

Making the global local

Should the
drive to 30x30
be locally led?

A review of the evidence base for locally
led protected area management



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Preface

The following report was commissioned by Fauna & Flora and carried out by Equilibrium Research. We were asked to undertake a rapid survey of evidence relating to the practice and effectiveness of various forms of locally led protected areas. The results are presented below. Despite the existence of a growing body of research and some impressive overview papers there are still major data gaps in this area, a point highlighted by many of the people we talked to. The following is therefore the best overview we can give at present. The results and conclusions are our own and do not necessarily reflect the opinions of staff at Fauna & Flora. We are very grateful for the opportunity to carry out what has been a fascinating albeit short and intensive study.

Sue Stolton, Hannah L. Timmins and Nigel Dudley
Equilibrium Research, October 2024

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Executive summary

There has been a profound shift in attitudes towards the designation and management of site-based conservation over the past 25 years, from being a predominantly science-based, top-down and government-led approach to one that focuses on governance and equity, and is far more variable, bottom-up and locally led.

This short research report outlines the shift towards locally led conservation (section 1), looks at the evidence base for successful implementation of the approach from peer-reviewed literature (section 2); and then draws out lessons learned on what makes locally led approaches succeed in the long term (section 3). A review is made of assessment and reporting on the success of locally led approaches (section 4). The report ends with recommendations and a policy call to the upcoming Convention on Biological Diversity (CBD) Conference of the Parties (COP) to ensure locally led approaches are central to the implementation of its conservation targets (section 5).

This call acknowledges that the CBD's Kunming-Montreal Global Biodiversity Framework (GBF) can accelerate the move to local leadership in conservation, linked to its goals related to increased equity, localisation and a focus on human rights. All major conservation NGOs and multilateral institutions accept and are actively working with local people and organisations to support the GBF, which includes its Target 3, a call to increase protection to 30% of land and sea by 2030 (from the current 17.5% of terrestrial areas and nearly 8.5% of marine areas).

This research report concludes that locally managed protected and conserved areas can be effective tools for biodiversity conservation and the achievement of GBF Target 3, with greater social acceptance, than imposed, top-down protected areas managed solely by governments.

However, local leadership does not invariably guarantee success. Each case is different and most require a combination of a strong local community and effective local entities, often with some outside support and sympathetic policies and legislation. In these contexts, local leadership and management can create greater impact and be more sustainable.

There is already enough experience in locally led protected areas around the world that important lessons have been learned. Such approaches generally take longer to set up, implying a long-term commitment from any partners, changed attitudes amongst donors and institutional partners and sometimes also legislative changes. Security of tenure for resident or user communities is often critical. Partners – including conservation NGOs – must understand the local context and ensure that conservation is relevant to communities and that any results are clearly reported to them. Building baseline data on conservation and social values is important both for adaptive management and reporting and should be a joint enterprise (“seeing with two eyes”) between local entities and outside bodies or research scientists, both in terms of agreeing indicators and collecting data. Equity is important but difficult to attain; in an ideal context everyone in the community or communities involved needs to have a stake in, and receive benefits from, the project.

In this context, Target 3 of the GBF needs to be judged as much by – probably more by – the quality of protected areas in terms of their impact rather than the quantity of areas designated.

Introduction

This research report explores the role of locally led conservation, in light of the targets set by the country signatories to the Convention on Biological Diversity.

Protected areas are changing from top-down, mainly government-run institutions with little or no local consultation to ones based more on local leadership.^{1,2,3} This research report looks at the evolution of locally managed protected areas, their implications for human rights and how conservation organisations are responding. It provides a synthesis of their effectiveness from a biodiversity and social perspective, summarises lessons learned, outlining the conditions for success, and makes recommendations for the future. Many of these issues are also relevant to “other effective area-based conservation measures” or OECMs, defined by the Convention on Biological Diversity in 2018, but there is as yet insufficient data available to draw any meaningful conclusions and these are not considered here.

A note on terminology, what does locally led mean?

Initiatives that fall under the title of “locally led” can range from projects led by local NGOs to those initiated and managed by local communities with NGO support, to fully autonomous Indigenous Protected Areas, independent of outsiders. There is no agreed definition. A project initiated and led by an urban-based NGO will be very different from one led by Indigenous Peoples in their own territory. Here, we use a broad definition of “locally led” covering the full range of options outlined above. Local leadership is an emerging context in many countries and can also reflect a move towards self-determination, where communities are enabled to take a more active role in management or co-management.

This analysis therefore covers self-declared protected areas set up by the people living there⁴ and places where Indigenous Peoples and local communities work with governments or NGOs to plan and manage protected areas.⁵ More generally, it recognises requirements for a local voice in decision-making about management of protected areas. The Convention on Biological Diversity requires any protected area on Indigenous Peoples’ territory to have their Free, Prior and Informed Consent.⁶ All these assume conservation must be participatory, with local stakeholders as project partners, and ideally also yield direct benefits for them.⁷

There are already many different models of community control – community-based organisations, village resource committees, conservancies etc. – and of “local” NGOs. As with any decision-making system, there are risks, in this case particularly of “elite capture” where a minority of powerful individuals or families hold the real power. The existence of clear legislation, policies and oversight are important here.

Locally led conservation can take longer to achieve but the evidence we have found suggests that it is generally more effective and longer lasting than government-led conservation. Reduced poaching⁸ and deforestation⁹ tends to occur when management is led by or in partnership with local communities or Indigenous Peoples. There are also strong ethical and social arguments for giving local people a greater say in the management of the environment in which they live.

Governments have agreed ambitious targets for biodiversity, including in December 2022 the CBD’s Kunming-Montreal Global Biodiversity Framework (GBF) Target 3 for 30% of land, inland water and ocean to be in protected and conserved areas by 2030, with requirements for effectiveness, connectivity, ecological representation, social equity and human rights (“30x30”).¹⁰ These aim to halt biodiversity loss

and in many cases to recover the abundance of species that have suffered historic declines (“bending the curve”), see Figure 1. The approach towards and the effectiveness of area-based conservation will therefore be critical to the success of Target 3.

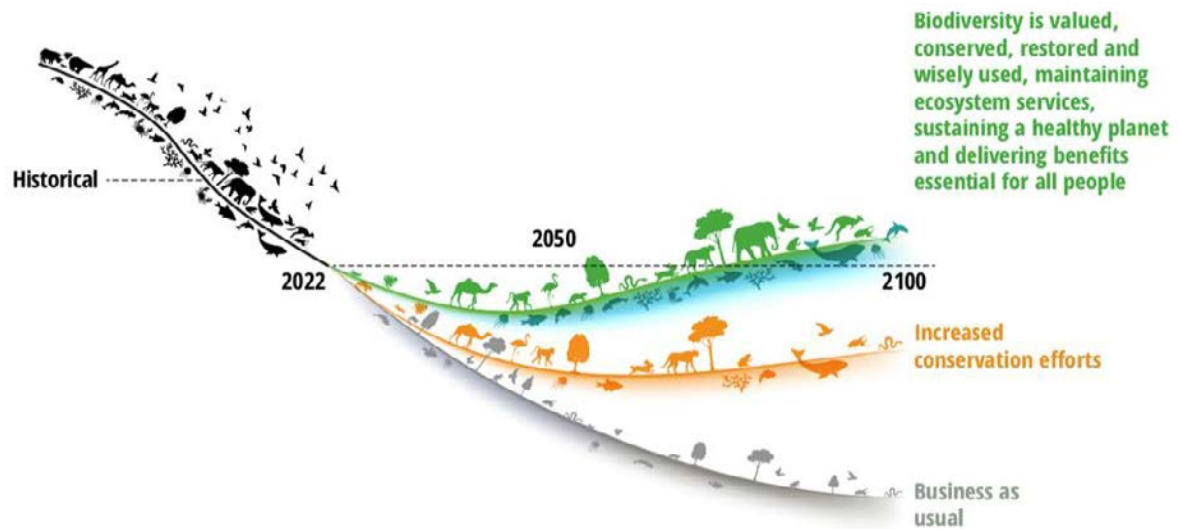


Figure 1: The ultimate objective of Target 3, and the GBF, is to reverse the decline in biodiversity and put nature on a path to recovery.¹¹

This has been a rapid survey. The findings below draw from:

- Web research based on key words (see appendix) filtering “since 2020”.
- Published findings, including individual case studies and synthesis reports.
- Analysis of NGO and multilateral donor impact reports, plus selected interviews.
- Meetings with staff at Fauna & Flora.
- Materials from our own files and field experience.

The synthesis of global literature is based on numerous case studies across different continents that provide empirical evidence that local management, when combined with adequate skills and resources, leads to better conservation outcomes. Examples have been drawn particularly from the experience at Fauna & Flora.

There is growing evidence that conservation led or supported by those immediately affected is both more successful and more durable.¹² However, much of the evidence is still at a site level or qualitative. The literature review also included a lot of anecdotal evidence (see Appendix 1 for details). Nonetheless, there are a growing number of examples. Appendix 2 highlights cases where equity, local capacity building and partnership have been central to successful conservation outcomes in protected and conserved areas. Some of these, their key lessons and analyses of effectiveness, are written up below, along with some general conclusions.

Section 1: The rise of locally led conservation approaches

Locally led conservation has been a reaction to earlier approaches that tended to see people living in the areas being conserved as a threat.

1.1. Tragedy or fortune of the commons

Early conservation was influenced by fears that traditional management systems had broken down and communities were destroying the environment around them. Garrett Hardin, in his 1968 article "*The Tragedy of the Commons*", argued that individuals' self-interest would always deplete shared resources, causing environmental loss.¹³ While such examples do occur, we now know they are anything but inevitable. In particular, Elinor Ostrom's research, particularly her 1990 book *Governing the Commons*,¹⁴ showed that local communities can manage common resources sustainably through collective action and well-designed governance systems. Initiatives like the Campfire process in Zimbabwe¹⁵ piloted the conservancy system and the Evaluating Eden research project led by the International Institute for Environment and Development demonstrated positive impacts.¹⁶ Further work has identified the steps that need to be in place to facilitate effective community conservation.¹⁷

The evolution from top-down to bottom up-approaches represents a significant shift in thinking.¹⁸ The Convention on Biological Diversity (CBD) was a landmark treaty in 1992 highlighting the necessity of biodiversity conservation, sustainable use, and the equitable sharing of resulting benefits. This laid the groundwork for more inclusive conservation. There have been some key milestones, including acknowledgement of traditional ecological knowledge (TEK),¹⁹ the rise of community-based natural resource management,²⁰ debates at the Vth World Parks Congress in 2000,²¹ the CBD's Programme of Work on Protected Areas,²² recognition of Indigenous and Community Conserved Areas as protected areas,²³ their growing role in global conservation efforts^{24,25} and the emergence of other effective area-based conservation measures (OECMs).²⁶

1.2. Defining and advancing human rights

Locally led conservation is closely associated with increased emphasis on human rights. These rights are inherent to all, regardless of nationality, sex, ethnic origin, colour, religion, language or any other status. They range from the most fundamental – the rights to life and food – to those that make life worth living, such as the rights to education, work, health and liberty.²⁷

The Universal Declaration of Human Rights (UDHR) was adopted by the UN General Assembly in 1948, the first time that basic civil, political, economic, social and cultural rights were defined for all people.²⁸ In 2007 the UN Declaration on the Rights of Indigenous Peoples (UNDRIP) reinforced the rights of Indigenous Peoples to manage their territories, and resources, influencing conservation to be more inclusive of Indigenous management.²⁹ The process of recognising and advancing rights is ongoing, with a roadmap for advancing human rights in conservation drawn up in 2024.³⁰

1.3. A move to more local and co-management

There has been a general move towards empowering local actors (including local NGOs) within the development community, recognising their greater ability to understand local contexts, and developments in conservation practice mirror these changes. A global study on governance in 2023 concluded that there is a tendency for community-based or co-managed governance arrangements to produce beneficial outcomes for both people and nature,³¹ whereas in traditional top-down approaches local people had sometimes suffered loss of territory or resources.^{32,33,34} It is increasingly argued that

bottom-up initiatives, or participatory processes, are the strongest models for long-term success for nature.³⁵ Considerable trust is being put in this model as the world moves towards implementing the 30x30 goal. Many organisations are focusing their efforts towards social *and* conservation outcomes, a hard to attain win-win. Protected area governance is changing, but these changes are highly variable around the world and changes are moving at different speeds.

Overall progress in a switch to locally led protected area management remains quite slow. The World Database on Protected Areas (WDPA) and World Database on OECMs (WD-OECM) collate information on area-based conservation. A 2022 assessment found that Oceania had the highest proportion of community-based protected areas (39% of all protected areas in the region), plus over a quarter of Indigenous and community protected areas and the highest rate of shared governance (12%).³⁶ In Papua New Guinea, for example, up to 90% of land is under Indigenous tenure, and all protected areas have a mix of state and Indigenous governance.^{37,38} The Latin America and Caribbean region has the next highest level with just 7.1%. (There are however major problems with under-reporting of governance.)³⁹

1.4. NGO responses to the trend in locally led conservation

Virtually all conservation NGOs now stress the importance of the empowerment of Indigenous Peoples and local communities to their mission. NGOs and donor agencies are increasingly assessing their impact using various tools and frameworks that measure both ecological and social outcomes. However, any quantitative data reporting on the linkages between locally led initiatives and conservation outcomes is still rare.

Analysis of NGO impact reports finds a strong emphasis on working with and for Indigenous Peoples, local communities and local partners in those assessed, with phrases such as the following:

- BirdLife International: “*We empower local people*”.⁴⁰
- Conservation International: “*Re-Imagining Conservation*” programme.⁴¹
- Fauna & Flora “*We work closely with local conservation partners around the world*”⁴²
- IUCN: “*...facilitating and supporting Indigenous-led stewardship of nature*”.⁴³
- Re:wild: “*Funding Indigenous Peoples and local communities directly*”.⁴⁴
- The Nature Conservancy: “*...working alongside local leaders*”.⁴⁵
- UNEP-WCMC: “*We support Indigenous peoples and local communities to showcase conservation efforts*”.⁴⁶
- Wetlands International: “*Resilient wetland communities*”.⁴⁷
- Wildlife Conservation Network: “*Conservation is about helping people as well as wildlife*”.⁴⁸
- Wildlife Conservation Society: “*Honouring forest guardians with direct resources*”.⁴⁹
- WWF: “*Together with the people living closest to nature*”.⁵⁰

The following section looks at the evidence for the extent to which these approaches are being successful.

