

VERSION 2.0

THE VOICE, CHOICE, AND ACTION FRAMEWORK

A Conservation
Practitioner's
Guide to Indigenous
and Community-Led
Conservation



Acknowledgements

“**The Voice, Choice, and Action (VCA) Framework: A Conservation Practitioner’s Guide to Indigenous and Community-led Conservation, Version 2.0**” builds on the core foundation of Version 1.0 (2017). It was developed in respect and support of Indigenous Peoples and local communities around the world. The authors and The Nature Conservancy (TNC) acknowledge the traditional owners, custodians, and stewards of the lands and waters that this VCA Framework intends to support, and those whose traditional territories the geographically dispersed authors have encompassed while writing this report.

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To access an interactive web version of the VCA Framework, visit www.tncvoicechoiceaction.org

Gratitude to and Acknowledgement of the First Stewards

The Nature Conservancy (TNC) is a conservation organization committed to creating a future in which nature and people thrive, and achieving our mission must encompass inclusion, collaboration, and supporting the original and current stewards of Earth's natural systems. We recognize that as an organization that owns and manages land, the systems and regulations of private property, protection, and lands and waters management that have been core to our work came at a dire cost to Indigenous Peoples. With these words, we acknowledge the traditional stewards, past, present, and emerging, and recognize our institutional history, responsibility, and commitment. We are committed to gaining deeper awareness of the history and enduring impacts of colonialism—including our own contributions to this history as an organization—and resulting responsibilities, including building partnerships based on respect, equity, open dialogue, integrity, and mutual accountability.



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Partner-Centered Principles

TNC's work with Indigenous Peoples and local communities is based on building relationships, honoring self-determination, establishing trust, and focusing on shared interests. TNC's partner-centered principles include:

- **Indigenous and community-led:** We seek to understand what a community wants our role to be. Together with communities, we co-create plans that align with the communities' priorities and TNC's experience and mission.
- **Diverse and inclusive:** We recognize and respect the diversity of Indigenous Peoples and local communities, and the diversity that exists within communities. We aim to center gender equity and inter-generational leadership in our work.
- **Grounded in reciprocity:** Our partnerships with Indigenous Peoples and local communities are opportunities for mutual learning, sharing, and benefit between the communities and TNC. We strive for transformational—not transactional—partnerships in the spirit of reciprocity.
- **Based on communication and accountability:** We listen deeply and open clear lines of communication. We commit to fulfilling agreed-upon roles and responsibilities, and to holding ourselves accountable for long-term partnerships and commitments.
- **Flexible, adaptive, and patient:** We strive to be flexible to the needs, realities, and competing priorities within communities. We recognize the interconnectedness of all things. And we learn from past mistakes.

We commit to and invite all other conservation organizations and practitioners to respect and uphold human rights standards including the [UN Declaration on the Rights of Indigenous Peoples](#) and other relevant conventions, apply and monitor social and environmental safeguards, and appropriately support the governance, knowledge systems, and self-determined sustainable visions of current and future generations of Indigenous Peoples and local communities.

We commit to uphold and fully respect the distinct and differentiated [rights of Indigenous Peoples and local communities](#) and collaborate along shared principles and best practices to support, to the best of our abilities, the self-empowerment of Indigenous Peoples and local communities and their leadership and guidance in the inclusive and effective conservation of biodiversity, sustainable development, and mitigation of climate change.

What's New in Version Two?

"Strong Voices, Active Choices: TNC's Practitioner Framework to Strengthen Outcomes for People and Nature, Version 1.0" was originally co-developed and released in 2017 by a diverse group of TNC staff spanning geographies and roles, and in consideration of program experience, subject matter expertise, and scientific literature. Over the past 5 years, the framework has gained traction and been applied within the organization as our common approach to partnering with Indigenous Peoples and local communities on shared environmental and human well-being goals. The feedback has been positive, with an increase in application and usage. Since its initial writing there have been new internally and externally developed studies and analyses. These efforts, along with social and environmental changes globally, have furthered our understanding and approaches in this area. Now is the right time for a "refresh" of the framework. Readers will find much of the content from the original conservation practitioners' document has been retained, with some adjustments and additions. These include:

- Indigenous Peoples and local community members' review and input on framework theory and narrative, ensuring relevance of tools for advancing Indigenous and local community aspirations and visions,
- Bringing forward a holistic view of natural systems by broadening the scope of the framework and associated content, language, examples, and evidence to be inclusive of and applicable to freshwater and coastal ecosystems, in addition to terrestrial ecosystems,
- Addition of new evidence and citations, and well as tools and resources from internal and external studies and sources,
- Update and refinement of the "Tools and Resources" sections to include fewer, more actionable tools, that are of greatest use to conservation practitioners implementing the framework,
- Clearer connection between the framework and the associated common measures and TNC's organizational metrics, and
- The formal addition of three crosscutting foundational elements that touch down in each pillar of the framework as critical enabling conditions for success:
 - Equitable Benefits, Impacts, and Inclusion,
 - Strong Connection to Knowledge and Place, and
 - Durable Outcomes for People and Nature.

As conservation practitioners and organizations working to implement and build upon these shared concepts, now commonly known as "**The Voice, Choice, and Action Framework: A Conservation Practitioner's Guide to Indigenous and Community-Led Conservation, Version 2.0**"—or VCA Framework for short—we hope you find these updates useful and that they help you advance meaningful and durable conservation work. As we collectively grow, evolve, and nurture our rights-based approaches to community-led conservation, we strive to support and strengthen the voice, choice, and action of Indigenous Peoples and local communities.



An Introduction to the Voice, Choice, and Action (VCA) Framework

Indigenous Peoples and Local Communities

The VCA Framework is most applicable to people who:

- are connected to the lands, waters, and natural resources of their area or place including through strong familial ties, shared culture (e.g., language, religion, traditions, spirituality, Tribe), and shared practice (e.g., farming, fishing, livestock keeping),
- have an inter-dependence on these systems for economic, familial, cultural, religious, and/or health and nutritional needs,
- have an interest in influencing the future health of living resources in the area,
- have historical or traditional precedents for self-governance in the area, and
- who have some level of communal or common property management over the area's natural resources.

The people described above may lack economic opportunities, alternatives, or employment, may face significant external development pressures, may be experiencing tangible impacts from climate change that are affecting their ability to manage, steward, and use their natural resources, and may include the original inhabitants of a place and/or people who have more recently settled in a place and have a close relationship with the area's lands, waters, and natural resources. Indigenous Peoples and Indigenous communities are communities whose members include the original inhabitants of a place and thus consider themselves distinct from other sectors of the societies who also inhabit the territories which the Indigenous Peoples originally occupied prior to colonization.¹

Core attributes of Indigenous Peoples:

Indigenous communities, Peoples, and Nations are those which, having a historical continuity with pre-invasion and pre-colonial societies that developed on their territories, consider themselves distinct from other sectors of the societies now prevailing on those territories, or parts of them. They form at present non-dominant sectors of society and are determined to preserve, develop, and transmit to future generations their ancestral territories and their ethnic identity as the basis of their continued existence as peoples, in accordance with their own cultural patterns, social institutions, and legal system (Martinez Cobo 1982). Additionally, we recognize and reaffirm that Indigenous individuals are entitled without discrimination to all human rights recognized in international law, and that Indigenous Peoples possess collective rights which are indispensable for their existence, well-being, and integral development as peoples.²

Distinctions of Local Communities:

Local communities often have a similar connection to and dependence on lands, waters, and resources for their culture and livelihoods, as well as systems of communal or common pool governance of natural resources. However, members of local communities have not collectively self-identified as Indigenous Peoples. As such, collective rights under international law available for Indigenous Peoples' Nations may not be applicable or available to local communities. Regardless, we maintain our commitment to upholding the human rights of all local communities with whom we partner.

Indigenous Peoples (IPs) and local communities (LCs) are frequently referred to collectively as "IPLCs" in international conventions (e.g., Convention on Biological Diversity, United Nations Framework Convention on Climate Change). We recognize the distinction between "IPs" and "LCs," with IPs holding collective rights as enshrined in the United Nations Declaration on the Rights of Indigenous Peoples.³ Throughout this document, we have refrained from using the acronym "IPLC" out of respect for this distinction between Indigenous Peoples and local communities, and instead spell out the full name with appropriate capitalization of "Indigenous Peoples" to recognize the diverse, sovereign communities who were living in specific regions when Europeans first attempted to name, categorize, and colonize them.

Indigenous Peoples and local communities are vital leaders in the pursuit of lasting solutions to the world's most pressing environmental and human well-being challenges. They manage or have tenure rights over more than 25 percent of the world's land⁴ and more than double that is claimed but not yet legally recognized,⁵ including interconnected systems of forests, grasslands, wetlands, rivers, lakes, the underlying groundwater, and coasts. With their territories harboring more than 24 percent of the world's tropical forest carbon,⁶ and much of global biodiversity,⁷ and with nine out of 10 of the 32 million fishers worldwide being small-scale or artisanal fishers,⁸ Indigenous Peoples and local communities are among our most important partners, and have proven to be the most effective stewards of nature in the world—achieving greater conservation results and sustaining more biodiversity than government protected areas.⁹⁻¹⁰

Indigenous Peoples and local communities face challenges in achieving healthy and thriving communities and environments due to legacies and continued acts of colonialism, persistent inequities, and increasing consolidation of economic power. Expanding beyond this paradigm, when Indigenous Peoples and local communities' authority and capacity⁹ to steward their lands, waters, and resources is strengthened, when livelihood opportunities exist that are aligned with their values, and when these opportunities and benefits are distributed equitably, then durable and lasting solutions for people and nature will result. As such, we work in partnership to support natural resource management and stewardship that is defined, led, and implemented by Indigenous Peoples and local communities; grounded in community values, knowledge, and perspectives; and focused on the interconnected issues of supporting vibrant communities, strong cultures, viable local economies, and healthy ecosystems.

a. For the purposes of the VCA Framework, authority is defined as the perception of natural resource users and rightsholders that a governance group genuinely represents their interests and has legal or customary jurisdiction to govern "their" natural resources¹¹. Capacity is a multi-faceted concept generally conceptualized as "having the ability to act," and various types of capital including human, social, institutional, natural, and economic must be leveraged to do so.¹²⁻¹³

The People/Nature Connection

The VCA Framework is grounded in the understanding that the health of the natural world and the well-being of people are inextricably connected. This goes beyond the concept of ecosystems services (i.e., the provisioning, regulating, and supporting functions that the environment provides for people) to an integrated holistic view that incorporates the various relationships and feedback loops in the social-ecological system^b (Figure 1).

In the diagram below, the **blue pathway** represents one in which environmental conservation strategies lead to changes in ecosystem integrity—and subsequently ecosystem services—which then impact human well-being. This is the pathway most frequently recognized and referenced among conservation organizations. Another pathway, which is equally important in community-led conservation, is represented by the **orange pathway**—programs engage in socially oriented conservation strategies (e.g., capacity building, sustainable livelihoods, etc.) which lead to social change, which impact both human well-being and ecological integrity directly. At the same time, peoples' well-being impacts their ability, capacity, and willingness to engage in stewardship actions, as depicted by the **green pathway**. Finally, in places where there is a deep connection to lands, waters, and resources, peoples' perception of the health of those places may directly impact their health and identity (**red pathway**).

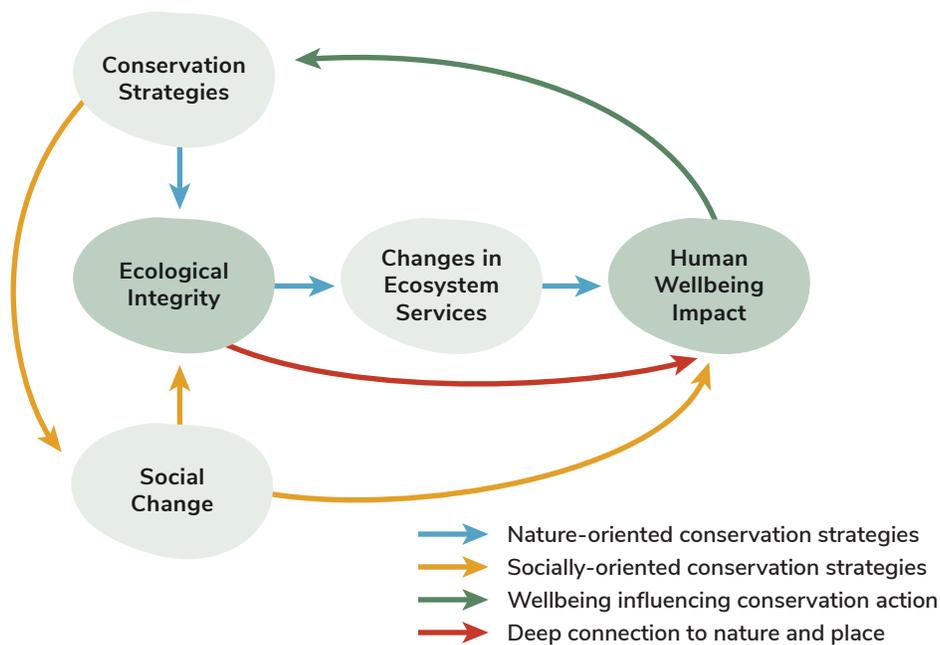
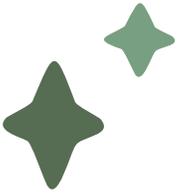


Figure 1: Diagram of the people/nature connection¹⁴

b. Social-ecological system refers to the integrated concept of humans-in-nature, and emphasizes the linkage between the natural environment and social systems dealing with property rights, resource tenure systems, systems of knowledge pertinent to environment and resources, and world views and ethics concerning environment and resources.¹⁵



Narrative Theory of Change

Our common approach to supporting Indigenous and local community authority and capacity in natural resource management and decision making is the VCA Framework. The VCA Framework is intended for situations where human well-being and environmental outcomes are linked and interdependent, where the leadership of Indigenous Peoples and local communities is essential to achieving shared goals, where power imbalances may hinder achieving positive results for people and nature, and where projects may significantly impact local communities.

Equitable and lasting positive results for people and nature generally requires the presence of the VCA Framework's interdependent and mutually reinforcing four pillars and three foundational elements (Figure 2). The four pillars of the framework (rights, capacity, decision making, and livelihoods) represent the characteristics necessary for successful community-led conservation. In fact, a recent systematic review and analysis suggests that as more of these four pillars are present, a higher probability of successful joint environmental and socio-economic outcomes emerges.¹⁶ The three foundational elements (equity, knowledge and place, and durability) represent enabling conditions critical for enduring community-led conservation.

Due to the interdependent nature of the VCA Framework, we do not imply an order to the pillars and foundational elements. All aspects are needed for lasting positive outcomes for people and nature, and multiple aspects are often implemented simultaneously. Further, context (e.g., existing community capacities, jurisdictional policy and institutions, ecosystem type, drivers of change, history, etc.), informed by a thorough situation analysis, will dictate which aspect(s) to prioritize in a program's strategy.

Visual Representation Symbolism

The artwork resembles a **turtle**, which is a creature that thrives in all major biomes. The turtle is also a prominent part of the creation stories among many Indigenous Peoples. The canvas resembles a **hand drum**, which symbolizes the heartbeat of the universe. In many Indigenous cultures, the hand drum is a sacred tool that connects heaven and earth, while also maintaining the rhythm of the world order.

The four (4) pillars are integrated in the form of the turtle's feet. The **bear's** footprint is a symbol of protection, while the Northern Lights surrounding it are symbolic of the everlasting connections with our ancestors. The **eagle** is widely recognized as a symbol of leadership. The **fire** is a symbol of a gathering place and is surrounded by dancing flames which are symbolic of people interacting in unison with one another. Finally, the **sun** is a symbol of life eternal, and the rays of light emanating from it represent joy, energy, and vitality.

The foundational elements are integrated in the form of representative images in three (3) distinct regions on the turtle's back. These regions are separated by symbols of water that are connected in the middle by a **sacred hoop**. The sacred hoop, sometimes referred to as a medicine wheel, is a reminder that everything is related, and all things are in a continuous process of growth and progression.

The turtle's head is constructed using flowing water elements, representing life's journey. By its very nature, the head represents wisdom, while the heart below it shows connectivity to the heart & soul.

Visual Representation of the VCA Framework

“ALL pillars and foundational elements are interconnected and interdependent, and needed for lasting positive results for people and nature”

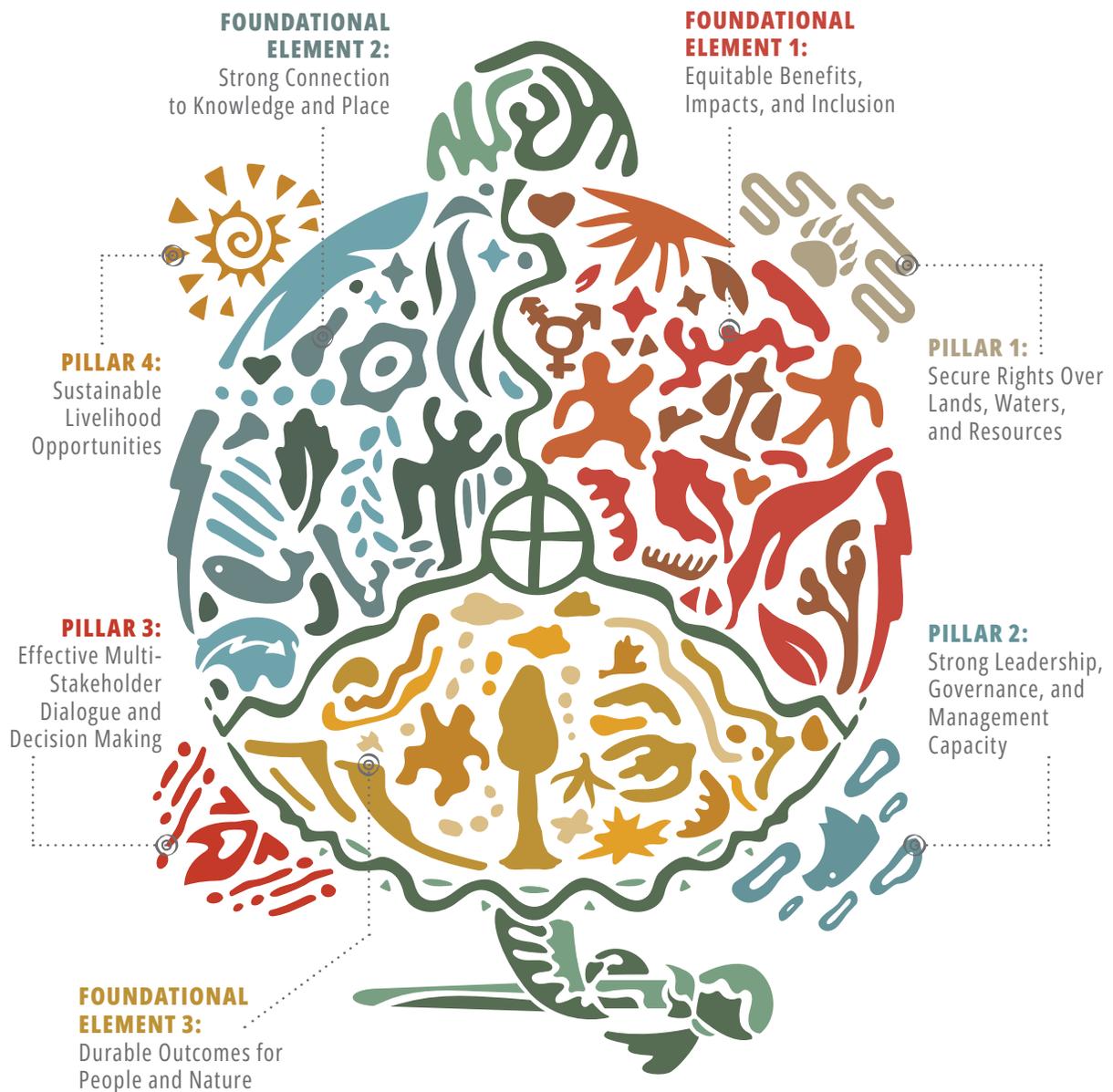


Figure 2: Visual representation of the VCA Framework

Pillars of the VCA Framework



PILLAR 1

➤ Secure Rights Over Lands, Waters, and Resources

Refers to both the actual legal status as well as the perception by Indigenous Peoples and local communities that their rights over lands, waters, and resources will be upheld by other members of society, including external communities, corporate entities, and the government. It is dependent on the type (e.g., ownership, management, withdrawal, use, or access) and form (e.g., communal, public, or private) of rights that are held, and the acknowledgement and enforcement of those rights by customary and formal institutions. When Indigenous Peoples and local communities have rights over lands, waters, and resources that are recognized and enforced by society and the government, they are better able to assert their interests in how these resources are used and managed. In turn, this can result in stronger community security and engagement in natural resource management and sustainable natural resource use, especially in situations where the community has a strong stewardship ethic, robust governance structures, accountable leadership, and economic opportunities that are closely linked to environmental stewardship and sustainable management of resources.



PILLAR 2

➤ Strong Leadership, Governance, and Management Capacity

Refers to the multiple capacities of Indigenous Peoples and local communities to lead decision making about lands, waters, and resources; maintain clear and equitable rules and processes for management of natural resources; and the skills, knowledge, and technology to engage in forums, administrate business and finances, and manage natural systems. When Indigenous Peoples and local communities have individuals, leaders, and institutions with strong capacities, they are better able to achieve the collective action, community cohesion, and effective governance needed for sustainable natural resource management; respond to external threats to lands, waters, and resources; pursue, exercise, and defend their rights; develop sustainable livelihood opportunities; and participate in decision making that impacts the lands, waters, and resources on which they depend.



