilience, and social inclusion, and to demonstrate effective biodiversity conservation. The IUCN Green List of Protected and Conserved Areas Standard (the Standard) offers independent expert review of progress against 17 criteria for effectiveness, with the incentive of certification and recognition for successful achievement of the full Standard [2]. The Standard was developed through a collaborative and science-based process led by the IUCN World Commission on Protected Areas (WCPA) to establish a global benchmark for effective and equitable protected and conserved area management. Initiated in 2012 and formally launched in 2017, it has involved extensive consultations, pilot testing in multiple countries, and iterative refinements to ensure its applicability. The Standard provides a globally recognized benchmark for effectiveness, encouraging the adoption of best practices in conservation. It is recognized as a complementary indicator for Target 3 of the KM-GBF.

This paper explores the alignment between the IUCN Green List Standard and KM-GBF targets, showcasing its role in enhancing conservation outcomes. We examine the Standard’s diagnostic tools and knowledge products, highlighting their contributions to bridging capacity gaps and fostering evidence-based practices. This analysis reaffirms the IUCN Green List’s role as a cornerstone of global biodiversity strategies.

The IUCN Green List and the Global Biodiversity Framework

The Standard serves to enhance the effectiveness of protected and conserved areas through enhanced governance and management. It supports the implementation of the KM-GBF, particularly in its ambition to equitably and effectively conserve 30% of the planet by 2030 under Target 3. The Standard establishes a globally consistent and recognized benchmark for “effective conservation,” offering measurable criteria that ensure protected and conserved areas achieve tangible outcomes in biodiversity protection, equitable governance, and ecosystem

resilience. By addressing these dimensions, the Green List plays a pivotal role in guiding countries to meet their conservation commitments under the KM-GBF.

A protected or conserved area embarking on the Green List pathway conducts a self-assessment against the IUCN Green List Standard criteria under the good governance, sound design and planning, effective management, and successful conservation outcomes components. A scoring system reflects the alignment of governance and management according to the criteria. If gaps or areas for improvement are identified during the self-assessment, action plans are developed to address these capacity gaps. Progress is measured against the initial benchmarks.

The Standard is recognized as a certification framework by international conventions, national governments, conservation organizations, and the broader scientific community as a credible tool for effective and equitable area-based conservation. It has been formally acknowledged by the CBD as a tool for supporting the implementation of the KM-GBF, particularly Target 3 on protected and conserved areas. Additionally, the standard is endorsed by UN agencies, intergovernmental bodies, and major environmental NGOs as a mechanism to improve and validate conservation outcomes. Recognition occurs through formal adoption in national policies, integration into global conservation strategies, and endorsement in international reports and assessments. The certification process is governed by the IUCN Green List Panel, with assessments carried out by independent expert evaluators under the guidance of national expert assessment groups. Certification follows a rigorous review process that ensures compliance with the Green List’s four key components—good governance, sound design and planning, effective management, and conservation outcomes described through 17 criteria and supporting indicators. The integrity and credibility of the certification process is assured through globally recognized and independent third-party assurance (audits, evaluations, and monitoring). Figure 1 illustrates the four core components of the Green List Standard, while Table 1 provides a detailed breakdown of the 17 criteria, showcasing their alignment with these components.

Table 1: The IUCN Green List Standard 17 criteria (copyright IUCN).

Good Governance	Sound Design and Planning	Effective Management	Conservation Outcomes
1.1 Guarantee Legitimacy and Voice 1.2 Achieve Transparency and Accountability 1.3 Enable Governance Vitality and Capacity to Respond Actively	2.1 Identify and Understand Major Site Values 2.2 Design for Long-Term Conservation of Major Site Values 2.3 Understand Threats and Challenges to Major Site Values 2.4 Understand Social and Economic Context	3.1 Develop and Implement a Long-Term Management Strategy 3.2 Manage Ecological Condition 3.3 Manage Within Social and Economic Context of the Area 3.4 Manage Threats 3.5 Effectively and Fairly Enforce Laws and Regulations 3.6 Manage Access, Resources Use and Visitation 3.7 Measure Success	4.1 Demonstrate Conservation of Major Natural Values 4.2 Demonstrate Conservation of Major Associated Ecosystem Services 4.3 Demonstrate Conservation of Cultural Values



Figure 1: The IUCN Green List Standard four components (copyright IUCN).