Quotation from the field: “*When it comes to sensitive issues like changing cultural traditions, people are more likely to listen to rangers that are from their communities. Indigenous rangers are also more familiar with local bylaws and social norms and can navigate them with care and skill.*”

Bunty Tao, Asian Representative for the International Ranger Association, India⁵¹

Section 2: Evidence base from global studies on governance and conservation effectiveness in protected areas

This section reviews the emergence of an evidence base for effective and equitable locally led protected area management looking at peer-reviewed research, case studies, and policy analyses. Overall, the results indicate that locally led initiatives often lead to more sustainable and resilient outcomes by aligning conservation with the needs and knowledge of the people who live closest to the land. Numerous case studies underscore that when communities and local organisations are given the tools, rights, and incentives to manage their natural resources, they often produce more enduring conservation results.

There is ample evidence to suggest that terrestrial^{52,53,54} and marine^{55,56} protected areas governed or co-managed by Indigenous Peoples or local communities experience less than average habitat change and sometimes perform better than state-run protected areas.⁵⁷ Indigenous Peoples also manage many inland waters.⁵⁸ These approaches also improve conditions for mitigation of climate change by for instance reducing carbon loss from deforestation or grassland degradation.^{59,60} Traditional ecological knowledge and management is increasingly used to inform conservation management.⁶¹ Additionally, adaptive, place-based, and local governance of resources can address the legacies of colonial rule as well as providing effective conservation.⁶²

Research reviews and meta-analyses highlight many cases where protected areas managed in partnership with local communities deliver better outcomes, including reduced poaching⁶³ and reduced deforestation,⁶⁴ compared to areas managed solely by state authorities. Below we provide an overview of recent global literature.

2.1. What do global synthesis studies tell us?

In 2023, researchers reviewed over 150 papers comparing governance and conservation effectiveness of protected areas managed by states with those managed by Indigenous Peoples and/or local communities. There has apparently been a general, if incomplete, shift to more inclusive and participatory governance of conservation areas, although as noted above this is still a small proportion of all protected areas. Conclusions about conservation were tentative, but noted that there is a tendency for community-based or co-managed governance arrangements to produce beneficial outcomes for both people and nature. Outcomes are highly context-specific however, and global generalisations have limited value.⁶⁵

This study built on previous work, including three global assessments carried out over the last decade. A 2015 assessment of social and conservation outcomes of protected areas conducted a global meta-analysis of 165 protected areas. The review assessed how protected areas affect the well-being of local people, associated factors, and the relationship between protected areas' conservation and socio-economic outcomes. It concluded that protected areas associated with positive socio-economic outcomes were more likely to report positive conservation outcomes. Both were more likely to occur when protected areas adopted co-management regimes, empowered local people, reduced economic inequalities, and maintained cultural and livelihood benefits.⁶⁶ In 2020, a review of successes, challenges, and lessons from Indigenous protected areas focused primarily on enabling conditions and analysed 58 papers, describing 86 specific initiatives involving at least 68 Indigenous Peoples across 25 countries. It found that restrictions to effective local involvement included lack of supportive legislation, insufficient funding, limited benefits, and the need for additional capacities and resources. There were recommendations for more resources to monitor and manage areas and the need to better integrate management priorities with local and larger-scale socio-cultural and environmental issues.⁶⁷ In 2021, a

systematic review and synthesis of 169 publications investigated how different forms of governance influence conservation outcomes. The paper concluded that equitable conservation, which empowers and supports local environmental stewardship, is the most effective approach to achieve long-term conservation of biodiversity, particularly when upheld in wider law and policy.⁶⁸

Quotation from the field: *“Throughout the year, we the indigenous people have always depended on Nature for survival through traditional knowledge practices, human and animals treatment. Today, Man’s inhuman act towards Nature has resulted to loss of Biodiversity leading to the destruction of habits, live styles, culture and Indigenous knowledge. We there seek for an improvement in indigenous youth representation at decision making levels in order to restores our lost glories bearing in mind the best way forward is to get back to Nature.”*

Aliou Mustafa, National Indigenous people’s fellow, Cameroon⁶⁹

In 2024, another synthesis paper looked at 648 empirical studies to develop a typology of Indigenous Peoples and local community roles in governance and for a subsample of 170 analysed reported ecological outcomes. It concluded that more equitable governance, based on equal partnerships or primary control for Indigenous Peoples and local communities, is associated with significantly more positive social outcomes.⁷⁰

However, it is important not to oversimplify. Research finds considerable variation in success in Indigenous and community protected area management.^{71,72,73} A study of community forests in 51 countries found environmental conditions improved in 56% but decreased in 32%.⁷⁴

Section 3: Principles, good practices and lessons learnt from locally led conservation case studies

Numerous case studies underscore that when communities are given the tools, rights, and incentives to manage their natural resources, they often produce more enduring conservation results. The section below identifies lessons learnt on the abundance of community-led projects worldwide (see boxes and Appendix 2).

3.1. Context matters: consider cultural and economic shifts and influences

Community-Based Conservation (CBC) projects do not happen in a vacuum. Success or failure is influenced by – and dependent on integrating into – the community’s historical, geographical and cultural context. Colonial history is very important in many countries. Colonisation occurs not only in a spatial way but also through institutional mechanisms and cultural and economic influences. For example, in the Beni department of Amazonian Bolivia, 1960s colonisation policies brought thousands of Quechua and Aymara people, along with their cultivation methods and social institutions, into the Indigenous Territory of Pilón Lajas. The Indigenous Tsimane’ and Mosetene people adapted by adopting some non-native, unsustainable agricultural practices that today threaten the integrity of the Pilón Lajas Biosphere Reserve.⁷⁵

Among migrant people, land rights are often one of their main motivators, and consequently a leading cause of land conversion and degradation. Under such land seizures, private property can be a transferred value to Indigenous groups along with economic growth.⁷⁶ Cultural shifts like these can have massive ecological effects and CBC efforts may be totally ineffective if such projects are separated from economic, cultural and rights-based contexts. The mapping of historical influences and cultural values should be a key component of any CBC initiative.

3.2. Equity and equality can guide project design

Ensuring equity in biodiversity conservation governance is based on planning, implementation and the benefits of conservation being fairly shared among all stakeholders, especially those communities who rely on natural resources for their livelihoods. When communities have a stake in the conservation process, they are more likely to support and engage in efforts to protect biodiversity.

Equity also addresses historical injustices where vulnerable groups were excluded from decision-making about their own lands and resources. However, addressing issues such as undemocratic governance or historical injustice is a long-term and uncertain political process. For this reason, NGOs like Fauna & Flora do not make equity and good governance at a national or sub-national scale an essential prerequisite for working with partners, but rather goals at a project level.

There is no universal or ‘best’ governance arrangement and it is important to acknowledge that certain arrangements will be more or less appropriate, legitimate and useful under different circumstances. A governance arrangement must therefore be tailored to the historical and social context to be effective in delivering lasting conservation results and livelihood benefits. Working with partners including Fauna & Flora, the International Institute for Environment and Development (IIED) has developed a range of assessment methodologies (see box below), undertaken assessments and implemented results. Analysing governance, equity and rights improves consistency across projects, informs actions in the field and helps achieve better outcomes.

Social Assessment for Protected and Conserved Areas (SAPA)

SAPA is a methodology assessing the social impacts of protected or conserved areas. SAPA evaluates both positive and negative effects of protected areas on communities, including ecosystem services, employment, and human-wildlife conflict. It uses tools like community meetings, workshops, and surveys to gather insights, promote governance improvements for equity and conservation outcomes.

Used increasingly worldwide, early assessments across Kenya and Uganda⁷⁷ found that while protected areas contribute positively to human well-being (through ecosystem services, protected area-related employment, and development projects etc.), issues like unfair law enforcement and resource access persist. In terms of governance, while transparency and participation are improving, inequities remain, especially for women and lower-income households.

SAPA is one of three tools for assessing the social impacts,⁷⁸ governance and equity of conservation. The other two include:

1. *Governance Assessment for Protected and Conserved Areas (GAPA)*⁷⁹ which focuses on governance challenges and underlying causes but only for PCAs where actors are willing to explore sensitive governance issues.
2. *Site-level Assessment of Governance and Equity (SAGE)*⁸⁰ is less detailed than GAPA but covers a broader scope of issues and costs less using a more rapid methodology.

CASE STUDY: Community conservancies building sustainable governance in Namibia

Namibia gained independence from South Africa in 1990. In 1995, the Ministry of Environment and Tourism established a framework for community-based natural resource management.⁸¹ This gave conditional rights over wildlife to communal areas and allowed communal conservancies to derive financial benefits from sustainable wildlife use and tourism.⁸² In 1996, the Nature Conservation Amendment Act gave communities residing on communal land, and desiring to have the area or any part of the area declared a conservancy, the mechanisms to apply to the Ministry⁸³ and further gave conservancies the rights over wildlife and tourism in the area. The Amendment⁸⁴ stipulated that the geographic area should be discussed with others before being proposed,⁸⁵ and that conservancies could not be part of an existing game park.

Conservancies have transparent processes for elections of a management committee. Conservancy applications must include a constitution for the proposed committee that, i) provides for transparent elections of members; ii) specifies conditions under which members can be replaced (e.g., no confidence votes); iii) specifies how conflicts of interest in decision-making or benefit distribution will be addressed; and iv) provides mechanisms to ensure proper financial management. When the application is submitted, the Minister must be satisfied that the conservancy will represent the community living in the area.⁸⁶ Conservancies manage wildlife for the benefit of residents and decide how to spend wildlife revenues, which can be used for projects and/or household distribution. They have helped to ensure that large animals like elephants and rhinoceros survive outside national parks, maintaining ecological connectivity in the country.⁸⁷

It is not the role of the Ministry or NGOs actively to establish conservancies, but to support and assist communities that want to form a conservancy. Legislative changes needed to promote these developments involve long-term processes, starting with an assessment of options and considering both legal avenues available and potential roadblocks to introducing changes of this kind.

3.3. Long-term commitment is essential

Ecosystems and biodiversity recovery often require extended timeframes as ecological processes such as species population growth and adaptation to climate change are slow to manifest. Community engagement and local governance also often need years to build, to ensure that local stakeholders remain invested in the conservation goals. A long-term focus increases the chances that conservation efforts are sustainable and provides the ability to track long-term impact.

Many of Fauna & Flora's partnerships with local organisations are over 20 years' old. It provides financial support, capacity-building, and technical expertise, allowing local organisations and communities to take ownership of conservation projects into the future.

The Indigenous-led South Rupununi Conservation Society (SRCS) in Guyana has been working for nearly two decades to conserve the endangered red siskin (*Spinus cucullata*), and other wildlife, after the society's president, Leroy Ignacio, discovered a population of red siskins in 2000. SRCS is just one of many national partnerships and projects supported by the Conservation Leadership Programme (CLP); a 40-year collaboration between BirdLife International, Fauna & Flora and the Wildlife Conservation Society, offering grants and training to grassroots conservationists. Supported by CLP grants in 2023, SRCS expanded its efforts, contributing to the designation of the South Rupununi as an Important Bird & Biodiversity Area and establishing a 75,000-hectare conservation zone, involving community rangers and ecotourism.⁸⁸

CASE STUDY: Working towards long-term forest restoration in Central Asia

Local communities in Kyrgyzstan and Tajikistan are working with national governments and regional and international conservation organisations like Fauna & Flora to conserve and restore fruit-and-nut forests. The long-term aim is to ensure the full recovery of Central Asia's fruit-and-nut forest landscapes, thus supporting the well-being and resilience of forest communities. The initiative aims to restore these critical ecosystems by supporting sustainable livelihoods, planting native trees, and protecting endangered species like Niedzwetzky's apple (*Malus niedzwetzkyana*) and Bukharan pear (*Pyrus korshinskyi*). Local communities are involved in forest management. By increasing forest connectivity and reducing human pressure, the project promotes long-term recovery and resilience of these unique landscapes.

The project began in 2006 with the discovery of populations of Niedzwetzky's apple, followed by a baseline survey of fruit trees. Conservation measures for endangered trees were set up. By 2018 community groups had been established to support local livelihoods through collection and sale of fruit and nuts. By 2020, over 500,000 trees had been planted, restoring forests in two reserves in Tajikistan. The project combines local livelihood support with the discovery and conservation of fruit trees.⁸⁹

3.4. Legislation for local involvement must be supportive

The concept of incorporating non-state conservation governance types and locally led initiatives into national protected area systems is relatively new in some regions, and not all countries have the legal means to acknowledge, support and report non-government governance. One of the major successes of the GBF may be a change in governments' approaches to conservation. Legal instruments will have to be developed to facilitate this in some countries.

Locally led protected area initiatives have a number of options for recognition:

- Through policy and legislative change, creating a legal framework and supportive resources.⁹⁰

- Formal government recognition of tenure rights of territories and areas conserved by Indigenous Peoples and local communities (ICCAS)⁹¹ and OECMs.
- Informal self-declaration outside the legal protected area system, as with many ICCAs and Locally Managed Marine Areas (LMMAs) in the Pacific. Such areas can be included in the World Database on Protected Areas (WDPA) or World Database on OECMs (WD-OECM) if the government agrees.
- Within the state protected area system in both new and existing protected areas, by increasing the role and decision-making power of Indigenous People and local communities through co-management agreements; this is becoming common in Canada for instance.⁹²
- Through land purchase and transfer of rights as a community or privately protected area.