PILLAR 3

➤ **Effective Multi-Stakeholder Dialogue and Decision Making**

Refers to the ability of Indigenous Peoples and local communities to organize or attend, voice thoughts and knowledge, and see uptake of their ideas and desires in forums that bring together multiple actors with an interest in lands, waters, or resources. These forums can occur at the local, regional, national, or international scale, can overlap in mandate or authority, and can have the goals of knowledge exchange, conflict resolution, and/or decision making. When Indigenous Peoples and local communities effectively and meaningfully engage in multi-stakeholder dialogue and decision making, and lasting structures are established to maintain that engagement, natural resource management decisions better reflect diverse perspectives on sustainability, incorporate unique insights on management and resilience, and benefit from a sophisticated understanding of the interconnectedness of people and nature. Additionally, Indigenous and local community rightsholders benefit from increased voice and visibility, a stronger negotiating position to advance their vision for economic prosperity, and a leveling of power dynamics.



PILLAR 4

➤ **Sustainable Livelihood Opportunities**

Refers to the ability of Indigenous Peoples and local communities to pursue culturally aligned livelihood opportunities (e.g., adding value or stability to existing livelihoods, adopting new livelihoods or businesses bolstered by access to loans, credit, and other financing, or obtaining employment or compensation for good stewardship) that are in accordance with their vision for the future and enable them to thrive in place. When Indigenous Peoples and local communities have livelihood opportunities that are environmentally sustainable and culturally aligned, they are better able to assert their environmental and economic interests while maintaining a stronger negotiating position against unsustainable development options that degrade the environment and are poorly matched to their cultural values.

Foundational Elements of the VCA Framework



FOUNDATIONAL
ELEMENT 1

Equitable Benefits, Impacts, and Inclusion

Refers to the ability of Indigenous Peoples and local communities, and the intersecting social identities that comprise the community, to benefit equitably from partnerships, maximize positive impacts and minimize negative impacts (particularly to vulnerable or underrepresented social identities), and achieve equitable participation in decision making, training, and economic opportunities. When Indigenous Peoples and local communities, and the various intersecting identities that make up communities, can participate and benefit equitably from conservation initiatives, stewardship activities are strengthened by the unique perspectives and knowledges of different community members and the longevity of community decisions and actions is increased, leading to better outcomes for both people and nature.



FOUNDATIONAL
ELEMENT 2

Strong Connection to Knowledge and Place

Refers to the continued existence, use, and transmission of Indigenous Peoples' and local communities' place-based knowledge, language, culture, stories, and traditional practices that are critical to their well-being, and are the foundation for the success of their natural resource governance, management, and livelihoods. When Indigenous Peoples and local communities can maintain, revive, strengthen, use, and transfer their knowledge—which is often rooted in time, culture, and place—they are better able to center natural resource management decisions on principles of reciprocity, and ensure future generations can benefit from traditional ways of knowing and being.



FOUNDATIONAL
ELEMENT 3

➤ **Durable Outcomes for People and Nature**

Refers to the external enabling conditions that influence the long-term success of community-led stewardship, including the existence of conservation finance to fund long-term operating and management costs; a favorable local, regional, national, and international policy environment; and the diffusion of innovation through networks and scaling without compromising values. When Indigenous Peoples and local communities have access to finance that covers the full cost of stewardship activities; favorable government institutions that elevate their collective rights and participation in policy-making; and the ability to achieve the needed scale of impact through expansion, replication, and diffusion of successful models of community-led conservation, their efforts to thrive in place are more likely to achieve long-term social, economic, and environmental sustainability.

Monitoring and Evaluation of VCA Framework Implementation

See [“Tool 1: VCA Framework Measures Guidance Document”](#) for guidance on monitoring implementation of the VCA Framework

We developed a monitoring, evaluation, and learning (MEL) approach for use by programs implementing the VCA Framework, which includes common measures. These measures facilitate our ability to speak about outcomes across programs and geographies from a place of evidence, build the evidence base for socially oriented conservation strategies, foster shared learning, and enable adaptive management. The approach aims to strike a balance between consistency and flexibility—with 10 common outcome-level measures and the ability to choose from a menu of context-specific indicators to inform them. Five of the 10 common measures align directly with TNC’s organizational metrics (indicated by an asterisk in Table 1), and therefore offer an opportunity to increase the efficiency and impact of monitoring efforts. Table 1 depicts the common VCA Measures along with the associated VCA pillar or foundational element.

Table 1: VCA Common Measures.

VCA Framework Pillar or Foundational Element	VCA Common Measure
Secure Rights Over Lands, Waters, and Resources	*1) Number of people with increased security of rights over traditional lands, waters, or resources
Strong Leadership, Governance, and Management Capacity	2) Number of people with increased governance capacity
	3) Number of people with increased natural resource management capacity
Effective Multi-Stakeholder Dialogue and Decision Making	*4) Number of people with increased ability to meaningfully participate in decision making about traditional lands, waters, or resources
Sustainable Livelihood Opportunities	*5) Number of people with increased sustainable, place-based economic opportunity
Equitable Benefits, Impacts, and Inclusion	Equity considerations suggested for each common measure (see individual sections of guidance document)
Strong Connection to Knowledge and Place	6) Number of people with increased connection to knowledge and place
Healthy and sustainably managed traditional lands, waters, or resources ^c	*7) Number of hectares of land or waters/river km/km coastline protected
	*8) Number of hectares of land or waters/river km/km coastline under improved management
	9) Number of hectares of land or waters/river km/km coastline with improved ecological condition
	10) Number of hectares of land or waters/river km/km coastline with improved health of culturally important places or species

*VCA Measures marked with an asterisk align directly with TNC's organizational metrics.

c. Note, while "healthy and sustainably managed traditional lands, waters, or resources" is not a VCA Framework pillar, it is an explicit environmental outcome of the framework, and closely linked to Indigenous and local community human well-being. Therefore, we include these measures to understand the environmental outcomes of our strategies.



TOOL 1: GUIDE—VCA FRAMEWORK MEASURES GUIDANCE DOCUMENT

As the original VCA Framework gained traction across programs, we heard a call from conservation practitioners for simple, common, adaptable, and feasible guidance to monitor outcomes generated by implementing the VCA Framework. Given the framework's focus on socially oriented strategies informed by the people/nature connection, and backed by mounting evidence, this guidance places emphasis on tracking indicators of human well-being in addition to the environment. The guidance is intended to explicitly link to [TNC's Shared Conservation Agenda \(SCA\)](#) and [Conservation by Design 2.0](#), and help programs adopting the VCA Framework provide information to monitor their progress on human well-being and environmental outcomes to inform TNC's broader efforts.

Additionally, a [self-paced online training curriculum on VCA Framework Monitoring, Evaluation, and Learning \(MEL\)](#) is available on conservationtraining.org, which covers MEL plan development; ethics, human rights, and equity in MEL; focus group and key informant interview design; social survey design; data collection tools and implementation; data management systems and processes; and data visualization and communication. For access to the training curriculum, contact conservationtraining@tnc.org.

All “Tools and Resources” materials referenced within this document can be accessed at www.tncvoicechoiceaction.org



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Understanding Freshwater Resource Characteristics and their Implications

The VCA Framework was written to be applicable across terrestrial, freshwater, and coastal ecosystems. Freshwater resources^d have certain unique characteristics that are not shared with terrestrial or coastal ecosystems. Appreciating the unique characteristics of freshwater resources is critical to understanding the nuances in how to apply the framework successfully.

Mobility: Freshwater resources are inherently mobile, creating the potential for high variability in flows and resource availability across space and time, and increasing the speed at which impacts to the resources are distributed. Further, due to this mobility, connectivity is essential for many species and processes. Freshwater resources management must therefore be adaptable because the availability changes over time, and it can be expensive to make freshwater resources available when and where they are needed by people.

Impacts on quality and quantity: The state of freshwater resources in one location reflects the cumulative effects of all upstream aquatic and terrestrial uses (including agriculture, livestock rearing, manufacturing, electricity generation, and transportation) and governance in upstream jurisdictions, in addition to climatic and other factors. Therefore, whether water will exist for downstream users—and the quality of that water resource—is not guaranteed, often with very short time spans between cause and effect due to the high mobility of water. Further, the approach to freshwater resource management may differ depending on one's location in the watershed.

Observational challenges: Freshwater resources are often difficult to observe and monitor (e.g., groundwater, migratory fish stocks), which poses greater challenges to developing an accurate understanding of these resources, establishing boundaries around rights and governance, and providing the feedback users require to manage them. This is particularly challenging in the face of climate change.

Externalities: Externalities—or costs/benefits not reflected in the price charged for goods and service—shape and influence power dynamics among freshwater resource users. Being located upstream provides certain advantages over being located downstream, and power imbalances act to either counter or reinforce these dynamics. This has been an issue in many transboundary water systems, where upstream users have developed infrastructure and diverted water resources away from tributaries or rivers, leaving downstream users with reduced water availability and more erratic flows. Such disputes are heightened in times of increased water scarcity, such as from rapid population growth, climatic variability, and civil unrest.

Non-substitutable and essential: There is no substitute for freshwater—it is necessary for all life on earth. Given its status as a basic human right, people rarely have ownership rights over water. Instead, the most relevant types of rights associated with freshwater are access, withdrawal, and exclusion rights (more on this in the “secure rights” section). Water is the driver behind many economic sectors (e.g., agriculture, energy production, manufacturing) and as such, distribution and management are often very contentious.

d. Freshwater ecosystems include groundwater and springs, rivers and streams, lakes and ponds, and wetlands. The term “freshwater resources” implies the water itself as a resource, in addition to the aquatic organisms that live within the water.

The VCA Framework: Understanding and Putting into Practice the Pillars and Foundational Elements

This section describes the knowledge and evidence underpinning the VCA Framework, how this touches down in practice, and a small set of actionable tools and resources that have been curated as key to supporting the implementation of the VCA Framework. It begins with the four pillars, followed by the three foundational elements. The **pillars** of the framework (rights, capacity, decision making, and livelihoods) represent the characteristics necessary for successful community-led conservation. The **foundational elements** (equity, knowledge and place, and durability) represent enabling conditions critical for enduring community-led conservation. Each pillar and foundational element section includes subsections on “Knowledge, Evidence, and Practice,” “Case Studies,” and “Tools and Resources.” This information is derived from conservation practitioner and program experience, Indigenous and local community partners’ knowledge and experience, subject matter experts, and the scientific literature. The citations and references can be used in elevating and making the case for an evidence- and experience-based common strategic approach to supporting Indigenous and local community authority and capacity in natural resource management and decision making to leaders, funders, peer organizations, and partners. Conservation practitioners may find the highlighted tools and resources useful at any stage of project development—from planning and situation analysis; to implementation; to monitoring, evaluation, and learning.

We acknowledge that the evidence presented in the following sections relies heavily on Western science and can compartmentalize and simplify the complex relationships and dynamics between people and nature in specific places that create uniquely thriving and vibrant systems. Within many Indigenous and local communities, sustainability is a result of lifeways rooted in humans’ role and responsibility in maintaining the balance of all life,¹⁷ which is fundamentally at odds with the categorization that is characteristic of Western science. In our current context, we recognize that community-led conservation work still exists within societies where Western scientific thinking shapes environmental decisions and norms at micro- and macro-levels. Indigenous Knowledge and science is a whole knowledge system in and of itself, equal to all others.¹⁸ The desired outcome of providing synthesis of Western science is to support conservation practitioners who are utilizing multiple ways of knowing and working to move beyond solely relying on Western scientific teaching and practice, to expand ways of knowing that inform conservation. This section is meant to aid people who are working at this intersection, drawing on the tools of the Western system of knowledge alongside Indigenous and other ways of knowing.

Additionally, TNC is committed to a human rights-based approach to conservation, standing with Indigenous Peoples and local communities as they protect and exercise their rights. That commitment is reflected in our [Vision, Values, Code of Conduct](#) and fundamental approach to conservation, including this VCA Framework. We recognize the particular importance of Free, Prior & Informed Consent. Respecting and promoting the human rights of Indigenous Peoples and local communities is both a moral obligation and an enabling condition for sustainable conservation and human well-being. For more information on our rights-based approach, see [TNC’s Human Rights Guide](#) (also discussed in the “Equitable Benefits, Impacts, and Inclusion” section).



Pillar 1

Secure Rights Over Lands, Waters, and Resources



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Knowledge, Evidence, and Practice

KEY POINTS

- Formal recognition of rights can be important in certain contexts, but it does not always equate to secure rights. The type of property rights held, the knowledge by communities of their rights, their ability to exercise those rights, and the recognition and respect of rights by other actors all contribute to tenure security.
- Secure rights can help align incentives for sustainable use and management of lands, waters, and resources by enabling communities—including those with strong values and knowledge around stewardship and sustainability—to exert their voice and agency in management decisions.
- In general, tenure security is associated with both positive human well-being and environmental outcomes, but tradeoffs exist. Our knowledge about how tenure security intersects with other factors shaping sustainable use and management of resources is still growing, pointing to the importance of careful situation analysis and monitoring.
- Rights to coastal and freshwater resources are complex, evolving, and require extra considerations compared to land rights. The unique features of these resources directly contribute to the complexity of rights, governance, and security—and use rights are often more common than control rights in these contexts.

KEY TERMS

Property Rights—the authority to undertake particular actions related to a specific domain. Property rights include access, withdrawal (i.e., extraction), management, exclusion, alienation (i.e., title transfer), and due process and compensation. Property rights are often bundled into use rights (access, withdrawal) and control rights (management, ownership, exclusion, alienation).¹⁹

Collective Rights—Indigenous Peoples have collective rights that are indispensable for their existence, well-being, and integral development as peoples. In that regard, States recognize and respect the right of Indigenous Peoples to their collective action; to their juridical, social, political, and economic systems or institutions; to their own cultures; to profess and practice their spiritual beliefs; to use their own tongues and languages; and to their lands, territories, and resources. States shall promote, with the full and effective participation of Indigenous Peoples, the harmonious coexistence of the rights and systems of different population groups and cultures.²⁰

Tenure Form—determines who can use what resources, for how long, and under what conditions.²¹ Some examples include public, private, communal, collective Indigenous or customary.²²

Tenure Security—the perception or belief a rightsholder has that property rights will be upheld by society—including communities, the government, and other actors.²³ It results from an interaction between tenure form, property rights, and institutions.

➤ Property Rights

See [“Tool 2: Tenure Rightsholder and Stakeholder Mapping”](#) for a template to aid in identifying rightsholders and stakeholders in an area, along with whether rights are formally or informally held.

The factors that influence whether a person or community has tenure security are complex. Property rights dictate the type of actions that a rightsholder can take regarding lands, waters, or resources. Property rights include *use rights*—access and withdrawal—and *control rights*—management, exclusion, and the right to subdivide or sell^{19, 24}—in addition to due process and compensation. The type of rights afforded to people and communities may differ within and across areas. For example, a community may have full use and control rights over grazing land and may allow access to that land by neighboring communities during certain times of the year or during drought. An area of a lake may be owned by the government, and communities living along the lake may have access and withdrawal rights (e.g., fishing) during the year, except during spawning season. An ocean area may be primarily open access, with traditional management rights recognized and upheld by local and neighboring communities, with access to the area only allowed depending upon the season or withdrawal rights allowed for only specific species.

Importantly, *simply holding rights is not enough*. These rights must be recognized and enforced (i.e., respected). Individuals, households, communities, businesses, and other stakeholders may informally recognize and enforce property rights even if these rights are not formally recognized by the government (i.e., de facto rights). Formally, the government may provide documentation and legal recognition of rights to the rightsholder (i.e., de jure rights). Depending on the context, communities may need both informal and formal recognition and enforcement, while in some instances informal recognition may be sufficient to provide tenure security for the time being. Whether formal rights are needed ultimately depends on whether the government or other actors uphold or contest the system. The interplay between formal and informal recognition and enforcement of property rights is a key factor in determining tenure security.

➤ Tenure Security

See [“Tool 3: Tenure Security Assessment”](#) for a diagnostic to help understand tenure security in a particular context, as well as how it might be supported in partnership with Indigenous Peoples and local communities.

Tenure security is the perception or belief a rightsholder has that property rights will be upheld by society, including communities, the government, and other actors.^{23,25-26} It is ultimately a subjective view that people have over the rights to lands, waters, and resources, and is the interaction of property rights and the formal and informal institutions dictating use and access. As a result, it is possible to have tenure security without formal title—as mentioned above, people may feel very secure in their customary tenure if it is not challenged. For instance, there are few cases where legal title to water is held by individuals or communities, but many water users often feel they have security over access to and use of water. We often focus on tenure security because the perception of security over lands, waters, and resources is a key factor in the decisions people make about how to use and manage their property. For instance, if a rightsholder perceives that they have insecure tenure, they may be less likely to make long-term investments (e.g., manage their timber harvest sustainably, invest in soil and water conservation practices) because any benefits from these decisions would not be realized for years and there is no guarantee that rights would still be held at that time. In comparison, a rightsholder with secure tenure may have greater assurance that they themselves will benefit from any investments or resource use decisions because there is little worry of encroachment, conflict, or other actions that would result in losing use or control over the lands, waters, or resources. Simply put, the more secure communities are in their tenure, the more likely it is they will engage in sustainable use and management.²⁷⁻³⁰

Table 2: Illustrative examples of common tenure security issues and activities one might pursue to address them.²⁷ A full risk assessment is necessary to understand the potential unintended consequences of tenure security actions (such as increased conflict or retaliation) since rights can be contentious. Ultimately, the appropriateness (and likelihood for success or failure) of any strategy to strengthen tenure security will depend on the context, source and drivers of insecurity, and enabling conditions. See [Tool 3 for more information](#).

Tenure Security Issue	Example Activities to Strengthen Tenure Security
Communities hold informal or customary rights, but these are not recognized or upheld by the government or other actors	Mapping and planning support, legal aid to navigate legal and bureaucratic systems, coupled with capacity-building to exercise rights, and pursuing government support in recognizing and enforcing community rights
Communities hold formal rights but are unaware of these rights	Awareness raising campaigns, coupled with capacity-building to exercise rights
Communities hold and are aware of formal rights but do not know how to exercise them	Legal aid to navigate legal and bureaucratic systems, coupled with capacity-building to exercise rights
Multiple actors exercising formal and informal rights or claims over the same lands, waters, or resources	Facilitating conflict resolution between rightsholders, legal aid to clarify rights, and pursuing government support in enforcing community rights
Legal instruments exist for communities to pursue formal rights, but they do not hold formal rights	Mapping and planning support, legal aid to navigate legal and bureaucratic systems, coupled with capacity-building to exercise rights
No legal instruments exist for communities to pursue formal rights	Policy advocacy in support of regulatory reform

➤ Tenure Form

Tenure form determines who can use what resources, for how long, and under what conditions.²¹ For example, there may be restrictions or limitations on property rights that impact which specific resources those rights apply to (e.g., rights to manage one species but not another), and for how long those rights apply (e.g., rights that are maintained until they are transferred vs. a time-limited lease). This needs to be considered in determining how secure rights are. For example, if a community has use and control rights to a forest for 20 years, but subsurface rights were leased to a company in a mineral-rich area, the communities may not feel and be secure in their rights.

In the contexts where Indigenous Peoples and local communities reside, there may be some mix of public, private, communal, collective Indigenous, and/or customary tenure form. In cases where Indigenous Peoples have been stripped of their communal or collective tenure, we often work in partnership to restore this tenure (e.g., repatriation of private lands, waters, or resources to communal or collective tenure; policy advocacy for the creation of Indigenous protected areas) or restore and support Indigenous and local community authority. In public, communal, and collective tenure forms, resources are often common pool—in that many have use rights (i.e., access and withdrawal/extraction) without the easy ability to exclude people (e.g., coastal fisheries, forests, grasslands, and aquifers). In these cases, it can be important to clarify who or what determines control rights (particularly management and exclusion rights) if the context allows, and strengthen common pool governance systems (covered in next section), particularly in the absence of a strong stewardship ethic or in the presence of diverse sets of actors or strong economic drivers.

➤ Emerging Evidence

The logic behind why and how strengthening tenure security can lead to overall positive benefits is clear: securing tenure can reduce uncertainty, provide clarity in who has say in use and management decisions, identify who will benefit from the lands, waters, and resources, and be a key component in unlocking capital (e.g., providing access to credit, empowering rightsholders to take part in decisions).³¹⁻³⁴ However, in general there is greater evidence that strengthening tenure security is positively associated with human well-being outcomes compared to environmental outcomes, and recent systematic reviews indicate that evidence on environmental outcomes across biomes, populations, countries, and other factors is inconsistent.²⁷ For example, there are cases of top-down titling programs that have led to undesirable outcomes such as greater conflict and greater tenure insecurity because they ignored or were incongruent with customary institutions and natural resource governance systems.³⁵

Because evidence is still emerging on the likelihood of whether strengthening tenure security will lead to positive environmental and human well-being outcomes, careful monitoring is needed to avoid or address unintended consequences. For example, strengthened tenure security can increase incentives to make long-term land investments, but this may lead to greater investment in agriculture or infrastructure than in sustainable land management or protection.²⁷ On the other hand, areas where communities have greater tenure security may see reduced deforestation by incentivizing benefits accrued from forests through other means, such as payment for ecosystem services.³⁶ For aquatic systems, secure tenure—which clarifies who has rights to certain water or aquatic organisms and when—can set the stage for negotiating extraction and use agreements, as well as how rightsholders will monitor and enforce these

agreements.³⁷ In coastal areas, establishing rights-based management systems for fisheries can lead to positive impacts on fish stocks and variable social and economic outcomes. However, this may not be adequate to address the broader environmental impacts of fishing, for example on non-target or protected species as well as the surrounding ecosystem.³⁸⁻³⁹

➤ **Special Considerations for Rights in Freshwater and Coastal Contexts**

Because of their fluid nature, freshwater and coastal resources are less likely to be “owned” like land or other properties. Rather, it is necessary to look at who holds different (and often overlapping) “bundles of rights,” including use rights and control rights, and how rights to water are tied to rights to land. For example, with many freshwater resources, the scale of rights and management of resources does not match the ecological scale of the systems (e.g., rivers often cross multiple political boundaries). Further, even if a community has rights to use or manage a freshwater resource, if the resource is depleted upstream, they may never be able to exercise these rights. As a result, it is critical to carefully assess how the characteristics of freshwater and coastal resources can create challenges or opportunities for tenure security, and the various threats to tenure security that can stem directly from the characteristics of a particular natural resource. Rights alone do not guarantee the ability to use or benefit from freshwater and coastal resources. Many water bodies have been over-allocated, so rights exceed the available resources (e.g., freshwater withdrawal rights, coastal fishing rights). In the freshwater context, this is exacerbated during drought years. Similarly, many water bodies are contaminated, making the available resources unusable for some purposes. For this, it is important to take power dynamics between freshwater and coastal resource users into account because imbalances can prevent certain groups from asserting their rights.





