



Strengthening Sustainable Tourism's Role in Biodiversity Conservation and Community Resilience

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Executive Summary

Tourism, defined widely to include all types and forms of permitted outdoor recreation and visitation to Protected and Conserved Areas (PCAs) including by local, national and international visitors, plays a complex and often contested role in PCAs. While a significant share of global tourism depends on the ecological richness of these areas, their conservation value does not automatically translate into sustainable financial returns. Nonetheless, when effectively managed, tourism in PCAs can generate conservation funding, support local livelihoods, and provide infrastructure investment, particularly in under-resourced landscapes (Leung et al., 2018). Beyond economics, public use of PCAs contributes to building social license for conservation, enhancing environmental literacy, and improving physical and mental health (UNDP et al., 2021). These benefits underline the role of tourism not only as a financing mechanism, but also as a vehicle for cultivating societal support for biodiversity protection. However, these opportunities coexist with considerable risks: unregulated or poorly managed visitation can result in ecosystem degradation, cultural dislocation, and exacerbation of existing social inequalities. Navigating these tensions requires robust, evidence-based planning and governance frameworks that align tourism strategies with biodiversity targets and equitable development (Guix et al., 2024).

To ensure that tourism contributes meaningfully to biodiversity outcomes and community resilience, this paper advances three strategic goals. First, *tourism revenue—where present and viable—should be aligned with national biodiversity strategies and action plans through transparent, locally supported financing mechanisms*. Second, *tourism should be used to strengthen resilience by supporting diversified, nature-compatible livelihoods, especially in rural and Indigenous-managed landscapes*. Third, *governance systems must evolve to foster collaborative management models that enable tourism actors, communities, and conservation authorities to co-design, finance, and monitor tourism's contributions to PCAs*. These goals respond to the International Union for Conservation of Nature's Resolution 130 (IUCN, 2020), which calls for an expanded role for sustainable tourism in halting biodiversity loss. Acknowledging that revenues from tourism are one of many potential funding sources for PCAs, this paper underscores the need for hybrid models that integrate tourism's tangible and intangible contributions into broader conservation financing and policy systems.

Sustainable tourism offers a unique opportunity to align economic development with conservation goals. PCAs are among the most visited natural sites globally, with their ecosystem services underpinning a significant share of tourism revenues. Tourism revenues can be reinvested to fund biodiversity protection, promote local stewardship of ecosystems, and strengthen the resilience of both natural and human communities. For example, conservancies in Kenya and Namibia demonstrate how strategic investments in nature-based tourism can bolster conservation outcomes while supporting local economies.

Tourism also fosters understanding and appreciation of nature with visitor programs that inspire participation in conservation efforts. For example, Volcanoes National Park visitor center in Rwanda offers educational programs and interpretive tours that engage tourists with local wildlife and conservation efforts. Since 2005, Rwanda has charged first a 5% and then a 10% levy on national park entry fees to create a pooled Tourism Revenue Sharing Program (TRSP), which improves livelihoods for 14 districts and a total population of 1.4 million people. This levy has linked national parks to community development, with funding distributed through local community cooperatives to ensure auditable systems of equitable revenue distribution (Snyman et al., 2023). This type of tourism revenue sharing has spread community benefits widely and moved community development forward. Rwanda's TRSP, a vital revenue source for communities living outside of national parks, has transformed local livelihoods and created sustainable, equitable opportunities for men and women on a regional basis (Snyman et al., 2023).



The service provided by biodiversity includes shows of natural beauty, like this display of wildflowers in West Coast National Park in South Africa. © Stephen F. McCool

While tourism's contributions to biodiversity conservation are clear, challenges remain. Habitat destruction and resource overuse underscore the need for a regenerative "nature-positive" approach that can halt and reverse environmental damage while restoring critical ecosystems. Tourism-related investments in coral reef restoration and carbon sequestration initiatives demonstrate how nature-positive tourism (NPT) can yield both ecological and economic benefits.

Realizing tourism's full potential as a catalyst for conservation requires bold and coordinated action. Governments must establish clear regulatory frameworks and biodiversity performance standards to guide tourism development. Aligning tourism with environmental protection policies provides incentives for travel and tourism businesses to improve nature-positive practices and invest in local efforts to support national biodiversity objectives (Snyman and Spenceley, 2019). PCAs should partner with outside conservation organizations and academic research centers to put evidence-based data management systems with key indicators, such as IUCN Good Practice Documents on a range of topics related to public use and tourism in PCAs, and those related to management effectiveness and the IUCN Green List, in place to guide local authorities' decision-making. Conservation organizations and academic research centers should work in concert with local tourism operators and local authorities to manage such data and monitor the impact of regional tourism while managing natural resources efficiently and sustainably. For example, the private sector can adopt nature-positive practices and report results to regional data centers for monitoring; or local experts can encourage local businesses to adopt rigorous certification processes and biodiversity-friendly practices that align with conservation targets.

Table 1 lists twelve actions recommended for policymakers, nongovernmental organizations (NGOs), academic research centers, and the private sector. By embracing these recommendations and aligning with global initiatives such as the Kunming-Montreal Global Biodiversity Framework and National Biodiversity Strategies and Action Plans (NBSAPs), stakeholders can position environmentally responsible tourism to advance conservation while fostering long-term sustainability. To illustrate these recommendations, we share six case studies that demonstrate how tourism can drive biodiversity conservation (see Table 2). The recent formation of the industry-led Nature Positive Tourism Partnership—consisting of the World Travel and Tourism Council, the World Sustainable Hospitality Alliance, and UN Tourism—indicates a strong ambition for the sector to embrace these opportunities.

Table 1: Recommended Actions for Sustainable Tourism and Biodiversity Conservation

Stakeholder	Recommended Actions
Policyholders	1. Establish biodiversity performance indicators and accountability mechanisms for tourism projects and destinations.
	2. Develop cross-sector policies with programs that integrate biodiversity priorities into national and regional tourism strategies.
	3. Create financial incentives and policies (e.g., tax benefits, subsidies, ecosystem service credits) to promote private-sector investments in conservation, and establish legal frameworks that ensure visitor fees, concession revenues, and other tourism-derived income are transparently reinvested in the protected areas and communities that generate them.
	4. Create training programs in brief form to engage local and regional tourism policymakers in national biodiversity objectives.
NGOs, Conservation Organizations, and Academic Research Centers	5. Review training required for Indigenous Peoples and Local Communities (IPLCs) as part of regional dialogue on types of governance, biodiversity monitoring, and financial management required.
	6. Facilitate global networks to share best practices in sustainable tourism and destination management.
	7. Digitalize and widely distribute all elements of National Biodiversity Strategies and Action Plans (NBSAPs) to allow data alignment with regional

	zoning and municipal planning, tourism business planning, and national and regional conservation targets.
	8. Support development of evidence-based tools to monitor socioeconomic and ecological impacts of tourism on biodiversity for the use by PCAs managers and regional decision makers.
Private Sector (Tourism Industry and Operators)	9. Adopt nationally and internationally recognized sustainability certifications to align business practices with conservation goals.
	10. Adopt NPT actions to integrate biodiversity restoration and ecosystem enhancement into operational strategies.
	11. Establish co-creation partnerships with IPLCs to develop culturally and environmentally appropriate tourism experiences.
	12. Develop visitor engagement programs to inspire tourists to contribute to conservation through environmentally responsible behavior, donations, volunteerism, citizen science, and advocacy.

Table 2: Case Studies of Sustainable Tourism Initiatives

Case Study	Key Focus Areas
Case Study 1: Peru and Vietnam: Sustainable Tourism and Protected Areas in a Post-COVID World	Community-based tourism for conservation, capacity-building, and alternative livelihoods.
Case Study 2: Iberostar's Nature Positive Tourism Model	Private sector-led biodiversity restoration and sustainability initiatives.
Case Study 3: Nepal's Sagarmatha National Park	Collaborative governance for conservation funding and sustainable tourism.
Case Study 4: Coastal Lagoons in the UAE	Integrating ecosystem services valuation into tourism and conservation financing.
Case Study 5: The Rivers Fiji Conservation Model	Conservation leases, Indigenous engagement, and tourism revenue-sharing.
Case Study 6: Cristalino Jungle Lodge and Foundation—A Private Conservation Model in Brazil	Private protected area management, biodiversity conservation through ecotourism, NGO collaboration, environmental education, and community engagement.

This paper follows the principles outlined in IUCN Resolution 130 and offers policymakers, practitioners, and stakeholders a road map for transforming tourism into a powerful mechanism for safeguarding ecosystems. Through strategic planning and collaboration, tourism can protect biodiversity, drive sustainable economic development, and ensure a thriving planet for future generations.

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Preface

Preservation of biodiversity is fundamental to sustaining the stability, resilience, and essential functions of the planet's ecosystems. However, biodiversity faces escalating threats from human activities and climate change. Protected and conserved areas (PCAs) provide a foundation for global conservation efforts to safeguard vital habitats, species and ecosystem services. This paper, developed for the International Union for Conservation of Nature (IUCN) World Commission on Protected Areas (WCPA) Issues Paper Series, addresses the role of sustainable tourism in biodiversity conservation and community resilience. Often criticized for its environmental impacts, tourism can be a force for good when guided by principles of sustainability, inclusivity, and equity. When effectively managed, it offers the opportunity to align conservation goals with economic development and community empowerment, and thus to deliver conservation *through* development and visitor engagement.

Drawing from a rich array of research, policy frameworks, and real-world case studies, this paper examines how sustainable tourism can transform conservation practices. Its recommendations align with conservation priorities of the United Nations (UN) Convention on Biological Diversity (CBD) Kunming-Montreal Global Biodiversity Framework and the UN Sustainable Development Goals (SDGs). It emphasizes the importance of partnerships, inclusive governance, and innovative financing mechanisms.