In Papua New Guinea (PNG) a new conservation law provides mechanisms for the Conservation and Environment Protection Authority (CEPA) to engage with communities and provincial and local governments to regulate and manage protected areas.⁹³ Communities can work with CEPA to designate their own land as a protected area. Whereas previously landowners have given up land for logging or palm oil in return for money, CEPA promises the resources and technical support needed for sustainable livelihood projects such as ecotourism, sustainable fisheries and organic farming. In return, landowning clans design a conservation management plan for the land and its resources.⁹⁴

With a similar focus, the Autonomous Region of Príncipe (São Tomé and Príncipe) is establishing a network of participatory fisheries management and conservation zones.⁹⁵ Starting in 2019, consultation on each island co-designed Marine Protected Areas (MPAs). This was led by local NGOs, supported by Fauna & Flora, and involved 37 fishing communities. Using participatory mapping, data on fishing grounds, benthic habitats and catch were collected. Priority areas for marine protection were discussed at General Assemblies where stakeholders selected MPAs and their boundaries by vote. Biennial national-scale household surveys in Príncipe in 2021, after consultation was under way, revealed that 97% of respondents had a moderately positive attitude to marine conservation.⁹⁶

3.5 Tenure rights are a major incentive to conservation

Conservation initiatives are increasingly devolving land to communities to secure conservation goals.⁹⁷ Devolved rights over resources to communities generally promotes greater equity in benefits distribution and sustainability.^{98,99,100} Multiple studies have shown that secure tenure rights improve likelihood of success in community well-being and environmental outcomes.¹⁰¹ Analysis of 136 community-based projects assessed multiple community characteristics as to whether CBC was an effective conservation tool. The findings confirmed that community characteristics, such as tenure regimes, are important for project success.¹⁰²

Secure tenure ensures access to future resources and thus invokes a sense of responsibility for managing resources sustainably, increasing buy-in to facilitate greater cooperation on project rules and interventions. Securing tenure can itself also act as a benefit and incentive.¹⁰³ With tenurial rights communities are better equipped to protect their resources from outside groups like mining or agribusinesses. For example, in Brazil, research found that Indigenous territories were at least as effective as strictly protected areas in protecting forests at moderate levels of external deforestation pressure and more effective than strictly protected areas at high levels of pressure.¹⁰⁴

However, many countries still lack legal frameworks to support community-led protected areas or are in the process of developing these. For example, Indonesia has developed new social forestry options,¹⁰⁵ and Kenya's community conservancies help to support conservation.¹⁰⁶

CASE STUDY: Reinforcing community land rights

Liberia's Upper Guinean Forests are crucial for biodiversity, including pygmy hippos, forest elephants, and western chimpanzees, while also supporting local livelihoods and storing carbon. In 2023, Fauna & Flora helped organise the Liberian Conservation Area and Land Dialogue, bringing together government and NGOs to adopt a rights-based approach for creating protected areas. This culminated in the Gbehzohn Declaration ensuring compliance with the 2018 Land Rights Act, which recognises communities as landowners. This empowers communities to benefit from conservation and secure long-term protection for areas like Sapo National Park.¹⁰⁷

Communal rights and subverting the tragedy of the commons idea

Sensitivity to local attitudes towards land and water rights is important. Private property is an imported concept for many communities and misaligned tenurial systems can be problematic and have detrimental environmental impacts. In Kenya's iconic 140,000 ha Maasai Mara landscape, top-down approaches imposed privatised tenurial systems onto the communities, dividing the area into 14,528 individual parcels with fences,¹⁰⁸ which led to over-grazing, land-grabbing and a fragmented ecosystem.^{109,110} Inappropriately applying a private tenure system can fracture cultural-ecological relationships between communities and the land.¹¹¹ The full devolution of rights must be sensitive to communities' culture, traditions, and history.

In addition to being a conservation incentive in itself, securing tenure can provide a platform to inspire collaborative action and on which to organise incentives, such as wildlife tourism or REDD+ benefits, and the process through which to reach these incentives, such as sustainable management.

CASE STUDY: Communal land rights – Hadzabe reversing the tragedy of the commons

Securing communal tenure and rights works best when the community has an ingrained culture of sustainable use. In Tanzania, the Hadzabe people have bylaws forbidding fencing, charcoaling, and conversion of lands to agriculture or permanent livestock.¹¹² The Hadzabe have experienced an extreme socio-cultural shift as other groups moved into their ancestral lands over the past few hundred years. As a culture of consensus, the Hadzabe moved away, relinquishing lands to farmers and pastoralists and squeezing themselves onto smaller patches of land.¹¹³ Today however, they have utilised communal Certificates of Customary Rights of Occupancy (CCROs) to exercise greater control over their lands to support traditional resource use and thus an ecologically lighter use of the area.

3.6. Locally based organisations play an important role in collectivisation, collaboration and amplifying conservation messages

Co-designing projects between NGOs and local partners is a collaborative process where both parties actively participate in planning, developing and implementing conservation. Co-design ensures that local communities and other local stakeholders are involved from the outset, sharing decision-making power and responsibility. This integrates local knowledge, cultural values, and priorities, making projects more relevant and hopefully more effective. By working together, NGOs and local partners can create solutions that are not only ecologically sound but also socially equitable and sustainable in the long term.

Fauna & Flora's conservation interventions primarily focus on long-term partnerships with local organisations or local communities. This is within the wider context of partnerships with a broad range of

nearly 400 in-country organisations. As part of this engagement over 1,500 staff from partner and in-country organisations have received training in conservation. Overall, 99% of Fauna & Flora projects are linked to local communities, and almost 50% of the protected areas Fauna & Flora works with are community-led.

Examples of this work include Fauna & Flora's long-term support for Fundación Cuero y Salado (FUCSA) in Honduras. Since partnering in 2011, Fauna & Flora has helped FUCSA strengthen marine protected area management at Cuero y Salado Wildlife Refuge. FUCSA's initiatives, including improving mangrove systems and monitoring climate change, have resulted in stronger regulations and ecosystem restoration. By 2023, threats to the refuge had stabilised, and the ecosystem's health had improved, notably through successful mangrove planting and protection efforts.¹¹⁴

CASE STUDY: A community-based organisation in Belize amplifying and scaling up the conservation message

In Belize, the Community Baboon Sanctuary (CBS) is a community-led initiative where 200 landowners from seven villages have set aside land for the protection of black howler monkeys (*Alouatta pigra*). The area is managed by the Women's Conservation Group and each landowner has signed a voluntary pledge to abide by a howler-monkey-positive land management plan. Howler tourism is bringing finance to the area; locally-owned accommodation, restaurants and local guide services benefit and the area has Belize's first museum, a small natural history museum.¹¹⁵ CBS's strongest success, however, may well be its influence on rural communities across Belize. CBS has spread interest in howler protection country wide. International and national publicity has inspired dozens of other community-based conservation and ecotourism programmes and the Community Baboon Sanctuary has even donated howlers for reintroduction to other sites in Belize.¹¹⁶

Community-based Organisations (CBOs - sometimes formalised as part of a tenurial system particularly in East Africa) can play a role in catalysing collective action to resolve ecological threats. Most of Kenya's wildlife is found outside protected areas and, in 2013, the Wildlife Conservation and Management Act articulated a vision of *community conservancies* as the instrument for protecting and managing wildlife outside designated protected areas.^{117, 118}

Conservancies, established by a community, on community land, aim to develop a common vision to manage the area collectively and are effectively given protected area status. Communities are the dominant decision-makers and enforcers, democratically electing a representative board from the community. The Board determines benefit-sharing mechanisms, drives strategic development of the conservancy, and oversees operational management whilst sub-committees on finance, grazing, and tourism may be established to drive strategic plans and provide oversight.¹¹⁹ The conservancy model is evolving, but conservancies have demonstrated significant potential and generated positive and direct economic, communal and environmental results. As of 2023, there were 230 wildlife conservancies in Kenya totalling 9.04 million ha and comprising 16% of Kenya's total land mass.¹²⁰

3.7. Develop and clearly demonstrate appropriate conservation incentives and livelihood opportunities

While devolution of rights provides fertile ground for conservation, supporting such efforts can create challenges. If a protected area prevents other uses that provide subsistence and/or money to local people or access to cultural or spiritual values, some form of compensation or conservation incentive needs to be in place. This may be possible through ecotourism, payment for ecosystem services or similar and the site may provide benefits, such as spillover of fish from MPAs into fishing grounds. In other cases, land or water in protected areas may have little other value, or values that are not affected by protection, such as many cultural and recreational values.

For example, recent research has mapped out and analysed the effectiveness of 36 governance incentives in MPAs.¹²¹ A strong correlation was found between MPA effectiveness and the number and diversity of incentives used. Combinations of incentives are mostly needed in less effective MPAs; there are no particular ‘magic wand’ incentives or ‘best practice’ combinations guaranteeing effectiveness.¹²²

Addressing the development agenda and needs of people living in or near protected areas has become a central important facet of management. It is important to ensure and demonstrate these areas are not just about protecting nature, but also helping to protect the livelihoods of Indigenous Peoples or other local communities and that resource use can be a benign part of management in many protected areas.

Sustainable business and resource use in protected areas

Getting the right balance between conservation and sustainable use involves not just agreeing on what is hoped to be a sustainable offtake, which does not impact conservation objectives, but also monitoring this over time, adjusting if necessary, and policing to make sure that everyone sticks to agreements. National laws and policies can both help and hinder. A survey of sustainable business opportunities in protected areas identified six major lessons:¹²³

1. Innovation works best from the ground up, with Indigenous Peoples and local communities as the innovators or at least as willing and active partners/participants from the beginning.¹²⁴
2. A three-way link between communities, protected area managers and businesses is the most successful model.
3. Sustainable management is at the heart of successful business models and needs to be carefully monitored and maintained.
4. High-value and quality market products are a key element when use of natural resources is the basis of the economic model.
5. Successful models cannot simply be replicated; each protected area is different and needs its own approach; innovation is essential.
6. A diversification of money-making options is a good insurance policy in case one or more fail.

Experience in Fauna & Flora: Fauna & Flora’s 2023 impact report highlighted that livelihood activities carried out by projects they supported had directly benefited almost 14,000 people across the nearly 400 sites. Creating the so called ‘win-win-win’ scenario is never easy, but enabling communities to meet their own needs by developing nature-based businesses helps to generate engagement and positive associations. In 2023, Fauna & Flora could report that at least 3,600 people in projects around the world had seen tangible benefits in terms of employment and/or income.¹²⁵

CASE STUDY: Sustainable wool ranching fetches premium prices in Argentina

Península Valdés (PV) is an arid temperate grassland and has a suite of grassland predators and prey including guanacos, rhea, puma, pampas cat etc. PV is an important source of food for more than 20,000 birds and as a regular stopover for a critically endangered subspecies of red knot.¹²⁶

Ranchers in Patagonia have been sustained by the wool economy for hundreds of years, but recent falls in wool prices combined with decreased productivity of the land due to pervasive overgrazing and severe droughts have damaged livelihoods.¹²⁷ Ranchers in PV once hunted wild predators and herbivores to reduce direct and indirect losses and densely managed sheep herds once marginalised the native guanacos, pushing them into less productive grasslands.^{128, 129}

The PV Tourism Nature Reserve, much of which is privately owned by ranchers, is successfully protecting coastal wildlife.¹³⁰ Here, a group of six ranchers operating inside the reserve formed the Merino de Península Valdés group to commit to achieving a coexistence between sheep farming and wildlife.¹³¹ Their sustainable grazing management plan decreased the herd stocking rate and permitted only the non-lethal control of predators and guanacos (*Lama guanicoe*) (e.g. guardian dogs).¹³²

In 2016, their wool was Certified Wildlife Friendly®.¹³³ These ranches have an average of 2,000 sheep each and produce between 6,500-8,000 kg of fine merino wool per year. The raw wool is bought by one of two international companies and fetches US\$5.50-6.00 per kg, generating US\$35,750 to US\$48,000 per ranch annually. The ranchers also invested in a small facility to process part of the wool separately to maintain traceability and reach markets willing to buy certified wool. Experimental batches of their top wool sold in Buenos Aires for US\$22.50 per kg which could produce an annual turnover of US\$180,000.¹³⁴

Incentives are not limited to economic incentives. Also important are communication incentives (e.g. raising awareness and recognition of ecosystem services and benefits), knowledge incentives (e.g. as collective learning), legal incentives (e.g. penalties for incurrences, and tenurial protections from outside resource users), and participation incentives (e.g. cooperation and building on local customs).¹³⁵

CASE STUDY: TÜRKIYE: Creating a market for invasive alien species

Marketing invasive alien fish, under certain circumstances, can be beneficial for conservation because it creates incentives to reduce their populations. By promoting their consumption or commercial use, local communities, fishers, and businesses are encouraged to catch them and control populations. This turns a challenge into an opportunity for sustainable livelihoods while protecting biodiversity and restoring ecological balance. In Gökova Bay in Türkiye a new local market has been developed for invasive lionfish, with significant increases in market value recorded over the course of the project. In 2023 nearly 500 people attended Invasive Alien Species tasting and awareness-raising events in the region. Supported by Fauna & Flora, the local NGO Akdeniz Koruma Derneği (AKD) has taken on the role of market facilitator using a participatory market systems development approach to ensure the market emerges equitably and empowers marginalised actors. AKD is focusing on brokering connections between key market actors and building capacity of cooperatives, providing a means for its role to be passed on in future. AKD has also engaged with a Small-Scale Fishers Union, representing 14 cooperative members to engage in the trade in invasive species through providing their expertise, access to partnerships with private sector distributors and support in seeking investment for a processing and storage facility.

Not all protected areas supply economic returns and success should not be judged solely on their ability to generate revenue. Many were set up because natural resources had declined due to mismanagement or over-exploitation, others because the areas are important for biodiversity or ecosystem services. Much of the resistance to protected areas comes if and when adjacent communities lose out, or believe they are losing out, on the economic activities that would be available in the absence of a protected or conserved area. No global survey has taken place, but it is estimated that tens of millions of people currently use resources within protected areas.¹³⁶

Equitably managed protected areas generating finance

Approaches such as sustainable livelihood projects and community-based natural resource management (CBNRM) continue to be much used as conservation approaches, where sustainable livelihoods aim to replace unsustainable practices and CBNRM helps communities continue or restart traditional practices in a sustainable way that links cultural heritage, livelihoods and conservation.

The effectiveness of sustainable livelihoods¹³⁷ and CBNRM¹³⁸ has been questioned, with plenty of examples of failed schemes; however, evidence does not suggest that the approaches are inherently flawed, but rather that they have in many cases been poorly thought through. If monitoring has taken place at all it has not been rigorous enough to draw concrete conclusions. The lack of any theory of change, detailed background research about needs and attitudes, or follow-up monitoring were all identified as important gaps in many schemes.¹³⁹

More recent approaches include conservation enterprises, defined as businesses that generate economic, and ideally social benefits, in ways that help meet conservation objectives. These incentivise biodiversity conservation by providing benefits to stakeholders who engage in a business for the production and sale of related goods and services. Enterprises range from ecotourism services and beekeeping to handicrafts or timber and non-timber forest products¹⁴⁰ (see box on invasive alien species in Türkiye).