The use of the Standard has developed into an operationalized and globally applied certification system. At the time of publication, it has been successfully implemented in 91 sites across 21 countries throughout Africa, Asia, Europe and Central and South America, where protected and conserved areas have undergone assessment and achieved Green List certification. The certified sites serve as examples of best practices in conservation. The growing number of Green List sites reflects the increasing adoption of the Standard by governments and conservation practitioners, providing encouraging feedback on its usefulness and applicability.

Target 3 of the KM-GBF highlights the importance of equitable governance often neglected in conservation programmes, emphasizing that conservation must respect the rights of Indigenous Peoples and local communities while providing shared benefits. The Standard aligns with this principle by embedding governance principles that prioritize inclusivity, equity, and participatory decision-making. For instance, the Standard requires areas seeking certification to demonstrate how they engage Indigenous and local communities in planning and management processes, and that their interests are respected and considered in conservation governance and management. This reflects other KM-GBF goals, such as Target 22, which underscores the importance of protecting Indigenous rights and fostering equitable benefit-sharing.

Beyond governance, the Standard supports KM-GBF objectives related to ecosystem connectivity and resilience. By

promoting integrated management of biodiversity corridors and connected landscapes, seascapes and freshwater systems, the Green List ensures that certified areas contribute to larger-scale ecological networks, and in strengthening resilience to impacts of climate change and other anthropogenic pressures. Countries such as China have already utilized the Green List framework to measure and improve biodiversity outcomes in key hotspots, demonstrating the scalability and adaptability of the Standard to diverse ecological and socio-political contexts [3].

Countries can leverage the Standard to integrate measures for conservation effectiveness into their National Biodiversity Strategies and Action Plans (NBSAPs). This integration allows for assessing the management effectiveness and governance equity of existing protected and conserved areas, while also identifying gaps in achieving KM-GBF targets. The structured process of assessment against the Standard, which includes rigorous peer-review and independent site-level evaluation by experts, ensures global consistency and accountability. For example, Colombia has used Green List principles to strengthen governance in protected and conserved areas by actively involving Indigenous communities, thereby improving both conservation outcomes and community well-being and rights [4]. Moreover, the global recognition of local achievements through certification serves as a powerful incentive for countries. It not only motivates them to uphold high standards of conservation but also exerts ongoing positive pressure to sustain their performance and proactively address threats to these areas.

Another significant advantage of adopting the Standard is its potential to mobilize resources as well as to serve as a metric for investments. Certified areas and those committing to progressing toward certification often attract greater international and other funding. Donors and investors increasingly seek transparency and accountability in conservation financing, and the Standard serves as a reliable indicator of credibility of claims. France, for example, has leveraged Green List recognition to secure funding for conservation efforts in its overseas territories, demonstrating how the framework can unlock financial resources for biodiversity protection [5].

In essence, the use of the Standard provides governments and protected and conserved area managers with a structured framework that evaluates and enhances current and ongoing site performance and identifies areas for improvement. For communities, it integrates and safeguards their interests. For donors, it ensures that their investments are channeled toward well-managed and impactful conservation initiatives with globally consistent and measurable outcomes.

In addition, the application of the Standard contributes to the achievement of multiple United Nations Sustainable Development Goals (SDGs), particularly SDG 14 (Life Below Water) and SDG 15 (Life on Land). By establishing rigorous and globally consistent requirements for governance, equity, and effective management in protected and conserved areas, the Green List ensures that these areas not only safeguard biodiversity but also support sustainable livelihoods, resilience, and social equity. For example, its emphasis on participatory governance and inclusion of Indigenous Peoples and local communities aligns with SDG 10 (Reduced Inequalities) and SDG 16 (Peace, Justice, and Strong Institutions). Furthermore, the Standard's focus on adaptive management supports climate resilience (SDG 13) and resource efficiency (SDG 12), while promoting partnerships (SDG 17) essential for global biodiversity conservation efforts.

The Standard fosters regional and global collaboration by providing a platform for knowledge exchange and innovation. Countries participating in the Green List process benefit from the collective expertise of the IUCN network, which facilitates peer-reviewed assessments and cross-border/cross-regional conservation initiatives. For example, the Triangular Cooperation Partnership (TCP) between China, Namibia, Zambia, and Germany aimed at improving the quality of protected area management and governance in the African partner countries through the implementation of the Standard by convening cooperation among experts. This collaborative approach is particularly valuable for transboundary conservation efforts, where shared governance and ecosystem connectivity are essential for success.