As the world grapples with unprecedented ecological and societal challenges, this paper aims to inspire bold action and collaborative solutions. It is intended for policymakers, conservation practitioners, and tourism professionals dedicated to creating a future in which biodiversity thrives, communities flourish, and visitors are inspired.



A mangrove lagoon in the United Arab Emirates. © Karim Hagga

Introduction

The accelerating loss of global biodiversity threatens total systems collapse. Biodiversity underpins not only essential ecosystem services, including food security, climate regulation, and cultural identity, but also economic development and diversification, making its preservation a moral and ecological imperative (Díaz et al., 2019). Human activities are driving unprecedented rates of species extinction and habitat degradation, creating an urgent need for innovative strategies that integrate conservation efforts with sustainable development practices (IPBES, 2019).

In this context, sustainable tourism has emerged as a vital tool for strengthening biodiversity conservation and community resilience. Tourism can balance environmental conservation with economic growth and community well-being (Buckley, 2012; Fennell, 2020). When effectively managed, sustainable tourism provides financial incentives to conserve natural habitats, promote environmental stewardship among visitors and locals, and enhance the resilience of communities dependent on natural resources (Weaver and Lawton, 2017; Leung et al., 2018). This paper highlights sustainable tourism's synergistic potential and provides recommendations for policymakers, business leaders, and conservationists.

Protected and conserved areas (PCAs), which safeguard critical habitats and species diversity, are cornerstones of global conservation efforts. Formally designated areas with a primary focus on biodiversity conservation, PCAs range from strict no-use nature reserves and national parks to areas with sustainable use (Dudley, 2008). These areas can include any area supporting high levels of biodiversity, including village forests, commercial hunting reserves, shipwreck sites, or community gardens (Borrini et al., 2014). However, their increasing popularity has led to heightened pressures, including rising numbers of visitors and shifting visitor behaviors (Leung et al., 2018). Globally, an estimated 8 billion visits are made to terrestrial protected areas each year—roughly one visit per person on the planet annually—underscoring the immense scale of human interaction with these landscapes (Balmford et al., 2015). Total international visitor arrivals reached 1.5 billion in 2019; while the COVID-19 pandemic reduced arrivals, they have rebounded to pre-pandemic levels, exacerbating existing challenges on all continents (World Tourism Organization, 2023; Spenceley et al., 2021; Tejedo et al., 2024).

Unregulated or poorly managed tourism can threaten biodiversity by causing habitat degradation, wildlife disturbance, pollution, and cultural erosion (Newsome et al., 2013). For example, nature tourism without controls may lead to increased waste, vegetation loss, and behavioral shifts in wildlife. In addition to traditional tourism pressures, there is an increasing trend toward novel and more intense recreational activities in PCAs—such as large-scale events, adventure sports, and social media-driven visitation—which may conflict with conservation objectives (Newsome & Hughes, 2018). These contemporary forms of recreation present complex management challenges that require

adaptive visitor planning and a deeper understanding of how different user groups interact with conservation values.

Emerging trends such as overtourism, social media-driven interest in fragile ecosystems, and the growing demand for personalized, immersive experiences combine to exacerbate these challenges (Mandić and Petrić, 2021; Mandić and McCool, 2022). While travel and tourism contributed an estimated 8.8% of global carbon emissions in 2019, primarily from air travel (Sun et al., 2024), it is essential to recognize that international nature-based tourism can also deliver significant conservation benefits. By adding tangible economic value to wildlife and habitat, especially in biodiversity hotspots across South America, Africa, and Asia, tourism creates financial incentives for habitat protection and species conservation (Spenceley et al., 2021). In many regions, visitor spending supports anti-poaching initiatives, community-based conservation, and the management of protected areas. Compared to carbon-intensive mass gatherings, well-managed international ecotourism offers a more sustainable and purpose-driven trade-off that aligns economic development with biodiversity outcomes. Promoting a model of regenerative, nature-positive tourism is therefore paramount to ensure tourism delivers net gains for both conservation and community resilience. Sustainable tourism policies and actions can mitigate some of these challenges through environmentally responsible, socially equitable, and economically viable practices. Aligning tourism development with conservation objectives enhances biodiversity protection while generating tangible benefits for local communities (Stone and Nyaupane, 2017a; McCool and Mandić, 2024). Given that Indigenous People are estimated to manage some 80% of remaining biodiversity and that tourism is often a main source of income and employment for Indigenous People, it is especially important to actively engage Indigenous Peoples and Local Communities (IPLCs) in tourism and biodiversity conservation (Borrini-Feyerabend et al., 2013; Worboys et al., 2015). Community-based tourism initiatives empower locals to manage resources sustainably, diversify income sources, and build resilience against external economic downturns or environmental disasters (Stone and Nyaupane, 2017b).

Furthermore, tourism is a powerful economic driver, contributing nearly 10% of global GDP and generating trillions of dollars annually. Over 50% of the global tourism market is propelled by nature-based tourism and is projected to generate US\$665 billion annually by 2030 (WTTC, 2022b; 2019). Wildlife tourism alone generates more than US\$340 billion annually, supports more than 20 million jobs globally (WTTC, 2022b), reinforces conservation efforts, and fosters local environmental stewardship (Grand View Research, 2020). According to the World Bank (2021a), investments in PCAs and nature-based tourism yield an impressive economic return, with every US\$2 spent generating at least US\$12, underscoring the sector's effectiveness in driving biodiversity conservation. Despite these returns, conservation efforts worldwide are chronically underfunded, which hampers their ability to conserve biodiversity (UNEP, 2021; Paulson Institute et al., 2020). Global analyses have documented persistent deficiencies in protected area management due to inadequate resources, staffing, and governance (Leverington et al., 2010; Coad et al., 2013). These limitations undermine the capacity of PCAs to achieve biodiversity objectives, even as tourism revenue increasingly

supports their operations. Moreover, governments spend approximately US\$500 billion per year in support of initiatives that is potentially harmful to biodiversity—five to six times more than total spending for biodiversity itself (OECD, 2020). It is also worth noting that tourism in and around PCAs confers significant health and education benefits for communities (Naidoo et al., 2019).

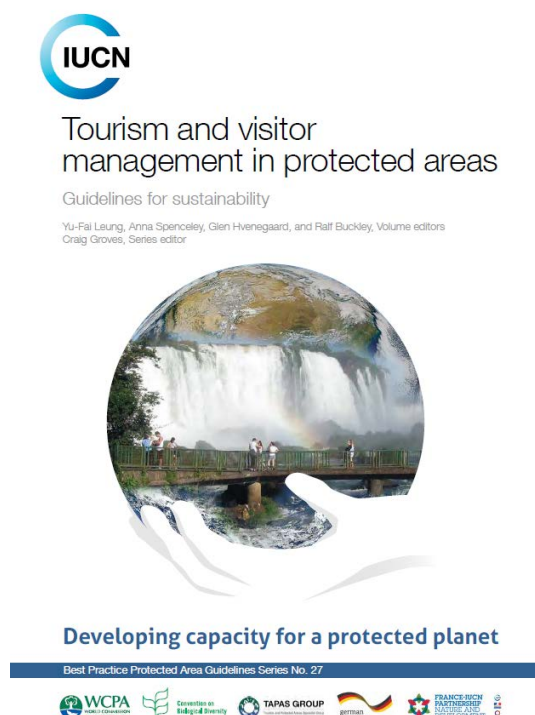


Figure 1. Tourism and Visitor Management in Protected Areas Guidelines

Tourism stakeholders must be closely involved in the governance of protected areas, especially where the area generates vital funding for conservation activities. The IUCN Tourism and Visitor Management in Protected Areas Guidelines (Leung et al., 2018) has championed the integration of tourism revenue into conservation financing. Successful models demonstrate how tourism businesses can align their operations with conservation goals through eco-certification schemes, visitor fees that support Protected Area management, and active participation in governance.

IUCN Resolution 130: Strengthening Sustainable Tourism for Biodiversity Conservation and Community Resilience

The growing significance of the relationship between tourism and biodiversity prompted IUCN Resolution 130, “Strengthening Sustainable Tourism’s Role in Biodiversity Conservation and Community Resilience,” which was adopted during the 2020 IUCN World Conservation Congress. This resolution acknowledges the vital role of nature-based tourism in supporting biodiversity conservation while also generating economic benefits and strengthening the resilience of local communities. Nature-based tourism uses natural resources in a wild or undeveloped form so that visitors may enjoy undeveloped natural areas or wildlife (Leung et al., 2018). Table 3 illustrates the

alignment of Resolution 130 with other international commitments, international policy frameworks, the Sustainable Development Goals (SDGs), and the Convention on Biological Diversity (CBD) targets. Table 4 outlines the Resolution's strategic objectives.