Outcomes-based payments for conservation are primarily linked to payments for ecosystem services (PES), biodiversity offsets and carbon credits. The last are generally part of the REDD+ process, 'reducing emissions from deforestation and forest degradation', involving forest conservation and sustainable management and enhancement of forest carbon stocks in developing countries. These schemes usually limit harmful activities, for example many PES schemes focus on stopping forest loss to protect water resources, or carbon credits provide impetus to stop deforestation, using funds to offset greenhouse gas emissions. Similar initiatives based on active management include impact investment bonds and wildlife credits. These can all be categorised under the concept of biodiversity credits or 'biocredits', units of biodiversity emerging from pre-agreed management that improves biodiversity against a baseline, for example its quantity, value or composition.¹⁴¹

3.8. Link conservation project design to local values

The spiritual, economic, cultural and traditional values of a community are important when considering the design of a project and the likelihood of win-win-win outcomes. Understanding how cultural values and norms affect relationships with nature can enhance conservation efforts, prevent conservation actions undermining local culture and values and create opportunities to reinforce local culture instead. Cultural values approaches can maintain and enhance local culture (as a contribution to human well-being), deepen links between communities and conservation activities; facilitate parallel conservation of nature and culture; promote non-material as well as material natural values; and allow specific cultural values to inform and drive conservation efforts.¹⁴² For example, flagship species that are important to donors do not always align with the species that are important for local communities. Ten criteria have

been proposed for choosing locally appropriate flagship species including their identifiability and existing usage to local people.¹⁴³

Local initiatives can be tailored to fit unique cultural, economic, and ecological needs of the area, making them more relevant and impactful. Indonesia's Indigenous groups often utilise customary *adat* practices to define traditional rules around sustainable management. In Maluku, local, dynamic fisheries closures are encompassed in traditional marine tenure and belief systems, or *sasi*, and these have been effective historically at reducing overfishing.¹⁴⁴ Sacred natural sites, or an area that is habitat for a sacred species, both provide powerful, non-economic incentives for conservation.¹⁴⁵ Sacred natural sites can provide effective biodiversity conservation in many places.¹⁴⁶

3.9. Co-management and co-learning generate engagement, enthusiasm and ownership of projects

The term "participation" can encapsulate a lot of very different approaches, often considered within the framing of Arnstein's "*Ladder of Participation*".¹⁴⁷ These ideas have been transferred, in varying forms, to conservation approaches.¹⁴⁸ Co-management in marine protected areas (MPAs) for instance has been defined along a spectrum from strong to mild to non-existent and correlated to effectiveness. The most successful co-management was found to need shared decision-making power, the recognition of Indigenous rights and the involvement of Indigenous communities in monitoring.¹⁴⁹ In reality, the extent and type of participation depends on the willingness of governments and other entities to share power. It is influenced by factors such as governance quality and rule of law.

CASE STUDY: Creating new conservation areas in South Sudan

Fauna & Flora has been working in South Sudan, alongside local communities and the Ministry of Wildlife Conservation, to establish two Community Conserved Areas, covering 5,560 hectares of forest. These areas aim to support biodiversity, promote sustainable livelihoods, and reduce pressure on state-protected reserves. Training and biomonitoring patrols are being implemented to ensure ongoing conservation efforts. This initiative serves as a potential model for future community-led resource management in South Sudan.

3.10. Networks of small-scale, community-led protected areas become landscapes of conservation

The concept of creativity and diffusion is particularly important given the focus on working with local, often quite small organisations in discrete areas. Communities often have rights and management responsibilities over relatively small areas, which limits their ability to set aside larger areas for biodiversity conservation. Creating successful models that grow into larger conservation initiatives is an important part of Fauna & Flora's theory of change (see Figure 2 and examples from work in Scotland and Belize). Research highlights practical approaches, such as adaptive management and network building, to expand conservation from local projects to broader, long-term initiatives.¹⁵⁰ By connecting a patchwork of small-scale meaningful conservation initiatives, much larger conservation impacts can be achieved. The approach is very focused on a bottom-up rather than a top-down approach to defining what areas need conserving, but (as this report argues) is more likely to result in durable, resilient and impactful conservation gains.

This work has demonstrated success, including across marine environments (Appendix and case studies). In Honduras, five NGOs in the Atlántida Seascape (which covers four marine protected areas and connecting waters) are building a collaborative governance structure, empowering small-scale fishers,

women and Indigenous groups to participate in decision-making. This has generated positive effects, including enhanced social capital, and early signs of increased abundance of fish and flagship species.¹⁵¹

3.10. Link project design to biodiversity and ensure conservation impacts

It is not easy to bend the biodiversity curve (see Figure 1) and see improvements in species and habitats given the threats of habitat loss, resource use and climate change. Fauna & Flora aims to track and demonstrate conservation success through theory of change metrics (see box). This focus began a decade ago, building on a collaborative research project, to develop cross-project generic impact chains that document common paths to long-term conservation impact. Progress is inevitably slow; biodiversity recovery will only be apparent after multiple years (typically longer than average grant cycles). Across the sites Fauna & Flora works in, the trend is that even after five years only 25% of sites show biodiversity recovery. The majority of the sites (around 95%), have however been brought under more effective management (e.g., improved protection or enforcement) in the same period – and over 60% show evidence of reduced threats, and are thus expected to show a conservation impact in the coming years.¹⁵²

Quotation from the field: *“Local communities must be empowered to develop their natural resources for a greener Earth. Through years of patient work, Seva Mandir is witnessing a grassroots movement, led by very poor peasants in the tradition of Gandhi-ji’s satyagraha (truth force) for protecting the environment.”*
Priyanka Singh, Seva Mandir, southern Rajasthan, India¹⁵³

Theory of Change (ToC)

ToCs identify the cause-and-effect relationships between actions, outputs and desired outcomes, and help develop options for achieving the desired outcome. The ToC considers external factors like social, political, or economic conditions that influence whether outcomes are achieved. The ToC should explain actions which will lead to incremental changes and contribute to achieving the broader goal. Metrics (e.g., indicators, benchmarks or milestones) measure progress at each stage of the process, from outputs to outcomes to impact. They help evaluate whether the interventions are having the intended effect. Conservation outcomes can take many years to achieve, so having clear aims and actions is important, as is the need to assess success along the way and adapt plans and ToCs as things both succeed and sometimes fail to make desired changes.

Examples of conservation success include work by the Association for the Conservation of Biodiversity of Kazakhstan (ACBK), as part of the Altyn Dala Conservation Initiative, a collaboration between ACBK and international NGOs including Fauna & Flora. Here, conservation efforts have reduced threats to the saiga antelope (*Saiga tatarica*) in the Ustyurt plateau. The impact has been a growth in the plateau’s saiga population to almost 40,000 individuals in 2023 – up from only 1,900 in 2016.¹⁵⁴ This has contributed to a wider population recovery, the saiga has gone from being listed as Critically Endangered to Near Threatened on IUCN’s Red List.¹⁵⁵ The ToC has moved through planned stages of activities which initially focused on ensuring the saiga’s survival to developing strategies of coexistence between the saiga and local communities.

In Vietnam, monitoring teams have found more than 1,000 *Magnolia grandis* saplings growing wild in the forest – the result of a decade of work with local partners to protect this critically endangered tree.¹⁵⁶ Other examples (see Appendix for details) include the recovery of marine and coastal habitats in one of

Fauna & Flora’s longest-standing marine sites, Samut Kaoh Rung, Cambodia; widespread conservation of the Maya Golden Landscape in Belize and in PiSiSi, Indonesia (see Appendix 2).

Quotation from the field: *“Biodiversity carries significant importance for Indigenous Communities. We rely on biodiversity to function in our daily lives, conduct our ceremonies, traditions, and culture. Our lifestyles also foster biodiversity. We use our Indigenous Knowledge, wisdom, and culture in managing our community biodiversity in creating future sustainability.”*

Manop Boonyuen, Akha village chief and leader of Pa Kia Village, Chiang Rai Province, Thailand¹⁵⁷

CASE STUDIES: Supporting coastal communities in Scotland and Türkiye

*Fauna & Flora has helped support communities around the world who want to protect key areas of coastline and create a stronger collective voice in influencing policy.*¹⁵⁸

In Scotland, Fauna & Flora was invited to work with the Community of Arran Seabed Trust (COAST) in 2011.¹⁵⁹ Initially work focused on providing support in local conservation work in the Isle of Arran. From this grew a wider community-led initiative co-created by Fauna & Flora and COAST, to further protection of Scotland’s marine environment, aiming to enable community-led marine conservation, to test applicability of the approach used by Fauna & Flora globally and bring learning from around the world back to a UK context (see figure 2).

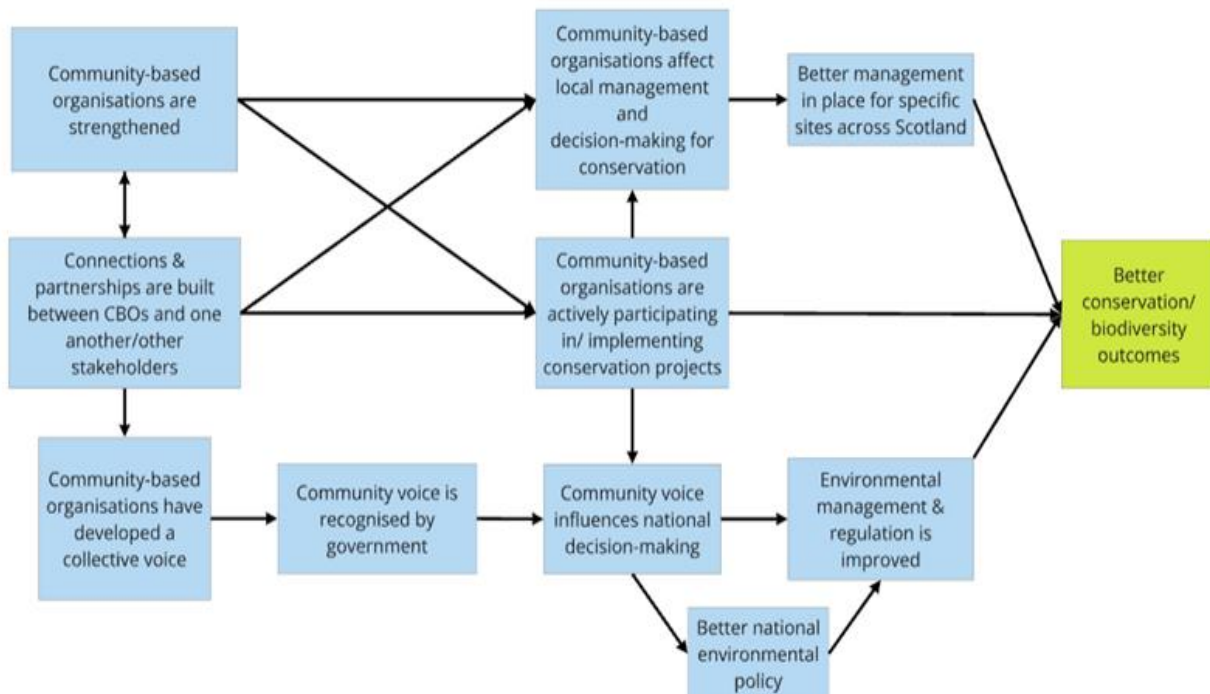


Figure 2: Fauna & Flora Theory of Change work for community- and partner-focused approach in Scotland

As a result, there is evidence of increased conservation capacity and on-the ground conservation impact¹⁶⁰ in localities across Scotland's coast and increased representation of community voices for decision-making. A key outcome has been the emergence of a Scottish 'Coastal Communities Network' (CCN), a dynamic forum for communities to engage on issues of shared concern in marine protection. CCN has created opportunities for coordinated and community-led influence upon marine management, leveraged from previously unconnected coastal communities.^{161,162}

In Türkiye, Fauna & Flora joined forces with a new NGO, Akdeniz Koruma Derneği (AKD) in 2012, to tackle growing threats to marine life and coastal livelihoods posed by overfishing, destructive methods, coastal development and pollution.¹⁶³ The main focus was development of a community-based management model for strictly protected no-take zones in the Gökova Bay MPA. AKD has drawn on local knowledge in designing protected areas, promoting sustainable fishing and employing fishers as marine rangers. Sandbar sharks (*Carcharhinus plumbeus*, regionally Endangered), loggerhead turtles (*Caretta caretta*, Vulnerable) and Mediterranean monk seals (*Monachus monachus*, Endangered) have been observed in the bay for the first time in many years. In 2023, Boncuk Bay was recognised as an Important Shark and Ray Area by IUCN.¹⁶⁴ AKD supported by Fauna & Flora is scaling this approach to a further three MPAs along 570km² of the Mediterranean coast.¹⁶⁵ The Ministry of Agriculture and Forestry is now consulting AKD and other stakeholders regarding a review of legislation in 2024 and AKD is in dialogue with stakeholders from across the seascape including small-scale fishers and local businesses.

3.12. Challenges in ensuring conservation success

The strength of these programmes and the extent to which this marks a real change or is just tokenistic depends at least partly on attitudes of staff on the ground, and for large organisations an across-the-board analysis is difficult. Success also changes over time; replacement of one project leader with another can completely change the approach. Some projects that have been heavily criticised for poor human rights records in the last few years were, in the past, exemplars of good practice.¹⁶⁶

Win-win-win scenarios across environmental, income and natural resource rights are rare and trade-offs almost always have to be made, for example forgoing timber extraction in favour of forest conservation.¹⁶⁷ Political pressures and economic, environmental and social change, including prior conservation initiatives, can all undermine long-term management.^{168,169} Where Indigenous Peoples or local communities are socially or physically fragmented, or where traditions have been lost, it may take a conscious effort to rekindle a close connection with nature. Decentralisation of control may need to go hand in hand with efforts to strengthen or revitalise local institutions through provision of resources, inter-institutional collaboration and supportive policies and legislation.¹⁷⁰

Protected and conserved areas are only part of a response to environmental degradation,¹⁷¹ which requires fundamental changes in the way that society, industry and commerce views the natural world. The world is politically volatile, and many countries with the most intact biodiversity also have the most unstable governments; the context of conservation can change dramatically with a change of government or a sudden spurt in economic development. Even where governments are more stable, conservation decisions are sometimes low priority and agreed actions can take a long time to enact. It is important that the international NGO community does not withdraw from countries due to political issues and instability and continues wherever possible to support local conservation partners through difficult times.¹⁷²

Section 4: Assessing and reporting on conservation effectiveness and equity

Measuring conservation outcomes is essential for achieving long-term impact by tracking progress, informing decision-making, ensuring accountability, and fostering adaptive management for sustainable success. However, as this section outlines, measuring the impact of locally led conservation is proving challenging.