Case Studies

Securing Rights to Territories and Resources in Tanzania

Tanzania's northern rangelands stretch across 8 million acres (3.2 million hectares) and include some of Africa's most important wildlife migration sites, including the Serengeti and the Ngorongoro Crater, as well as the homes of Maasai pastoralists and the Hadzabe and Akie, some of the last remaining hunter-gatherer Tribes on Earth. Population density has nearly tripled in this region in the last 40 years, which is leading to competition between land uses (mainly agriculture and grazing), threatening pastoralists and hunter-gatherer ways of living, as well as the wildlife that depend on these lands for grazing and migration. Local villages have the right to subdivide all their village land, and once land is officially given to an individual, that land can be further subdivided to sons. This law favors local and individual ownership. Additionally, the Tanzanian central government has significant authority and can expropriate land for large commercial farms if the village does not hold official title (ownership) via a Certificate of Customary Right of Occupancy (CCRO).

TNC in Africa is working with communities and partners to secure legal tenure and management rights for pastoralist and hunter-gatherer communities through collective CCRO designations. This legal tool—pioneered by partner Ujamaa Community Resource Trust and building off existing CCRO designations for individuals—allows communities to own and manage traditional lands and earn benefits from natural resource-based enterprises such as ecotourism and carbon credits. The collective CCRO provides an additional layer of protection for common pool resources that is helpful for long-term management and improved and secured grazing access over time.

By expanding this model across Tanzania's rangelands, we are seeing more equal access and ownership, and more secure communal rights to land over the long-term as the basis for pastoralist livestock production and land management systems. When cross-border grazing corridors are kept open, livestock and wildlife become healthier, which reduces conflict between villages and can increase their revenue via sustainable livelihood opportunities. The tenure mechanism itself is linked to sustainable land management via the requirement for Village Land Use Plans and provides a basis for negotiating with government and tourism operators. Although some cases of farming encroachment exist, when tested, the courts have ruled

ICON LEGEND
VCA Framework Biomes



TERRESTRIAL



FRESHWATER



COASTAL



in favor of the CCRO and easements. Over the past nine years, 5 million acres (~2 million hectares) have been put under Village Land Use Plans (the first step in obtaining a CCRO designation). In the entire landscape, 4.2 million acres (~1.7 million hectares) of rangelands have been protected via 80 CCROs and two Wildlife Management Areas (areas of communal land set aside exclusively as habitat for wildlife by member villages), with additional CCROs covering 370,650 acres (~150,000 hectares) expected by June 2022. The success of CCROs demonstrates a pathway for preventing land conversion that could lead to loss of grazing areas.

However, there are still ongoing challenges that must be resolved. Even after land use plans were demarcated and CCROs were formed, there was some overgrazing in CCROs. TNC's holistic grazing management program aims to promote best grazing approaches in the CCROs, such as rotational grazing, blocking systems, and bunched herding that can reduce grazing pressure on CCRO lands. The program will also help secure inter-village grazing agreements that seek to connect CCROs with other grazing areas. While CCROs are increasingly recognized as legitimate by local stakeholders, there are ongoing governance challenges and a need to ensure that all CCROs are equally respected.



Addressing Water Scarcity Through Indigenous Rights in the Colorado River Basin



The Colorado River Basin is one of the United States' most iconic landscapes, home to the Grand Canyon and an array of diverse traditional and Tribal stewards. It supports a wide variety of freshwater and terrestrial ecosystems that host enormous biodiversity, and it is home to many cultures, communities, and economic interests. For thousands of years, water from the Colorado River and its tributaries has been the life source for local Indigenous Peoples, and is essential to their cultural and economic well-being. Colonization of lands and waters by settlers drastically altered the ability of Indigenous Peoples to continue to inhabit, use, and care for the rivers and lands in this area. Genocide, forcible removal from ancestral lands, broken treaties, and a host of federal laws and policies designed to undermine Tribal control of resources and to assimilate Indigenous Peoples deprived them of access to the lands, waters, food, and other natural resources of the Basin. In addition, building of the extensive water infrastructure system of dams, canals, and reservoirs further degraded the natural environment and largely neglected the water needs of Indigenous Peoples, who were forced into non-Indigenous farming and ranching and life on arid reservations.

With more than 40 million people depending on its water for both agriculture and domestic needs, the Colorado River is intensively controlled, and a complex set of rules and laws dictates water management and use across the Basin's many interested parties. Legal precedent entitles Tribal Nations to substantial, senior-priority water rights^e in the Basin. However, major water-related decision making forums and processes have yet to sufficiently recognize the role of Tribal management of water and natural resources. Currently, 22 of the 30 Tribal Nations in the Basin have quantified water rights in at least one state in which their reservations are located, and control about 3.5 billion cubic meters of water per year, which is approximately 20 percent of the water in the Basin. That amount is expected to increase as Tribal Nations with remaining claims

e. The allocation and use of water by non-federal entities in many states in the Western U.S. is governed by the Doctrine of Prior Appropriation, whereby the first entity to appropriate a quantity of water from a source for a beneficial use acquires the right to its future use as against later users. Federal reserved water rights, including those reserved on behalf of Tribal Nations, are linked with the United States' federal reservation of lands and usually have a priority date tied to the date of the federal reservation of lands. Because of this, Tribal water rights in the Western U.S. are often administered with a very early and senior priority date.



in some Basin states quantify their water rights. Significant portions of these Tribal water rights are currently undeveloped (i.e., not being exercised or used) but will likely displace current water uses when they are developed.^f Despite the amount of Tribal water, many powerful actors in the Basin (e.g., federal and state governments, major water users including municipalities and agricultural businesses) have intentionally and systematically excluded Tribal Nations from efforts to protect and

develop their water rights, and thwarted voluntary Tribal participation in policy negotiations. As recently as 2019, because of the unwillingness of state and federal negotiators to take a hard look at the role of Tribal water in assessing water scarcity risk and solutions, the Tribal Nations have been mostly excluded from participating in creating programs designed to reduce water scarcity risk. This exclusion has resulted in solutions that fail to recognize and respect treaty and other rights of Indigenous Peoples, and missed opportunities to work with Tribal Nations to mobilize Tribal water to address the Basin's socio-economic and environmental challenges. These policy processes are also missing a critical opportunity to integrate Indigenous perspectives on the stewardship of resources—including Indigenous cultural and spiritual connections to the lands and waters in the Basin—to shape the future of this shared and sacred river.

TNC's Colorado River Program works across all seven Basin states in the United States (Wyoming, Colorado, Utah, New Mexico, Arizona, Nevada, and California), in Mexico, as well as at a Basin scale. The focus is on three strategies: working to balance water needs among the many users (including nature), improving water infrastructure and other operations to improve environmental flows, and advancing a Tribal Water Initiative. Through the Tribal Water Initiative, we are working with Tribal Nations to advance their interests and their positioning to address the pressing socio-economic and environmental challenges, by elevating Tribal voices in critical policy discussions to support their stewardship of the Basin, as well as creating innovative on-the-ground freshwater conservation projects that support more equitable and durable solutions for people and nature. For instance, in the renegotiation process of the [Colorado River Interim Guidelines for Lower Basin Shortages and Coordinated Operations for Lakes Powell and Mead](#), TNC was invited to work with Tribal Nations and multi-Tribal organizations to understand and advance their goals, such as ensuring that the next guidelines reflect a comprehensive understanding of Tribal water rights.

Engaging Tribal Nations in the Colorado River Basin is changing TNC's approach to water scarcity work. Our initial engagement is showing promising opportunities for both project and policy work to address water scarcity and environmental needs in the Basin. It also requires us to begin considering some of the critical equity and human rights implications for Indigenous Peoples in our work, including the need for reconciliation processes addressing past resource deprivation and acknowledgement of the conservation sector's role in that legacy. We are committed to crafting solutions that do not further disadvantage vulnerable communities but, rather, build partnerships to amplify the strength and power of these communities to co-create mutually beneficial solutions and projects.

f. This is because of both the senior priority date of Tribal federal reserved rights claims and because of multiple articles in the Colorado River Basin compacts that state that Tribal rights are not subject to compacts.



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Communal Rights in Kenyan Coastal Fisheries

Sitting at the northern edge of Kenya's coast, the Lamu-Tana Seascape hosts rich and diverse coastal resources, including over 66 percent of Kenya's mangroves, some of Kenya's highest densities of inshore finfish and crustaceans, and a unique mix of Arabian Gulf with East African coral and fish species. Rare and endemic corals along with endangered fish, sea turtles, coastal sharks, and a very small number of dugong also occur here. Livelihoods of the coastal communities in the area are largely dependent on these natural resources, and with few employment alternatives, pressure and over-exploitation are increasing. Along with ongoing conflict and remoteness that have restricted development and access to markets, the livelihoods and resources in the area are at risk.⁴⁰

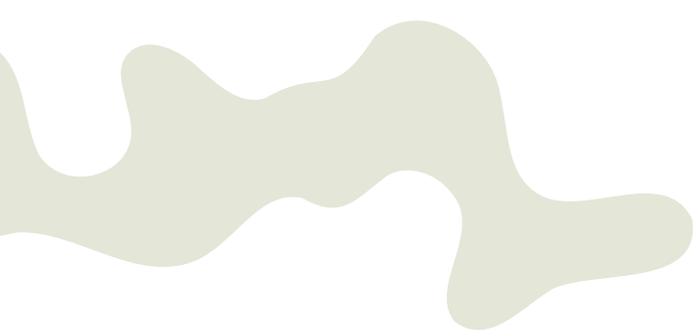
To increase local ownership and management of these resources, TNC, Northern Rangelands Trust (NRT), and other partners are supporting communities in securing co-management rights across multiple natural resource management jurisdictions and communities to integrate a holistic resource management approach for the area's coastal ecosystems. The "community conservancy" model, regulated under the Wildlife Conservation and Management Act (2013), has been applied broadly for community management of terrestrial areas. With the support and technical guidance of NRT and TNC, this approach has been adopted in the Lamu-Tana Seascape for coastal communities and marine areas, connecting multiple villages, fisheries, and habitats under an overarching Conservancy Development Plan. This plan incorporates important design guidelines necessary for effective coastal conservation.

Four coastal community conservancies—Kiunga, Awer, Pate, and the Lower Tana Delta—have been established, and within those conservancies multiple community resource management institutions must be authorized to provide legal empowerment to the conservancy and communities in managing the full suite of coastal resources, given the various laws and jurisdictions at play. Community-run co-management units, called Beach Management Units (BMUs), are responsible for managing artisanal fishery use and access. BMUs are supported by a legal framework within Kenya's Fisheries Regulations (2007), and are intended to bring resource user groups and governmental bodies together to share fisheries management and conservation responsibilities. Within the four community conservancies, 21 fisheries BMUs

have been established and training conducted on leadership, fisheries co-management, and financial management. Each BMU submitted their by-laws to county governments for review and received a new BMU registration certificate, effectively empowering communities' control over their fisheries resources. The establishment of the conservancy and associated BMUs have enabled the Pate Marine Community Conservancy to create temporary octopus closures (a type of locally managed marine area) that have led to increased participation of women in conservation activities, increased catch and size of the octopus, better market price, increased population of other fish, and improved habitat condition.

Learning exchange visits between Pate and the Kiunga and Lower Tana Delta conservancies inspired the Kiunga Community Conservancy to implement similar closures in their fishing areas within the Kiunga Marine National Reserve (KMNR). Marine protection and conservation are managed by the Kenya Wildlife Service (KWS) in the form of marine parks, which are well-enforced no take zones protecting key fisheries and marine reserves, where subsistence fishing with traditional fishing gear is allowed and is poorly enforced. Because of Kiunga's marine reserve designation, a more complicated, formal process, and approval at the national level was required to secure community management authority under KWS. This included completing, village-by-village, community awareness and capacity building meetings on establishing temporary octopus closures, changing the conservancy name to Kiunga Community Wildlife Association (KICOWA) to operate within a gazetted area, and presenting a letter to KWS on the community's decision to establish temporary octopus closures within KMNR. Upon completion of this process, KICOWA successfully established two temporary octopus closures in March 2021, which were the first to be completed within a national marine reserve and a significant development in integrating a more community-based approach in Kenya's marine protected area management.

Achieving effective management of coastal ecosystems in northern Kenya requires a complex alignment of the laws and institutions associated with each resource and tenure designation. TNC and local partners' work has focused on strengthening governance by supporting communities in establishing and staffing the necessary institutions to collaboratively manage natural resources, and enabling synergies to be developed across the various community-led conservation institutions.



Tools and Resources



TOOL 2: TEMPLATE—RIGHTSHOLDER AND STAKEHOLDER MAPPING

Since the rights held (or not held) over lands, waters, and resources are critical to understanding the underlying context of a place, it is important to undertake an exercise to better understand the tenure form of a resource, the suite of actors with a right or stake in a resource, the type of recognition they hold, and potentially overlapping rights or claims. This template can be used during situation analysis to document this information by consulting local, regional, and national policy instruments, the department of natural resources (or similar government institutions), and the community or its representative institution. This exercise should be followed by “[Tool 3: Tenure Security Assessment](#)” to determine security of the rights, and which activities might be appropriate to address sources of insecurity.



TOOL 3: DIAGNOSTIC—TENURE SECURITY ASSESSMENT

Tenure security is a complex topic with multiple intersecting and influencing considerations. In “[Tool 2: Tenure Rightsholder and Stakeholder Mapping](#),” we determined the tenure form of a resource, the suite of actors with a right or stake in a resource, the type of recognition they hold, and potentially overlapping rights or claims. Using this information, we now identify potential sources of tenure insecurity faced by Indigenous Peoples and local communities, and what actions conservation organizations might take in partnership with Indigenous Peoples and local communities to support strengthened tenure security. This information should be discussed with the community, or its representative institutions, during situation analysis using key informant interviews and focus group discussions.

Please note, a **full risk assessment is necessary to understand the potential unintended consequences (e.g., increased conflict or retaliation) of mitigating actions, since rights can be contentious. Ultimately, the appropriateness (and likelihood for success or failure) of any strategy to strengthen tenure security will depend on the context, source and drivers of insecurity, and enabling conditions*



Pillar 2

Strong Leadership, Governance, and Management Capacity



Knowledge, Evidence, and Practice

KEY POINTS

- Strong capacity is foundational to a community's ability to act collectively, effectively govern, and sustainably manage natural resources, as well as their ability to advocate for their rights to territory and resources, assert decision making authority, negotiate with other stakeholders and/or rightsholders, access and manage funds and external support, and pursue self-determined, culturally aligned economic opportunities.
- Capacity-building strategies employ a wide range of activities that target different types of capital—including human, social, institutional, systemic, natural, and economic—which need to be tailored to the current levels of capacity and needs of the community.
- It is important to work with a community's chosen leaders as well as within their existing knowledge systems and institutions where possible, while making special provisions for the meaningful engagement of vulnerable or underrepresented social identities (e.g., women, youth, economically disadvantaged or oppressed, ethnic minorities, etc.) in defining the rules and regulations that govern them.
- Communities can be very successful at governing common pool resources and these communities and the resources themselves often have several shared characteristics (for more on these characteristics, read on).

KEY TERMS

Capacity—multi-faceted concept generally described as “having the ability to act,” and various types of capital including human, social, institutional, natural, and economic must be used to do so.¹²⁻¹³

Collective Action—an action taken by a group to achieve a common objective.⁴¹⁻⁴⁴

Common Pool Resource—any material good diminished in quantity or quality through use (i.e., subtractable) and costly or difficult to exclude others from using.⁴⁵

Governance—in the context of natural resource management, refers to the norms, institutions, and processes that determine how power and responsibilities over natural resources are exercised, how decisions are made, and how people participate in and benefit from the management of natural resources.

Indigenous Knowledge—a cumulative body of knowledge, practices, and beliefs, evolving and governed by adaptive processes and handed down and across (through) generations by cultural transmission, about the relationship of living beings (including humans) with one another and with their environment.⁴⁶ This concept is sometimes referred to as “local knowledge” by those that do not self-identify as Indigenous Peoples.

Institutions—the rules and/or organizations that structure political, economic, and social interaction. They consist of both informal rules (e.g., sanctions, taboos, customs, traditions, and codes of conduct), and formal rules (e.g., constitutions, laws, property rights).⁴⁷

Social Cohesion—a form of social capital that influences collective action; a property of a group that describes the level of connectedness and solidarity experienced by its members, which when strong can foster a sense of belonging and shared experience providing an important basis for cooperation.

➤ Types of Capacity, Capacity-building, and Environmental Outcomes

Community-led natural resource management is a complex social process that requires collective action and effective governance of common pool resources, and is supported by investments in different types of capital (i.e., assets—both monetary and non-monetary; see Table 3). The need for strong and capable community members, leaders, and institutions makes capacity-building one of the most broadly applicable and foundational strategies of the VCA Framework. There is mounting evidence that investments in capacity-building strategies are important to environmental outcomes.⁴⁸⁻⁴⁹ Capacity is a multi-faceted concept generally described as “having the ability to act,” and various types of capital including human, social, institutional, natural, and economic must be used to do so.¹²⁻¹³ Capacity-building activities typically seek to enhance one or more of these forms of capital, specifically where needs are identified by a situation analysis or priorities are expressed by Indigenous and local community partners (Table 3). Though community-led natural resource management is highly context dependent,⁵⁰ capacity is foundational and investments in strengthening one or more of these types of capital are almost always needed.

Table 3: Types of capital, targets of capacity-building, and some example activities. Note that it is important to consider each type of capital in any community capacity assessment (for examples on how to assess, see [Hartanto et al., 2014](#)).⁵¹

Type of capital	Targets of capacity-building	Example Activities
Human	<ul style="list-style-type: none"> • Awareness • Knowledge • Skills • Experience 	<ul style="list-style-type: none"> • Supporting assessment, revitalization, and adoption of stewardship-aligned Indigenous or local knowledge practices (e.g., traditional burning, grazing, fishing practices) • Conducting education and outreach/ awareness-raising campaigns • Introducing citizen science, monitoring for adaptive management, and assessment of project outcomes (e.g., invasive species reporting, species monitoring) • Providing training and technical assistance (e.g., improved natural resource management, soil conservation practices, improved equipment use) • Convening knowledge exchange • Facilitating peer-to-peer learning opportunities
Social	<ul style="list-style-type: none"> • Knowledge/ Understanding • Familiarity • Identity • Trust • Social cohesion/ collective action • Connection to place 	<ul style="list-style-type: none"> • Conducting education and outreach/ awareness-raising campaigns • Providing opportunities for interaction • Mobilizing around shared goals/purpose • Engaging in network-building • Facilitating trust-building within or with community • Supporting programs to foster shared identity, purpose, and intergenerational transfer of knowledge (e.g., youth, Elder, and women’s groups) • Supporting healing and racial equity • Creating safe spaces for oral histories, customary and natural laws to surface and inform project planning, governance mechanisms and implementation • Creating and supporting access to and ownership of traditional territories if displacement has occurred / is occurring

(Table 3 continued)

Type of capital	Targets of capacity-building	Example Activities
Institutional	<ul style="list-style-type: none">• Leadership• Leadership effectiveness• Institutions/governance bodies/structures• Governance effectiveness	<ul style="list-style-type: none">• Conducting leadership and governance mapping assessments to understand traditional and contemporary governance systems• Supporting community leaders in strengthening existing governance structures (e.g., leadership workshops, community-based organizations, guardians, monitors, etc.)• Supporting and applying community visioning and land use planning• Supporting development and/or documentation of community rules and regulations governing natural resource use• Providing support for monitoring and enforcement• Introducing non-colonial mechanisms and platforms for resolving disputes and conflicts• Training community leaders in conflict resolution/mediation• Support, seek, and encourage restoring and resurfacing traditional or localized peacemaking processes
Natural	<ul style="list-style-type: none">• Resources• Ecosystem services	<ul style="list-style-type: none">• Assisting in restoration projects• Supporting revitalization of traditional management practices and providing training in improved management practices• Championing Indigenous or community-managed protected areas
Economic	<ul style="list-style-type: none">• Infrastructure• Financial resources• Administration	<ul style="list-style-type: none">• Supporting sustainable livelihoods opportunities• Connecting to infrastructure improvement opportunities (e.g., roads, irrigation canals, refrigeration, broadband)• Supplying improved equipment (e.g., fishing gear, agricultural equipment)• Providing or connecting to credit, micro-loans, and start-up funds to purchase essentials (e.g., community mill and processing equipment, boats/vehicles, monitoring equipment, etc.)• Training on budgeting, accounting, and project management• Monitoring that helps identify the economic value of natural resources• Sponsoring resilient community-led economy concepts



The results of recent reviews of community-based conservation back the importance of various capacity-building investments to environmental outcomes.^{16,48} Many have identified which types of capital and commonly employed activities are most strongly associated with generating human well-being and environmental benefits. Of note are those that strengthen human capital via education, training, and technical assistance;^{48,52} those that strengthen social capital via efforts to build trust and increase social cohesion;^{16,53-54} those that strengthen institutional capital via investments in community leaders and institutions for natural resource governance;^{16,48,55-58} those that strengthen economic capital via investments in infrastructure, business, administration, and financial management;¹⁶ and those that build combinations of capital (e.g., human, social, and institutional) via the creation of networks for learning and knowledge exchange.^{16,59}

➤ Community Leadership and Institutions

See [“Tool 4: Community Leaders and Institutions”](#) for a checklist with key criteria in support of effective community leaders and institutions.