Table 3: Alignment of Resolution 130 with Other International Commitments, Policy Frameworks, and the SDGs and CBD Targets

Linkages	Description
Alignment of Resolution 130 with previous international commitments	
IUCN Resolution 6.060 (Hawai'i, 2016)	Called for higher sustainability standards in nature-based tourism and better integration of ecotourism into conservation policies.
United Nations General Assembly (UNGA) Resolutions	Recognized sustainable tourism's role in achieving the 2030 Agenda for Sustainable Development and promoting economic growth, cultural preservation, and environmental conservation.
Convention on Biological Diversity (CBD) Decisions	Highlighted the contributions of tourism to biodiversity conservation, community development, and poverty eradication.
Policy frameworks	
UNGA Resolution A/RES/77/178 (2022)	Encourages sustainable tourism, including sustainable nature-based tourism, as a tool for economic growth, social development, and environmental protection.
UNGA Resolution A/RES/78/260 (2024)	Proclaims 2027 as the International Year of Sustainable and Resilient Tourism; highlights tourism's role in biodiversity conservation and socioeconomic resilience.
SDGs	
SDG Target 8.9	Promotes policies that support sustainable tourism to generate employment and preserve local culture.
SDG Target 12.b	Encourages the monitoring of sustainable tourism's impact on conservation and development.
SDG Target 14.7	Encourages tourism development that safeguards marine biodiversity, respects ecological integrity, and enhances the resilience of coastal communities.
CBD decisions and guidelines	
CBD Decision XII/5 (2014)	Advocates for integrating biodiversity into poverty eradication and development strategies and emphasizes sustainable tourism as a key mechanism.
CBD Guidelines on Biodiversity and Tourism Development	Provides a framework for ensuring that tourism activities are ecologically sustainable, economically viable, and socially equitable; reinforces ecotourism's role in conservation.

Table 4: Strategic Objectives of Resolution 130

Objective	Description
Recognizing sustainable tourism as a key driver for conservation financing	Encourages the use of tourism revenue to support PCAs, biodiversity conservation, and ecosystem restoration.
Strengthening community resilience by integrating ecotourism into conservation strategies	Enhances socioeconomic opportunities for communities reliant on conservation and tourism, particularly in post-COVID recovery efforts.
Encouraging PCAs and tourism operators to adopt best practices in sustainable tourism	Promotes responsible tourism policies, visitor management strategies, and eco-certification initiatives.
Addressing challenges posed by the COVID-19 crisis on tourism-dependent communities	Ensures that tourism recovery strategies align with long-term conservation goals and socioeconomic resilience.

Resolution 130 strengthens the IUCN's commitment to sustainable tourism as a tool for the conservation of biodiversity and socioeconomic development. It builds upon previous resolutions and aligns with global sustainability frameworks to ensure that ecotourism continues to support both nature and local communities, especially during environmental and economic crises. With the growing threats posed by biodiversity loss and unsustainable tourism, integrating sustainable tourism into conservation strategies

is imperative. International cooperation, inclusive policies, and responsible tourism development are crucial to fostering a resilient and prosperous future in which biodiversity thrives and communities benefit.

By expanding on these principles, this paper provides practical guidance to integrate sustainable tourism into biodiversity conservation strategies, illustrated with six international case studies.

The primary objectives of this paper are to:

- **Recognize the environmental, economic, and social benefits of nature-based tourism:** Highlight practices that create measurable economic benefits, support biodiversity conservation, and promote local community engagement. These efforts inspire both community-led conservation initiatives and greater environmental awareness among tourists.
- **Promote collaborative models:** Encourage functional collaborations among conservationists, local communities, governments, and the tourism industry. These collaborations emphasize co-management, shared responsibility, and commitment to biodiversity conservation.
- **Advocate for inclusive policies:** Call for policy reforms that integrate tourism revenue streams with biodiversity conservation and community development, ensuring that a portion of tourism income is reinvested into long-term conservation projects and local well-being initiatives. Such policies should promote equitable access to PCAs, including for domestic visitors and marginalized groups, and support non-discriminatory tourism infrastructure and services.

The interlinked crises of biodiversity loss and unsustainable tourism are global issues requiring coordinated action across sectors to create regionally adaptive solutions (Buckley, 2010). This paper provides guidance for various cultural and ecological contexts to a global audience of policymakers and conservationists. With the increasing threats posed by environmental degradation and changing visitor dynamics, integrating sustainable tourism into conservation strategies is not simply beneficial—it is imperative for the health of our planet and the well-being of future generations.

The Importance of Biodiversity and Protected and Conserved Areas

Protected and conserved areas (PCAs) are key to biodiversity conservation and are a core component of many of the 2030 Targets in the Kunming-Montreal Global Biodiversity Framework (Dudley, 2024b), such as Target 1, “Plan and Manage All Areas to Reduce Biodiversity Loss,” and Target 3, “Conserve 30% of Land, Waters, and Seas.” Although it is not included directly as a central sector in the same way as agriculture, fisheries, or forestry, sustainable nature-based tourism (NBT) emerges as a vital

mechanism, providing impressive economic and social benefits to support biodiversity goals while fostering community resilience. Many biodiversity-rich regions, particularly those within protected and conserved areas, have been established and maintained for their ecological significance and cultural ecosystem services. These services include recreation and tourism, which, if done well, foster inspirational, educational, experiential, nature-positive benefits and strengthen a global commitment to conservation efforts (Leung et al., 2018). For instance, the UAE's coastal lagoons initiative (see Case Study 4) demonstrates how investments in NBT can preserve critical habitats, such as mangroves and seagrasses, while simultaneously enhancing ecosystem services. This dual impact safeguards biodiversity and creates opportunities for sustainable economic growth.

NBT can be a double-edged sword, though. Before the COVID-19 pandemic, significant wildlife and NBT destinations, including PCAs, received approximately 8 billion visits annually, generating approximately US\$600 billion per year in direct expenditures (Balmford et al., 2015; World Tourism Organization, 2021). The continued global growth of tourism in PCAs has raised significant concerns about the adverse impacts of tourism on biodiversity conservation goals, from so-called overtourism—characterized by overcrowding in destinations—to detrimental behaviors, such as harm caused by irresponsible individuals (Honey and Frenkiel, 2021; Perera et al., 2024). The COVID-19 pandemic from 2020 to 2022 halted international NBT in an unprecedented way as it starkly demonstrated that the lack of NBT and its revenues can be detrimental to PCAs and associated communities by undermining funding, conservation efforts, and local livelihoods (Spenceley et al., 2021). Additionally, while the international black-market trade in wildlife parts declined in some regions because of travel restrictions (Spenceley, 2021), other areas experienced increased poaching as communities faced food insecurity and limited access to PCAs by rangers and tour groups (Lucas, 2022; Newsome, 2021). Many PCAs suffered a loss of revenue from tourism fees and charges, which led to lowered management effectiveness.

The pandemic also provided a timely opportunity to reflect on the challenge of sustainability in tourism (Galvani et al., 2020) and to deliberate on how tourism should recover and adapt post-pandemic to better support PCAs, biodiversity conservation, and local communities (Spenceley et al., 2022; Nielsen et al., 2022; United Nations, 2020). The IUCN Resolution 130 was conceived during this traumatic period of reflection (Do and Schlaepfer, 2023). The resolution advocates embedding tourism within conservation strategies and emphasizes the importance of including governance, policy alignment, and innovative financial mechanisms to ensure that tourism becomes a driver of biodiversity conservation.

Initiatives have been introduced or developed since the pandemic to showcase how tourism can “build back better” to facilitate recovery while strengthening biodiversity conservation and community resilience (Rushton et al., 2024). For example, Kenya's wildlife conservancy-based ecotourism models demonstrate how community-led initiatives can enhance biodiversity conservation while improving livelihoods through increased income and support for community projects (Muriithi, 2022).

Similarly, the Nature Positive Tourism framework developed by the World Travel and Tourism Council (WTTC)—and more recently promoted through a partnership with the World Sustainable Hospitality Alliance (SHA) and UN Tourism (formerly the World Tourism Organization)—represents an innovative industry-led approach to promoting sector sustainability (Imbsen et al., 2022a and 2022b). NPT aims to deliver a framework designed specifically for tourism businesses to integrate biodiversity conservation into industry practices in order to minimize environmental impacts, promote regenerative tourism models, and actively contribute to restoring and protecting natural ecosystems.

The success of the NPT framework, however, hinges on further investment in the design of robust indicators and scientific metrics that measure conservation outcomes. Critics point out that, without such collaboration between industry and science, the usual risks of greenwashing, where developments harmful to biodiversity are marketed as sustainable, can undermine genuine conservation efforts (Buckley et al., 2024). While 95% of tourism policies acknowledged nature as a primary asset for tourism in 2024, only 23% of these policies call for monitoring biodiversity indicators, which demonstrates that nature-positive tourism policies frequently do not mandate measurements of biodiversity impacts (UNTourism, 2024). One established framework for ensuring conservation effectiveness is the IUCN Green List, which recognizes protected and conserved areas that meet global standards for effective management, equitable governance, and positive biodiversity outcomes. Formal evaluations using validated metrics are essential to ensure NPT programs achieve measurable biodiversity gains and align with global conservation goals. Building NPT metrics into tourism-related concession agreements, for example, can offer pathways for greater transparency and accountability (Spenceley et al., 2017). Research has shown a lack of commitment from tourism authorities and staff members of destination marketing organizations (DMOs) toward controlling tourism growth, which has resulted in the marketing of nature destinations without the use of any evidence-based systems to ensure sites are protected from excessive growth (Torres-Delgado et al., 2024).

The Importance of Public Access to Protected and Conserved Areas

Protected and conserved areas (PCAs) play a pivotal role in supporting public recreation, education, and human well-being. Ensuring equitable access to these spaces strengthens the connection between people and nature, fostering broader public support for conservation goals and policies. However, such access must be managed carefully, as the growing diversity of recreational use can lead to unintended ecological and social impacts if not properly regulated (Newsome & Hughes, 2025). Balancing inclusive access with conservation imperatives requires adaptive visitor management and thoughtful zoning strategies.