4.1. Monitoring outcomes

Achieving conservation impact can take years, sometimes decades, so that intermediate outcomes need to be tracked to assess the chances of long-term success.¹⁷³ It is important to focus on *outcomes*, and not just *outputs*, noting that outputs measure activities completed whereas outcomes assess whether management is resulting in the goals and objectives set for biodiversity conservation, economic development, social sustainability or cultural heritage.¹⁷⁴

Measuring conservation outcomes is vital for achieving long-term conservation impact because it:

1. Tracks progress, to assess whether strategies are working, enabling adjustments and adaptations.
2. Informs decision-making: to guide resource allocation and refine approaches.
3. Ensures accountability: by demonstrating success to funders, stakeholders and communities.
4. Supports sustainability: by understanding ecological and social changes, organisations can develop adaptive management strategies that ensure resilience and enduring conservation.

A dozen NGOs and multilateral agencies were contacted to find out if they had made any systematic attempts to assess the conservation success of locally led approaches. Impact reports and relevant published papers were also consulted. While not everyone replied in the time available, it seems as if there is still a gap in knowledge, both about how to do such an assessment and in serious attempts to build data.

UNDP has gone further than most, through its role in administering the Global Environment Facility (GEF) Small Grants Programme, which is aimed explicitly at Indigenous People and local community groups. Some 1,311 protected areas have been included, covering 43 million hectares.¹⁷⁵ From 2000-2013, UNDP and GEF also ran the COMPACT programme to test the validity of Integrated Conservation and Development Programmes and community-led approaches.¹⁷⁶ Even in these cases, assessment has principally been on outputs rather than conservation outcomes. The World Bank has also made considerable efforts to assess impacts in the Amazon, both as part of the Amazon Regional Protected Areas programme (ARPA)¹⁷⁷ and more generally.¹⁷⁸ It is notable that development organisations seem to have gone further in this regard than many NGOs, although detailed data are still lacking throughout.

There have been some major studies of the status of biodiversity within the territories of Indigenous Peoples,^{179,180} but this is different from regular monitoring of trends in individual projects. Several organisations followed up to say that they would like to be doing more in this area and recognised that the techniques, let alone the implementation, of monitoring for locally led protected areas remain undeveloped, at least at a global level.

Bottom-up monitoring in conservation emphasises community involvement, local knowledge and participatory approaches.¹⁸¹ It empowers communities to take ownership of conservation activities, enhancing their capacity and fostering stewardship.¹⁸² This has been found to improve ecological

outcomes by integrating local insights and ensuring that interventions are socially acceptable and culturally relevant.¹⁸³ Connecting top-down and bottom-up monitoring links Indigenous and local knowledge with western science and can provide benefits such as improved information and increased project efficiency and sustainability.¹⁸⁴

Fauna & Flora uses a bottom-up monitoring approach and does not impose top-down organisational metrics or monitoring techniques on local partners.¹⁸⁵ Each partner, local context and project has its own priorities and agendas and these are respected.^{186,187} Fauna & Flora collates project-defined data to assess conservation impact that includes measures such as the increase or stabilisation of populations of key species, reduction of poaching, and improved habitat quality. For example, monitoring species such as endangered turtles or coral reefs helps assess whether the protected areas conserve these key species effectively.¹⁸⁸ Local leadership and monitoring is also essential in developing projects for the biodiversity credits market.¹⁸⁹ Every project has a ToC (see box above) and impact chains linked to long-term biological outcomes. Interim indicators show pathways to outcomes and adaptation needs. There is also a need to balance locally driven monitoring with donor requirements, which can confuse things and force specific monitoring actions – but in general expectations are carefully managed to ensure the integrity of the locally led approach.

Section 5: Reviewing lessons learned and conclusions

The GBF 30x30 target has raised concerns that it might focus on expanding formal protected areas rather than supporting community-led and locally managed conservation initiatives. To avoid this, equitable implementation is essential, ensuring local stewardship and rights are prioritised. This section looks at lessons which can be applied to help this prioritisation and suggests an overall recommendation to the CBD's Conference of Parties to support community-led conservation.

This report explores whether, and how, initiatives that are locally led and community-driven are more likely to endure and are as such key to effective and equitable area-based conservation. There are however no black and white answers in conservation. Getting conservation right is tricky and often a fragile endeavour, capable of disintegrating if things go wrong. Would-be critics can generally find examples of failure of any approach to support their position. This report has tried to focus on the balance of probabilities. **It suggests that – if done right – locally led and managed protected and conserved areas can and do work for both nature and people.** Furthermore, they do so in a fairer and more sustainable way than traditional, top-down approaches. The findings note however that success is context specific and more monitoring is needed.

5.1. Lessons learned

To achieve success, the evidence base above has highlighted some important factors which need to be in place for locally led conservation to be successful.

1. **Equity and equality are vital:** Long-term engagement and effort are needed to ensure a full range of voices is heard and that the marginalised are not excluded from the discussion.
2. **Conservation takes time:** Research shows that the most productive forms of collaboration often build on a long-term base of trust.¹⁹⁰ This creates a tension between the urgency to act and the time needed to build the relationships to ensure that actions are successful, but long-term relationships are more likely to be effective than short-term engagement.
3. **Legal rights to governance of natural resources by Indigenous Peoples, local communities or collectives should be acknowledged.** Acknowledgement of the rights of Indigenous Peoples, local communities or collectives to own or control resources as common property is increasing. In some cases, these rights are also being recognised in legislation. Under customary tenure arrangements, people gain access to the commons as a social right due to their membership of the local community or specific collective.
4. **Combining ways of knowing:** Participation works best if everyone feels engaged and is contributing actively rather than as a passive spectator being asked an opinion.¹⁹¹ Data showing how local knowledge is being used in monitoring biodiversity or managing natural resources helps demonstrate this synergy. Ultimately, this involves empowering local people to be able to tell governments, NGOs and other capacity supporters what they need to do, rather than vice versa.
5. **Interlinking effectiveness and equity:** Effective biodiversity conservation is far more achievable if the whole community is invested in success, rather than this being of interest solely to conservation

professionals or NGOs. And this investment usually comes from both long-term engagement and a general feeling that the protected area is providing positive benefits for the whole community.

6. **Trust-based philanthropy:** There needs to be a shift away from traditional top-down, short-term, restrictive funding models towards flexible, unrestricted funding, reducing bureaucratic processes, and empowering grantees to make decisions. In some cases, smaller amounts of money, easily and flexibly available, may be more useful than large grants.
7. **Make conservation relevant to local people:** It is as important to invest in people as it is to invest in conservation. It is also necessary to understand why local communities want to take part in conservation projects. The process of working collaboratively towards a common goal may be a significant factor encouraging involvement in some cases.
8. **Let communities know what is happening.** Regular reporting of progress (or reasons for lack of progress) and results is important, both to reassure the people most directly affected that promises are being kept, and more subtly to maintain communication channels between different groups.
9. **Ensure equitable benefit sharing.** Relevance is linked to communities realising and receiving a meaningful share of the benefits. Equitable benefit-sharing is difficult, sometimes impossible, in a world based around huge disparities in wealth. But everyone should feel that they are a beneficiary of the project.
10. **Positive coexistence is vital:** Building wildlife populations is difficult if human communities are threatened by those species. Positive coexistence describes a dynamic state in which the interests and needs of humans and wildlife are generally met, though this coexistence may still contain some level of impact to both and is characterised by a level of tolerance on the human side.¹⁹²
11. **Improve baseline data:** Data and information on locally led approaches is often anecdotal. Stronger data, built with communities and measuring the things that communities are interested in, is needed all over the world. The effectiveness of protected areas managed by states and areas managed by Indigenous Peoples and/or local communities can be hard to compare.¹⁹³ One study states: *“Our results show that there has been an extensive investment in alternative livelihood projects, yet the structure and results of most of these projects have not been documented in a way that they can be captured using standardised search processes. Either this is because there has been little reporting on the outcomes of these projects, or that post-project monitoring is largely absent”*.¹⁹⁴
12. **Community attitudes are changing:** What was obvious from research 20 years ago may no longer be true today. Attitude surveys are notoriously difficult;¹⁹⁵ they almost inevitably distil complex and half-understood feelings down into a simple binary choice or set of choices, are prone to bias due to choice of questions and often under-represent one or more sectors of society.

5.2 Conclusions and recommendations

A commitment to locally led approaches to protected areas has both ethical and practical components; if successful there is good evidence for its effectiveness and longevity but there is also a parallel and important ethical choice to be made that conservation should not trample over human rights. This does not mean that individual human needs and wants always have precedence over those of other species, but that conservation needs wherever possible to proceed in a respectful process of negotiation, compromise and consensus.

There is still much to be learned about how this is achieved in practice, albeit with a growing number of successful case studies. Some of the claims made for community approaches verge on the utopian, with an assumption that collective action is a guarantee of success, and this is not the case. As a matter of urgency, we need to learn more about bottom-up conservation approaches, and the different factors and contextual elements which may predict their success.

More and better guidance is needed on local co-management, which will inevitably often involve groups with different perspectives and priorities and implies a radical shift in governance.

Monitoring is a critical component of such programmes, both to track the biodiversity outcomes and to measure and report the social and economic outcomes that are essential to maintain local support.

Commitment must come from the top. Revised National Biodiversity Strategy and Action Plans should advocate participation and leadership of Indigenous Peoples and local communities. Similar commitments need to be written into nature-based solutions in the Nationally Determined Contributions being prepared for the UN Framework Convention on Climate Change, and into the efforts at Land Degradation Neutrality from the UN Convention to Combat Desertification.

The forthcoming CBD Conference of Parties has an opportunity to highlight several of the messages in this report. **Target 3 needs to be judged as much by – probably more by – the quality of impact of protected areas rather than the quantity of areas designated.** Finance must be unlocked for and directed towards Indigenous Peoples and local communities, and local leadership is needed particularly in the field of biodiversity credits. Finally, the need for greater recognition of the synergies between climate action and biodiversity action is still urgently required.

Key definitions

Equity: The CBD enshrined the three elements of equity (recognition, procedure and distribution).¹⁹⁶ For all those involved in protected and conservation areas, this means ensuring:

- *Recognition:* in terms of recognition and respect for the rights of rights-holders and recognition and respect for all relevant actors and their knowledge.
- *Procedure:* in terms of full and effective participation of all relevant actors in decision-making, transparency, information sharing and accountability for actions/inactions; access to justice including effective dispute resolution processes and fair and effective law enforcement (or, more broadly, the rule of law)
- *Distribution:* in terms of effective mitigation of negative impacts on relevant actors and benefits equitably shared among relevant actors.¹⁹⁷

The need for equity recognises that people are not all in the same starting position. Historical and ongoing social disadvantages can prevent a level playing field. Equity is therefore the process to achieve equality.

Governance: In the context of protected and conserved areas, governance has been defined as: “*the interactions among structures, processes and traditions that determine how power is exercised, how decisions are taken on issues of public concern, and how citizens or other stakeholders have their say*”.¹⁹⁸ Governance arrangements are expressed through legal and policy frameworks, strategies, and management plans; they include the organisational arrangements for following up on policies and plans and monitoring performance. Governance covers the rules of decision-making, including who gets access to information and participates in the decision-making process, as well as the decisions themselves.¹⁹⁹

Governance type: IUCN has codified four governance types (plus several subtypes) which are used to describe governance of protected areas and OECMs: governance by government, shared governance, private governance and governance by Indigenous Peoples and local communities.²⁰⁰

Management effectiveness: Is defined by IUCN-WCPA as how well the protected or conserved area is being managed – primarily the extent to which it is protecting values and achieving goals and objectives.

The term management effectiveness reflects three main themes:

- Design issues relating to both individual sites and protected area systems.
- Adequacy and appropriateness of management systems and processes.
- Delivery of protected area objectives including conservation of values.²⁰¹

Protected and conserved areas: There are several terms used to describe conservation areas. Protected areas and other effective area-based conservation measure (OECM) are both officially defined and appear in international decisions such as the CBD and its GBF. In addition, the phrase “*protected and conserved areas*” is often used as equivalent to and more succinct than “protected areas and other effective area-based conservation measures” but this is unofficial phrasing and “conserved area” should not necessarily be considered as equivalent to OECM.²⁰² 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*”. This definition is backed by several principles, including “*Only those areas where the main objective is conserving nature can be considered protected areas; this can include many areas with other goals as well, at the same level, but in the case of conflict, nature conservation will be the priority*” and “*The*

definition and categories of protected areas should not be used as an excuse for dispossessing people of their land.”²⁰³ CBD Signatories agreed a definition of OECMs in 2018: “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, socio–economic, and other locally relevant values.”²⁰⁴

Sustainable: The United Nations defines sustainability as “meeting the needs of the present without compromising the ability of future generations to meet their own needs.” ²⁰⁵

Appendix 1

The search parameters for the literature review: one word from each column in the table was essential.

Table 1: Search parameters

“Locally led approach”	“Protected area management”
“Locally led approaches”	“Conservation outcomes”
“Equity”	“Conservation effectiveness”
“Community-led”	

Appendix 2

The table below draws on a wide-ranging literature review to provide examples of protected areas (all sites are list on the [UNEP-WCMC World Database of Protected Areas](#) which is used to officially report protected area coverage to the UN Conventions, links to the site record are given in the sites name).