In Lebanon, the Standard has been instrumental in strengthening the management of Saint Maroun, enhancing governance structures and conservation strategies while engaging local communities in decision-making. Similarly, in the Kingdom of Saudi Arabia, the Ibx Reserve has applied the

Standard to improve habitat connectivity and reintroduction efforts for threatened species, supporting the Kingdom's Vision 2030 biodiversity goals. In Peru, the Amaraeri Communal Reserve, co-managed by Indigenous communities and the Peruvian government, has leveraged the Green List to strengthen Indigenous-led governance and ensure conservation actions align with traditional knowledge and local livelihoods. Additionally, in the Republic of Congo, Indigenous Peoples and Local Communities have utilized the Standard as a tool to secure greater recognition of their conservation contributions, integrating traditional land management with scientific approaches to achieve sustainable protection of their territories. These diverse examples highlight the Green List's flexibility and effectiveness in supporting conservation across different ecological, social, and governance contexts.

To maximize the potential of the Standard, countries can embed its principles in their policy frameworks and ensure that institutions are equipped to coordinate implementation. Strong partnerships with Indigenous Peoples, local communities, and private sector stakeholders are essential for fostering governance that is both inclusive and equitable. Additionally, countries must establish robust monitoring and reporting systems aligned with Green List criteria to track progress effectively. By aligning these efforts with the KM-GBF, parties can achieve not only Target 3 but also broader conservation and sustainable development goals.

The IUCN Green List Standard offers a practical means for translating the KM-GBF's ambitious targets into measurable and impactful outcomes. Its emphasis on effective management, equity, and connectivity ensures that conservation efforts are not only ecologically sound but also socially just. As the global community strives to halt biodiversity loss, the Green List Standard offers a pathway for nations and other actors to enhance their conservation strategies and achieve long-term resilience and sustainability.

Mapping IUCN Green List Criteria to KM-GBF Targets

The IUCN Green List Standard supports progress towards KM-GBF targets, addressing critical needs in governance, ecological connectivity, management effectiveness, financial sustainability, and community empowerment (Figure 2).

The Green List Standard is structured according to the following four pillars, grouping the 17 criteria that must be met by the Standard. These pillars in turn support important elements of the KM-GBF.

Governance and Inclusivity (Criteria 1-4)

Governance Quality, Legitimacy and Voice, Inclusivity, and Accountability support KM-GBF Targets 1, 2, 3, 21, and 22 by promoting equitable governance. These criteria emphasize participatory decision-making and active involvement of Indigenous and local communities, fostering biodiversity outcomes and fair benefit-sharing [6,7].



Figure 2: Relationship between the IUCN Green List Standard criteria (grouped by thematic area) and the KM-GBF targets. The size of each bubble is proportionate to the weight of each relationship.

Ecological Connectivity and Conservation Objectives (Criteria 5–6)

Criteria on Connectivity, Design, and Conservation Objectives address KM-GBF Targets 1, 2, 3, 12, and 14. They ensure protected areas are designed for biodiversity persistence, supporting genetic diversity, and maintaining ecosystem resilience [8].

Management Effectiveness and Law Enforcement (Criteria 7 and 11)

These criteria align with KM-GBF Targets 3, 4, 8, and 9. They emphasize reducing illegal activities, promoting sustainable use, and ensuring effective site-level management for biodiversity conservation and species recovery [9].

Sustainable Finance and Risk Management (Criteria 9–10)

Addressing KM-GBF Targets 18, 19, and 20, these criteria highlight financial sustainability and long-term resource mobilization as essential for adaptive management and conservation resilience [10,11].

Transparent Monitoring and Biodiversity Outcomes (Criteria 14 and 15)

These criteria support KM-GBF Targets 1, 2, 3, and 10 by implementing rigorous monitoring systems that track biodiversity

improvements and inform adaptive management while building stakeholder trust [12].

Capacity Building and Knowledge Sharing (Criteria 7, 8, and 17)

Knowledge and Innovation, Stakeholder Capacity, and Empowerment criteria contribute to KM-GBF Targets 21, 22, and 23 by enhancing local engagement and management capabilities, particularly for Indigenous and local communities [2].

Evidence-Based Framework and Assurance System

The IUCN Green List Standard provides for an evidence-based framework that integrates a rigorous assurance system, verifying that protected and conserved areas meet each criterion supported by indicators. This ensures that conservation actions are grounded in scientific principles that underpin the Standard and are adaptive to ecological and socio-economic changes [2].