Effective community leaders and institutions⁹ are critical to community-led stewardship, and investments in strengthening the capacity of both have been associated with positive environmental outcomes.^{16,48,55-58} Leaders are essentially any individual with influence, and leadership originates from many places and can take on many forms. Community leaders can be secular or spiritual, elected or appointed, male or female, individual or collective, and can embody many qualities with bearing on environmental outcomes.⁶⁰⁻⁶² In order for both community leaders and institutions to be effective at governance and have the trust and confidence of the community, they must generally be perceived as legitimate, transparent, accountable, inclusive, fair, connected, and resilient, as well as have the ability to influence peoples' attitudes and behavior.⁶³⁻⁶⁴ When these key criteria are present, community leaders and institutions can be powerful advocates and motivators of collective action,⁶⁵ in addition to supporting effective governance of natural resources through improved coordination, enforcement, compliance, and conflict resolution.⁶⁶ Beyond this, community leaders and institutions can facilitate social learning, and the diffusion of innovations within the community and beyond.⁶⁷⁻⁶⁸ Experience has shown that when community leaders and institutions are ineffective, subject to corruption or capture of benefits by community elites, or exhibit poor coordination with others, communities often fail to uphold stewardship activities.⁵⁶ Therefore, when partnering with communities to support capacity-building for community leaders and institutions, it is important to work closely with the community to identify which individuals and institutions to engage, determine what kind of training would be most welcome and helpful to complement localized knowledge and skill sets, and whether this training is likely to support stewardship goals. Working with the community's chosen leaders and through its existing institutions is important and more likely to result in lasting positive impacts. Expect the learning to occur both ways with local leaders also having much to teach conservation organizations, in addition to what they can learn from us and others in the conservation sector.

g. Here, the use of the term “community institution” refers to the various entities (e.g., leaders, committees, community-based organizations, etc.) that enforce the norms, rules, regulations, and policies communities establish to govern natural resources.

➤ **Collective Action and Social Cohesion**

See [“Tool 5: Collective Action and Social Cohesion”](#) for checklists with key resource and user group characteristics that support collective action and social cohesion.

Collective action is generally defined as an action taken by a group to achieve a common objective⁴¹⁻⁴⁴ and is an important enabler of effective governance of common pool resources and successful community-led stewardship.⁶⁹ There is a substantial body of literature that discusses the importance of social cohesion to collective action, which in turn is influenced by several resource and community characteristics, such as familiarity, frequent interaction, shared identity and purpose, reciprocity, and trust.^{44,70,71} These conditions are less likely to exist in communities that are large, diverse, rapidly growing or changing, involved in conflict, have pronounced inequality or legacies of oppression, marginalization, and dispossession,^{16,59,72-73} which are common results of colonization and subsequent intergenerational trauma. A recent analysis found community-led conservation projects that acknowledged and addressed existing trust issues (an important enabler for social cohesion) were more successful at generating human well-being and environmental benefits than those that did not.⁵⁴ Other studies have made related observations of the importance of shared identity and purpose to social cohesion and the collective action required for successful environmental outcomes.⁵⁴ These findings argue for more awareness of the importance of social cohesion, collective action, acknowledging hard truths and lived experiences as part of trust building, and shared purpose, as well as increased investment in activities that help repair and build these fundamental conditions.

➤ **Common Pool Resources, Governance, and Sustainable Natural Resource Management**

See [“Tool 6: Common Pool Resource Governance”](#) for a checklist with key conditions favoring effective common pool resource governance.

See [“Tool 7: The Natural Resource Governance Tool”](#) for step-by-step guidance on creating a context-specific governance index to assess and track governance at the community or community institution scale.

Common pool resources are any material good diminished in quantity or quality through use, and which are difficult and/or costly to exclude others from using.⁴⁵ Such qualities are typical for resources that are large, heterogenous, unpredictable in space or time, and/or migratory or fugitive (i.e., moves freely between locations). Many of these resources are critical to Indigenous Peoples and local communities’ livelihoods and identities.⁷⁴ Common property is a specific way of relating to common pool resources, where governance of the resource is achieved communally by a group of users with acknowledged (formal or informal; de jure or de facto) rights of access and use (see previous section for more information on property rights).⁷⁵ These forms of property and natural resource governance are particularly prevalent among Indigenous Peoples and local communities.



Many researchers have suggested that common property and communal resource governance is not only the optimal governance structure for common pool resources, but quite often results in more sustainable natural resource management,⁷⁶⁻⁷⁹ with studies confirming that lands and waters with long histories of governance by Indigenous Peoples and local communities (most often communal) have been well protected and sustainably managed over time.⁸⁰⁻⁸² Indigenous and local community governed lands and waters see less loss of intact forest,⁸³ more carbon storage potential,⁸⁴⁻⁸⁵ and greater provision of essential ecosystem services⁸⁶ than government-run protected areas. It is important to note that while communal resource governance can result in sustainable natural resource management, this result is not guaranteed—particularly when faced with an increasing size and pace of external demand for resources. Certain conditions favor effective communal resource governance, and where these conditions are not met, failures notoriously dubbed “tragedies of the commons” can occur.⁸⁷ Some of these favorable conditions include:⁶⁹⁻⁷⁰

- Resource boundaries are clearly defined,
- Rules exist for resource use that are tailored to the local context, and the benefits individuals derive from the resource are proportional to the costs,
- Those affected by the rules can participate in modifying the rules,
- Monitoring of resource use occurs and those that monitor are held accountable by resource users,
- Punishment for rule breakers is proportional to the severity of the offense, and
- There are quick, low cost means of resolving conflict.

For transboundary systems at larger scales, such as coasts, aquifers, rivers, or large lakes, coordination of communities and community members beyond the household or community levels becomes important for governing common pool resources. Because of interconnections among the multiple users of resources that function at larger scales, cooperation and compromises are required to ensure equitable distribution of resources and impacts. Historically, a diverse range of community-based institutions have developed, monitored, and enforced their own rules for extracting, managing, and developing such resources. Local communities can and have governed their own resources—within the limits of larger upstream/downstream or cross-boundary interlinkages—even if customary rights are not formally recognized by the government.



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Case Studies



Community Leadership and Institutional Capacity-Building in the Emerald Edge

At 100 million acres (40 million hectares), the Emerald Edge is the largest intact coastal temperate rainforest system remaining in the world. This band of vibrant forest and ocean stretches northward from the Olympic Peninsula of Washington State, through Canada's coastal British Columbia and the Great Bear Rainforest, to the panhandle of remote Southeast Alaska. Indigenous custodians have recognized rights and authority to these resources—thus the focus of the Emerald Edge Program has been on strengthening the capacity of Indigenous Peoples and local communities for continued good stewardship. TNC works to support community leadership and governance, as well as promote economic opportunities that improve local livelihoods, providing incentives and additional capacity for sustainable natural resource management.

To this end, TNC has implemented several specific programs meant to build a “ladder of opportunity” for Indigenous communities. The [Supporting Emerging Aboriginal Stewards \(SEAS\)](#) program—or “youth on the land programming”—aims to engage, develop, prepare, and empower Indigenous youth to become the next generation of place-based stewards. Young people take excursions onto their traditional territories to reconnect to the natural world, engage in customary activities, and learn from Elders. Another initiative, the [Indigenous Guardians](#) program, supports Indigenous rangers to take control of monitoring their territories and continue the work of their ancestors to manage and respect their natural and cultural resources through traditional institutions and governance structures. These rangers monitor the health of important food, social, and ceremonial species, taking account of various resource uses throughout their territory and contributing to the successful implementation, monitoring, and evaluation of community land and marine use plans. TNC and partners co-developed an [Indigenous Guardians Toolkit](#) to facilitate the expansion of the program within and beyond British Columbia. Building on the work in Canada, the [Seacoast Trust](#) project is establishing Guardian programs in Alaska and using both the toolkit and conservation financing endowment model to secure their vision for the future.

ICON LEGEND
VCA Framework Biomes



TERRESTRIAL



FRESHWATER



COASTAL

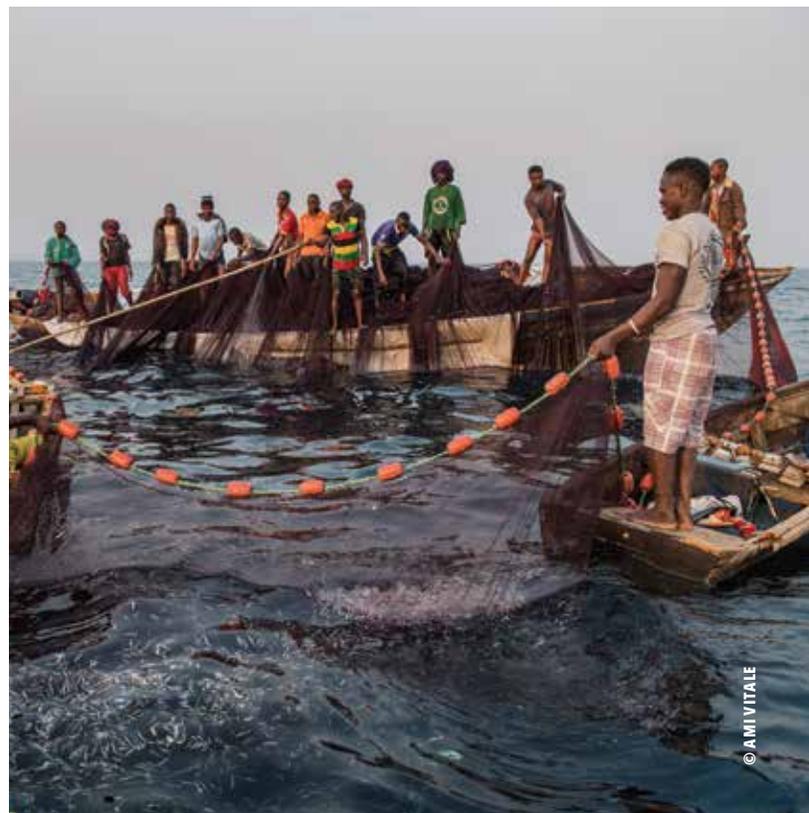
Expansion of this capacity-building program has continued across the Emerald Edge through the provision of critical technical and financial capacity in support of community visioning and land use planning for the Ahousaht Nation in British Columbia. A subsequent leadership exchange coordinated between the Ahousaht and Haida Nations helped Ahousaht leadership strengthen their negotiations with the Provincial Government and achieve more effective governance authority. The Ahousaht Nation also established a [Coastal Guardian](#) program, which resulted in a mapping effort in partnership with TNC (who provided technical mapping support) to delineate their territories and resources, including the integration of areas of cultural significance. All of this has served to bolster collective action, effective governance, and the Ahousahts' negotiations with external stakeholders. For example, most recently, the Ahousaht Nation signed a new agreement with British Columbia to provide a joint set of recommendations to the Cabinet for implementation of their land use vision which will result in new conservation, forestry, and economic development areas and a governance agreement.



Freshwater Fisheries Management in Lake Tanganyika

For over a decade, TNC has been involved in community-based conservation initiatives and sustainable fisheries management in East Africa's Lake Tanganyika Basin. Lake Tanganyika is the second largest lake on Earth by volume, containing 17 percent of the planet's surface freshwater. The basin hosts some of Africa's most iconic aquatic and terrestrial organisms and is best known for its 250+ species of cichlids, 98 percent of which are endemic. A complex web of interactions between the lake's topography, biogeochemistry, upwelling regime, and pelagic and nearshore ecosystems has produced a productive inland fishery that supports 12 million people as a source of protein and income. Fish contributes 40 percent of animal protein in local diets, and there are an estimated 95,000 active fishers on the lake. The countries that share Lake Tanganyika—Tanzania, Democratic Republic of the Congo, Zambia, and Burundi—have varying capacity to support fisheries management, and the lake remains primarily an artisanal and subsistence open-access fishery. Additionally, the region has high population growth and high levels of poverty, exerting pressure on an already overused natural resource.

In 2012, TNC and partners established the [Tuungane Project](#) (Kiswahili for "Let's Unite") in Tanzania to introduce solutions that promote healthier families, fisheries, and forests, using an integrated approach that addresses both health and environmental issues simultaneously. These holistic solutions promise more durable results than the more traditional siloed approach because the conservation practices are designed to also improve people's lives. Fisheries management under this project has focused on establishing community Beach Management Units (BMUs) to manage fisheries resources, providing BMUs with training and tools to strengthen community leadership and capacities, developing community-based monitoring systems, and



creating finance mechanisms that cover the full costs of fisheries management. TNC is also seeking to actively scale impacts across Lake Tanganyika. Partnering with The Lake Tanganyika Authority (LTA)—a Lake Tanganyika regional governing body with a mandate to promote sustainable development and management of the region's natural resources—as well as the United Nations Environment Programme, International Union for Conservation of Nature, and Global Environment Facility, TNC aims to promote fishery co-management institutions and the establishment of community-based fish reserves (protected breeding sites) across the lake.

Strong leadership and capacity are important for establishing robust institutions and coordinating action to manage common pool resources. In Tanzania, for example, village leaders are elected every 5 years. These leaders manage the community alongside an executive committee. The BMU leaders, who manage fishing resources and bylaws, are elected every three years. Leadership terms of office requires TNC to continually build relationships with new leaders and provide ongoing training to improve BMU effectiveness, income generation, and buy-in of the communities without BMUs. Terms of leadership are designed to be staggered so senior leaders will bear partial responsibility for introducing successors to the governance practices. TNC focuses on supporting more consistent and gender-equitable leadership dedicated to effectively carrying out conservation actions at the BMU level and improving BMU finance capacity. While there is a national policy in place that mandates 30% of leadership positions must be held by women (also reinforced in BMU bylaws), women in leadership positions can still be limited in their contribution and involvement due to cultural and religious norms. To address the challenges, the project facilitates purposeful nominations of female leaders, organizes tailored trainings to increase motivation and confidence, and actively engages nominated women's partners as part of the process.

Having strong leadership in place at the village level, clear bylaws and institutional structure, the backing of the government for difficult enforcement issues, and incentives to avoid free-riders (i.e., those who benefit without paying/putting in work) have all proved critical in those BMUs that have been successful on Lake Tanganyika. Additionally, Collaborative Fisheries Management Areas (CFMAs), consisting of a confederation of BMU networks, have been created following the Tanzania guideline. CFMAs have been successful in cases where these networks can support and work with individual BMUs through wider patrols to protect relatively large areas designated as fish reserves.

However, to make the BMU financially sustainable will require a change in policy and practice that can only be made by the Government of Tanzania. TNC, in collaboration with the government and LTA, is piloting a fisheries-based business enterprises framework, the success of which will be adaptively replicated in other parts of Lake Tanganyika to enhance durable conservation of the fisheries resources. Although the Tuungane Project has had notable successes, the community-based freshwater conservation work is only starting its journey towards financial sustainability. TNC is working with partners to use value-chain analysis and harness market incentives to ensure that fishers in well-managed BMUs receive an individual and/or common financial benefit over the longer term. The first step is to advocate to the government for the return of some percentage (10-15 percent) of the government revenues (including costs for transportation of fisheries products) which is being managed by BMUs on behalf of the District Government Authority. Project success depends on effectively engaging Indigenous Peoples and local communities in an array of roles, including as land- and resource-holders, as owners and partners, and as leaders and beneficiaries. Strengthening and establishing local institutions is viewed as fundamental to long-term sustainability and resilience, and the project is increasing its efforts in this regard.

Tools and Resources



TOOL 4: DIAGNOSTIC—COMMUNITY LEADERS AND INSTITUTIONS

Strong community leaders and institutions are foundational to community-led conservation. The key criteria in this tool can be used to assess the effectiveness of both, which in turn influences the trust and confidence individuals are likely to place in them. This information should be discussed with the community, or its representative institutions, during situation analysis using key informant interviews and focus group discussions. You may use the checklist to log your response to each of the questions to determine potential growth areas and opportunities to support appropriate capacity-building activities in partnership with Indigenous Peoples and local communities.



TOOL 5: DIAGNOSTIC—COLLECTIVE ACTION AND SOCIAL COHESION

Collective action is a prerequisite for effective governance and is influenced by certain resource and community characteristics. This information should be discussed with the community, or its representative institutions, during situation analysis using key informant interviews and focus group discussions. You may use the checklist to log your response to each of the questions to determine potential growth areas and opportunities to support appropriate capacity-building activities in partnership with Indigenous Peoples and local communities.



TOOL 6: DIAGNOSTIC—COMMON POOL RESOURCE GOVERNANCE

Common pool resource governance is widely found within Indigenous and local community territories. When considering how we might support communities in sustainable natural resource management, it is important to assess eight conditions that influence the effectiveness of these property regimes.⁶⁹⁻⁷⁰ This information should be discussed with the community, or its representative institutions, during situation analysis using key informant interviews and focus group discussions. You may use the checklist to log your response to each of the questions to determine potential growth areas and opportunities to support appropriate capacity-building activities in partnership with Indigenous Peoples and local communities.



TOOL 7: STEP-BY-STEP GUIDE—NATURAL RESOURCE GOVERNANCE TOOL

This guide is designed to offer conservation practitioners a set of basic concepts and tools to better understand, assess, and support effective governance of natural resources in landscapes and seascapes. The guide is designed to aid in understanding of key criteria for effective governance of natural resources and serve as a diagnostic.



Pillar 3

Effective Multi-Stakeholder Dialogue and Decision Making



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Knowledge, Evidence, and Practice

KEY POINTS

- Multi-stakeholder dialogue and decision making (MSD) is most appropriate in complex situations with multiple actors that have diverse interests in lands, waters, or resources.
- MSD can have many purposes—from information sharing, to conflict resolution, to decision making—and can occur at and across the local, regional, or national/international scale. However, to be successful and influential, the scale of the MSD needs to match the scale of the issue and the actors involved.
- Strategies that involve MSD should be paired with strategies that increase Indigenous and local community leadership and/or capacity to engage, in addition to training for other stakeholders on how to engage effectively and respectfully with Indigenous Peoples and local communities.
- Skillful and consistent facilitation of MSD is critical for creating connections and social cohesion among the various actors, and for supporting negotiations, collective learning, and conflict resolution over time.
- Power dynamics are an important consideration in MSDs and failing to recognize and address them can serve to perpetuate existing inequities in the system.
- Depending on the format and need, MSD can be set up as short-term working groups or long-term institutions—enduring platforms or forums for dialogue can be essential if on-going conflict resolution and decision making around a set of regulations or agreements will be needed.

KEY TERMS

Multi-Stakeholder Dialogue—a forum that brings actors with a shared interest in an issue or decision into contact with one another to exchange information and institutional knowledge, generate solutions and relevant good practices, enhance trust, resolve conflict, and/or come to a decision. This forum can be short-term or long-term, can occur at a variety of scales, and can link to other MSDs.

Rightsholder—a person or group of people with recognized rights to provide or withhold consent in decision making about lands, waters, or resources management. We refer to Indigenous Peoples as “rightsholders” given their internationally recognized human rights most recently articulated in the [2007 United Nations Declaration on the Rights of Indigenous Peoples](#).

Stakeholder—a person or group of people with an interest in lands, waters, or resources. Sometimes referred to as “interest holder.”

⑤ Understanding Multi-Stakeholder Dialogue and Decision Making

In any given natural resource management context, there are typically multiple actors or groups with an interest in lands, waters, or resources, and oftentimes these actors may have competing and overlapping claims or use rights. A wide range of stakeholders may wish to influence the use and management of natural resources, particularly in cases where rights are unclear, not formalized, or resources are open access. Contexts are complex with power dynamics at play and are often situated within a history of inequities when it comes to meaningful participation—particularly for Indigenous Peoples and local communities. Indigenous Peoples specifically are considered “rightsholders”—not “stakeholders”—in consideration of and respect for their internationally recognized human rights to provide or withhold consent in decision making about their territories or resources, in addition to localized country, region, or state rights associated with Indigenous Peoples.

Multi-stakeholder Dialogue (MSD) aims to bring relevant rightsholders and stakeholders into contact with one another. MSD has much in common with governance and collective action aspects covered in the “Strong Leadership, Governance, and Management Capacity” section (Pillar 2). However, unlike that pillar, which is focused on capacity-building within the community or community organization, MSD focuses on inter-group/inter-stakeholder capacity and collaboration, which comes with its own needs and challenges and can be highly matrixed.

MSD—when well-designed and executed—can be used to meet various objectives, such as to enhance levels of trust and social cohesion between different actors, share information and institutional knowledge, generate solutions and relevant good practices, foster collaboration and cross-learning, clarify rights, balance the power for those involved, address conflicts, or come to decisions. With sufficient time, resources, and preparation, MSD can be a very effective tool for bringing diverse constituencies together to build consensus around complex, multifaceted and—in some cases—divisive issues.⁸⁸ In fact, a recent systematic review and analysis found multi-stakeholder dialogue was important to community-based conservation success, and that projects that include such activities have a higher probability of achieving positive human well-being and environmental outcomes.¹⁶

In the case of decision making MSDs, the forums may include people who make decisions, those who influence decisions, as well as those who are affected by the decisions. In these situations, it is important to clearly identify the purpose and authority of the multi-stakeholder engagement to generate any action or decision. As it relates to partnerships with Indigenous Peoples and local communities, conservation organizations can support and strengthen their ability to participate, influence, and make decisions in such forums, as well as educate other stakeholders on how to engage effectively and respectfully with Indigenous Peoples and local communities. Table 4 lists some of the roles conservation organizations might play in MSD, keeping in mind they may hold multiple roles in the same MSD or across MSDs.