Access to PCAs contributes to physical and mental health. Research shows that exposure to nature reduces stress, anxiety, and depression while promoting physical activity and social cohesion, particularly for urban populations facing “nature deficit disorder” (Buckley et al., 2019; Louv, 2005; King et al., 2023). Recognizing these benefits, global public health initiatives increasingly incorporate access to green spaces into urban planning and national health strategies (WHO, 2020). For example, a network of more than 15,000 healthcare providers in Canada can now prescribe nature to enhance patient health and well-being (B.C. Parks Foundation, 2024). These measures underscore the critical role of PCAs as both ecological assets and resources for public health (Lemieux et al., 2022).

PCAs are also powerful platforms for environmental education and citizen engagement. Programs such as wildlife interpretation centers, biodiversity monitoring, and citizen science initiatives provide visitors with immersive learning experiences and foster a conservation ethic and responsible behaviors aligned with environmental goals (Spenceley et al., 2021; Bonney et al., 2016; Lemieux et al., 2018; Forest Peoples Program, 2024). By connecting visitors to conservation efforts, these initiatives cultivate a constituency that actively supports policies and funding for biodiversity protection. Moreover, sustainable visits to PCAs generate tangible economic benefits, creating incentives for conservation. Revenue from entrance fees and ecotourism supports conservation management while driving local economic development, including job creation and infrastructure improvements. For example, partnerships with Indigenous and local communities integrate traditional knowledge into conservation strategies, offering the co-benefits of cultural preservation and biodiversity stewardship (WTTC, 2022a; Eagles et al., 2017; Stone and Nyaupane, 2017a).

While access to PCAs offers advantages, managing visitors has its challenges. Overcrowding, climate change, habitat degradation, and socioeconomic disparities can undermine the ecological integrity of PCAs and limit their inclusivity (Newsome et al., 2013; Mandić and Petrić, 2021; Dowie, 2011; Mandić et al., 2024). High entrance fees or inadequate infrastructure may exclude marginalized communities, and the growing number of climate disasters can strain local community resources, requiring high-cost disaster recovery funds to bring tourists back to areas hit by disasters, such as Hurricane Maria in Puerto Rico (Mehta, 2021). Unregulated tourism development frequently strains natural resources and can eliminate natural climate buffer zones, such as mangrove forests, and undermine visitor experiences.

To address these challenges, governments and PCA managers should adopt integrated visitor management strategies that respond to over-visitation and the need to reduce climate risks in tourism zones. Approaches such as visitor reservations and fees, together with regional planning to limit overbuilding through zoning, green infrastructure development, and regulatory protection of fragile areas, all done with community co-management, can optimize access while minimizing ecological impacts (Leung et al., 2018; Spenceley et al., 2021; Epler Wood, 2017). Sustainable transportation systems and inclusive infrastructure further enhance accessibility and foster both conservation and public engagement (UNWTO, 2021). When visitor access is integrated into broader

conservation and policy agendas, PCAs can simultaneously function as biodiversity sanctuaries and vital public assets. Managing this access on a regional basis via zoning allows for joint planning among municipal planning authorities, PCAs, and tourism authorities to put a master plan with key indicators in place (Epler Wood, 2017). Ensuring equitable and sustainable access to these spaces reinforces the reciprocal relationship between people and nature, strengthening public support for conservation and the long-term protection of the planet's natural heritage.

Collaborative Governance Models

Collaborative governance models are decision-making frameworks that engage multiple stakeholders—including local authorities, conservation organizations, local communities, and the private sector—in the shared management of protected areas. These structured frameworks define how conservation areas are managed, including decision-making processes, stakeholder roles, and policy enforcement, and ensure free, prior, and informed consent (FPIC) for Indigenous Peoples and Local Communities. Effective governance integrates sustainable tourism into conservation strategies and ensures transparency, equitable participation, and accountability while balancing ecological integrity and the impacts of climate change with economic and social benefits. These frameworks must not only mitigate risks but also proactively support biodiversity goals and strengthen local resilience. The COVID-19 pandemic underscored the reliance of many protected and conserved areas (PCAs) on tourism revenue and exposed vulnerabilities in conservation funding and community livelihoods. It also demonstrated the urgent need for such robust governance models. The COVID-19-related disruption was also a catalyst for new approaches that align conservation with socioeconomic objectives, as championed in IUCN Resolution 130.

International frameworks, such as the 30×30 target of the Kunming-Montreal Global Biodiversity Framework, advocate for inclusive governance approaches that integrate sustainable tourism, resource management, and Indigenous stewardship while maintaining conservation objectives (WWF and IUCN WCPA, 2023). Successful examples of collaborative governance, such as Nepal's Sagarmatha National Park (Case Study 3), illustrate how tourism revenues can directly fund conservation initiatives while supporting community livelihoods.

The active participation of Indigenous groups, local communities, tourism operators, and private-sector entities in the governance and management of PCAs is recognized as essential (Fitzsimons et al., 2024). For example, in Canada, Indigenous protected and conserved areas (IPCAs) have emerged as a critical area-based conservation strategy (Kettunen et al., 2020). IPCAs are Indigenous-led and elevate Indigenous rights and responsibilities toward conservation. They provide a critical opportunity for Indigenous Peoples to continue to exercise or to reinstate their traditional roles, knowledge, and responsibilities as stewards of such areas (ICE, 2018). In another example, the collaborative governance approach in Sagarmatha National Park illustrates how co-

management models can effectively balance biodiversity conservation with the socioeconomic needs of Indigenous communities by using participatory decision-making frameworks. These models not only empower Indigenous Peoples and Local Communities to assume leadership roles in conservation but also create opportunities for sustainable tourism to deliver economic and ecological benefits (WWF and IUCN WCPA, 2023).

Expanding collaboration between PCAs and Other Effective Area-based Conservation Measures (OECMs) is another approach vital for advancing sustainable tourism by integrating the roles of these conservation frameworks. PCAs, such as national parks and national forests, typically prioritize biodiversity preservation, ecosystem services, and recreational access through various management approaches. For example, national parks prioritize conservation while allowing regulated public enjoyment, whereas national forests (at least in the United States) focus on sustainable multiple-use activities and recreation. OECMs, by contrast, encompass areas managed for purposes other than conservation—such as Indigenous-managed lands in Australia, community conservancies in Namibia, and sacred natural sites in Kenya—that still deliver effective outcomes for biodiversity (Dudley et al., 2018; IUCN-WCPA Task Force on OECMs, 2019). By fostering strategic connections between these areas, stakeholders can offer diverse tourism experiences, such as wilderness exploration and cultural immersion, and thus directly support conservation goals while benefiting local communities (IUCN-WCPA Task Force on OECMs, 2019; Jonas et al., 2024).

In addition, adaptive management frameworks are essential to ensure that tourism balances conservation needs with community welfare. Tourism planned with local community involvement can contribute to local development by providing jobs while ensuring the long-term sustainability of PCAs (Leung et al., 2018). For instance, in Kenya's Maasai Mara and Tanzania's Serengeti, community-led tourism initiatives reduce pressures on natural resources while offering alternative livelihoods (Dudley et al., 2024a). These initiatives demonstrate how inclusive governance and effectively managed tourism can coexist to achieve biodiversity and socioeconomic objectives.

The World Bank (2021b) has established a practical toolkit that includes a resource guide and case studies to guide the establishment of collaborative management partnership areas. The toolkit outlines key elements such as institutional governance models, stakeholder engagement strategies, legal frameworks, sustainable financing mechanisms, and monitoring systems—offering a structured approach for implementing effective co-management in protected and conserved areas.

Inclusive Governance for Biodiversity Conservation and Local Livelihoods

The complex yet essential interplay between biodiversity conservation and the human rights of host communities requires a balance between ecological priorities, human welfare, and economic development (Esmail et al., 2023). Maintaining this balance is critical to ensure conservation efforts are both effective and equitable. Considerations such as animal welfare (Hampton & Hyndman, 2018), visitor satisfaction, FPIC, and local economies must be addressed to achieve sustainable outcomes.

In many areas of the world, Indigenous Peoples and traditional communities continually serve as stewards of some of the planet's most biodiverse regions, making their involvement indispensable to protected area governance (Garnett et al., 2018). Further, tourism is often a main source of employment for Indigenous Peoples (UNWTO, 2021). Recognizing Indigenous and community-conserved areas (ICCAs) has emerged as a pivotal strategy for integrating traditional ecological knowledge with contemporary conservation science (Dawson et al., 2021). For instance, the Rivers Fiji initiative (Case Study 5) demonstrates how Indigenous stewardship and conservation leases align biodiversity goals with economic benefits.

A foundational principle of inclusive governance is ensuring free, prior, and informed consent (FPIC) as outlined in the United Nations Declaration on the Rights of Indigenous Peoples (UNDRIP). FPIC is critical for safeguarding Indigenous rights and ensuring that conservation projects do not undermine the livelihoods of local communities (IUCN-WCPA Task Force on OECMs, 2019). The role of FPIC is exemplified by co-managed PCAs, such as Australia's Indigenous Protected Areas (IPAs), where Indigenous leadership in managing high-conservation-value lands has yielded significant biodiversity and community benefits (National Indigenous Australians Agency, 2024). Conversely, for example, the tensions within Tanzania's Ngorongoro Conservation Area (Amnesty International, 2024) underscore the challenges of balancing conservation priorities with local community rights, illustrating the urgent need for inclusive policies grounded in trust-building and respectful dialogue.

Indigenous and community-based tourism offers immense potential for bridging conservation and community goals. Authentic experiences, owned and led by Indigenous communities, provide economic opportunities while fostering cultural pride and environmental stewardship. However, tensions can arise where customary resource use or cultural practices intersect with conservation priorities, highlighting the need for conservation-minded, participatory management approaches to ensure long-term sustainability (Newsome, 2015). Local communities can benefit through employment, the sale of traditional crafts, and tourism businesses such as eco-lodges or guiding services. Increasingly, Indigenous-led tourism enterprises are not only creating economic opportunities but also shaping conservation strategies, ensuring Indigenous voices are central to decision-making processes (e.g., Souza et al., 2024; Carr et al.,

2016; Hsu and Nilep, 2015; Kithiia and Reilly, 2016; Kemp et al., 2024; Recio and Hestad, 2022).