The certification process includes site assessments and verification audits, and multiple levels of independent expert review, ensuring that protected and conserved areas' claims of achieving measurable, positive conservation outcomes are credible and consistent. Key design elements of the assurance system include standardized assessment criteria, peer-reviewed evaluations, and stakeholder engagement to uphold transparency and accountability. The process involves national and regional

expert assessment groups (EAGs), an independent reviewer panel, and the IUCN Green List Panel validating site performance against the Standard. While these mechanisms provide a robust foundation for certification, the assurance system continues to be refined towards improving efficiency, strengthening social and environmental safeguards, and ensuring greater inclusivity of Indigenous and local communities. Efforts are underway to enhance digital reporting tools and adaptive monitoring processes, making the Green List framework more responsive to emerging conservation challenges.

A key component of the Green List is its diagnostic pathway, which supports sites in identifying gaps in governance, management, and financing. This diagnostic process allows protected and conserved areas to assess capacity and resource needs, enabling targeted interventions and resource mobilization for effective biodiversity management [7]. Such diagnostics are particularly valuable for sites in resource-limited settings, ensuring they can access the support necessary for enhancing performance.

Knowledge Products Supporting Green List Compliance

The *IUCN Green List of Protected and Conserved Areas: Standard Version 1.1* [5] is complemented by a suite of knowledge products that provide guidance and evidence toward meeting each criterion. These products offer practical, scientifically validated guidance and support for protected and conserved areas managers, enhancing compliance and supporting adaptive management. Many of these documents have been compiled and are available in *Protected Area Resource Book for Practitioners* [7]. Key examples include:

a) Governance Quality (Criteria 1–4): Resources such as *Governance for the conservation of nature* [6], *Framework for assessing and monitoring forest governance* [13], *Enhancing governance for effective and equitable protected and conserved areas* [14] provide frameworks for inclusive governance.

b) Ecological Connectivity (Criterion 5): Guidelines like *Guidelines for conserving connectivity through ecological networks* [15], *Connectivity conservation guidelines for forest landscapes* [16], *Ecological connectivity in protected area networks* [17], and *Guidelines on connectivity conservation* [18] offer practical strategies for maintaining ecological corridors.

c) Management Effectiveness (Criterion 7): The *Management effectiveness framework: Evaluating management of protected areas* [19], *Forest and protected area management guidelines* [20], and *World heritage and management effectiveness* [21] enhance site management capabilities.

d) Risk Management (Criterion 9): The *Protected Area Resource Book* [7], *Managing protected areas in times of risk and uncertainty* [22], *Risk mitigation guidelines for conservation and forestry projects* [23] outline frameworks for biodiversity risk

mitigation.

e) Sustainable Finance (Criterion 10): Tools like *Sustainable Financing of Protected Areas* [10], *Forest finance and investment guidelines* [24], and *Conservation finance guidebook* [25] provide strategies for long-term financial viability.

f) Transparent Monitoring (Criterion 15): Monitoring methodologies from the *Protected Planet Report* [26], *Strategic framework for transparent monitoring of biodiversity targets* [27], *Biodiversity monitoring frameworks for protected areas* [28] and *Monitoring tools for forest and biodiversity conservation* [29] ensure progress tracking on biodiversity goals.

g) Climate Adaptation (Criterion 16): The *Guidelines on Climate Change and Protected Areas* [30], *Climate-smart agriculture and forestry guidelines* [31], and *National adaptation plans for climate resilience in ecosystems* [32] support climate-resilient protected and conserved areas management.

These knowledge products are instrumental in guiding PAs through the Green List certification process, ensuring that conservation actions are both scientifically sound and operationally feasible.

Conclusion

The IUCN Green List Standard and the supporting assurance activities and framework represent a useful transformative pathway for advancing several KM-GBF targets. By fostering collaboration across sectors, regions, and stakeholders, it reinforces the collective commitment to achieving the KM-GBF's vision of protecting 30% of the planet's terrestrial, freshwater, and marine ecosystems by 2030. By integrating a scientifically assured approach with evidence-based criteria, the Standard Green List not only certifies that protected and conserved areas are effective but helps achieve national and global conservation priorities. Its role as a benchmark for governance, management, ecological connectivity, and financial sustainability is pivotal in achieving a Nature-Positive future.

The assurance framework brings a globally recognized and consistent set of reviews and verification activities that allow those that rely on the outcomes of assessment and the work of protected and conserved areas to have confidence that those claims are valid and have been applied with global high integrity.

Author Contribution

Conceptualization, Khalid Pasha; methodology, Khalid Pasha and Olivier Chassot; resources, Khalid Pasha and Olivier Chassot; writing—original draft preparation, Khalid Pasha & Olivier Chassot; writing—review and editing, Dindo Campilan, James Hardcastle, Ulrika Åberg, Elizabeth Murphy, Jacob Brunner, Wenjia Jin, Siska Sihombing, Jennifer Kelleher, Nadine Seleem, Maeve Nightingale, Clémence Bourlet, Aissa Traore, Yves Olatoundji, Thierry Lefebvre, and Hiep Nguyen. All authors have read and agreed to the published version of the manuscript.