Table 4: Roles for conservation organizations in MSD.

Role	Description
Convener	Organizing the structure for different actors to engage in dialogue—could include funding of the forums
Facilitator	Facilitating the dialogue itself—including moving the agenda forward, conflict resolution, and consensus building
Capacity-builder	Building capacity of various actors to engage with each other effectively and respectfully
Supporter	Providing funding and logistical support for Indigenous and local community leadership participation in MSD, particularly those requiring significant travel
Implementer	Supports participating individuals and organizations in implementing decisions, actions, and follow up needs that emerge from the MSD

MSD can occur at and between many scales—from local level examples with one community, a corporate entity, and/or local government with an interest in a discreet place or resource (e.g., water user associations in a watershed, fisheries co-management arrangements), to the regional level involving multiple actors over one or more jurisdictions (e.g., Amazonia Agora platform for the sustained reduction of deforestation in Pará, Brazil), to the global level taking place at the national or international scale (e.g., Micronesia Challenge to effectively conserve 30 percent of near-shore marine resources, United Nations Framework Convention on Climate Change). Critically, the appropriate scale of the MSD depends on the scale of the issue and the actors involved. Further, it is possible to have many overlapping MSDs that address issues at different spatial scales, and MSDs that are convened temporarily or permanently.³⁷ Bridging organizations—often NGOs or research institutions—can play a crucial role as facilitators, creating connections among the various actors, and supporting negotiations, collective learning, and conflict resolution.⁸⁹⁻⁹⁰

MSD is important across terrestrial, coastal, and freshwater ecosystems, as each context includes multiple actors with sometimes divergent interests. However, MSD is particularly critical in coastal and freshwater systems due to the different rights and tenure structures in these spaces, where multiple actors or institutions may have legitimate rights over the same resource, where there can be multiple users (including those external to where the resource is), where there are fewer “exclusive” or private rights, and (in the case of rivers and streams) where upstream users can have impacts on the quality and quantity of resources for downstream users. Given these additional complexities of natural resource management in the freshwater and coastal spaces, MSD is often a critical strategy to navigate these challenges. In recognition of government limitations, there is greater movement toward decentralized management that favors inclusive and participatory decision making approaches such as this.

➤ **The Effectiveness of Multi-Stakeholder Dialogue and Decision Making**

See [“Tool 8: Key Attributes of Effective Multi-Stakeholder Dialogue and Decision Making”](#) for a checklist with key criteria for effective MSD.

See [“Tool 9: The Social Innovation Lab”](#) for a guide to an MSD approach that focuses on bringing together diverse groups of people in conflict over complex and challenging problems to jointly co-develop and test solutions.

Several factors influence the effectiveness of MSD. For example, a key driver for participation by all parties is the relevance of the issue. When the management challenge or issue is immediate and urgent, social pressure for all to participate is often high, especially where interdependence between stakeholders is obvious.⁹¹ In addition, it is critical that the full suite of actors is included—namely relevant rightsholders and stakeholders who have an interest in and stand to be impacted by the management challenge or issue, as well as those with knowledge to skillfully facilitate.⁹¹ Further, if the MSD is not a decision making body itself (e.g., convened for knowledge sharing or conflict resolution), there must be a link to the decision making process in order to influence it.⁹²

MSDs work best when they:

- embrace conflicts and connections within and beyond the group, creating space for individual actors’ agendas and discord, while also creating the space to meaningfully engage across conflict (rather than focusing on the collective goals and harmony of the team),
- experiment systematically with different perspectives and co-created solutions, taking one step at a time and building on the information that is gained through experimentation (rather than insisting on clear agreements about the problem, solution, and plan before action is taken), and
- focus on participants’ role in perpetuating the current situation and creating an alternative solution (rather than focus on changing what other people are doing).⁹³

This is championed by proponents of the “social innovation lab” approach, which is one type of MSD that specializes in complex and unpredictable issues that include diverse sets of actors often with different world views and understandings of the problem.⁹³ Social innovation lab approaches to systems change rely on convening a subset of the larger system using highly skilled facilitation. Such approaches break down hierarchies and foster connections, grasp the nature of the whole system including differing perceptions of the problem, generate reflections on various roles within the system, and co-create/experiment with possible solutions. This process often leads to innovative ideas and forward progress where issues were previously “stuck.”

Thus far, evidence on the effectiveness of MSD in achieving conservation goals is still emerging; robust monitoring and evaluation programs could help fill these knowledge gaps.⁹⁰ Analysis of examples of MSD finds that positive impacts on social outcomes—such as rights recognition, increased access to information, and tenure security—have been observed in many cases; however, this appears to be very closely tied to the level and quality of participation by local communities. For example, an analysis of several MSDs initiated through the European Union Forest Law Enforcement, Governance, and Trade (EU-FLEGT) Facility found a general correlation between strength of participation and extent of positive social impacts across the reviewed case.⁹⁴ Whereas in Brazil’s Pantanal Wetlands, conservation and government activities attempted to assure sustainable fisheries through a superficial co-management approach based around a regulating commission comprising legislators, scientists, and enforcers. The lack of effective fisher participation in the MSD led to lack of understanding of management requirements, fishers’ distrust of the MSD’s urban-based scientists, and noncompliance with rules.⁹⁵⁻⁹⁶



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Case Studies

Multi-stakeholder Dialogue in Cambodia's Tonle Sap Lake and Floodplains

Cambodia's Tonle Sap Lake is a large, seasonally inundated lake bordering five Cambodian provinces and draining into the lower Mekong River system. Intense conflict has arisen in response to upstream-downstream competition, both nationally and internationally. Local sources of resource competition are found within the fishing sector, as well as between the fishing sector and other sectors, the latter involving conflicts among fishing and dry-season irrigated rice production. Expansion of the rice production is often backed by powerful investors from outside of local communities, creating private irrigation areas that displace customary community use.

To address fishing-sector conflict, the Cambodian government changed its national fishery policy from centralized control of large-scale commercial fishing lots to a form of decentralized co-management based on community fishery organizations (CFOs). The newness of the CFOs meant that their legitimacy, leadership, and governance capacity were low, so local competition for fishing resources initially rose as users maneuvered to secure rights under the new system or take advantage of enforcement gaps, which led to widespread illegal fishing.

To increase their governance capacity, CFOs used a participatory multi-stakeholder process to restructure management and improve enforcement. The CFOs also increased their capacity to resolve interprovincial and intersectoral disputes. In the case of the dry-season rice farmer associations, a verbal agreement was made in the presence of provincial agriculture and fisheries departments, which was later formalized by the Fisheries Administration. The CFOs also increased their capacity to petition for government support to change or allow exemptions from current regulations. This resulted in a pilot project to establish a commercial fishery under community management, with safeguards to ensure adequate resource protection and benefit sharing. The CFOs also engaged in networking among the communities surrounding the lake (through a series of marketplace knowledge events) and with a national grassroots network representing fishing communities.

The success of the participatory multi-stakeholder process was so great that a national grassroots network representing fishing communities modified its internal governance and increased collaboration with national government authorities and the formal nongovernmental sector. The Fisheries Administration also proposed incorporating the process in the implementation of ongoing fisheries reforms. These results may be generalizable to other large, open-drainage systems of international significance, such as Lake Victoria (bordered by Kenya, Tanzania, and Uganda) and Lake Kariba (bordered by Zambia and Zimbabwe).

Source: Ratner et al. 2018 as cited in Zhang et al. 2020³⁷

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Tools and Resources



TOOL 8: DIAGNOSTIC—KEY ATTRIBUTES OF EFFECTIVE MULTI-STAKEHOLDER DIALOGUE AND DECISION MAKING

Multi-stakeholder dialogue and decision making focuses on inter-group and inter-rightsholder/stakeholder capacity and collaboration, which comes with its own needs and challenges. An important role of conservation organizations is often that of “convener” and “facilitator.” Whether conservation organizations are involved in supporting Indigenous and local community leadership in convening a new MSD, facilitating an MSD, or supporting meaningful Indigenous and local community participation in an existing MSD, the checklist of key criteria of effective MSDs can be used to understand the MSD structure and whether/where adjustments might be warranted.



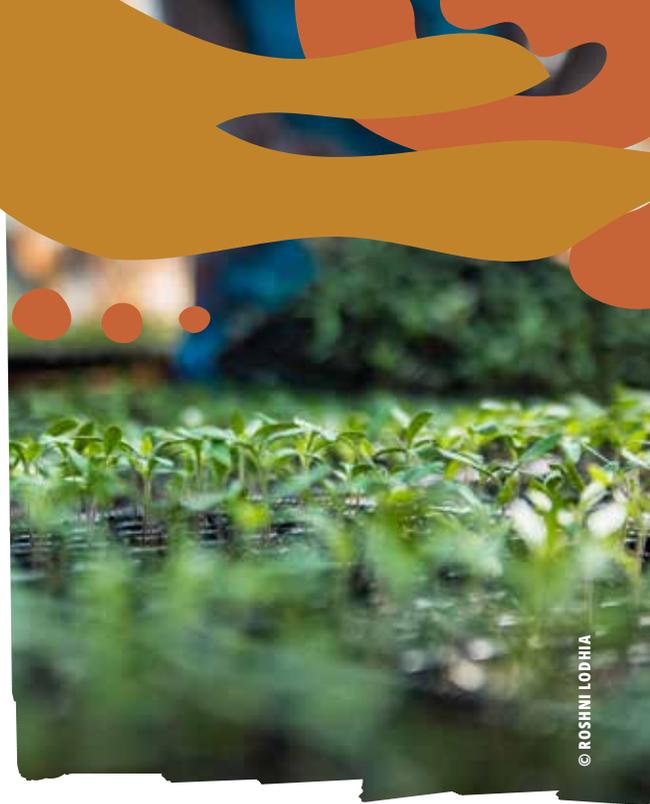
TOOL 9: GUIDE—THE SOCIAL INNOVATION LAB

This guide by Reos Partners, entitled “The Reos Change Lab: Addressing Complex Challenges with Social Innovation,”⁹⁷ presents an approach to creating and navigating change and transformation in complex social systems. While this guide is not a “how-to,” it is an in-depth exploration of the Change Lab approach, as well as an overview of some of the associated principles, tools, and resources. The guide explains the process of initiating, convening, and facilitating a social change process that is systemic, creative, and participative—a “who,” “what,” and “why” of social innovation. As conveners and facilitators of MSD, conservation practitioners trained in the Change Lab approach may find this helpful to supporting Indigenous and local community leadership and meaningful participation in MSD, and building understanding and capacity amongst diverse stakeholders.



Pillar 4

Sustainable Livelihood Opportunities



Knowledge, Evidence, and Practice

KEY POINTS

- It is essential that partnerships to build livelihood opportunities be directly linked with sustainable natural resource management for community-led conservation to be effective and durable.
- Sustainable livelihoods initiatives focus on business and household income, and often do not cover the full and direct costs of conservation, highlighting the need for such initiatives to be paired with conservation finance.
- In addition to furthering environmental and social goals, sustainable livelihood opportunities must be viable from a business perspective, which requires navigating financial, market, operational, governance, regulatory, and other considerations. Deep understanding of the specific context is critical, including any barriers that might limit feasibility.
- Diversification of livelihood options helps reduce financial shocks associated with any one option failing.
- Although not a steadfast rule, sustainable livelihood opportunities based on existing community activities—for example, identifying markets for fish caught with sustainable approaches or scaling up existing sustainable forestry activities—achieve faster uptake and require less capacity-building than opportunities that require people to learn completely new skills, such as developing ecotourism ventures.

KEY TERMS

Conservation Finance—mechanisms and strategies that generate, manage, and deploy financial resources and align incentives to achieve nature conservation outcomes.⁹⁸ Conservation finance is aimed at funding the full costs of conservation and maintaining long-term financial sustainability.⁹⁹

Payments for Ecosystem Services (PES)—payments for ecosystem services (PES) are payments from the beneficiaries or users of an ecosystem service to the caretakers of that service. Ecosystem services can include carbon sequestration and storage, biodiversity, watershed protection, and natural resource beauty. PES includes well-developed mechanisms, such as carbon credits and watershed investments, as well as more exploratory schemes, such as payments for biodiversity.

Sustainable Livelihood Opportunities—refers to the existence of and ability to engage in sustainable livelihood options that allow a person to remain rooted in place. A livelihood is a means of making a living or securing the necessities of life. A livelihood is sustainable when it minimizes harm to the natural resource base, enables people to cope with and recover from financial shocks and stresses, and equitably enhances environmental, social, cultural, and economic well-being now and for future generations.

🔗 Types of Sustainable Livelihood Opportunities

Sustainable livelihoods include subsistence ways of living—such as subsistence farming or fishing—as well as opportunities and incentives for people to generate income through environmentally sustainable and culturally appropriate management of their natural resources. The [United Nations Declaration on the Rights of Indigenous Peoples](#) states that Indigenous Peoples have the right to self-determination—which includes economic self-determination.³ When people can align their economic needs with their visions for the future and their desires for sustainability, they are better able to champion environmental stewardship. A recent systematic literature review found that economic development activities were the most important project-level enablers for positive environmental and human well-being outcomes, increasing the probability of combined success.¹⁶ When co-developed with and driven by local community visions, and thoughtfully designed and implemented, sustainable livelihood approaches offer a powerful opportunity to improve community well-being and the environment.

Generally, sustainable livelihood opportunities can be classified into three categories:

1. subsistence livelihoods,
2. direct compensation, and
3. community enterprises.

Depending on the local context, it might be appropriate to engage in more than one category, or all three (Table 5).

Table 5: Categories and examples of sustainable livelihood opportunities.

Category	Example Sustainable Livelihood Opportunities
Subsistence livelihoods	Creation of goods and services that are utilized by the producer and their family or community, rather than marketed and sold (e.g., sustainable agriculture, fisheries products, medicinal plants, cultural practices). Communities might be interested in improving the sustainability and enabling conditions of subsistence livelihoods. For example, transitioning to more sustainable farming or harvesting practices or creating community-managed marine protected areas as methods to help improve food security
Direct compensation where community members receive income for their participation in environmental stewardship	Environmental incentives (e.g., carbon offsets, water funds, and other payments for ecosystem services), direct employment in conservation (e.g., rangers/guardians, environmental monitoring), and benefit-sharing mechanisms (e.g., conservation project community fund)
Community enterprises	Creation of goods and services to be marketed and sold, often tied to the sustainable use of natural resources (e.g., cacao, spices, rubber, fish, seaweed, livestock, or ecotourism)

The three categories above are supported by enabling opportunities that create access to financing and training. Enabling financial opportunities can include microfinance, village savings and loan associations, and other opportunities that allow for job creation, enterprise development, and financial security. Enabling capacity-building opportunities can include entrepreneurship training, business and technical assistance, and the strengthening of community enterprises.

Sustainable livelihood opportunities generate income to meet personal and household needs, which improves people's financial security and resilience, incentivizes sustainable resource management, and reduces unsustainable development pressures. However, they typically do not generate enough revenue to pay for the direct costs of conservation.⁹⁹ For example, a community aquaculture venture might provide people with income from seaweed sales, but not pay for the maintenance, monitoring, and restoration of the surrounding reef.

➤ The Success of Sustainable Livelihood Opportunities

See [“Tool 10: Guidebook to Sustainable Livelihoods and Community Enterprises”](#) for a guide to strengthen sustainable livelihood opportunities in partnership with Indigenous Peoples and local communities.

See [“Tool 11: Preparing Communities to Prosper”](#) chapter—beginning on page 183—of the [“Namati Community Land Protection Facilitators Guide”](#)¹⁰⁰ for guidance and activities to prepare communities to negotiate with investors and to take specific steps to actualize their shared community vision.

In many places around the world, Indigenous and local communities face economic stress with high unemployment and few options to generate income. In these circumstances, people who value natural resources may experience an unfortunate reality of tradeoffs between conserving those resources and supporting themselves and their families. Additionally, in some cases, they may have few options but to leave their communities in search of job and/or education opportunities. Outmigration, when it occurs in large numbers, can have the impacts of weakening community social fabric, disrupting connections to place and capacity for collective action, and reducing the number of people stewarding the resource, potentially creating opportunity for exploitation by outsiders and/or extractive industries with competing interests.

Successful co-development of sustainable livelihood opportunities depends on several key factors. For one, opportunities that leverage a community’s existing skills and knowledge tend to have faster uptake than those that require the community to learn entirely new skills. Even opportunities focused on existing skills require high levels of business and financial capacity-building to become viable, often over a period of 8-10 years or more.¹⁰¹ Sustainable livelihood opportunities also require ongoing, reliable access to affordable finance, which is often lacking in the early stages of development.¹⁰¹ Communities must be able to effectively sell their products and services and access markets at fair prices. They must have a viable business model, which requires appropriate governance, operations, financing, and market and regulatory considerations, among others. Direct business support and a deep understanding of the given context are critical.¹⁰¹ The success of sustainable livelihood opportunities also depends on elements of human well-being beyond wealth creation, such as the needs and aspirations of the people involved, cultural values, and the vision they have for the future of their communities.¹⁰²⁻¹⁰³ It is important to first understand how individuals and communities value natural resources and how economic stresses influence their ability to act on their values.

Perhaps most important, sustainable livelihood opportunities—across all the above categories—need to be closely linked to sustainable management of the natural resources themselves. One aquaculture company in Kenya employed members of the local fishing community, trained them for future leadership opportunities, and paid the community above local market wages along with lease payments for use of their land. Establishing a protected breeding area there led to the rediscovery of species formally believed to be extinct.¹⁰¹ In another example, a farmer-owned company in India helped farmers reach markets at 20-30 percent higher prices, implement sustainable harvesting practices, and provided training on health, Indigenous rights, and other knowledge.¹⁰¹ On the other hand, examples where sustainable livelihood opportunities are not closely linked to sustainable management of natural resources have resulted in supplementary sources of income with (unsustainable) exploitation of the resource continuing at similar levels.^{102,104} This was demonstrated in one study where fishers were provided new boats without increased enforcement of fisheries regulations, which led to increased harvest of near-shore fish.¹⁰⁵ In another example, communities participating in an alternative livelihoods program without a strong sustainable land use planning component used their increased income to expand livestock holdings, which ultimately further degraded the habitat the program aimed to protect.¹⁰⁶

Each of the above considerations highlights the importance of community-led, community-driven sustainable livelihood opportunities that account for these nuances and include a mixed portfolio of options, diversifying the risk of any one venture failing. However, it is important to note that there are upfront costs associated with diversification that may put low-income groups at a comparative disadvantage for participation in such initiatives. Dialogue with individuals and groups at multiple levels can help create understanding about the evolving nature of opportunities and threats from different perspectives; good dialogue allows management approaches to be adapted accordingly.^{102,107}



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Case Studies



Northern Australia—Sustainable Livelihoods Through Carbon Enterprises and Direct Employment in Conservation Management

Historically, much of Northern Australia existed as a complex mosaic of land and sea traditionally managed by hundreds of Indigenous clans. However, colonization left these clans dispossessed of their lands in the 19th and 20th centuries, interrupting their relationship, knowledge, and practice that underpinned patterns of environmental stewardship developed over more than 65,000 years. Without this traditional management, the savannas of Northern Australia have become subject to more wildfires late in the dry season, which burn more intensely, damage habitat for native plants and animals, and release higher levels of greenhouse gases. More recently, large areas of land have been returned to the management control of Indigenous Peoples. Native Title and other forms of Indigenous tenure and rights now cover more than 60 percent of the northern savannas. These underlying rights have served as an important foundation for partnership between TNC and Indigenous communities to secure financing and support the institutional and governance systems to sustain land- and sea-based enterprises. In fact, this case represents a compelling example of how sustainable livelihoods and conservation finance can work together to create positive outcomes for communities and the natural environment.

TNC’s Northern Australia program works with Indigenous Australians as they manage their traditional lands and renew and strengthen their connection to Country. Indigenous partners engage in participatory planning for their territories, called [Healthy Country Planning](#) (adapted by Traditional Owners in Australia from Conservation Action Planning to better fit their context and priorities). This enables them to envision a future for their lands with economic opportunity that aligns with their cultural priorities. As a key part of land

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management, Indigenous Australians have revived traditional fire management practices, helping restore and maintain the area's rich biodiversity and protect important cultural sites and environmental features. By reducing destructive late season wildfires, these practices on Indigenous lands have resulted in the avoided release of more than 8 million tons of carbon dioxide equivalent across more than 50 million acres (19.3 million hectares), with plans to expand the model across Northern Australia to include carbon sequestration.

Reducing greenhouse gas emissions enables the community to generate and sell carbon credits through Australia's carbon market, which creates important opportunities for communities. Traditional fire management has generated more than AUD \$100 million in carbon finance, which enables groups to leverage additional investments from the government, philanthropy, and other sources. [Warddeken Land Management Ltd.](#), a community-owned company, executes financing responsibilities and other services related to land management and community well-being. The company includes board members from each clan group and a knowledge-holder steering committee representing diverse knowledges.