In South America, Cristalino Jungle Lodge in Brazil provides a compelling example of a privately owned ecotourism enterprise that safeguards biodiversity while generating tangible benefits for local communities (Newsome, 2019). Situated within a 28,000-hectare private reserve, the lodge's integrated model combines nature-based tourism, education, and scientific research. Its nonprofit foundation engages local youth and educators in environmental education, while revenues from birdwatching tourism support conservation and sustainable employment (Case Study 6).

The demand for “authenticity” in tourism, however, can sometimes have unintended consequences. Tourists may anticipate performances or activities that do not align with the authentic cultural practices of a region, such as the widespread expectation that First Nations performing groups play the didgeridoo in every part of Australia despite its limited geographical use historically (Curtin and Bird, 2021). These expectations can impose cultural constraints on Indigenous communities, particularly youth and women, who may face pressures to conform to tourist demands at the expense of their own educational or professional aspirations.

Responding to such practices, a growing number of responsible tourism companies and international nongovernmental organizations (INGOs), such as the Transformational Travel Council, are engaging with local stakeholders to balance authenticity with the evolving aspirations of Indigenous and traditional communities through thoughtful, community-led planning. Thus tools and approaches are available to tourism enterprises for educating visitors about the complexities of Indigenous and traditional cultures rather than perpetuating stereotypes. By fostering mutual understanding, tourism serves as a platform for cross-cultural dialogue and respect.

Building successful partnerships among Indigenous communities, conservation organizations, and tourism stakeholders requires ongoing mutual respect and reciprocal learning. Indigenous ecological understanding, such as knowledge of seasonal patterns and sustainable harvesting practices, can enhance the sustainability of tourism activities, while tourism professionals bring expertise in business operations and visitor management. Such collaboration ensures that tourism ventures benefit local communities and conservation efforts. For example, the collaborative initiatives in Peru's Amarakaeri Communal Reserve (Case Study 1) illustrate how capacity building for Indigenous communities strengthens both biodiversity conservation and tourism management.

Additionally, tourism revenues can fund critical community development projects, such as schools, healthcare facilities, and clean water systems, fostering long-term resilience and well-being. Datasets collated over 30 years illustrate how Nepal's Sagarmatha National Park typifies such approaches; it is arguably one of the world's foremost examples of community development and well-being through tourism (Rogers and Pradan, 2022). Section 6 offers further examples of tourism income supporting anti-

poaching initiatives, wildlife monitoring, and cultural preservation projects, demonstrating its potential for positive impact.

Ultimately, bridging conservation and community goals hinges on inclusive governance, equitable benefit-sharing, and collaborative solutions. By integrating Indigenous and traditional knowledge with modern conservation practices and sustainable tourism strategies, stakeholders can create robust models (Figure 2) that achieve ecological resilience while empowering local communities.

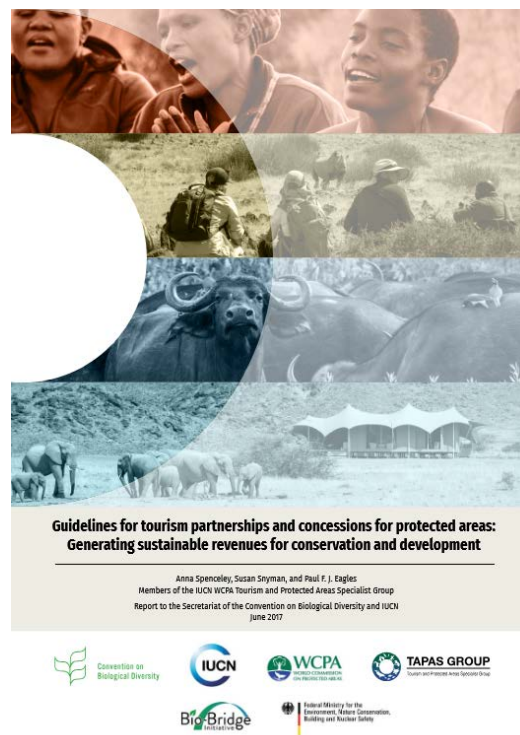


Figure 2. The IUCN publication *Guidelines for Tourism Partnerships and Concessions for Protected Areas: Generating Sustainable Revenues for Conservation and Development* (Spenceley et al., 2021) is a key resource that supports this approach.

This publication provides practical guidance on structuring partnerships and concessions that generate sustainable revenue streams while maintaining conservation priorities. The guidelines emphasize the importance of equitable agreements, capacity building, and monitoring frameworks, ensuring that tourism revenues contribute directly to biodiversity protection and community resilience. By fostering transparent partnerships among protected area authorities, communities, and tourism operators, these guidelines highlight how tourism can balance economic benefits with ecological integrity.

Economic and Social Benefits of Nature-Based Tourism

The integration of community engagement and inclusive governance into conservation strategies aligns ecological goals with human rights and socioeconomic well-being. As discussed in Section 4, equitable partnerships and the integration of traditional knowledge foster conservation frameworks that deliver both ecological and social benefits. This section illustrates how tourism's vast economic and cultural reach can serve as a catalyst for biodiversity conservation. Strategic investments, inclusive business models, and educational initiatives can maximize tourism's potential for creating ecological resilience and socioeconomic equity.

Tourism plays a vital role in biodiversity conservation; its dependence on nature generates economic benefits, fosters community engagement, and promotes global awareness of conservation issues (Spenceley et al., 2020; Souza et al., 2021; Souza et al., 2018). Over 80% of tourism-related goods and services rely on natural ecosystems, and nature-based tourism generates approximately US\$600 billion annually. Wildlife tourism alone accounts for US\$343 billion annually and supports 21.8 million jobs globally (WTTC, 2019). This financial input is critical for sustaining conservation programs, as demonstrated by the US\$142 million generated annually from entrance fees in African PCAs, which fund biodiversity management and operational costs (WTTC, 2022a).

Community participation is central to aligning tourism with conservation efforts and contributes to national and local economies. For example, Indigenous-led tourism in Canada generated US\$1.9 billion annually pre-COVID, supporting 40,000 jobs while reinforcing biodiversity stewardship through traditional ecological knowledge (ITAC, 2022). Similarly, in Namibia, tourism revenues are a critical funding source for the country's 87 registered communal conservancies, which manage approximately 20% of its land. Reinvesting tourism revenues into anti-poaching initiatives, wildlife monitoring, infrastructure development, and livelihood support for local communities bolsters both conservation and socioeconomic resilience (NACSO, 2022).

Tourism also serves as a powerful platform for raising awareness about biodiversity loss. Global surveys indicate that over 90% of people, including in regions such as Brazil, the EU, and India, are deeply concerned about the decline in animal and plant species (EIU, 2021). Through well-designed education and interpretation programs, tourism businesses inspire visitors to become active participants in conservation efforts. Initiatives in Rwanda, where former poachers are trained as guides in PCAs, exemplify how tourism can contribute directly to wildlife protection while transforming individuals into conservation stewards. By amplifying conservation messages and connecting tourism and biodiversity protection, these programs not only reduce poaching but also provide educational opportunities for visitors (University of Kent, 2008). Through such

efforts, tourism can shift from being merely an economic activity to becoming a driver of ecological and cultural empowerment.

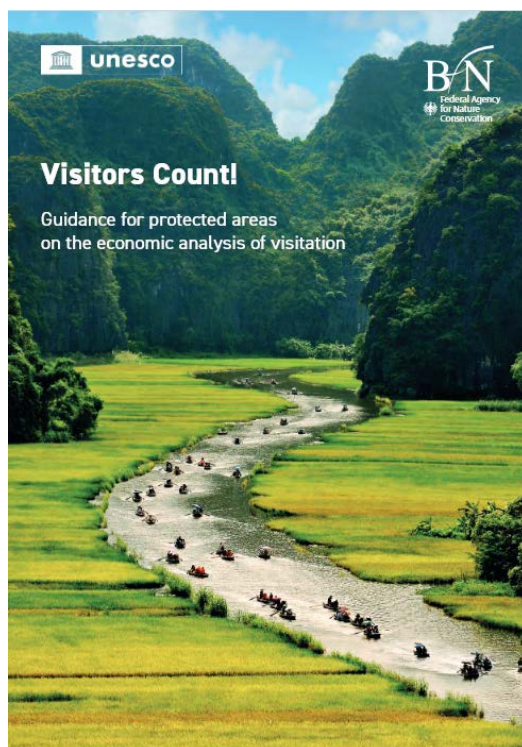


Figure 3. Visitors Count! Guidance for Protected Areas on the Economic Analysis of Visitation

This comprehensive publication underscores the pivotal role of visitor data in the effective management and sustainable development of protected areas (PAs). The guidance provides useful insights into visitor behavior, preferences, and economic contributions, enabling park managers, policymakers, and conservation practitioners to make informed decisions that balance conservation priorities with tourism opportunities. Visitors Count! (Spenceley et al., 2021) highlights best practices for data collection, analysis, and application, showcasing how understanding visitor dynamics can enhance the visitor experience, foster community engagement, and generate crucial funding for conservation efforts. This publication is a vital tool for integrating visitor data into decision-making processes and ensuring that tourism in PAs contributes meaningfully to biodiversity conservation and sustainable development goals.