Area	Community	Community involvement	Equity in management	Management effectiveness	Sources
1. Gladden Spit and Silk Cayes, Belize	Local communities	In the early 1990s, local people protested against the potential sale of a nearby island, Laughing Bird Caye, to a private developer. They petitioned the state to protect the island, and Laughing Bird Caye National Park was declared in 1996. The Friends of Laughing Bird Caye (as they called themselves) sought funding from the UNDP/GEF Small Grants Programme, they became incorporated as a non-profit organisation and later changed their name to “Friends of Nature”.	Friends of Nature adaptively co-manages the MPA with the Fisheries Department (e.g., resource monitoring and evaluation, policy and decision making) and the involvement of fishers and other stakeholders.	Friends of Nature works with partners to monitor the spawning aggregation, collecting data and liaising with the regional conservation effort. In 2000, the government of Belize extended the area and declared the Gladden Spit & Silk Cayes Marine Reserve, an 11,000 ha MPA in the southern waters of Belize.	Gray, N.J. (2008). <i>Producing success: Co-management of a marine protected area in Belize</i> . Digital Library of the Commons. https://dlc.dlib.indiana.edu/dlcrest/api/core/bitstreams/8068599f-8f68-4bb6-ac67-6ca6ec2014f8/content Granados-Dieseldorff, P., Heyman, W.D., & Azueta, J. (2013). History and co-management of the artisanal mutton snapper (<i>Lutjanus analis</i>) spawning aggregation fishery at Gladden Spit, Belize, 1950–2011. <i>Fisheries Research</i> , 147, 213–221. https://doi.org/10.1016/j.fishres.2013.07.018 Goetze, T., & Pomeroy, R.S. (2003). Co-managed marine protected areas: A case study of Friends of Nature, Belize. <i>Proceedings of the Gulf and Caribbean Fisheries Institute</i> , 56, 1–10. https://aquadocs.org/handle/1834/29693

Area	Community	Community involvement	Equity in management	Management effectiveness	Sources
2. Prey Lang, Cambodia	Indigenous Kuy people	<p>Communities petitioned the government to protect the area for more than 20 years before the Prey Lang Wildlife Sanctuary was formally recognised and gazetted in 2016, under the 2001 Land Law, which formally recognises and protects the rights of Indigenous Peoples to their ancestral lands.</p> <p>The Prey Lang Community Network (PLCN) works to save the Prey Lang forest from illegal logging and industrial agriculture.</p>	<p>The PLCN makes decisions regarding how the Sanctuary is managed and protected. The PLCN patrol the forest to stop illegal logging, seize logging equipment, and confiscate guns, snares and illegal fishing gear. Rangers from the Ministry of Environment and local police sometimes join forest patrols organised by the PLCN.</p>	<p>The University of Copenhagen conducted an assessment of the biodiversity and ecological importance of Prey Lang in 2007. Thirty-one threatened tree species were recorded. The Prey Lang forest is a Biodiversity Hotspot; it contains seven different types of rainforest, containing a large number of rare and endangered species</p>	<p>Prey Lang Prey Lang Community Network Wildlife Conservation Society Cambodia. (2015). <i>Biodiversity assessment of Prey Lang: Kratie, Kampong Thom, Stung Treng, and Preah Vihear Provinces.</i> https://preylang.net/wp-content/uploads/Other%20reports/PL-Biodiversity-Assessment-Report.pdf https://www.iccaregistry.org/en/explore/Cambodia/prey-lang-wildlife-sanctuary</p>
3. Península Valdés Protected Area and World Heritage Site, Argentina	Local ranchers	<p>Private owners conserve their property rights and are involved in the conservation efforts and in the decisions of the administration of Peninsula Valdés (AANPPV instituted in the Law XI-30-ANEXO-A). Ranchers operating inside the reserve formed the Merino de Península Valdés group to develop sustainable grazing management plans. Their wool is now Certified Wildlife Friendly.</p>	<p>The Provincial Tourism Authority is responsible for the protection of the area; decisions are agreed with representatives of all stakeholders.</p> <p>The World Heritage site has a remarkably detailed management plan, elaborated through a participatory process fully taking into account that most land of the peninsula is privately owned and managed.</p>	<p>IUCN's World Heritage Outlook has assessed the site as Good. Although the area is used for sheep grazing, the semi-natural terrestrial ecosystem continues to be an important remnant of the coastal Patagonian grasslands, which have been modified and overused even more intensively elsewhere.</p>	<p>Stolton, S., Timmins, H. and Dudley, N. (2021). <i>Making Money Local: Can Protected Areas Deliver Both Economic Benefits and Conservation Objectives?</i>, Technical Series 97, Secretariat of the Convention on Biological Diversity, Montreal. https://www.cbd.int/doc/publications/cbd-ts-97-en.pdf https://worldheritageoutlook.iucn.org/explorate-sites/wdpaid/198291</p>

Area	Community	Community involvement	Equity in management	Management effectiveness	Sources
4. Lawachara National Park, Bangladesh	Khasia Indigenous group, a Bangladeshi ethnic minority	Local people of LNP depend substantially on the park for maintaining their livelihoods. 30 punjis (villages) surrounding LNP that have been co-managing and protecting the park with the Bangladesh Forest Department since 2005 through a USAID conservation initiative entitled 'Nishorgo' meaning idyllic nature.	A co-management committee is in place. Members represent their communities (they are selected by election process) and are actively contributing to management through regular co-management committee meetings.	Effective conservation faces many challenges in Bangladesh, but one study suggests Lawachara National Park is in better condition than other NPs in the area, although data is scant.	Stolton, S., Timmins, H. and Dudley, N. (2021). <i>Making Money Local: Can Protected Areas Deliver Both Economic Benefits and Conservation Objectives?</i> , Technical Series 97, Secretariat of the Convention on Biological Diversity, Montreal. https://www.cbd.int/doc/publications/cbd-ts-97-en.pdf Uddin, M.S. et al (2007). Comparative evaluation of co-management impacts on protected area: A case study from Lawachara National Park, Maulvibazar, Sylhet. <i>Journal of Forestry and Environment</i> , 5, 103-110. Miah, M R., Hasan, M.M., Parisha, J.T., Alam, M.S., Sayok, A.K., Sarok, A., & Uddin, M.B. (2023). Enhancing national park information knowledge to improve biodiversity conservation in Bangladesh: A study on policy perspectives. <i>International Journal of Plant Research</i> , 13. 1-23. 10.5923/j.plant.20231301.01.
5. Maya Mountain North Forest Reserve, Bladen Nature Reserve, and Golden Stream Corridor Preserve , Belize	Indigenous Maya people	In 1998 a consortium of community leaders founded the Golden Stream Corridor Preserve, securing a vital wildlife corridor in Belize's Maya Golden Landscape in the Toledo District from exploitation. In 2002, the organisation changed its name to Ya'axché Conservation Trust.	Ya'axché currently manages/co-manages four Protected Areas. The Government of Belize aims to sign 36 agreements under a new national Co-Management Framework.	Bladen Nature Reserve has most of its forest cover intact and its biodiversity in good condition; Golden Stream and Boden Creek Ecological Preserve are threatened by some unauthorised extraction but the majority of the forest and biodiversity is in good condition. Maya Mountain North also has challenges with illegal activities but it retains most of its land area under forest cover.	https://www.yaaxche.org/ Ya'axché Conservation Trust. (2023). State of the protected areas report 2022: An assessment of Bladen Nature Reserve, Golden Stream Corridor Preserve and Maya Mountain North Forest Reserve. https://www.yaaxche.org/wp-content/uploads/scientific-reports/status-reports/State%20of%20the%20Protected%20Areas%20Report-%202022.pdf https://www.pressoffice.gov.bz/gob-continues-signing-of-protected-areas-co-management-agreements-with-conservation-partners/

Area	Community	Community involvement	Equity in management	Management effectiveness	Sources
6. Ostional National Wildlife Refuge, Costa Rica	Local communities	The refuge is managed by the National System of Conservation Areas (SINAC) and a local council (CIMACO) made up of representatives from local communities, local government, fishing bodies and the nearby university.	The community, through the Ostional Integral Development Association (ADIO), holds responsibilities and commitments for environmental, social and economic issues which contribute to the management of the refuge and to community development.	Ostional National Wildlife Refuge has one of the densest concentrations of olive ridley turtles in the world, with tens or hundreds of thousands of nesting females arriving each year.	Stolton, S., Timmins, H. and Dudley, N. (2021). <i>Making Money Local: Can Protected Areas Deliver Both Economic Benefits and Conservation Objectives?</i> , Technical Series 97, Secretariat of the Convention on Biological Diversity, Montreal. https://www.cbd.int/doc/publications/cbd-ts-97-en.pdf Valverde, R.A., Orrego, C.M., Tordoir, M.T., Gómez, F.M., Solís, D.S., Hernández, R.A., Gómez, G.B., Brenes, L.M., Baltodano, J.P., Fonseca, L.G., & Spotila, J.R. (2012). Olive ridley mass nesting ecology and egg harvest at Ostional Beach. <i>Chelonian Conservation and Biology</i> , 11(1), 1-11. https://doi.org/10.2744/CCB-0959.1
7. Vueti Navakavu Locally Managed Marine Area (LMMA), Fiji	The Navakavu LMMA is the traditional fishing ground for four local villages.	In 2002, responding to declines in catches, the communities set up a 'no-take zone' with support from the Fiji LMMA network and the University for the South Pacific.	The area is a locally managed marine area (LMMA); these are defined as areas of nearshore waters and coastal resources that are largely or wholly managed at a local level by the coastal communities, land-owning groups, partner organisations, and/or collaborative government.	The Muaivuso peninsula is surrounded by a coral reef, mangroves and remnants of coastal forest providing important biodiversity habitat, including species important for local fisheries. All fishing and extractive activities are prohibited, but spillover effects replenish fish stocks in the surrounding traditional fishing grounds (for which the four villages have exclusive use rights). Since establishment, nearly 300 mollusc species have either been seen for the first time in over 40 years or are clearly increasing in abundance and/or size class.	Stolton, S., Timmins, H. and Dudley, N. (2021). <i>Making Money Local: Can Protected Areas Deliver Both Economic Benefits and Conservation Objectives?</i> , Technical Series 97, Secretariat of the CBD, Montreal. https://www.cbd.int/doc/publications/cbd-ts-97-en.pdf Govan, H., Aalbersberg, W., Tawake, A., and Parks, J. (2008). <i>Locally-Managed Marine Areas: A guide for practitioners</i> . The Locally-Managed Marine Area Network. https://lmmannetwork.org/wp-content/uploads/2021/08/Govan-et-al-2008-LMMA-CBAM-Guide.pdf Thaman, B., Manoa, P., Vave, R., & Veitayaki, J. (2017). The Recovery of a Tropical Marine Mollusk Fishery in Navakavu, Fiji. <i>Journal of Ethnobiology</i> , vol. 37, no. 3, 2017, pp. 494-513.

Area	Community	Community involvement	Equity in management	Management effectiveness	Sources
8. Velondriake Paysage Harmonieux Protégé, Madagascar	Mostly semi-nomadic people	<p>Since 2004, local fishers have been managing octopus fisheries through contemporary adaptation of customary laws known as dina.</p> <p>Velondriake, meaning ‘to live with the sea’ in the local Malagasy language, supports one of the largest and most biologically diverse coral reef systems in the western Indian Ocean.</p>	Involvement in these closures has also led to non-fisheries benefits including community interest in broader resource management, community member empowerment through involvement in decision-making and improved local governance.	The LMMA’s management plan includes strategic, short-term bans on fishing in specific reef areas (rotational temporary closures) allowing the population and the reef ecosystem to regenerate. An analysis in 2015 of the impacts on fisheries of 36 closures within Velondriake over eight years showed that the average weight of octopus landed per fisher per day increased by 87%, from 2.4 kg in the month prior to the closure to, 4.4 kg in the month after a reopening.	<p>Stolton, S., Timmins, H. and Dudley, N. (2021). <i>Making Money Local: Can Protected Areas Deliver Both Economic Benefits and Conservation Objectives?</i>, Technical Series 97, Secretariat of the CBD, Montreal. https://www.cbd.int/doc/publications/cbd-ts-97-en.pdf</p> <p>see also: https://www.ipbes.net/policy-support/case-studies/velondriake-locally-managed-marine-area-lmma</p> <p>Gardner, C.J., Cripps, G., Day, L.P., Dewar, K., Gough, C., Peabody, S., et al., (2020). A decade and a half of learning from Madagascar’s first locally managed marine area. <i>Conservation Science and Practice</i>, 2(12), p.e298.</p>
8. Ometepe Island Biosphere Reserve, Nicaragua	Local communities including the Indigenous community of Urbaite Las Pilas	Collaborative management committees - led by the local municipal authorities and Ministry of Environment and aim to include local community representation - oversee the management of the three core protected areas within the Biosphere Reserve: Maderas Volcano National Park, Concepcion Volcano Natural Reserve and Peña Inculta Wildlife Refuge. Collaborative management agreements signed in 2022.	Community surveys have confirmed that support for the Biosphere Reserve designation and model for Ometepe is high. Female and male community members and farmers are engaged in conservation actions to protect threatened species (e.g. yellow-naped parrot) and forest/wetland habitats, as well as efforts to adopt environmentally friendly agroecological practices.	The Biosphere Reserve was designated in 2010. Ometepe te quiero verde (Ometepe I love/want you green) campaign launched in 2011, with significant community support, including involvement in planting 10,000 trees on the island. An estimated 10% of subsistence farming families on the island have adopted agroecological practices compatible with conservation, with 30% of these agroecological farms led by women.	<p>https://www.unesco.org/en/mab/ometepe-island</p> <p>https://www.fauna-flora.org/projects/improving-sustainable-use-natural-resources-ometepe/</p> <p>https://info.undp.org/docs/pdc/Documents/NIC/00083775_ProDoc00092085.pdf</p> <p>https://www.marena.gob.ni/2022/08/05/firma-tres-convenios-de-manejo-colaborativo-de-la-reserva-de-la-biosfera-ista-de-ometepe/</p> <p>https://www.darwininitiative.org.uk/project/DAR27010</p> <p>Garber, P.A., Molina, A., & Molina, R.L. (2010). Putting the community back in community ecology and education: The role of field schools and private reserves in the ethical training of primatologists. <i>American Journal of Primatology</i>, 72(9), 785–793.</p>