The company uses this financing to support a mix of community organizations and sustainable livelihood opportunities, which is key to its durability and financial self-sufficiency. Initiatives include capacity-building, infrastructure, community programs, carbon abatement enterprises, and Indigenous ranger programs. Ranger programs employ and train local men and women in land management and habitat restoration, combining Indigenous Knowledge and Western science for lasting results. The skills, management capacity, and governance arrangements developed through rangers' programs and carbon abatement enterprises also provide a foundation for developing additional sustainable livelihood opportunities. For example, some local community members undertake fee-for-service activities, such as weed control, feral animal control, biosecurity protection, and wildlife surveys for neighboring landowners, government agencies, and the resources industry. Others develop ecotourism, cultural tourism opportunities, and bush food enterprises. This provides an important foundation for future sustainable livelihood opportunities based on culturally appropriate management of land resources.

Additional case studies on Sustainable Livelihood Opportunities can be accessed [here](#).



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Tools and Resources



TOOL 10: GUIDE—GUIDEBOOK TO SUSTAINABLE LIVELIHOODS AND COMMUNITY ENTERPRISES

This guide is designed to help conservation practitioners advance sustainable livelihoods in partnership with Indigenous Peoples and local communities. The guide provides the foundational knowledge necessary to understand sustainable livelihoods and outlines actionable steps and tools conservation practitioners can use when co-developing sustainable community enterprises.



TOOL 11: GUIDE—PREPARING COMMUNITIES TO PROSPER

The activities in this chapter of the Namati Community Land Protection Facilitators Guide¹⁰⁰—“Preparing Communities to Prosper” beginning on page 183—are designed to foster long-term community growth and prosperity, according to each community’s self-defined plans and intentions. They support community members to pursue a range of livelihoods, regenerate local ecosystems, prepare for potential negotiations with investors, and take specific steps to actualize their shared community vision.



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Foundational Element 1

Equitable Benefits, Impacts, and Inclusion



Knowledge, Evidence, and Practice

KEY POINTS

- Supporting human rights and equity is both a moral imperative and an essential precondition for sustainable conservation outcomes. For Indigenous Peoples, this includes the right to self-determination and the standard of Free, Prior, and Informed Consent.
- Equity should be examined at both the scale of the community (e.g., community to community, company, and government) as well as the scale of the individual (e.g., across social identities). In consideration of context, reflect on whether some are benefiting more than others, being impacted more than others, and being included more than others—and take actions to avoid/address as appropriate.
- Participatory situation analysis with gender and power analysis is critical for foundational understanding of what equity means in any given context, and the power dynamics that underlie and impact partnerships with communities. Any activities should be based on sound understanding of the context and rooted in support of the specific social identities' leadership, priorities, and vision for their participation and their future.
- Rights can vary within communities and across resources, and some social identities (e.g., women, youth, new migrants) may not be afforded the same rights as others, hence the need for an equity lens. Careful consideration of who the rightsholders are within a community and how secure any given rights are is needed, as this has implications for who has a say in use and management decisions, and who receives benefits.
- In participatory processes such as leadership and management capacity-building workshops and MSD, it is particularly important to ensure equitable participation and leadership opportunities across social identities, pay attention to micro and macro power dynamics and provide capacity-building on all sides to address power imbalances, and understand and mitigate potential unintended consequences of participation for community members.
- When supporting sustainable livelihoods, the same emphasis should be placed on ensuring equity in opportunities and benefits across social identities and avoiding unintended consequences—particularly elite capture, widening existing wealth gaps, and increase of gender-based violence.



KEY TERMS

Elite Capture—implies several related, yet distinctly different situations, including domination and control of decision making processes, monopolization of public benefits and resources, and a combination of both. The concept is also used to describe situations in which political and economic elites misappropriate resources and public funds or commit acts of malfeasance.¹⁰⁸

Equity—a multi-dimensional concept of ethical concerns and social justice based on the distribution of costs and benefits, process and participation, and recognition, underpinned by the context under consideration. Sometimes used synonymously with fairness or justice.¹⁰⁹

Human Rights—rights inherent to all people, whatever the nationality, place of residence, sex, gender identity, sexual orientation, national or ethnic origin, race, religion, language, age, ability, or any other status. We are all equally entitled to human rights without discrimination.¹¹⁰

Intersectionality—first coined in 1989 by professor Kimberlé Crenshaw, describes the concept that socially constructed traits do not exist in isolation from each other, but rather are interconnected and influence each other in overt and covert ways.¹¹¹

Social Identity—those aspects of a person that are defined in terms of his or her group memberships (e.g., Indigenous identity, race, ethnicity, religion or belief system affiliation, nationality, age, sexual orientation, gender identity, language, education level, socioeconomic status or class, geographic location, migration or visa status).¹¹²

See [“Tool 12: Conducting a Power Analysis”](#) for a tool that explains the multi-dimensional aspects of power, and provides guidance and templates for conducting power analysis.

See [“Tool 13: Human Rights Guide”](#) for detailed guidance on implementing a human rights-based approach.

See [“Tool 14: Gender Guidelines”](#) for detailed guidance on gender equity integration in conservation projects and strategies.

In the conservation sphere, social equity can be described as having four dimensions—1) distribution of costs, responsibilities, rights, and benefits, 2) the procedure by which decisions are made and who has a voice, 3) acknowledgement and respect for the equal status of distinct identities, histories, values, and interests, and 4) the underlying social, economic, environmental, and political history and circumstances.¹⁰⁹ At a bare minimum, conservation organizations should be committed to “first, do no harm” in the communities with whom we partner and ensure that local people do not unjustly shoulder the costs of conservation while society benefits.¹¹³⁻¹¹⁴ TNC is committed to fulfilling this baseline social safeguard requirement and to going beyond: through supporting and advancing Indigenous Peoples’ and local communities’ visions and self-determination.

This two-fold commitment—not only to do no harm, but also to build a true partnership approach centered on equity and self-determination—requires a strong understanding of the specific context. To do so, it is important to recognize communities as a diverse mix of groups and

identities. Different social groups or identities (e.g., based on gender, age, socio-economic status, ethnicity, race, religion, etc.) often use natural resources in different ways, depending on their knowledge and skills, that are directly linked with their socially defined roles and responsibilities, and are impacted in different ways. For example, certain activities may shift time allocations and increase the burden of work on more vulnerable household members, such as women and children. If these potential costs and differences are not fully understood, the success of any activity is likely to be limited, and possibly with unintended consequences for some community members. In contrast, when equity considerations are incorporated into program design, implementation, and monitoring, it will ultimately result in better outcomes for both people and nature and increase the longevity of community decisions and actions. This is supported by studies that found increased women's participation in forest and fisheries management resulted in improved resource-use rules, increased compliance, and better protected ecosystems.¹¹⁵⁻¹¹⁶

Co-creating respectful, equitable relationships with Indigenous Peoples and local communities takes time. Although TNC's engagement will look different in different situations, the responsibility to center Indigenous and local community visions for the future, and honor the diversity of social identities within these groups, remains constant. Across all activities, a robust, participatory situation analysis that includes intra-community gender and power analysis is important to understanding culturally responsive ways to support community authority and capacity. For instance, assessing the distribution of benefits—both tangible (e.g., income, technology) and intangible (e.g., education, status, participation, inclusion, safety, agency)—from conservation strategies is important, as some groups may benefit more than others. This analysis can guide how to provide that support in ways that avoid backlash and the potential for identity-based discrimination or violence. The analysis must recognize and respond to power dynamics, including different realities for different social identities, and move beyond treating any social identity as a homogenous group; rather, it is imperative to recognize that one's full identity is made up of numerous intersectionalities across different social identities.¹¹⁷ Facilitating targeted and effective community participation across social identities in situation analysis is important for ensuring that subsequent activities are collaboratively developed and culturally responsive, and that they do not cause unintended negative consequences, such as backlash, identity-based violence, or imposition of outside assumptions—including assumptions about what equity looks like—that may perpetuate colonial frameworks or impacts (personal correspondence, Janine Mohamed, Lowitja Institute).

➤ Equity in Rights and Tenure

Indigenous Peoples' fundamental right to self-determination rests on their secure rights over lands, waters, and resources. This is affirmed in the [United Nations Declaration on the Rights of Indigenous Peoples](#). For example, Article 25 asserts Indigenous Peoples' right to maintain and strengthen a spiritual relationship with their lands, waters, and territories; Article 29 outlines Indigenous Peoples' right to conservation, protection, and productive capacity of their lands or territories and resources; and Article 32 articulates Indigenous Peoples' right to determine priorities for lands, territories, and resources use and development.³

An equitable approach to securing Indigenous and local community rights over lands, waters, and resources may include supporting policy implementation or changes that contribute to more favorable rights and equity conditions. This approach also may also involve supporting equitable tenure, use, and inheritance rights across social identities within a community. Historically, efforts to increase tenure security have often focused predominantly on resources used by men, despite there being different uses and knowledge held by women. Further,

in some contexts women may not be able to own land, and if they are able to own land together with their husband, land is oftentimes inherited by male relatives if the husband passes away. This backdrop of structural inequality undermines women's well-being and security, as well as that of their communities and the ecosystems they protect. When women have more secure rights, they improve their resilience, their incomes, food supplies for their families, and the health of the lands, waters, and natural resources they manage.¹¹⁸⁻¹¹⁹

Geographic location can also impact power dynamics and rights regimes. For example, in freshwater contexts, being located upstream provides certain advantages over being located downstream, and power imbalances act to either counter or reinforce these dynamics. Notably, efforts to secure tenure may also increase the risk of conflict or discontent, as assigning and clarifying rights can have a zero-sum outcome. When someone is granted property rights another person or entity may lose those rights (e.g., moving from open access small-scale fisheries to rights-based management approaches).

➤ **Equity in Leadership, Governance, and Management Capacity**

Indigenous self-determination must be at the heart of efforts to support the leadership, governance, and management capacity of Indigenous Peoples and local communities.¹²⁰ This includes respecting and working with community leaders and institutions, traditional and contemporary governance structures, and decision making processes, as well as honoring and applying Indigenous and local knowledge alongside and on par with Western science,¹²¹ and taking measures to protect Indigenous and local community intellectual property. No activities should take place without Indigenous Peoples' Free, Prior and Informed Consent, which is an ongoing process that should be undertaken throughout the entire life cycle of an initiative.¹²² Building capacity goes both ways—staff and partner capacity also needs to be built for advancing an equitable and human rights-based approach to this work. Conservation practitioners should be open and willing to gain new insights, skills, and knowledge the more they engage, partner, and work alongside Indigenous Peoples and local communities.

When capacity-building strategies are designed and implemented, attention to inclusion, the equity of impacts and benefits, and the possibility of elite capture are important to their success. Successful capacity-building initiatives must advance equitable access (to information, tools, and opportunities), equitable participation (in trainings, meetings, and decision making processes), and equitable leadership (in planning, implementation, and monitoring). Different rightsholders and stakeholders have different experiences, preferences, and backgrounds, and informed action is required to ensure their inclusion. For example, women often steward different natural resources than men, which is important in programming around natural resource governance and management.

We support a gender equity approach. A bounty of evidence confirms that people and nature benefit when women have stronger rights, voices, and choices in natural resource management.¹¹⁵⁻¹¹⁶ By including all voices, we can better support the protection of the entire suite of resources that people rely on and care for. This entails including men and boys in gender analysis and gender equity-focused activities, so that together with women and girls, similarities and differences can be recognized, and solutions proposed to favor understanding, accountability, equity, and sustainability.

Examples of actions that may further equity in efforts to support strong community leadership, capacity, and governance are listed in Table 6. Please note there may be intersectionality between many of the identities listed.

Table 6: Examples of actions that can be taken to promote equity in leadership, governance, and management capacity-building for different social identities.

Example Social Identities	Example Equity Actions
Gender	Training and financial support for women’s networks and groups; holding additional, women-facilitated trainings for women community members; providing childcare at meetings or offering accommodations or stipends for women to bring their children and/or care providers; scheduling trainings and meetings for times and places that are safe and accessible for women and do not increase their time burden, risk exposure, and workload; ^h facilitating learning exchanges among women from different communities; supporting women’s capacity and confidence in areas such as public speaking, negotiations, financial management, and project leadership
Age	Training and financial support for youth networks and groups; fostering youth participation in decision making and leadership roles; developing sustainable livelihoods opportunities with youth; supporting Elders’ participation; supporting intergenerational connections; supporting healthy leadership transitions, mentorship, and succession planning
Ethnicity	Conducting workshops in local language and/or providing translation services and advertising in advance; ensuring training materials are available in accessible formats and languages; ⁱ creating methods and processes to learn and share local and ethnic knowledge surfaced and revealed; providing a neutral party peacemaker or mediator if needed
Socio-economic status/class	Compensating community members for their participation; ensuring meetings and trainings are not held at times of day when livelihood work is required or during harvest season; supporting and sourcing local vendors and service providers for place-based gatherings or events; avoiding preferential engagement with the wealthiest and most educated community members

h. This is also important for avoiding the unintended consequence of children missing school to help with household duties.

i. Consider literacy levels, as well as the possibility that women or ethnic minorities may speak an Indigenous or local language but not the national language.

➤ Equity in MSD

Many of the equity considerations related to designing effective multi-stakeholder dialogue and decision making processes overlap with those relevant to the leadership, governance, and management capacity pillar of the VCA Framework. The historic and current context of colonization and power imbalances necessitates capacity-building of all rightsholders and stakeholders involved. Otherwise, there is a risk of the same macro power dynamics playing out within the space of the initiative. This may involve building government or private company capacity in Indigenous rights and engagement, as well as support for Indigenous and local community capacity in engaging in policy or corporate spaces. It is important to remember that while conservation organizations can be a trusted convener in these spaces, we are not without bias, and the same principles that apply to our own capacity-building in the leadership pillar apply to our capacity-building for engagement in good faith as an actor within a multi-stakeholder environment.

Power dynamics are a key consideration in the design and success of MSD, both within the communities themselves and in relation to other stakeholder groups. In many cases, lack of formal rights, lack of capacity, and lack of economic alternatives can put local communities at a comparable disadvantage when it comes to power and influence in decision making. In the case of environmental degradation, those who benefit from environmentally degrading activities are often more powerful in the current systemic context than those who are harmed by degradation, thus forcing the less powerful actors to bear the costs.¹²³ Differences in access, influence, resources, and information are not always easily overcome, and those in power can be reluctant to relinquish control, many times using this power to dictate the form (e.g., time of day, time of year, location) and function (e.g., process) of dialogue. Insensitivity to the needs of Indigenous Peoples and local communities can further reduce their opportunities to meaningfully engage.⁹¹ In these cases, local communities could experience “token” or meaningless participation that does not lead to significant shifts in decision making authority. It is important, too, to acknowledge the rise of anti-Indigenous governments and other actors that promote violence against environmental defenders and undermine the security of lands, waters, and resources. Some actors and spaces will be unsafe for Indigenous and local community engagement, and it is critical to understand from the partners themselves in which to support their engagement and which they prefer to avoid. In all areas where multiple actors are engaged, it is important to collaboratively develop a culturally responsive, dialogue-focused conflict resolution plan.¹²⁴

MSDs should support access, participation, and leadership of all stakeholders (including vulnerable or underrepresented social identities) in all discussions and decision making.¹²⁵ Communities themselves have internal diversity that must be acknowledged to ensure adequate representation and participation—for example, women, Elders, and other groups who have unique perspectives and knowledge to add to the conversation. Regarding gender equity specifically, supporting connections and exchange across women’s networks and organizations may provide an important opportunity for learning, sharing, and advancement of women’s priorities.

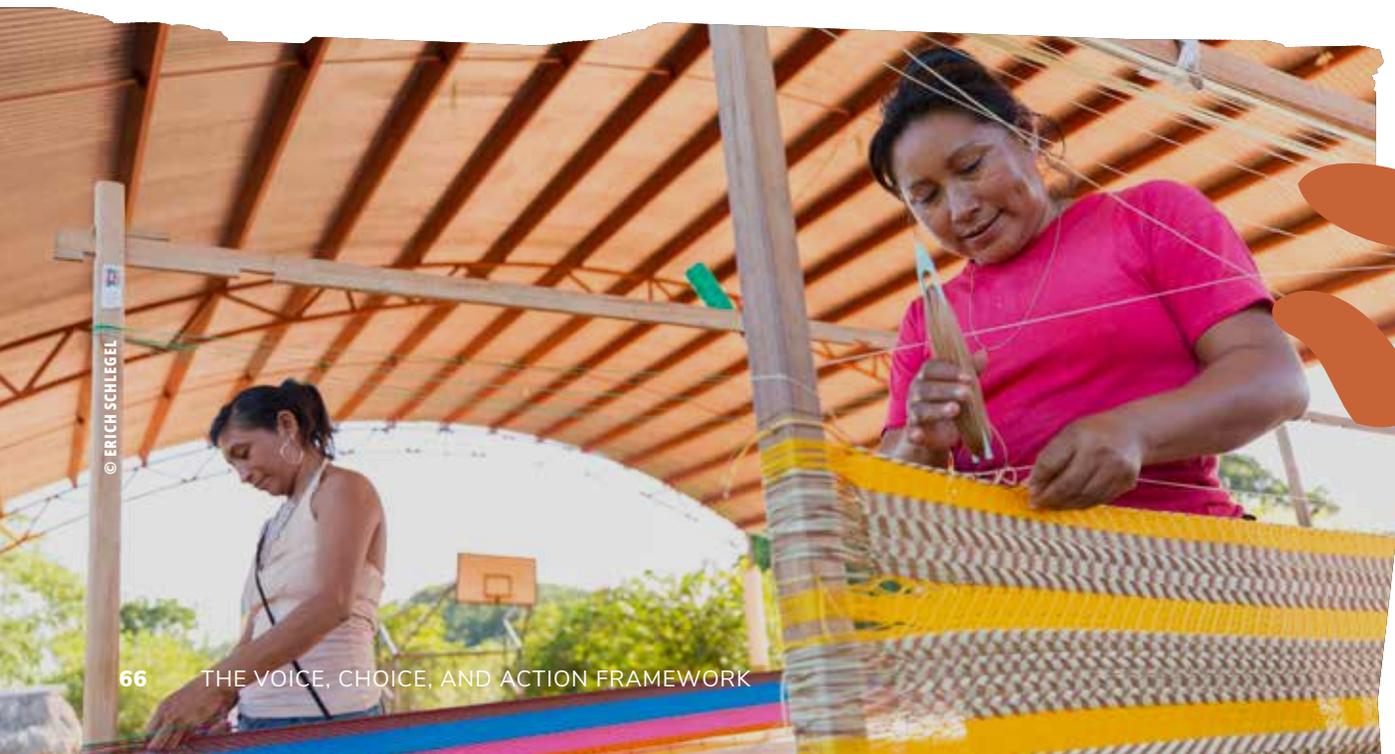
Please refer to Table 6 for examples of actions that can be taken to promote equity in MSD spaces. In general, attention should be paid to hidden/unintended costs of participation in the MSD (e.g., lost wages, shifts in time burden), accommodating for local languages (e.g., conducting in the local language or providing simultaneous translation), the time of day and year that the MSD takes place (e.g., not during harvest or fishing season), the format of the dialogue (e.g., aligned with traditional approaches to discussion and decision making), and that the right people are included (e.g., not just wealthy elite and with respect for chosen/traditional leaders).

➤ Equity in Sustainable Livelihood Opportunities

This pillar, perhaps more than any other, has the potential to exacerbate existing equity disparities, and thus great care should be taken to ensure a culturally responsive approach to equitable participation and benefit. On the other hand, sustainable livelihood opportunities have the potential to make systems more equitable, but only if these initiatives are coupled with or contribute to the transformation of current structures, which rely on inherent power imbalance. To make sustainable livelihood opportunities equitable, we must continually support the participation and leadership of different social identities in defining the “what” and the “how,” and support equitable benefit sharing within households and across social identities. Equitable distribution of benefits is also key to prevent deepening existing or creating new inequities within communities, as well as creating important co-benefits. For example, women and children may not experience benefits that are controlled by a male head-of-household. Further, if only select community members—usually the wealthiest—participate in the livelihood opportunity, income might not filter out to the rest of the community.¹²⁶ Finally, it is important to identify risks and safeguard against potential unintended negative consequences, such as backlash, gender-based violence or discrimination (for example, rooted in envy, fear, or anger at the disruption of power dynamics or wealth distribution), increased time burden and workload, or exacerbation of existing wealth gaps or disparities.¹²⁷⁻¹²⁹

Examples of gender equitable initiatives focused on sustainable livelihoods include supporting women’s access to technology, assets, savings, and credits; supporting women in the production and marketing of sustainable products that come from resources that women have traditionally managed; increasing the recognition and compensation for roles that women have traditionally performed; or supporting women in new endeavors that they choose. Fundamentally, gender equity improves lives, including health outcomes,¹³⁰ economic development,¹³¹ social policies, environmental sustainability, and opportunities for future generations.

Sustainable livelihood initiatives can also be critically important opportunities for youth leadership and compensation, enabling them to stay in their communities, receive knowledge passed down from their Elders, and take on roles in lands, waters, and resources stewardship. Based on an understanding of the context, targeting certain initiatives for youth participation (including both young women and young men) and intergenerational collaboration can be key for lasting positive change and a sustainable future.





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Case Studies



Women's Leadership in the Xikrin Indigenous People of Brazil



The Xikrin Indigenous People of Bacajá, numbering approximately 1,300 people, live in 20 villages in the Trancheira Bacajá Indigenous Land, a territory spanning 4 million acres (1.65 million hectares) in Brazil's Pará state in the heart of the Amazon Rainforest. A massive natural carbon sink and haven for biodiversity, the Amazon is undoubtedly one of the most important ecosystems in the world—and Indigenous lands are critical to its protection, comprising over 27 percent of the land area in the Amazon Basin and holding 33 percent of its carbon reserves. TNC has partnered with the Xikrin People on forest protection and livelihood opportunities for several years, and recently those partnerships have included an intentional gender focus.