Despite its benefits, tourism can contribute to biodiversity loss through unsustainable practices such as habitat destruction and resource overuse. Sustainability must start with reducing negative impacts from tourism by accounting for the cost of managing tourism locally and investing in sustainable infrastructure on a regional basis. Facilities for recycling, composting, and treatment of wastewater and solid waste, for example, can dramatically reduce the impact of tourism and increase the value of a destination (High Level Panel for Sustainable Ocean Economy, 2020). Local authorities need to understand the unaccounted-for costs of tourism known as the “invisible burden of tourism” and be prepared to finance the sustainable infrastructure required to manage tourism growth (Epler Wood et al., 2019). Investments in a nature-positive approach, which focuses on halting and reversing environmental damage while actively restoring ecosystems, can be part of mitigating climate change to protect tourism hotspots and prepare for climate risks. For example, investments in conserving coral reefs (which

support US\$36 billion in annual tourism revenue) highlight the dual economic and ecological advantages of prioritizing restoration efforts (OECD, 2020). By integrating biodiversity safeguards into business operations and collaborating with local communities and local authorities, tourism can facilitate global targets to halt biodiversity loss by 2030.

Tourism's potential to be a catalyst for conservation lies in its ability to combine economic incentives with ecological and social benefits (Figure 3). For example, the initiative by Iberostar Hotels (Case Study 2) illustrates how corporate leadership in reducing environmental impacts and investing in ecosystem restoration can drive sustainable tourism models that enhance biodiversity. Through strategic investment, community empowerment, and educational initiatives, the sector can mitigate its environmental footprint and actively contribute to the recovery of ecosystems. By harnessing this potential, tourism can ensure that natural heritage is preserved for future generations while driving sustainable development on a global scale.

Conclusion

The deepening biodiversity crisis not only threatens ecological loss but also creates a defining moment for humanity's collective future. As protected and conserved areas (PCAs) strive to safeguard the planet's critical ecosystems, sustainable tourism offers a powerful yet underused instrument to combine conservation goals with meeting community socioeconomic needs. This paper underscores how tourism can be a mechanism for global biodiversity conservation, equitable development, and cultural preservation.

To achieve this potential, tourism must become more than an economic activity—it must become the cornerstone of a conservation strategy that operates within a framework of inclusivity, equity, sustainability, and responsible visitor management to ensure long-term ecological and experiential value while responding to the growing crisis of climate change. This paper highlights how strengthened collaborations among governments, conservation organizations, academic research centers, the private sector, and IPLCs must support the next generation of sustainable tourism development, which requires evidence-based decision-making using science-based indicators. The case studies and examples presented—from co-managed Indigenous Protected Areas in Australia to community-driven ecotourism initiatives in Fiji—offer models for integrating biodiversity conservation with sustainable tourism to achieve the 30x30 targets. Each case study illustrates how sustainable tourism can provide funding for conservation, increased environmental awareness, strengthened cultural resilience, and inclusive economic growth. Achieving these successes requires dedicated effort from all stakeholders.

Implementing the Recommendations: A Road Map

While the recommendations outlined above provide a foundation for action, their successful implementation depends on well-structured governance, clear financing mechanisms, and strong partnerships. The following steps outline how policymakers, conservation organizations, and tourism businesses can move from recommendations to measurable outcomes.

Policymakers must prioritize the development of robust regulatory frameworks that integrate tourism and conservation at the national and local levels to ensure measurable biodiversity outcomes. Four key actions include:

1. **Establishing biodiversity performance indicators and accountability mechanisms for tourism projects and destinations**
 - Support tourism operations to conduct biodiversity impact assessments that align with national conservation priorities.
 - Implement monitoring frameworks based on existing tools, such as the **IUCN Green List** and Global Sustainable Tourism Council's (GSTC) destination sustainability criteria, to track compliance.
2. **Creating financial incentives and policies, such as tax benefits, subsidies, or ecosystem service credits, for private-sector investments in conservation**
 - Introduce tax credits or subsidies for businesses that invest in biodiversity conservation initiatives such as reforestation or wildlife corridors.
 - Implement **payments for ecosystem services (PES)** schemes in which tourism businesses contribute directly to conservation funds.
 - Implement laws and policies that promote public–private–community partnerships (PPCPs) for the development, financing, and operation of tourism and outdoor recreation programs and facilities in PCAs.
3. **Creating awareness initiatives or sponsorship programs for tourism to support national biodiversity objectives**
 - Establish public-private partnerships to fund conservation awareness campaigns targeting both tourists and industry stakeholders.
 - Launch a **Tourism and Biodiversity Fund**, in which a percentage of tourism revenue supports local conservation programs.
4. **Developing cross-sector policies that embed biodiversity issues and targets into national tourism strategies and vice versa**
 - Integrate biodiversity targets into tourism master plans with **monitored indicators transparently available** to guide local decisions and ensure adherence to conservation best practices and climate risk preparedness.
 - Facilitate collaboration between tourism and environmental ministries to create **joint biodiversity-tourism strategies**.
 - Facilitate collaboration among protected areas, municipal governments, and tourism authorities to use zoning in master plans **to mitigate climate risks**, enhance tourism development, and integrate biodiversity conservation.

For **NGOs, conservation organizations, and academic research centers**, the focus must shift toward building the capacity of IPLCs and destination marketing organizations (DMOs) to lead tourism and conservation initiatives in their regions. Four key actions are:

1. **Providing tailored training in governance, financial management, biodiversity monitoring, and community engagement**
 - Develop region-specific **training programs** using culturally appropriate and, where possible, digital and online tools to empower local communities in tourism management.
 - Facilitate workshops on sustainable tourism entrepreneurship and conservation financing.
 - Collaborate with academic and research centers on governance, finance, monitoring, and planning to support local action through training and digital education.
2. **Facilitating global networks, cross-sector alliances, and exchanges to share best practices and success stories**
 - Establish platforms for IPLCs and DMOs to connect with international academic research centers and conservation and tourism organizations.
 - Support **peer-learning programs** among successful community-based tourism projects.
 - Facilitate the adoption of GSTC-recognized sustainable tourism certification schemes, such as Biosphere Certification, by local governments and DMOs.
3. **Facilitating access to NBSAPs to help tourism businesses align with national conservation targets**
 - Create accessible databases or **online platforms** where tourism operators can view conservation priorities and best practices.
 - Provide **technical assistance** to tourism businesses to align their operations with biodiversity strategies.
4. **Updating processes and developing new tools to monitor tourism's socioeconomic and ecological impacts on biodiversity**
 - Invest in **real-time biodiversity monitoring technologies**, such as remote sensing and community-based reporting.
 - Design **biodiversity risk assessment toolkits** for tourism businesses to self-evaluate and mitigate negative impacts.

Tourism businesses operating in and around PCAs must align their business models with conservation goals while also engaging tourists as active contributors to biodiversity conservation. Four key actions include:

1. **Adhering to internationally recognized sustainability certifications to ensure compliance with biodiversity goals**
 - Adopt sustainable tourism **certification** such as GSTC accredited certification, the Sustainable Hospitality Alliance's Pathway to Net Positive Hospitality, or WTTC's Nature Positive Tourism toolkit.

- Encourage privately owned PCAs to adopt **IUCN Green List guidelines** for managing tourism in protected areas.
- 2. **Incorporating biodiversity restoration and ecosystem enhancement into operational plans that respond to climate change challenges and offer options for mitigation and adaptation**
 - Implement **biodiversity restoration initiatives**, such as coral reef rehabilitation or forest restoration projects.
 - Establish **eco-friendly infrastructure standards** that use materials and designs to minimize environmental footprints.
 - Assess the costs of new infrastructure for biodiversity protection and local well-being in destination tourism management.
- 3. **Establishing partnerships with IPLCs to develop culturally and environmentally appropriate tourism experiences**
 - Engage local communities in **decision-making** and revenue-sharing agreements for tourism projects.
 - Develop **co-managed ecotourism ventures** in which Indigenous and local groups play leadership roles.
- 4. **Developing visitor engagement programs to transform tourists from passive consumers into active biodiversity stewards**
 - Launch **visitor education programs** such as wildlife-friendly tourism guidelines that promote pro-environmental behavior.
 - Establish **volunteer tourism programs**, such as citizen science projects for biodiversity monitoring.

The efforts ahead must overcome many challenges, from the threat of greenwashing to the complexities of balancing economic interests with ecological integrity, as well as persistent ecological pressures such as invasive species, feral animals, and inappropriate fire regimes, which continue to undermine conservation outcomes in many protected areas (Schulze et al., 2018). Yet these challenges pale in comparison to the opportunities that lie within our grasp, which in turn can mitigate wider threats acting on PCAs. By reframing ecologically sustainable tourism as a tool for global biodiversity conservation, we can unlock its potential to catalyze a more just, resilient, and sustainable future.

As the IUCN and its partners continue to advance equitable governance and innovative conservation solutions, this paper serves as both a call to action and a road map. Turning this vision into reality requires bold leadership, multi-stakeholder collaboration, and clear accountability. To that end, governments, development partners, private-sector actors, and IPLCs must commit to collective action supported by data-driven monitoring and continuous learning.

Together, through strong leadership, we can foster a global coalition to activate these recommendations and turn visions into measurable actions. By working collectively and with urgency, we can ensure that biodiversity thrives, communities flourish, and cultural heritage endures. The stakes could not be higher—nor could the rewards be greater. A

more sustainable and equitable future for people and the planet is within reach—if we act now.

Case Studies

The following six case studies showcase successful examples of tourism in PCAs, emphasizing its transformative impact on biodiversity conservation, community well-being, and resilience.