Area	Community	Community involvement	Equity in management	Management effectiveness	Sources
9. Al-Hoceima National Park, Morocco	Local community	In 2008, local community members came together to establish the Integrated Resource Management Association (AI-Hoceima National Park (AHNP), financed by the Millennium Challenge, with the aim of protecting marine resources by strengthening the artisanal fishing community to monitor and combat illegal fishing in AHNP.	Of AHNP's 15,000 inhabitants, 2,000 participated in the planning of AHNP's 190 km ² Marine Protected Area, including the 20 km ² no-take zone.	Bordered on the north by the Mediterranean coast, Al-Hoceima protects some of the most unspoilt coast in Morocco, as well as high cliffs and a mountainous interior. Its marine waters are home to three species of dolphin; over a hundred species of fish; loggerhead, leatherback and green turtles and the rare giant ribbed Mediterranean limpet.	Stolton, S., Timmins, H. and Dudley, N. (2021). <i>Making Money Local: Can Protected Areas Deliver Both Economic Benefits and Conservation Objectives?</i> , Technical Series 97, Secretariat of the Convention on Biological Diversity, Montreal. https://www.cbd.int/doc/publications/cbd-ts-97-en.pdf https://www.unesco.org/en/articles/preserving-ecosystem-al-hoceima-national-park-marine-protected-area
10. Entlebuch Biosphere Reserve, Switzerland	Local community	The Entlebuch Biosphere Reserve (BRE) was established in 2001 through a highly participative approach led by local communities living in the area with the aim of conserving ecosystem services, promoting sustainable regional products, cultivating natural resources and developing ecotourism.	There are some 17,000 people living in the area. There was a highly participative approach in making the biosphere reserve proposal. Public meetings were held in the eight communities concerned, which approved the proposal with a vast majority. The inhabitants in Entlebuch aim at promoting regional products, cultivating natural resources (grass, wood, and landscape) and developing ecotourism. A project on monitoring the success of sustainable regional development is under way.	The Entlebuch Biosphere Reserve (BRE) in the Lucerne region is a mixed landscape of high peatlands, subalpine, riverine and alluvial forests, meadows and karst mountains with cave systems.	Stolton, S., Timmins, H. and Dudley, N. (2021). <i>Making Money Local: Can Protected Areas Deliver Both Economic Benefits and Conservation Objectives?</i> , Technical Series 97, Secretariat of the Convention on Biological Diversity, Montreal. https://www.cbd.int/doc/publications/cbd-ts-97-en.pdf Entlebuch - Man and the Biosphere Programme (MAB) (unesco.org)

Area	Community	Community involvement	Equity in management	Management effectiveness	Sources
11. Samut Kaoh Rung Marine National Park , Cambodia	Local communities	The park was developed through a “bottom-up approach”, in which input and concerns from relevant local, provincial and national stakeholders were taken into consideration at all levels of the consultation process.	Management is based around a Community Fisheries framework which promotes community patrols and legally recognised, community-level institutions are mandated to manage their marine resources. Since proclamation, a community-led approach to compliance and enforcement has driven the management strategy.	This first large-scale marine protected area was designated in 2016. Surveys in 2019 revealed signs of recovery in Koh Rong, such as increases in hard coral coverage and grouper and parrotfish biomass. Surveys have also demonstrated that seahorse populations are recovering and green turtle nests have been confirmed.	Church, G., Benbow, S., & Duffy, H. (2023). Putting communities at the heart of marine conservation. <i>Oryx</i> , 57(2), 137–138. https://doi.org/10.1017/S0030605323000145 Duffy, H., McNamara, A., Mulligan, B., et al. (2023). An assessment of marine turtle population status and conservation in Cambodia. <i>Oryx</i> , 57, 160–170. https://doi.org/10.1017/S0030605322000862 Assessing the influence of four years of Marine Protected Area status in the Koh Rong Marine National Park, PowerPoint Presentation (fauna-flora.org)
12. Kkpd Pulau Pinang, Siemat, Dan Simanaha (PiSiSi) , Indonesia	Local communities	The devastating tsunami led to a long-term decline in traditional practices. Conservation organisations have been working with local communities to re-establish the customary systems for fisheries management and the traditional approach to management of the community fishing grounds, known as lhoks.	The government has recognised the tenure of seven lhok areas within the PiSiSi MPA. Customary lhok protection has been integrated with MPA management. Two sites have agreed five-year plans for LMMA management focusing on institutional improvement, fisheries resource management and economic improvement, including a community-based monitoring surveillance, fisheries data collection, socialisation of customary rules and boundaries demarcation.	Community patrolling across PiSiSi has grown since 2015, with nearly 90% of the site now actively monitored. Surveys have indicated that reef fish were more abundant and diverse in well-managed lhoks.	Wilson, C., & Linkie, M. (2012). The Panglima Laot of Aceh: A case study in large-scale community-based marine management after the 2004 Indian Ocean tsunami. <i>Oryx</i> , 46(4), 495-500. Syakur, A., Wibowo, J.T., et al. (2012). Ensuring local stakeholder support for marine conservation: Establishing a locally-managed marine area network in Aceh. <i>Oryx</i> . 46(4):516-524. doi:10.1017/S0030605312000166 Novriyanto, W., Wibowo, J.T., et al. (2012). Linking coastal community livelihoods to marine conservation in Aceh, Indonesia. <i>Oryx</i> , 46(4):508-515. doi:10.1017/S0030605312000622 Campbell, S.J., Cinner, J.E., Ardiwijaya, R.L., et al. (2012). Avoiding conflicts and protecting coral reefs: customary management benefits marine habitats and fish biomass. <i>Oryx</i> . 46(4):486-494. doi:10.1017/S00306053120003483

Area	Community	Community involvement	Equity in management	Management effectiveness	Sources
13. Barras de Cuero y Salado, Cayos Cochinos and Islas de la Bahía (Bay Islands), Honduras	Local communities	A multi-stakeholder Seascape Forum (involving government, NGOs and small-scale fisher organisations), provides a hub for collaboration with a smaller, more agile Seascape Committee of MPA managers and policymakers who select and implement priority actions. The Committee has defined and is implementing collaborative regulations for the waters between the MPAs.	The establishment of a small-scale fisher-led roundtable in 2016 enabled fishers from two sites (Cayos Cochinos and Bay Islands MPAs) to determine their own seascape priorities. Fisher representatives from all 20 communities actively participate in the various seascape convening platforms, and communities are being encouraged and supported to engage in the updating of all three MPA management plans.	Threats have decreased substantially. Destructive fishing has been reduced, in Cayos Cochinos hawksbill turtle poaching has been reduced, in Cuero-Y-Salado manatee hunting has ceased, and hunting pressure on iguanas and hawksbill turtles is decreasing. Mangroves are also being protected and restored.	Fauna and Flora (2023). Fauna and Flora's Marine Programme. Available at: https://www.fauna-flora.org/wp-content/uploads/2024/10/fauna-flora-marine-programme-overview-2023.pdf
14. Pemba Channel Conservation Area, Tanzania	Local communities	Village-level associations (known as Shehia Fishers Committees) are being established along the south coast of Pemba Island to play an active role in the management of their marine resources.	Collaborative Management Group established in 2020 – known as ' <i>Stamishima</i> ' – acts as a fully functioning local enforcement network, focused on patrolling strategically and jointly to prevent illegal fishing.	Established in 2005 to protect its unique biodiversity and critical habitats, including inshore and deep-water coral communities, seagrass beds and sailfish, black marlin and tuna, lack of management capacity has meant this is effectively a 'paper park'. However NGO support to the Shehia Fishers Committees has provided early indications that reef species, such as parrotfish, are benefiting from the marine resource management being introduced.	Fauna and Flora (2023). Fauna and Flora's Marine Programme. Available at: https://www.fauna-flora.org/wp-content/uploads/2024/10/fauna-flora-marine-programme-overview-2023.pdf https://www.fauna-flora.org/projects/implementing-effective-marine-resource-co-management-pemba-channel-conservation-area/

Area	Community	Community involvement	Equity in management	Management effectiveness	Sources
15. Lower Tana Delta, Kiunga Marine Conservancy, Kenya	Local communities	In marine areas, three Locally Managed Marine Areas (LMMAs)/ fish replenishment zones have been established within Kiunga Marine National Reserve.	NGO support has built capacity in community conservancies and integrating governance and management mechanisms across different scales, empowering coastal communities to engage in biodiversity conservation and sustainable fisheries management.	Surveys have shown increased populations of fish species including endangered species such the Napoleon or humphead wrasse. There was a 286% increase in sea turtle nesting recorded in 2023 compared to 2022. Biodiversity surveys show fish density remains relatively stable in the reserve, with higher densities recorded within LMMAs.	Fauna and Flora (2023). Fauna and Flora's Marine Programme. Available at: https://www.fauna-flora.org/wp-content/uploads/2024/10/fauna-flora-marine-programme-overview-2023.pdf
16. Parque Natural Norte da Ilha do Maio, Cape Verde	Engaging eight coastal villages around the island	The Maio Biodiversity Foundation is empowering local communities to improve protection of nearshore waters and threatened species through several means, including the Guardians of the Sea—a group of local fishers who monitor and record infractions in their fishing grounds—and a beach patrol programme monitoring sea turtle nesting in coastal villages around Maio Island that is fully integrated into coastal communities.	Equity in management is unclear but benefits from conservation to local people include financial payments to families hosting international and local members of turtle conservation teams for their hospitality. Practical education and turtle-friendly income opportunities were key to the success of the Foundation's strategy.	In 2012 the island had the highest number of turtles killed and nests poached in the country. The work of the Maio Biodiversity Foundation has resulted in a 75% reduction in the poaching of nesting females, and has positioned Maio Island as a globally important refuge for the Vulnerable loggerhead sea turtle.	Church, G., Benbow, S., & Duffy, H. (2023). Putting communities at the heart of marine conservation. <i>Oryx</i> , 57(2), 137-138. https://doi.org/10.1017/S0030605323000145 Dutra, A., & Koenen, F. (2014). Community-based conservation: the key to protection of marine turtles on Maio Island, Cape Verde. <i>Oryx</i> , 48(3), 325-325. Patino-Martinez, J., Dos Passos, L., Amador, R., Teixidor, A., Cardoso, S., Marco, A., ... & Moreno, R. (2023). Strategic nest site selection in one of the world's largest loggerhead turtle nesting colonies, on Maio Island, Cabo Verde. <i>Oryx</i> , 57(2), 152-159.
17. Yopno Uruwa Som (YUS) Conservation Area, PNG	Local communities	The YUS Conservation Area started some 20 years ago, when local landholders and scientists from the Woodland Park Zoo in Seattle started to work together to conserve the	The YUS Conservation Area Management Committee represents a shared decision-making structure, combining the state gazettal of the area	The Conservation Area is owned by the local people who now receive support for management. Landholders have endorsed the landscape plan and zoning bylaws.	Nimwegen, P. van, Leverington, F.J, Jupiter, S. and Hockings, M. (eds.) (2022). <i>Conserving our sea of islands: State of protected and conserved areas in Oceania</i> . Gland, Switzerland: IUCN. https://www.zoo.org/tkcp/managingyus

Area	Community	Community involvement	Equity in management	Management effectiveness	Sources
		<p>area's biodiversity. This led to the creation of the Tree Kangaroo Conservation Program (TKCP), which is an umbrella partnership between the Zoo and TKCP-PNG, a local NGO.</p> <p>Over time landholders pledged their lands, which culminated in the establishment of YUS as the country's first nationally gazetted Conservation Area in 2009.</p>	combined with governance, ownership and interests of the customary landowners.	Nearly 70% of the YUS landscape is covered by a large unbroken tract of rainforest. In the 2016 nationwide assessment of protected area effectiveness, YUS received the highest score.	
18. Gunung Niut Nature Reserve (GNNR) , Indonesia	Indigenous community villages inside GNNR	Indigenous communities are allowed to harvest NTFP in certain community "take zones".	Yayasan Planet Indonesia, a local NGO, has moved towards a "community-led" approach. This is primarily through the Conservation Cooperative (CC) - a community-led organisation governing and managing surrounding natural resources.	Community members participate in SMART patrols to protect their natural resources - SMART showed a significant decrease in encounter rates of illegal hunting, logging and land-clearing inside GNNR (over 10-30 months). Satellite-monitored deforestation also reduced.	Novick, B., Crouch, J., Ahmad, A., Kartikawati, S. M., Sagita, N., & Miller, A. E. (2023). Understanding the interactions between human well-being and environmental outcomes through a community-led integrated landscape initiative in Indonesia. <i>Environmental Development</i> , 45, 100791. https://doi.org/10.1016/j.envdev.2022.100791
19. Paruku Indigenous Protected Area, Australia	Indigenous Peoples: Mulan Aboriginal and Billiluna Aboriginal Community	Paruku IPA Steering Committee, consisting of approximately 15 elders from Mulan and Billiluna communities. The Steering Committee is responsible for most of the IPA programme directions in partnership with Kimberley Land Council Land & Sea Management Unit staff.	The Paruku IPA Steering Committee ultimately reports to the Tjurabalan Native Title Lands Aboriginal Corporation, the title-holding body constituted after the awarding of native title determination.	Paruku is one of the last remaining strongholds of the endangered night parrot - Indigenous rangers are working to protect and restore its habitat.	https://www.iccaconsortium.org/wp-content/uploads/2015/08/db-australia-paruku-en.pdf https://www.countryneedspeople.org.au/indigenous_protected_areas_saving_species

Area	Community	Community involvement	Equity in management	Management effectiveness	Sources
20. Community Baboon Sanctuary (CBS), Belize	Private community landowners	The project involves the participation of seven villages. The area is owned by 200 private owners. Each landowner has signed a voluntary pledge to abide by a sanctuary generated land management plan.	CBS is managed by the Women's Conservation Group.. A new education centre was built in 2003. There are locally owned bed and breakfast and guide services, and a restaurant is run by the Women's Conservation Group.	In addition to the local protection of howler monkeys, the Community Baboon Sanctuary has spread the interest in howler protection country-wide. The CBS donated howlers for a reintroduction into the Cockscomb Basin of Belize and also has contributed howlers for a smaller release in the Cayo District of Belize.	https://www.iccaconsortium.org/wp-content/uploads/2015/08/db-belize-baboon-sanctuary-en.pdf https://communityconservation.org/community-baboon-sanctuary/
21. Nojkaaxmeen Elijo Panti National Park , Belize	Approximately 3,000 Indigenous, economically marginalised, Mayan Yucatec people	In 1998, worried by land being destroyed, the community asked the Minister of Agriculture to help them create an official park. The first action was to form a committee, headed by six local people and a board of governors; this gave birth to the Itzamna Society for the protection and Conservation of the Environment and Culture and Community Development.	The park is managed by the government of Belize to the community-elected board of governors: the Itzamna Society which stands for the protection and conservation of the environment, cultural patrimony and community development. The board has representation from three villages.	Although no wildlife assessment has been done, local people have reported sightings of many CITES-recognised endangered species in this area, including jaguars, tapirs, margays and howler monkeys.	https://www.iccaconsortium.org/wp-content/uploads/2015/08/db-belize-nojkaax-meen-elijio-panti-en.pdf https://www.epnp.org/ https://www.sgp.undp.org/spacial-itemid-projects-landing-page/spacial-itemid-project-search-results/spacial-itemid-project-detailpage.html?view=projectdetail&id=7141
22. Reserva de la Biosfera y Territorio Comunitario de Origen Pilon Lajas , Bolivia	1300 Indigenous people from the Asunción de Quiquibey, Gredal, Bisal, Corte, San Bernardo, San Luis Chico and San Luis Grande	Joint-management is between the Tsimane-Moseten Regional Council, representing the Indigenous communities, and the Director of the Biosphere Reserve, but land and resources are owned by the Indigenous communities. Communities participate in operational aspects, and decision-making.	The area's objectives are: conservation of natural and cultural components and sustainable livelihoods through NTFPs and community-based tourism.	Concern regarding cultural-economic influences of migrant groups on Indigenous people and resulting unsustainable agricultural practices of some Indigenous Peoples within the BR boundaries and in the buffer zones.	https://www.iccaconsortium.org/wp-content/uploads/2015/08/db-bolivia-pilon-lajas-en.pdf https://www.territorioindigenaygobernanza.com/web/reserva-y-tioc-pilon-lajas/ Bottazzi, P. (2008). <i>Linking "socio" and "bio" diversity: The stakes of indigenous and non-indigenous co-management in the Bolivian lowlands</i> (pp. 81-109). Swiss National Centre of Competence in Research (NCCR) North-South.