Observing that their responsibilities were often seen both inside and outside the village as secondary roles, the Xikrin women (known as *Menire*) set out to gain stronger recognition of their roles as natural resource managers, as well as opportunities to lead other types of projects in their communities. Their goal was to organize themselves and engage supportive partners, to grow their knowledge and skills and increase their visibility within their communities and in the world of the *kuben* (white people). With many of their roles and interests centered on sustainable natural resource management, supporting the *Menire*'s vision and leadership is a natural and long-term solution to improve environmental and human well-being.

The Xikrin women began this journey for external visibility in 2013, with a diverse portfolio of sustainable resource management and production projects in partnership with the Brazilian government's National Indigenous Peoples Foundation (FUNAI), The Nature Conservancy, the Plan for Regional Sustainable Development in Xingu (PDRS Xingu), and traditional *ribeirinho* communities in Rio Novo. These multi-stakeholder platforms for engagement have been key to driving and sustaining working partnerships in support of Indigenous Peoples' voice, choice, and action throughout the region.

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FRESHWATER



COASTAL



These women-led projects—including dress-making, flour production, vegetable cultivation, and dye creation for body paint (and more recently for painting materials such as bags and shirts)—all have the goal of supporting the sustainable management, harvest, and production of non-timber forest products, in turn promoting and maintaining a vibrant living forest. Some of these projects continue today and serve as examples for other villages, encouraging the participation of more interested families.

One project that has expanded and now includes the participation of several Xikrin villages is babaçu oil production, from the nut of a palm tree. The project centers on strengthening the Menire's capacity to lead the management, production, and commercialization of the babaçu oil for subsistence use within the villages and for external commercialization. The oil is sold at fair prices and routed directly to consumers or stores in urban centers, cutting out intermediary buyers and adding significant economic value to an activity of cultural and environmental importance.

This project has also included the establishment of a new *nhô rõny kangõ nhõ kikre* (babaçu oil processing house), a small oil extraction machine, and bottles and labels for packaging the oil. Processing babaçu oil for cooking, cosmetic, and ritual purposes is a traditional role and rich cultural heritage of the Menire that dates back generations; now it is providing the opportunity for greater leadership, income, and recognition for the Xikrin women and their villages. The project received recognition from the United Nations Food and Agriculture Organization for women's empowerment and autonomy in rural activities that promote healthy and traditional foods.

Indigenous women are the leaders of a promise to future generations. Mothers, grandmothers, great-grandmothers—all women in the community—share an important understanding of and responsibility for forest resources, which are critical for food security for the entire family, and for sustainable management of community resources. In the Xikrin People's Territorial and Environmental Management Plan (PGTA—developed in partnership with TNC), the Menire emphasized the importance of strengthening their traditional knowledge and the commercial management of non-timber forest products, such as the *piy* (Brazil nut). The entire family participates in the processing of the *piy*, including collection, washing, drying, transporting, and storing.



TNC also supports other Indigenous Peoples in managing and commercializing resources like the Brazil nut, including the Parakanã Indigenous People in the Apiterewa Indigenous Land, neighboring the Xikrin. As with the babaçu oil project, the Xikrin and Parakanã Peoples' established organizations are managing and selling the Brazil nut directly to the industry, for example to a bread factory, removing intermediary buyers and thereby receiving higher prices. The Parakanã People are also developing a strong commercial supply chain for their traditional crafts, selling them for an added value and to a market with stable demand. This in turn provides a constant flow of income that goes directly to the women, who use it to improve the lives of their families and villages and ultimately to strengthen Parakanã autonomy on their land.

An enabling condition that has contributed to success in these places has been the presence of secure demarcated land rights. Although far from fully secure of encroachment and illegal entry and extraction by outside actors, the fact that the Xikrin and Parakanã territories are demarcated makes for a more stable starting point for these efforts. Additionally, the support of long-term partnerships and strong multi-stakeholder platforms has been an important component of this work. For example, Indigenous Peoples from different lands are coming together in collaboration on sustainable livelihoods initiatives, to achieve greater scale and impact, and to connect with mechanisms such as the [selo Origens Brasil®](#) for sustainable certification. One of the ways TNC Brazil supports continued multi-stakeholder engagement is through maintaining a cooperative agreement with FUNAI, to ensure FUNAI and TNC objectives and actions are collaborative, complementary, and align behind shared goals in support of Indigenous leadership and self-determination throughout different ethno-regions.

The increasing visibility of Indigenous women's leadership in Indigenous associations and institutions at all levels across Brazil is leading to large-scale results: Today, the Coordination of Indigenous Organizations of the Brazilian Amazon (COIAB) and the Articulation of Indigenous Peoples of Brazil (APIB), for example, are represented by strong women leaders who promote both Indigenous rights and environmental sustainability at national and regional scales.

When the connections among conservation activities, gender equity, and Indigenous rights are understood, acknowledged, and supported, conservation activities have a much higher potential for generating positive social impacts and contributing to more enduring conservation outcomes. And key to this success is centering the vision and leadership of the Indigenous women themselves, and valuing their process for involvement of the men, youth, and other members of the community, with TNC and other partners playing a supportive role. Supporting Indigenous women to thrive in ways they determine as culturally responsive and aligned with their vision for the future is critical for ensuring the conservation of millions of hectares of ecologically critical lands across Latin America and around the world.

Tools and Resources



TOOL 12: QUESTIONNAIRE—CONDUCTING A POWER ANALYSIS

Power can be defined as the degree of control over material, human, intellectual, and financial resources exercised by different sections of society. The extent of power of an individual or group is correlated to how many different kinds of resources they can access and control. This tool explains the multi-dimensional aspects of power, and provides guidance and templates for conducting power analysis. Power analysis should be conducted during situation analysis that is a part of the planning process for conservation in partnership with Indigenous Peoples and local communities. As such, conservation practitioners may find it helpful to consolidate various aspects of situation analysis that might otherwise be conducted separately into one overarching analysis, which can help save limited time, resources, and social capital. This includes general situation and stakeholder analysis, gender analysis, tenure rights holder and stakeholder mapping, and equity considerations in implementation and monitoring, evaluation, and learning.



TOOL 13: TOOLKIT—TNC'S HUMAN RIGHTS GUIDE FOR WORKING WITH INDIGENOUS PEOPLES AND LOCAL COMMUNITIES

The audience for this guide is conservation practitioners, managers, and senior leaders. It applies to all work that may impact Indigenous Peoples and local communities, is relevant for all scales of work and strategic approaches, and is useful regardless of project role. The guide is informed by nine Principles and Safeguards that are drawn from TNC's commitments to international human rights law and standards. The main content of the guide is comprised of six modules and includes checklists, templates, tools, and case studies.

This guidance is also available in Chinese, French, Indonesian, Portuguese, Spanish, and Swahili. More information can be obtained by visiting the [Human Rights Guide](#) website.



TOOL 14: GUIDE—TNC'S GUIDANCE FOR INTEGRATING GENDER EQUITY IN CONSERVATION

The purpose of the guidance is to help conservation practitioners integrate gender equity considerations in a conservation project or strategy. The guidance follows the [Conservation by Design \(CbD\) 2.0](#) cycle and includes important information, tools, and resources for conducting an evidence-based gender analysis, developing a gender action plan, building a gender-responsive results-based framework (CbD Phase 1); integrating gender-responsive approaches and activities in implementation (CbD Phase 2); and monitoring, evaluating, and reporting on gender related outcomes (CbD Phase 3).

This guidance is also available in Chinese, French, Indonesian, Mongolian, Portuguese, Spanish, and Swahili.

Additionally, a [Gender Integration Workshop for Indigenous and Community-Based Conservation](#) based on the guide is available on conservationtraining.org, which covers gender analysis, gender action planning, gender equity in MEL, and gender based violence and safety. For access to the training curriculum, contact conservationtraining@tnc.org.



Foundational Element 2

Strong Connection to Knowledge and Place



Knowledge, Evidence, and Practice

KEY POINTS

- For many of the Indigenous Peoples and local communities with whom we partner, connection to knowledge and place is a critical aspect of identity and well-being, and a source of environmental reciprocity and care ethic.
- The level and intensity which humans experience connection to place can vary and change over time due to a variety of circumstances, including time spent in place, exposure to place-based knowledge, history, stories, and teachings, and ability to engage in cultural practices.
- Indigenous Knowledge and local knowledge differ from Western science, as they have often been accrued and passed on over thousands of years, and are inseparable from place, people, and the inter-relationship among them. Indigenous Knowledge continues on today in a modern, post-colonial era and is accessible to trusted knowledge keepers.
- Indigenous language, along with culture, fosters and enables environmental stewardship through carrying and contextualizing Indigenous Knowledge and instilling a worldview of respect and integration with the natural world. It entails and encodes the original instructions, spiritual and natural laws, practices, and philosophies that define connection to place.
- Any initiative that involves Indigenous Knowledge must respect intellectual property rights and data sovereignty; controlled and agreed upon access and sourcing; and center on supporting what communities decide and define as their own needs and usage agreement(s) for the knowledge shared.



KEY TERMS

Connection to Place—the relationship developed between individuals, communities, and societies and their surroundings through historical, cultural, environmental, personal, and social contexts.¹³²

Data Sovereignty—the right to maintain, control, protect, and develop cultural heritage, knowledge, and traditional cultural expressions, as well as the right to maintain, control, protect, and develop intellectual property over these.¹³³

Indigenous Knowledge—a cumulative body of knowledge, practices, and beliefs, evolving and governed by adaptive processes and handed down and across (through) generations by cultural transmission, about the relationship of living beings (including humans) with one another and with their environment.¹⁵ This concept is sometimes referred to as “local knowledge” by those that do not self-identify as Indigenous Peoples.

Intergenerational Transfer—the passing of Indigenous and local community values, beliefs, and biocultural knowledge from one generation to the next (for example, from Elders to youth through oral narratives).¹³⁴

Western Science—a system of knowledge—focused on the objective and quantifiable—which relies on application of the scientific method to phenomena in the world. The process of the scientific method begins with an observation followed by a hypothesis which is then tested. Depending on the test results (and replicability of those results), the hypothesis can become a scientific theory or “truth” about the world.

➤ Connection to Place, Well-being, and Environmental Stewardship

Connection to place refers to the relationship developed between individuals, communities, and societies and their surroundings through historical, cultural, spiritual, environmental, personal, and social contexts.¹³² Places and humans’ connection to them influence culture, worldviews, and identities.¹³⁵⁻¹³⁶ Places are a social construct built from the attributes that humans observe and understand from their surroundings,¹³⁷ and place attachment is an emotional bond to place that varies in intensity.¹³⁸⁻¹³⁹ Many Indigenous societies are inextricable from place, which is tied to their language, names, stories, songs, social organizational structures, knowledge, ceremonies, and spirituality. For the Indigenous Peoples and local communities with whom we partner, culture and place are often of critical importance to people’s identity and worldview, their traditional stewardship systems and use rules for lands, waters, and resources, and the conservation strategies that are most appropriate.

For many Indigenous communities, this relationship to place goes beyond provisioning into a two-way care ethic in which humans have helped foster the surrounding landscape and ecology and built continuity over time.¹⁴⁰ For Indigenous Peoples, connection to place is often a physical feeling, as well as a psychological and socio-cultural process that has developed through ancestry, history, and responsibility. Some local communities that don’t self-identify as Indigenous who are caring for resources may also have a similarly strong connection that is related to their culture and heritage. This level of attachment

reduces the ability to substitute one place for another, leads to a strong dependence on a specific place,¹⁴¹⁻¹⁴³ and can result in trauma (individual and inter-generational) if people are removed from their place by force, violence, climate change, or other means.¹⁴⁴⁻¹⁴⁵ Extensive research demonstrates that a strong connection to nature and place results in stronger pro environmental behavior and conservation outcomes,^{141,146-147,148-156} whereas destruction of nature has negative impacts on humans both psychologically and spiritually.¹⁵⁷ Research also indicates that the longer people live in a place, the stronger their connection.¹⁵⁸⁻¹⁵⁹

Though all humans experience place attachment, there are varying levels of intensity. Why this attachment occurs and varies relates to social organization, geography, language and cognitive structures, ritual process, rules around place use, and material production.¹⁶⁰ This last concept—specifically a place’s ability to contribute to survival, safety, and security through provision of food, water, shelter, and livelihoods—is often the source and extent of place attachment for local communities that are newer migrants to a place and lack a culture and history that ties them to that place. For these local communities, connection is tied closely with livelihoods.¹⁶¹ Climate change is negatively impacting farmers’ connection to place in Western Australia. These community connections are tied to their sense of ownership and working of the land. They describe their farms as the place they live and work, whereas the literature exploring Indigenous connection does not refer to place as where they work but rather their heritage and integral part of their culture/being.¹⁶²⁻¹⁶³ There is a nostalgic relationship between the above-mentioned farming communities and their land in which they mourn deteriorating environmental conditions, and potentially deteriorating place-based attachment.¹⁶² Their connection to place distinguishes between the worked landscape and nature. This is also distinct from Indigenous understanding in which the two are intertwined.¹⁶⁴ Additional research across diverse regions and cultures is needed to better understand local communities’ incentive to care for the landscape in a way that benefits both nature and their livelihoods.

➤ **Indigenous Knowledge, Local Knowledge, and Two-Eyed Seeing (as described by Elder Dr. Albert Marshall)**

The relationship between people, place, and their understanding and use of the surrounding resources is referred to as Indigenous Knowledge by those who self-identify as Indigenous Peoples, and local knowledge by those who do not. Indigenous Knowledge and local knowledge include practices for maintaining and enhancing the environment—lands, waters, flora, and fauna—and are integral to a community’s culture and livelihoods.¹⁶⁵⁻¹⁶⁷ In this worldview, culture is intermingled with place and social-ecological systems rather than separate as often seen in ecosystem services frameworks, and Indigenous Knowledge and local knowledge inform natural resource management. For example, they often take populations, habitats, and landscapes into consideration for harvesting and maintaining species which may result in both sustained populations and adequate resources available for local use (e.g., for medicines, food, baskets, canoes, etc.).¹⁶⁷⁻¹⁶⁸ Indigenous Knowledge includes concepts of respect, reciprocity, and the act of asking for permission, all of which are extended to nonhumans and passed down through generations.^{168,160}

The knowledge of how to take care of place and natural resources have resulted in altered distribution and abundance of resources that has led to much of the biodiversity scientists find in Indigenous managed landscapes.¹⁶⁹ These landscapes are not untouched places but rather actively managed through rules, stories, and customs that support abundance.¹⁶⁹ For example, among the Tlingit in Alaska, there are rules surrounding access to sensitive seal breeding locations that encourage healthy populations over time.¹⁶⁰ In Kenya, women in pastoralist communities have held extensive ecological knowledge related to the care of every life form, deeply aware of the interdependence between the spirit and earth, which is passed down through generations.¹⁷⁰

For Indigenous Peoples, Native language is closely tied to both knowledge and place. This warrants further discussion, as there are inherent characteristics of many Indigenous languages that are not readily familiar to non-Native speakers and that are linked to environmental stewardship and relationships with Earth's natural systems. Through carrying and contextualizing Indigenous Knowledge and instilling a worldview of respect and integration with the natural world, Indigenous language, along with culture, fosters and enables environmental stewardship. Indigenous language does so in the following ways:

- Indigenous Knowledge or reciprocity embedded in the names of species, natural resources, places, and oral history classification systems,
- Concepts of stewardship or natural resource management (caretaking) which have no direct translation in other languages,
- Linguistic structures that establish reciprocity, integration, balance, and respect towards the natural world, widely from non-hierarchical lenses,
- Place-based language that connects people to their environment and accompanying responsibilities, and
- Oral traditions, stories, histories, and what many cultures term “original instructions” which contain Indigenous Knowledge and environmental ethics and morals.¹⁷¹

Knowledge and the power to define what counts as real knowledge lie at the epistemic core of colonialism.¹⁷¹ At conservation organizations, science is foundational to our conservation work, and for many years, the Western way of scientific thinking has guided most efforts. But both organizationally and individually, we are recognizing and accepting that there are many ways of knowing and understanding the natural world and that such approaches should continue to be shared and applied by cultures across the globe, as they have done for millennia. Because Indigenous Peoples have been caring for their lands and waters for thousands of years, Indigenous Knowledge offers very rich information about places at a fine granular scale, and often across long periods of time. Accordingly, international bodies of science call for the inclusion of Indigenous Knowledge as important complements to Western scientific information. While this is true, it is also incomplete. Indigenous Knowledge is not data that can be extracted and put into Western science's frameworks. Indigenous Knowledge offers lessons in how to live in moral and sustainable ways. It offers a framework of knowledge and analysis and is inseparable from place, people, and the inter-relationship among them. Indigenous Knowledge integrates detailed empirical knowledge, material practices, ethical and spiritual responsibilities, and Indigenous values of kinship and mutual responsibility.¹⁷³ Further, Indigenous Knowledge is inseparable from place and the relationships between all beings in that place.



Indigenous societies are complex. The issue of sharing Indigenous Knowledge occurs at the interface of important aspects of this complexity. Holders of Indigenous Knowledge are not simply those who have a basic acquaintance with or academic-like awareness or education of the knowledge systems their community has been guided by for millennia. Holders of Indigenous Knowledge identify themselves using their own concepts. There are traditional governance structures that existed before present-day Tribal governments that may govern sovereignty over knowledge, how knowledge is shared, and who traditional knowledge holders are.

Working with Indigenous partners to interweave Indigenous Knowledge and a Western approach to conservation takes time, respect, and a deep understanding of the challenges and risks this work can present. Because Indigenous Knowledge is alive within a place and Indigenous Peoples' relationship to that place, we need to begin by engaging with the Indigenous Peoples of the places we work and respect their geographic intelligence and place-based wisdom. We need to understand that some knowledge is not appropriate to be shared. A good default is to assume that all information is confidential and furthermore might not fit or be appropriate to place as 'data points' into Western frameworks, methods, or ways of thinking. We cannot assume that we can store partner project information in our databases or necessarily make this information publicly available. Special attention and sensitivities are called for with GIS mapping and other technology uses where cyber security and other risks lie. That said, some Indigenous Peoples will welcome the opportunity to share the Indigenous names of plants and places to restore the Indigenous identity to their homelands and to keep that knowledge active and archivable. We should expect to engage knowledge holders in an ongoing and meaningful way in developing questions, research, and management plans.



➤ **Strengthening and Sustaining Connection to Knowledge and Place**

See [“Tool 15: Mapping Cultural Values”](#) for a guide on incorporating social, cultural, and biodiversity values into spatial mapping and planning.

See [“Tool 16: Intellectual Property Agreement”](#) for a customizable intellectual property agreement template for use with Indigenous and local community partners.

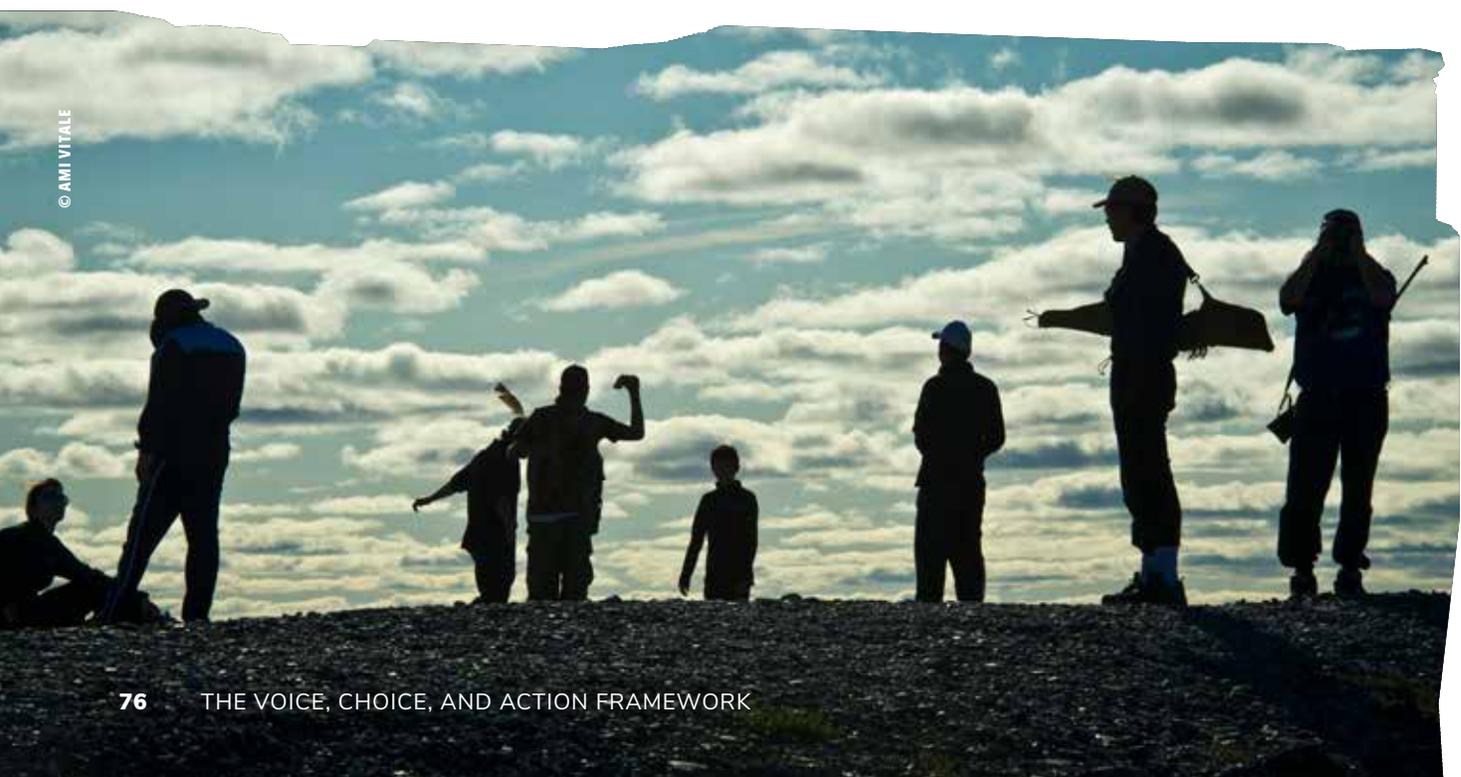
See [“Tool 17: Intergenerational Transfer of Knowledge and Youth Engagement”](#) for a toolkit designed to help support and strengthen land and water-based education programs for Indigenous youth.