Case Study 1: Peru and Vietnam: Sustainable Tourism and Protected Areas in a Post-COVID World

Goals Addressed:

- *Recognizing the economic and social benefits of nature-based tourism.*
- *Promoting collaborative models that empower Indigenous People and Local Communities (IPLCs).*
- *Advocating for inclusive policies linking conservation and tourism.*

Protected and conserved areas (PCAs) are vital for preserving biodiversity and supporting the well-being of local communities. The “Sustainable Tourism and Protected Areas in a Post-COVID World” project, led by Planeterra in partnership with the International Union for Conservation of Nature (IUCN), demonstrates how community engagement can drive sustainable outcomes. This initiative supported IPLCs in four PCAs—Río Abiseo National Park and Amarakaeri Communal Reserve in Peru, and Cuc Phuong National Park and Van Long Nature Reserve in Vietnam—by integrating tourism development with conservation objectives.

In Peru, Río Abiseo National Park, a UNESCO World Heritage site, and Amarakaeri Communal Reserve, a biodiversity hotspot within the Amazon, faced severe tourism declines during the COVID-19 pandemic. These disruptions left local livelihoods in jeopardy, particularly for Indigenous communities dependent on sustainable tourism. Planeterra’s project focused on building local capacity by providing training in tourism management, product development, hospitality, environmental education, and biodiversity monitoring. During the downturn, the project also supported alternative income-generating activities, such as handicrafts and sustainable agriculture, to help communities sustain their livelihoods despite reduced visitor numbers. This approach enabled IPLCs to create community-led tourism initiatives that offered authentic cultural and ecological experiences while minimizing environmental impacts. These efforts ensured that communities were better prepared for a recovery when tourism resumed. Empowered by these skills, local stakeholders could share their heritage with visitors, generate income, and promote conservation.

Similarly, Vietnam's Cuc Phuong National Park (the country's first national park and home to rare species like the Delacour's langur and clouded leopard) and Van Long Nature Reserve (a Ramsar wetland site) experienced significant economic challenges owing to reduced visitor numbers. Planeterra collaborated with these communities to develop eco-friendly tourism products, such as wildlife viewing and trekking experiences, which provided sustainable alternatives to harmful practices like poaching and illegal logging. By involving local communities in decision-making processes, the project ensured that tourism initiatives aligned with their cultural and ecological priorities.

Balancing conservation goals with the economic dependence of communities on natural resources presents a key challenge. Planeterra addressed this issue by fostering community participation in biodiversity monitoring and tourism management. This approach instilled a sense of ownership and stewardship among residents, leading to improved forest restoration, wildlife population recovery, and enhanced social cohesion.

The project underscores the transformative power of community engagement in achieving conservation success. Equipping IPLCs with tools and knowledge to manage tourism sustainably created a model in which both people and ecosystems thrive. These efforts emphasize the critical role of collaborative governance and inclusive policies in building a more resilient and equitable future for PCAs in Peru and Vietnam.



Tourists with fishermen in Cabo de Gata, Andalusia. © MEET Network (Photographer—Cris Willan, Green Traveller)

Case Study 2: Iberostar's Nature Positive Tourism Model

Goals Addressed:

- *Recognizing the economic and social benefits of nature-based tourism.*
- *Promoting collaborative models.*
- *Advocating for inclusive policies that integrate tourism revenue with biodiversity conservation.*

Iberostar Hotels and Resorts, a global leader in the hospitality industry with more than 100 properties in 16 countries, has taken bold steps to reduce its environmental footprint through its pioneering “Wave of Change” initiative. This comprehensive, science-based program exemplifies the nature-positive tourism approach by aiming to minimize biodiversity impacts while enhancing coastal ecosystems. Under this initiative, Iberostar has eliminated single-use plastics across its operations and transitioned to renewable energy to achieve carbon neutrality by 2030. In line with its economic goals and underscoring its dedication to sustainability leadership, the company is committed to becoming waste-free by 2025.

Iberostar also prioritizes sustainable seafood consumption. By 2025, the company aims to source 100% of its seafood from certified or responsible fisheries, a target already 83% achieved by 2023. Collaborations with local fishing collectives, such as Aliança Kirimurê in Brazil's Baía de Todos os Santos region, have supported two hundred families engaged in responsible fishing practices. These partnerships have improved processing facilities, strengthened distribution channels, and stimulated demand for sustainable seafood. Similarly, in the Canary Islands, Iberostar is working with the Sustainable Fisheries Partnership and the University of Las Palmas de Gran Canaria to address barriers to sustainable fishing, gathering critical data to inform fisheries management and ensure long-term stock viability.

Acknowledging that 15% of its emissions are currently unavoidable, Iberostar invests in nature-based solutions to offset its impact. These efforts include coral reef restoration in the Caribbean through a multinational program with one on-land coral lab and four underwater nurseries. Other initiatives include funding research into the Mediterranean seagrass species *Posidonia oceanica* and restoring mangrove forests and dune ecosystems to enhance coastal resilience.

Looking ahead to 2030, and reflecting a commitment to biodiversity conservation and climate resilience, Iberostar aims to enhance the ecosystems surrounding its properties. By collaborating with leading universities and research institutions like the Mediterranean Institute for Advanced Studies (IMEDEA), the company ensures its strategies are rooted in science and a long-term vision.

Iberostar's commitment to nature-positive tourism contributes to preserving natural ecosystems and demonstrates the economic and social benefits of aligning business operations with biodiversity conservation. These efforts highlight the potential of the

hospitality sector to drive meaningful environmental change while securing the resilience of businesses and communities alike.



Tourists with beekeeper in Kornati National Park, Croatia. © MEET Network (Photographer—Vicki Brown)

Case Study 3: Nepal's Sagarmatha National Park

Goals Addressed:

- *Recognizing the economic and social benefits of nature-based tourism.*
- *Promoting collaborative models for inclusive governance.*
- *Advocating for sustainable tourism to enhance community resilience.*

Sagarmatha (Mt. Everest) National Park (SNP), a UNESCO World Heritage site, is home to the world's highest mountain and some 5,000 Indigenous Sherpas. The park's tourism and conservation system exemplifies how tourism can be harnessed to advance biodiversity conservation and community development. Beneficiaries of this model include flagship species such as the snow leopard, musk deer, and Himalayan thar, as well as the park's forests, which have enjoyed significant regeneration over the last 30 years. In addition, decades of growing numbers of visitors have induced extraordinary societal change, transforming local livelihoods to the point where the site is possibly one of the world's best examples of community development and well-being through tourism.

The SNP's success is largely attributed to collaborative management approaches and Nepal's progressive governance frameworks. The National Parks and Wildlife Conservation Act of 1973, for example, mandates that 30–50% of park revenues from

visitor entry fees, resource harvesting permits, and fines be reinvested in integrated conservation and development projects (ICDPs). Most of this income is generated through visitor fees. A participatory governance model ensures these funds contribute directly to conservation efforts and community well-being.

At the heart of this system are the SNP's 28 User Groups, three User Committees, and a Buffer-Zone Management Committee, which were established by the park warden in consultation with local authorities and stakeholders. These committees, composed of locally elected representatives serving five-year terms, collaborate with park management to propose and implement annual ICDP work plans. Spending is distributed across five key areas:

- Conservation programs (30%)
- Community development programs (30%)
- Income-generating and skill development programs (20%)
- Conservation education programs (10%)
- Administrative expenses (10%)

Annual work plans must align with SNP management plans that are developed collaboratively every five years by the warden, local communities, and national stakeholders and approved by Nepal's Department of National Parks and Wildlife Conservation. In short, inclusive governance frameworks engage local communities in actions essential to the success of the SNP conservation objectives. Moreover, Sherpa community objectives to increase household incomes and community well-being through high-value visitor experiences that honor their Indigenous values underpin and help finance the conservation of the park's biodiversity and ecosystems. By balancing conservation priorities with community aspirations, the SNP demonstrates how tourism development ensures long-term resilience for both nature and people by driving participatory governance to deliver biodiversity protection and socioeconomic development.



Guests arriving at a Sherpa wedding in the Park's Buffer zone. © Paul Rogers.

Case Study 4: Coastal Lagoons in the UAE

Goals Addressed:

- *Recognizing the economic and social benefits of nature-based tourism.*
- *Promoting collaborative models for conservation financing.*
- *Advocating for inclusive policies through nature-positive economic development.*

Coastal lagoons in the United Arab Emirates (UAE) are vital ecosystems that provide coastal protection, carbon sequestration, fisheries, and aesthetic value. To unlock their conservation and economic potential, a joint initiative by Emirates Nature-WWF and Roland Berger developed a financial model to assess and enhance the ecosystem services of these lagoons, with a focus on tourism. Part of a broader Nature-based Solutions (NbS) program, this project highlights how nature-based tourism can simultaneously support ecosystem health and socioeconomic development by fostering a nature-positive economy.

The initiative evaluated several development scenarios, contrasting traditional urbanization with a nature-based tourism investment approach. The results showed that investing in nature-based tourism would lead to measurable increases in habitats such as mangrove forests, seagrasses, and mudflats, which, in turn, enhanced ecosystem services like carbon storage, biodiversity support, and fisheries productivity. A cost-benefit analysis conducted as part of the project estimated the net present value (NPV) of ecosystem services, including tourism, to be US\$2 billion over 30 years (with a discount rate of 4.9%). Over a 100-year horizon (at a 1% discount rate), the NPV increased to US\$20 billion, underscoring the long-term benefits of nature-positive investments.

This valuation, based on a master plan developed with an eco-architecture firm specializing in biophilic design and green infrastructure, provided a robust economic argument for adopting sustainable tourism over traditional development. By clarifying the tangible and intrinsic value of ecosystem services, the model influenced policymakers to integrate biodiversity considerations into the UAE's economic development framework, which paved the way for sustainable investment planning.