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References

1. Convention on Biological Diversity (CBD) (2022) Kunming-Montreal Global Biodiversity Framework; United Nations Convention on Biological Diversity.
2. Hockings M, Stolton S, Leverington F, Dudley N, Courrau J (2019) The IUCN Green List of Protected and Conserved Areas: Setting the Standard for Effective and Equitable Nature Conservation; IUCN: Gland, Switzerland.
3. IUCN (2022) Enhancing Biodiversity Conservation through the Green List Standard: Lessons from China; IUCN: Gland, Switzerland.
4. IUCN (2021) Achieving Equitable Governance in Protected Areas: Case Studies from Colombia; IUCN: Gland, Switzerland.
5. IUCN (2017) IUCN Green List of Protected and Conserved Areas: Standard Version 1.1; IUCN: Gland, Switzerland.
6. Borrini-Feyerabend G, Dudley N, Jaeger T, Lassen B, Broome NP, et al. (2013) Governance for the Conservation of Nature; IUCN: Gland, Switzerland.
7. GIZ (2021) Protected Area Resource Book for Practitioners; Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ) GmbH.
8. Watson JEM, Dudley N, Segan DB, Hockings M (2014) The performance and potential of protected areas. *Nature* 515(7525): 67-73.
9. Leverington F, Costa KL, Pavese H, Lisle A, Hockings M (2010) A Global Analysis of Protected Area Management Effectiveness. *Environmental Management* 46(5): 685-698.
10. Emerton L, Bishop J, Thomas L (2006) Sustainable Financing of Protected Areas: A Global Review of Challenges and Options. IUCN: Gland, Switzerland.
11. Huwyler F, Käppeli J, Tobin J (2014) Conservation Finance: From Niche to Mainstream; Credit Suisse, WWF, and McKinsey & Company.
12. Coad L, Leverington F, Knights K, Geldmann J, Eassom A, et al. (2015) Protected Planet Report 2015; UNEP-WCMC and IUCN.
13. Food and Agriculture Organization of the United Nations (FAO) (2011) Framework for Assessing and Monitoring Forest Governance.
14. IUCN & WWF (2021) Enhancing Governance for Effective and Equitable Protected and Conserved Areas.
15. Hilty J, Worboys GL, Keeley A, Woodley S, Lausche B, et al. (2020) Guidelines for Conserving Connectivity Through Ecological Networks and Corridors; IUCN: Gland, Switzerland.
16. Food and Agriculture Organization of the United Nations (FAO) (2020) Connectivity Conservation Guidelines for Forest Landscapes.
17. UNEP-WCMC (2018) Ecological Connectivity in Protected Area Networks.
18. Convention on Migratory Species (CMS) (2020) Guidelines on Connectivity Conservation.
19. IUCN-WCPA (2019) Management Effectiveness Framework: Evaluating Management of Protected Areas.
20. Food and Agriculture Organization of the United Nations (FAO) (2019) Forest and Protected Area Management Guidelines.
21. UNESCO (2018) World Heritage and Management Effectiveness.
22. IUCN (2014) Managing Protected Areas in Times of Risk and Uncertainty.
23. Food and Agriculture Organization of the United Nations (FAO) (2021) Risk Mitigation Guidelines for Conservation and Forestry Projects.
24. Food and Agriculture Organization of the United Nations (FAO) (2020) Forest Finance and Investment Guidelines.
25. IUCN (2014) Conservation Finance Guidebook.
26. UNEP-WCMC & IUCN (2024) Protected Planet Report 2024.
27. Convention on Biological Diversity (CBD) (2016) Strategic Framework for Transparent Monitoring of Biodiversity Targets.
28. UNEP-WCMC (2016) Biodiversity Monitoring Frameworks for Protected Areas.
29. Food and Agriculture Organization of the United Nations (FAO) (2021) Monitoring Tools for Forest and Biodiversity Conservation.
30. Gross JE, Woodley S, Welling L, Watson J (2016) Adapting to Climate Change: Guidance for Protected Area Managers and Planners. IUCN: Gland, Switzerland.
31. Food and Agriculture Organization of the United Nations (FAO) (2019) Climate-smart Agriculture and Forestry Guidelines.
32. United Nations Framework Convention on Climate Change (UNFCCC) (2018) National Adaptation Plans for Climate Resilience in Ecosystems.



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