Area	Community	Community involvement	Equity in management	Management effectiveness	Sources
23. Forest Reserve Todos Santos Cuchumatán , Guatemala	23 communities inside and around the reserve, with over 15,000 Maya Mam Indigenous people inhabitants	The mayor and council are responsible for managing the use and management of natural resources. But communities each appoint an auxiliary mayor and have traditional rangers to protect the forests. Most communities have created natural resources commissions managing natural resource use in the protected area.	There are some significant economic issues in the settlements around Todos Santos Cuchumatán - many people have left their communities for economic betterment in the USA.	There is very little deforestation in the reserve as compared to similar protected areas.	https://www.iccaconsortium.org/wp-content/uploads/2015/08/db-guatemala-en.pdf https://www.aljazeera.com/features/2019/7/25/why-has-guatemalas-highlands-embraced-the-american-flag https://pure.iiasa.ac.at/id/eprint/17514/1/Preprint2.pdf
25. Qeshm Island (northern Persian Gulf), Iran	Traditional fishermen of Qeshm Island - Indigenous Qeshmi	The local community has a long history in marine activities and collaborates with the government on management to protect the Island environment. After increased development on, local people showed resilience to detrimental change, increasing their efforts to keep their traditions alive, conserve the environment, and build the economy in a way that fits with local values.	Elders and community leaders (i.e. the skilled fishermen) take management decisions for the CCA and have oral rules and regulations about when and how to conduct fishing. But the government is in control of the area legally.	25 km of the south coast has been declared a turtle breeding and hatchery area. During the nesting and hatchery season, local people educate the public, patrol beaches, tag turtles, collect eggs, transfer eggs to special safe sites and guard the eggs.	https://www.iccaconsortium.org/wp-content/uploads/2015/08/db-iran-qeshm-island-en.pdf https://sdgs.un.org/partnerships/qeshm-island-environmental-management-office https://www.communityconservation.net/qeshm-island-southern-iran/
26. Kalama Conservancy , Kenya	Part of the larger Girgir Group Ranch, collectively owned by mostly ethnic Samburu but also include Boran and Rendille people -	Governed through a group ranch committee for wildlife, tourism and sustainable grazing under private/group ranch tenure.	2017 GAPA revealed strengths include respecting community members as key actors and the involvement of some community members in decision making. Some discontentedness with conservation management was observed from local communities.	The conservancy is a stronghold for the endangered Grevy's zebra. Kalama Conservancy serves as a vital wildlife corridor, enabling the free movement of large herds of elephants and other wildlife migrating between Samburu and Marsabit.	https://www.iccaconsortium.org/wp-content/uploads/2015/08/db-kenya-kalama-conservancy-en.pdf https://kalamaconservancy.org/ GAPA conducted: https://www.iied.org/sites/default/files/pdfs/migrate/17632IIED.pdf https://globalejournal.org/global-e/october-2020/whos-whos-out-challenges-conservation-partnerships-sub-saharan-africa

Area	Community	Community involvement	Equity in management	Management effectiveness	Sources
27. Lekurruki Conservancy , Kenya	Mukogodo Maasai (3,700 people) a mixture of transhumant and agro-pastoral	Governed through a group ranch committee for wildlife, tourism and sustainable grazing under private/group ranch tenure.	The Conservancy has an elected Board of 12 members representing 3 zones within the Lekurruki group ranch. The Board now has at least one Moran (young Masaai warrior), elder, and woman representative from each of the three areas in Lekurruki. This is a new approach to the structure of the board with a mind to ensure equal representation and strengthening governance.	Elephant and Grevy's zebra observations are increasing.	https://www.iccaconsortium.org/wp-content/uploads/2015/08/db-kenya-lekurruki-conservancy-en.pdf https://www.sanddamsworldwide.org.uk/news/lekurruki-conservancy-trusts-new-board-bring-strength-and-equal-representation https://www.sanddamsworldwide.org.uk/news/lekurruki-conservancy-trusts-new-board-bring-strength-and-equal-representation https://www.fondationensemble.org/en/projet/protoger-les-elephants-avec-des-retenues-de-sable/
28. Melako Conservancy , Kenya	Laisamis community (6,000 people) - a mixture of transhumant and agro-pastoral management. It undertakes transhumant grazing within a defined group ranch area	Community rangers are on daily patrol. The Melako Conservancy community have close partnership with Marsabit County Government, NRT, KWS and other NGOs to implement conservation work.	Previously Trust Land but now Community Land under the new Land Act 2012. Members of the environment, water, grazing and peace committees are drawn from the Loip Lapayian (elder's forum, women and morans are not members, this sits during the day) and Naapo (which sit at night). These institutions were voluntary and have been weakened over time by external development partners introducing a culture of 'allowances'.	Grevy's zebras, elephants, beisa oryx, giraffes, lions, gerenuk are common, as are a variety of bird species including sand grouse which gather in their thousands at water points in the dry season and are a unique attraction for the conservancy.	https://www.iccaconsortium.org/wp-content/uploads/2015/08/db-kenya-melako-conservancy-en.pdf https://static1.squarespace.com/static/5af1629f12b13f5ce97ca0b5/t/5b63dd53f950b73239ecf2a7/1533271387053/CMP_MELAKO_LowRes_SinglePages.pdf

Area	Community	Community involvement	Equity in management	Management effectiveness	Sources
29. Il Ngwesi Conservancy , Kenya	Mukogodo Maasai (6000 people)	<p>The area is a mixture of transhumant grazing within a defined group ranch area and agro-pastoral management.</p> <p>Profits from the lodge, donations from well-wishers and partnerships with local and international NGOs all support a range of community projects while at the same time ensure that the environment is managed sustainably. The model helps to foster communities that value wildlife and see purpose in acting as custodians of the land.</p>	Governed by Group ranch committee, group ranch membership and Il Ngwesi Trust for Tourism & wildlife conservation; some livestock.	<p>Since the conservancy was set up, wildlife numbers have steadily increased. More elephants were evident almost immediately, and within five years numbers had grown significantly, having found a safe place to rest and feed.</p>	<p>https://www.iccaconsortium.org/wp-content/uploads/2015/08/db-kenya-ngwesi-conservancy-en.pdf</p> <p>https://ilngwesi.com/content/visit/2016/04/04/the-il-ngwesi-story/</p>
30. Namunyak Conservancy , Kenya	Samburu (8000 people in group ranch membership) - a mixture of transhumant and agro-pastoral management. Namunyak is Kenya's largest community conservancy.	Governed by Trust board of directors. Namunyak is also one of central Kenya's leading community-based ecotourism initiatives catalysing the continuing establishment of these community conservancies in Samburu/Laikipia over the past decade.	The democratically elected Board of Trustees represent different units (areas) of the 850,000-acre conservancy.	<p>Namunyak serves as a critical wildlife refuge for many species and holds important northern populations of reticulated giraffe, gerenuk, leopard, African wild dog, impala, lion, greater kudu and many bird species.</p> <p>The conservancy is particularly important for elephant as they move seasonally between the Mathews Range and the Mt. Kenya and Ngare Ndare Forest, a route they have been using for decades.</p>	<p>https://www.iccaconsortium.org/wp-content/uploads/2015/08/db-kenya-namunyak-conservancy-en.pdf</p> <p>https://sarara.co/namunayk-conservancy</p>

Area	Community	Community involvement	Equity in management	Management effectiveness	Sources
31. Shompole Community Trust , Kenya	Shompole community	The Shompole Community Trust is a legally recognised corporation owned by the Maasai people and responsible for the management of the Group Ranch. The Trust has a board of directors comprising mostly local Maasai community leaders elected from sub-locations within the Group Ranch, and a few outside experts (e.g. director of ACC).	<p>The Group Ranch, under the management of Shompole Community Trust, coordinates the management and use of natural resources within its boundaries for its predominantly pastoralist members.</p> <p>The community has set aside 10,000 hectares for strict conservation, and in partnership with a private investor manages a luxury eco-lodge.</p>	The Conservancy has protected Shompole Group Ranch's wide range of wildlife species and in some cases regenerated population numbers.	<p>https://www.iccaconsortium.org/wp-content/uploads/2015/08/db-kenya-shompole-community-trust-en.pdf</p> <p>United Nations Development Programme. (2012). <i>Shompole Community Trust, Kenya</i>. Equator Initiative Case Study Series. New York, NY</p>
32. Terrenos dedicados a la Conservación del Ejido Luis Echeverría , Mexico	The Ejido Luis Echeverría community - 800ha of community conserved land	The <i>ejido assembly</i> represents the local community. Since 2005, members of the Alliance have worked together to ensure the protection of the lagoon.	<p>The Alliance established a Conservation Trust Fund to provide annual payments to the ejido to fund sustainable community development projects.</p> <p>The Alliance then negotiated a conservation easement—a lease in exchange for conservation—on 32 private parcels in the Luis Echeverría Álvarez ejido, encompassing another 8,400 ha.</p>	The Alliance has established protection measures on almost 137,000 hectares (ha) and about 241 kilometres (km) of shoreline. Permanent conservation of 57,000 ha has been secured on ejido and private properties on the east side of the lagoon.	<p>https://www.iccaconsortium.org/wp-content/uploads/2015/08/db-mexico-s-en.pdf</p> <p>https://www.nrdc.org/es/bio/james-blair/conservacion-comunidad-laguna-san-ignacio</p>

Area	Community	Community involvement	Equity in management	Management effectiveness	Sources
33. Frieze Hill Community Orchard , UK	Frieze Hill Community Orchard Group: unincorporated.	Owned by the Borough Council (a form of local government). Community group decided to accept an annual lease as the land tenure agreement. As of this writing the lease has been renewed each year since the community group became involved.	The Frieze Hill Community Orchard Group makes all decisions concerning the orchard. The core group consists of nine individuals; however, all decisions are made at group meetings and all members of the community are invited to join. Decisions are made by a show of hands and decided by simple majority.	The community group has turned the 1.39 ha field into a community orchard. There are approximately 100 trees that have been planted since 2004, with the objectives of being both a community space as well as an area that is beneficial to wildlife. Orchards in the UK have been identified as hotspots for biodiversity in the countryside by English Nature and are important habitats for invertebrates and rare plant life including lichens, fungi, and other plant groups.	https://www.iccaconsortium.org/wp-content/uploads/2015/08/db-uk-frieze-hill-community-orchard-en.pdf
34. Khu bao ton thien nhien dat ngap nuoc Van Long , Vietnam	Seven communes: Gia Hung, Lien Son, Gia Hoa, Gia Van, Gia Lap, Gian Tan and Gia Thanh; with about 46,700 people, all of whom can legally use and benefit from the Reserve.	A group of individuals, families, other 'communities' maintain usufruct rights and are directly concerned with the Reserve. There are two decision-making structures. Conservation is managed by Van Long Wetland Nature Reserve's management board. This represents all the surrounding local communities to uphold official law and locally applicable institutions and regulations, through the Commune administrative system. The other sector is tourism management. This is under the management of the Provincial Tourism Department.	As per Vietnam, all land belongs to the State. Households are allocated plots (household, agricultural) on 99-year leases which can be traded. Van Long is a mosaic of public commons, State land (the reserve and wetland), and private freehold land.	Van Long is home to the world's largest population of the critically endangered Delacour's langur (<i>Trachypithecus delacouri</i>). Recent counts confirmed c. 150-160 individuals of this langur, a significant increase since the time of the Nature Reserve establishment in 2001, at which point there were 60-67 individuals. PANORAMA features Van Long as an example of highly successful species conservation.	https://www.iccaconsortium.org/wp-content/uploads/2015/08/db-vietnam-van-long-en.pdf https://panorama.solutions/en/solution/conservation-delacours-langur-van-long-wetland-nature-reserve-vietnam

Area	Community	Community involvement	Equity in management	Management effectiveness	Sources
35. Lamlash Bay and South Arran MPA , Scotland	The Community of Arran Seabed Trust (COAST)	COAST campaigned for 13 years to establish the MPA. It became the first community-led MPA in Scotland.	Marine Scotland Compliance (MSC) is responsible for enforcing this legislation but COAST have developed a guide for spotting and reporting illegal commercial activities in the MPA.	During the past 10 years researchers have found that the size, fertility and abundance of commercial species such as lobsters and scallops is significantly better within the No Take Zone. Seabed biodiversity is increasing by 50% and anecdotal observations from divers, fishermen and anglers indicate that the seabed and fish are recovering.	https://www.arrancoast.com/no-take-zone/

Authors

Equilibrium Research is a small, specialist consultancy and research group, working with mainly non-governmental organisations, UN bodies and governments. We specialise on both field-based and policy research in the fields of designation and management of protected and conserved areas, landscape approaches to conservation and ecosystem services. Much of our work attempts to integrate social and ecological concerns within conservation approaches.

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