A key aspect of this initiative was the establishment of marine protected areas (MPAs) to legally safeguard the lagoons' natural capital. MPAs provide assurance to investors in nature-based tourism projects and enable innovative funding mechanisms, such as blue carbon and biodiversity credits. These mechanisms not only protect ecosystems but also generate additional resources for conservation.

Collaboration was central to the project's success. By working together to implement the initiative, public and private sectors, NGOs, local businesses, and community stakeholders demonstrate how partnerships are essential for scaling up nature-positive tourism. This collaboration ensures the dual benefits of ecological preservation and local economic development by aligning conservation goals with financial incentives.

The UAE's coastal lagoon initiative illustrates that nature-based tourism can drive conservation and socioeconomic growth. The project models how to achieve a thriving, nature-positive future by integrating ecosystem valuation into decision-making and fostering collaborative partnerships.



Flamingos in a mangrove lagoon in the United Arab Emirates. © Karim Haggar

Case Study 5: The Rivers Fiji Conservation Model

Goals Addressed:

- *Recognizing the economic and social benefits of nature-based tourism.*
- *Promoting collaborative models for community engagement.*
- *Advocating for inclusive policies that balance conservation with economic growth.*

Rivers Fiji, an ecotourism company based in Viti Levu, Republic of Fiji, has successfully implemented a sustainable tourism model that balances biodiversity conservation with community development. Operating for over 20 years, the company specializes in whitewater rafting and kayaking experiences within the Upper Navua River Gorge. The company's projects illustrate the power of ecotourism to protect ecosystems, empower local communities, and foster environmental stewardship.

Rivers Fiji spearheaded the creation of the Upper Navua Conservation Area (UNCA) in 2000 by establishing, through a conservation lease agreement, an 18-kilometer stretch of protected canyon. This agreement, which involves Indigenous landowners, a logging company, and the Native Land Trust Board, prohibits commercial extraction activities

within two hundred meters of the river. The conservation area safeguards critical habitats for endangered species, including Fiji's only boa constrictor, rare parrots, and iguanas. Designated as Fiji's first and only Ramsar site, the UNCA demonstrates the potential of conservation leases as a mechanism to protect ecosystems while generating sustainable tourism revenue.

Rivers Fiji actively integrates local communities into its operations by providing economic opportunities and development benefits. Indigenous landowners receive direct financial compensation through lease payments and user fees, and tourism operations have created jobs in guiding, hospitality, and supporting industries. This diversification of income sources has reduced reliance on environmentally harmful activities such as logging. Further enhancing local infrastructure, tourism revenues have funded the construction of schools, health clinics, and clean water systems.



Whitewater rafting in the Upper Navua Conservation Area. (© N. K. Bricker, Rivers Fiji)

The company also prioritizes education and skills development by offering hospitality, guiding, and environmental management training programs. Through collaborations with the local NGO NatureFiji-MareqetiViti, Rivers Fiji raises ecological awareness within the community. Initiatives such as educational river trips provide residents with firsthand experiences of the region's biodiversity by fostering an appreciation for conservation efforts. Outreach programs targeting children and families instill a culture of environmental stewardship among future generations.

Rivers Fiji exemplifies how small-scale ecotourism can drive conservation and community development. The company has safeguarded critical ecosystems by

protecting the Upper Navua River Gorge and prioritizing environmental education while delivering financial and social benefits to local communities. Its commitment to sustainable practices and community engagement underscores the role of ecotourism in achieving a balance between tourism and conservation.

Case Study 6: Cristalino Jungle Lodge and Foundation—A Private Conservation Model in Brazil

Goals Addressed:

- Recognizing the economic and social benefits of nature-based tourism.
- Promoting collaborative models between private enterprise and NGOs.
- Advocating for inclusive conservation through private protected areas and community engagement.

Cristalino Jungle Lodge, located in the southern Amazon region of Brazil, is a private ecotourism initiative that demonstrates how a commercially operated lodge can actively contribute to biodiversity conservation. Situated within a 28,000-hectare privately protected area known as the Cristalino Private Reserve of Natural Heritage (RPPN), the lodge was established with a dual mission: delivering world-class nature-based tourism experiences and preserving one of South America's most threatened forest ecosystems.

Owned and managed by individuals deeply committed to environmental stewardship, the lodge has become a model of how private landowners, in collaboration with non-governmental partners and researchers, can safeguard critical biodiversity. It supports conservation through habitat protection, the prevention of illegal logging, and sustainable tourism. The area is home to over 600 bird species and several endemic and threatened mammals, including jaguars, giant otters, and primates—making it a globally significant biodiversity hotspot for birdwatchers and wildlife enthusiasts.

The Cristalino Foundation, established as the lodge's nonprofit arm, complements the commercial operations by leading environmental education programs, scientific research, and conservation advocacy. Local school groups, Indigenous youth, and rural teachers are engaged through experiential learning programs, fostering a long-term conservation ethic among the next generation.

In addition, the lodge limits its ecological footprint through renewable energy systems, sustainable building materials, and waste reduction practices. It also supports local employment, prioritizing community-based hiring and capacity-building in eco-guiding and hospitality.

By investing in long-term ecosystem protection and scientific engagement, Cristalino Jungle Lodge exemplifies a successful nature-positive business model in a privately owned reserve. Its integrated approach—combining tourism, education, and research—

strengthens local livelihoods, supports biodiversity, and proves that small-scale private actors can play a pivotal role in global conservation efforts.

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PROTECTED AREA AND OECM DEFINITIONS, MANAGEMENT CATEGORIES AND GOVERNANCE TYPES

IUCN defines a protected area as:

A clearly defined geographical space, recognised, dedicated and managed, through legal or other effective means, to achieve the long-term conservation of nature with associated ecosystem services and cultural values.

The definition is expanded by six management categories (one with a sub-division), summarised below.

Ia Strict nature reserve: Strictly protected for biodiversity and also possibly geological / geomorphological features, where human visitation, use and impacts are controlled and limited to ensure protection of the conservation values.

Ib Wilderness area: Usually large unmodified or slightly modified areas, retaining their natural character and influence, without permanent or significant human habitation, protected and managed to preserve their natural condition.

II National park: Large natural or near-natural areas protecting large-scale ecological processes with characteristic species and ecosystems, which also have environmentally and culturally compatible spiritual, scientific, educational, recreational and visitor opportunities.

III Natural monument or feature: Areas set aside to protect a specific natural monument, which can be a landform, sea mount, marine cavern, geological feature such as a cave, or a living feature such as an ancient grove.

IV Habitat/species management area: Areas to protect particular species or habitats, where management reflects this priority. Many will need regular, active interventions to meet the needs of particular species or habitats, but this is not a requirement of the category.

V Protected landscape or seascape: Where the interaction of people and nature over time has produced a distinct character with significant ecological, biological, cultural and scenic value: and where safeguarding the integrity of this interaction is vital to protecting and sustaining the area and its associated nature conservation and other values.

VI Protected areas with sustainable use of natural resources: Areas which conserve ecosystems, together with associated cultural values and traditional natural resource management systems. Generally large, mainly in a natural condition, with a proportion under sustainable natural resource management and where low-level non-industrial natural resource use compatible with nature conservation is seen as one of the main aims.

The category should be based around the primary management objective(s), which should apply to at least three-quarters of the protected area – the 75 per cent rule.

The management categories are applied with a typology of governance types – a description of who holds authority and responsibility for the protected area. IUCN defines four governance types:

Type A. Governance by government: Federal or national ministry/agency in charge; sub-national ministry or agency in charge (e.g. at regional, provincial, municipal level); government-delegated management (e.g. to NGO).

Type B. Shared governance: Transboundary governance (formal and informal arrangements between two or more countries); collaborative governance (through various ways in which diverse actors and institutions work together); joint governance (pluralist board or other multi-party governing body).

Type C. Private governance: Conserved areas established and run by individual landowners; non-profit organisations (e.g. NGOs, universities) and for-profit organisations (e.g. corporate landowners).

Type D. Governance by Indigenous peoples and local communities: Indigenous peoples' conserved areas and territories – established and run by Indigenous peoples; community conserved areas – established and run by local communities.

The Convention on Biological Diversity defines an "other effective area-based conservation measure" (OECM) as:

A geographically defined area other than a Protected Area, which is governed and managed in ways that achieve positive and sustained long-term outcomes for the in situ conservation of biodiversity, with associated ecosystem functions and services and, where applicable, cultural, spiritual, socioeconomic, and other locally relevant values.

This covers three main cases:

- I Ancillary conservation** – areas delivering in-situ conservation as a by-product of management, even though biodiversity conservation is not an objective (e.g. some war grave sites).
- II Secondary conservation** – active conservation of an area where biodiversity outcomes are only a secondary management objective (e.g. some conservation corridors).
- III Primary conservation** – areas meeting the IUCN definition of a protected area, but where the governance authority (i.e. community, Indigenous peoples' group, religious group, private landowner or company) does not wish the area to be reported as a protected area.

For more information on the IUCN definition, categories and governance types, see Dudley (2008). *Guidelines for applying protected area management categories*, which can be downloaded at: <https://doi.org/10.2305/IUCN.CH.2008.PAPS.2.en>

For more on governance types, see Borrini-Feyerabend et al. (2013). *Governance of Protected Areas: From understanding to action*, which can be downloaded at <https://portals.iucn.org/library/node/29138>.

For more information on OECMs, see Jonas, H. D., Wood, P. & Woodley, S., Volume Editors (2024). *Guidance on other effective area-based conservation measures (OECMs)*. IUCN WCPA Good Practice Series, No.36. Gland, Switzerland: IUCN.

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