Connection to place is not a static state of being but rather something that continually changes and develops. In the last several hundred years, there have been enormous changes to humans' connection to place. In some cases, the deterioration of connection to knowledge and place is the result of colonization, forced and violent relocation, residential boarding schools, and propagation of monotheistic religions—in others, it is due to the slower processes of globalization, capitalism, climate change, and lack of opportunity in place.^{137,144,174-175} This has impacted not only connection to knowledge and place, but associated tenure security, traditional governance structures, and overall human well-being.¹⁶⁰

If we are to own our history as conservation organizations, we must also acknowledge and inspect how conservation has contributed to this disconnection. The conservation movement has displaced Indigenous ways through forced removal in the name of protection, blocking cultural access or use of natural resources, and by ignoring and suppressing Indigenous ways of knowing while holding up European-American Western science.¹⁷⁶⁻¹⁷⁷ Conservation has historically created a sense of exclusion rather than commons (“fortress conservation”), setting people as separate from nature.¹⁷⁸ The approach outlined in the VCA Framework provides an alternative that helps to re-establish and/or sustain connection to knowledge and place. We commit to recognizing and uplifting the role of Indigenous Peoples and local communities as stewards, recognizing that equity, Indigenous and local community leadership and power, secure rights, local knowledge, and traditional governance are essential to both well-being and shared environmental goals.

Some of the ways in which we are working to reinforce, strengthen, and revive connection to knowledge and place include accurately representing cultural values in spatial mapping and planning, improving Indigenous and local community access to, use of, and protection of sacred places, fostering intergenerational transfer of knowledge and language, and youth education. These and other examples of actions that can be taken can be found in Table 7.

Data sovereignty related to Indigenous Peoples is their right to maintain, control, protect, and develop their cultural heritage, knowledge, and traditional cultural expressions, as well as their right to maintain, control, protect and develop their intellectual property over these.¹³³ When inquiring about and supporting connection to place, and embedded Indigenous or local community knowledge, it is important to keep in mind that much of this information is sensitive intellectual property—individuals might not be comfortable sharing, and non-community members might not have the right to know this information. Care should be taken to respect and protect Indigenous and local community intellectual property and data sovereignty. This includes co-development of intellectual property agreements, respecting Indigenous Peoples’ and local communities’ right not to share information that they do not want to share, and prioritizing the goal of the continued existence and use of Indigenous Knowledge and local knowledge by Indigenous Peoples and local communities to perpetuate and advance their own cultures and well-being. It also includes always seeking permission and consent and review from a community before communicating a shared story about work done together, and respecting the community’s wishes if they do not want the story told (or do not want a conservation organization to tell it).



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Table 7: Examples of activities to support connection to knowledge and place.

Approach	Example activities
Improving access to and use of lands, waters, and resources	Facilitating repatriation or access and use agreements for private or publicly held lands of cultural significance; supporting community-led approaches to protect places and species of biocultural significance
Facilitating place-based education, training, and learning exchange	Supporting reinvigoration of traditional lands and waters management (e.g., traditional fire, fisheries management) and skills (e.g., boat building); upholding traditional natural resource governance systems; facilitating cross-community learning exchange and interweaving communities of practice
Documenting Indigenous Knowledge and local knowledge	Documenting Indigenous language; documenting stories; utilizing multi-media and other technology to attract youth and future generations to invest in their own learning, knowledge (e.g., seasonal calendars, place and species names), and history; ^j treating oral histories as a primary source of knowledge, if/when needed with collective attribution (collective vs. individual) to knowledge holders and sources of knowledge(s)
Supporting intergenerational transfer of knowledge	Championing youth culture camps; supporting access to Native languages; facilitating youth/ Elder connection on lands and waters; supporting revitalization of cultural practices and ceremonies
Interweaving Indigenous Knowledge, local knowledge, and Western science	Application of Native language for concepts, species and place names in planning and policy; facilitating inclusion of cultural values in spatial mapping and planning; ^k elevating Indigenous Knowledge and local knowledge as critical forms of evidence in partnership with universities and research institutions
Elevating respect and recognition of Indigenous and local community ways of knowing, being, and doing	Facilitating exchanges with government agencies and Western scientists to elevate Indigenous ways of knowing, resource management, and governance and foster respectful and effective collaboration; supporting Indigenous and local community participation in policy forums to share ways of knowing; codifying Indigenous and local community cultural law into contemporary law

j. Note, documentation is by and for Indigenous Peoples and local communities to sustain their culture and history. Respect of intellectual property rights and data sovereignty through appropriate approaches and processes are a must.

k. Also key for securing rights to lands, waters, and resources, as mapping and planning are critical steps in the process. Respect of intellectual property and data sovereignty through appropriate approaches and processes are a must.



Case Studies

Connection to Knowledge and Place in Mongolia

Mongolia is dominated by an expansive grassland ecosystem that remains sparsely populated to this day. The people of Mongolia are ethnically homogenous, with some cultural or lifestyle differences based on ecosystem, such as grasslands, mountains, or forests. There is strong traditional culture, lifestyle, and practice linked to pasturelands and livestock. Herders are nomadic, residing and grazing animals in different areas depending on season/time of year.

An important element of Mongolian culture is respect and reciprocity for nature in daily life. As part of this, many people have a strong sense of spirit in the landscape, and they practice associated rituals.

“In our traditional culture, if someone respects nature, nature gives back success and luck. So, ceremony and daily life relate to these concepts. Mongolians have always believed that the land and the resources don’t belong to them, it belongs to the spirit. From back in 13th century, they believed in Tengri, a heavenly being... the major belief was that we had that spirit in every mountain and river and these resources belonged to him not to herders. You have to politely ask the spirits to use the useful features like water and grass and animals and herders do that by doing a worship ceremony. So, in every community, there is a special place where people go and worship. That culture was one of the important foundations of Mongolians’ perspective on nature.”

-Gankhuyag Balbar on Mongolian culture and spirituality

People’s culture has been affected by centuries of political and economic changes, most recently in natural resource laws. Over the last three decades, Mongolia has undergone a rapid transition from a centrally planned, highly subsidized economy, to a democracy with an increasingly free market. Post-1990’s, Mongolian society and politics changed with the rise of mining, agriculture, construction, and tourism sectors, which led to more property rights and an individualized economy. This represented a new cultural shift, as there was not previously a notion of “private land ownership” in Mongolia—everything was common property.

Despite these changes, the nomadic way of transferring local knowledge continues within and between families. Transfer of knowledge, beliefs and respect for the natural world is maintained through stories, songs, epic poems, and through their traditional skills and practice of hunting and herding.

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COASTAL

“The parents are teaching their children in practice... at three to five years old it’s a big thing to get your kids to ride horses. Parents are excited... once you start them riding horses, you would be helping your parents to take up the livestock. They teach them everything. They teach about plants, what plants are good for animals and what plants are bad. Grandparents and grandmothers are the best teachers because they have the knowledge, and it is very important to them that they transfer that knowledge to their kids so that they can be a successful herder.”

-Gala Davaa on intergenerational transfer of knowledge

In 2012, the Mongolian parliament approved a law for community-based natural resource management based on collective rights. Much of TNC’s early work with communities centered on awareness-raising about these rights and how to exercise them. Working together, herders formed community-based natural resource management contracts and community-based organizations (CBOs). The establishment of CBOs is facilitating trust-building, mutual respect, cooperation and collective action, and unity amongst people that historically lived very independently, far flung across a vast landscape.

Community-based natural resource management training and planning provides Mongolia’s traditional people an avenue to elevate their knowledge in the modern system for enduring ties to their lands and ways of life. As such, connection to place and continuation of this culture is at the forefront of community-based conservation in Mongolia.

Contributions and quotes by TNC Mongolia staff Gankhuyag Balbar and Gala Davaa



Indigenous Knowledge in Alaska



People’s connection to place in Alaska is represented from the tundra and sub-arctic, to the forested, mountainous southeast rainforests. Indigenous Peoples’ connection to place, culture, and knowledge is ancient and modern, driving towards a future of community stewardship of healthy lands and waters. In Alaska, across generations spanning thousands of years, connection to place transitioned with natural cycles. Elders describe a nomadic lifestyle with camps for spring, summer, fall, and winter. The people would follow different life cycles, moving where they needed to be to sustain themselves in accordance with natural laws, customs, spiritual beliefs, and sustained knowledge systems. They were adaptable, constantly in a cycle of preparation for the next season.

“Being in right relationship with your place was primary. As much as the land cares for us and provides us sustenance, it’s also our responsibility to care for the lands and ‘resources.’ Stewardship is just that constant practice of care for and being cared for by your natural landscape. That symbiotic, reciprocal relationship continues today being transmitted across generations.”

-Andrea Akall’eq Burgess (Yup’ik)

Across Alaska, Indigenous Peoples use cultural and traditional knowledge to demonstrate active management for sustenance, wellbeing, and livelihoods. One example is around their relationship with salmon, as a relative.

“Indigenous Knowledge instructs you not to catch the first wave of fish, you’ve got to let that first pulse make it to the headwaters and then you can work on your harvest... A recognition that even if we’re hungry for fresh fish in the first pulse, you must let it pass, respecting those who are the strongest most resilient species, that know where to return, and ensuring they reach it to the headwaters so their descendants can return in future years in healthy numbers.”

Pre-colonial Yup’ik people were recognized for having a “zero footprint” for their sustainable lifeways, packing up camp and leaving the land in such a way it looked “untouched,” knowing from original instructions that this practice would allow for migratory birds and other key species to return. However, changes brought on by colonization have been devastating.

“We had to put a lot of our practices away, we had to put a blanket on top of our spiritual and Indigenous Knowledge, we had to hide it before it was completely criminalized and lost. They say that we’re now in the time of taking the blanket off because it’s becoming safe again, and our youth desire that knowledge, thankfully it’s surfacing and being applied again.”

“The healing movement is front and center. You can’t talk about language or protection of land or any number of things without healing also coming hand in hand and how people are conceptualizing this awakening. We have a phrase, ‘Tsu Héidei shugaxhtootaan, yá yaa khusgédaakeit, haa jeex’ anakh has kawdak’eet.’ Which is ‘we will now open this box of knowledge,’ and it was a recorded phrase by an Elder that is spoken down to the generations. Reverberated down.”

-Crystal Nelson (Tlingit)

This is both a desire coming from Indigenous youth themselves and the systems becoming more accepting, Elders know that healing the land and healing the people go hand in hand. It is apparent that coming together, healing the lands, waters, and peoples is about opening and remembering cultural practices and ways of knowing. This movement is emerging through Indigenous youth who are seeking more intergenerational and cultural transmission of Indigenous Knowledge, stewardship values, practices, and principles.

Tools and Resources



TOOL 15: MANUAL—MAPPING CULTURAL VALUES

TNC's Development by Design (DbD) framework considers community values—including biodiversity, cultural, and socio-economic values—in the impact assessment process for development proposals. DbD provides a holistic view of how future development could affect these values and offers solutions for informed decision making. DbD uses a Geographic Information System (GIS) mapping tool to assess and demonstrate likely impacts on these community-defined values. DbD supports the concept of Free, Prior, and Informed Consent and gives groups the opportunity to participate fully in the development decision making process. This manual was written based on experiences mapping cultural values in Australia, but can be applied elsewhere.



TOOL 16: TEMPLATE—INTELLECTUAL PROPERTY AGREEMENT

The process to strengthen connection to knowledge and place must be underpinned by respectful engagement, local stories, and evidence. When partnering with Indigenous Peoples, we must respect information about people, their knowledge, and their territories. Those working in this space seeking to publish information or data should follow appropriate protocols in establishing Free, Prior, and Informed Consent before publishing about Indigenous Peoples or their places. Out of respect for Indigenous and local community intellectual property rights and data sovereignty, TNC has developed a data and information sharing agreement template that can be tailored to context.

This template is also available in Spanish, Portuguese, and Indonesian.



TOOL 17: TOOLKIT—INTERGENERATIONAL TRANSFER OF KNOWLEDGE AND YOUTH ENGAGEMENT

The Supporting Emerging Aboriginal Stewards (SEAS) Toolkit was developed by Nature United¹⁷⁹ in collaboration with community partners to help support and strengthen land and water-based education programs for Indigenous youth. It was created to provide ideas, suggestions, and guidance to anyone working on developing and delivering these kinds of programs. This toolkit is for anyone who is interested in starting or strengthening a land and water-based education program for Indigenous youth. The toolkit is organized into six chapters, each of which answers important questions about how to design, implement, and strengthen such a program over time.

More information can be obtained by visiting the [SEAS website](#).



Foundational Element 3

Durable Outcomes for People and Nature



Knowledge, Evidence, And Practice

KEY POINTS

- Conservation finance—which typically includes a combination of financial instruments—is needed in addition to sustainable livelihood opportunities to maintain the long-term financial sustainability of community-led conservation.
- Key enabling features of successful conservation financing solutions are ongoing investment in long-term capacity building for Indigenous and local community organizations; Indigenous and local community ownership and leadership of conservation financing efforts; clarity of tenure; political support; ongoing fundraising efforts; diversification of financing sources; clearly distributed roles and responsibilities within the financing strategy; private sector partnerships for enterprise-based solutions; and flexible funding to respond to new opportunities.
- Successful local to global financing partnerships generally involve strong connection to Indigenous and local community priorities, strong contextual awareness in grant-making, strong partnerships with Indigenous and local community organizations implementing the projects, and the ability to enhance political enabling conditions for difficult projects. NGO intermediaries often serve important partnership roles in these processes.
- Shifts in policy at the local, regional, and/or national level are often needed to provide the enabling conditions and avenues for Indigenous Peoples and local communities to formalize their rights over lands, waters, and resources, codify their authority in natural resource decision making, and participate in certain sustainable livelihood opportunities.
- Rates and patterns of diffusion typically depend on the characteristics of the natural resource management practice, the communities themselves, and the context. Supporting community networks and inter-community learning exchange are important ways conservation organizations can use their convening skills to foster diffusion of community-led conservation and practices.



KEY TERMS

Conservation Finance—mechanisms and strategies that generate, manage, and deploy financial resources and align incentives to achieve nature conservation outcomes.⁹⁸ Conservation finance is aimed at funding the full costs of conservation and maintaining long-term financial sustainability.¹⁸⁰

Diffusion—the process by which prior adoption of a practice in a population alters the probability of adoption for others.¹⁸¹

Durability—the likelihood of positive outcomes for people and nature achieved via community-led conservation initiatives to persist throughout time. Key components of durability include long-term conservation finance, an enabling policy environment, and diffusion/scalability of initiatives.

Scaling—the speed, patterns of adoption, and spread of community-led conservation policies, programs, projects, and practices.¹⁸² Can include growth of a practice in one place and replication of a practice to other places.

Durability of community-led conservation initiatives refers to the likelihood that positive outcomes for people and nature achieved will persist over time. Durability interacts with the four pillars of the VCA Framework by providing a strong foundation and enabling environment for lasting outcomes—likewise, the pillars of the VCA Framework are required to achieve aspects of durability itself. Key components of durability include long-term conservation finance, an enabling policy environment, and diffusion/scalability of initiatives.

➤ Conservation Finance

See **“Tool 18: Conservation Finance Guide”** for guidance on supporting the scoping, planning, and development of conservation finance solutions.

Conservation finance is the practice of generating, managing, and deploying financial resources and aligning incentives to achieve conservation outcomes, and is aimed at funding the full costs of conservation—which are usually not completely covered by sustainable livelihoods initiatives—and maintaining long-term financial sustainability. Sustainable livelihood opportunities and conservation finance work synergistically to support dual outcomes for people and nature. Sustainable livelihood opportunities provide people with income to meet their personal and household needs, which allows people to lead secure and dignified lives, incentivizes sustainable natural resource management, and reduces unsustainable development pressures. Conservation finance creates a long-term funding stream for communities to pay for the management of their lands, waters, and resources based on their own vision of stewardship and natural resource management.

In most situations, a combination of financial instruments is leveraged (e.g., market incentives, fees, taxes, subsidies, public and private funding, investments/bonds) and this financing is disbursed via grants, performance-based payments, and microfinance. A recent report found

the key features of successful conservation financing solutions to be ongoing fundraising efforts; diversification of financing sources; clearly distributed roles and responsibilities within the financing strategy; private sector partnerships for enterprise-based solutions; and flexible funding to respond to new opportunities.¹⁸⁰ Further, the report concluded that success of Indigenous and local community-led conservation initiatives relies on conservation financing designed to empower Indigenous Peoples and local communities as stewards, not just beneficiaries, where “stewardship” is not just responsibility for natural resource management, but is understood to encompass ownership, decision making authority, and conservation embedded in the full social, economic, and cultural fabric of the community.

Conservation finance is foundational for the long-term success of initiatives to secure rights, increase capacities, strengthen participation in dialogue and decision making, and support sustainable livelihood opportunities—just as these pillars of the VCA Framework are critical to securing and maintaining conservation finance. For example, not only is conservation finance important for securing rights (e.g., through enabling the creation of an Indigenous protected area) but secure rights are often a requirement for accessing finance such as bank loans. Further, long-term finance can enable the ability to protect community lands and waters from outsiders and support the transfer of management to communities. This was the case with The Great Bear Rainforest Agreement, which, catalyzed by many years of First Nation-led advocacy, designated a large area of high ecological value on the Pacific coast of Canada for protection and ecosystem-based management. Through this agreement, First Nations have a strong role in governance, decision making, and management. Making this agreement possible required a significant financial commitment, which was secured through a conservation financing agreement called “[Coast Funds](#).” This endowed trust fund will maintain long-term support for conservation efforts, and includes a fund to support sustainable enterprise. A significant outcome of this deal included formal and functional recognition of the community’s roles as owners and managers of the region’s resources.

For conservation finance to be successful in the context of community-led conservation, it needs the long-term capacity of communities and local institutions to take on leadership roles in generating, managing, and distributing financing. Capacity is required with respect to management of internal relationships and relationships with outside parties; land and resource management; ability and comfort in interacting with business culture and government processes; and financial management without compromising value.¹⁸⁰ The process of obtaining conservation finance often involves supporting communities in developing their own community and resource use plans, which leads to greater leadership and decision making authority over how resources are used and allocated. Donors and intermediary NGOs should prioritize support for such capacity building. Many conservation financing mechanisms explicitly integrate funding to support governance and capacity-building. For example, federal funds are available to support governance and capacity-building for traditional owners of the Warddeken Indigenous protected area in Australia (owned and managed by the [Warddeken Land Management company](#)). The institutions and structures created or strengthened as part of securing conservation finance, can ultimately become involved in other initiatives (e.g., health, livelihoods, education, conflict resolution), leveraging existing and built capacity over time and reinforcing the overall enabling context for successful outcomes for people and nature.¹⁸⁰

A recent study found that donor rules and requirements are the most frequently cited barrier for Indigenous and local community organizations to effectively access funding for tenure formalization and forest management.¹⁸³ In many cases, prohibitive donor rules and requirements pertain specifically to legal recognition of Indigenous and local community organizations and/or resource-intensive project management and reporting stipulations. Many donors turn to intermediary organizations as a bridge, leveraging their legal standing as well as project

management and administrative capacities to broker funds between donors and Indigenous Peoples and local communities. For example, in response to struggles in channeling funding to Indigenous and local community organizations, the Amazon Fund (Fundo Amazônia)^I has in some cases partnered with intermediary institutions to re-grant funds and support the project and reporting requirements of large institutions such as Brazilian Development Bank, the manager of the fund. To address challenges deploying funds and maintaining compliance with donor requirements, funds are sometimes directed through local intermediary organizations that meet fiduciary requirements and are trusted partners of recipient Indigenous and local community organizations. Those organizations with deep grassroots connections, especially those with Indigenous leadership or significant experience working with local communities, are found in this work to be the most responsive to Indigenous and local community needs and priorities and, in turn, to serve as more effective intermediaries for financing.¹⁸³

More broadly, Indigenous and local community organizations generally regard NGO intermediaries and private foundations as more responsive to their priorities than other donors, and better at providing direct funding. Related advantages of various NGO intermediaries include strong contextual awareness in their grant-making, strong partnerships with the Indigenous and local community organizations implementing the projects, and the ability to enhance political enabling conditions for difficult projects. In some cases, NGO intermediaries have enhanced these advantages through the inclusion of Indigenous and local community representatives in their governance or advisory bodies.¹⁸³ Further research is needed to support donor adaptation of processes and accountability requirements to enable more direct financing of Indigenous and local community organizations. However, the aforementioned NGO intermediary advantages suggest important areas for focus, alongside opportunities for donors to enhance coordination and targeting with trusted intermediaries; reduce bureaucratic requirements; adapt financial mechanism structuring to local contexts; and significantly increase total funding for Indigenous- and local community-led conservation.

For effective long-term financing solutions, initiatives that initially benefit from strong external non-governmental organization (NGO) involvement require that requisite local capacity be in place before the NGO exits. It is important for local governance and capacity to be ready to carry on after an NGO partnership concludes to avoid the community experiencing detrimental interruptions in natural resource management and financing streams. For example, Northern Rangelands Trust—a non-profit supporting the capacity of community conservancies in northern Kenya—is piloting a program to “graduate” some of the conservancies that it has supported for 15 years, shifting the relationship to one with greater conservancy autonomy and self-reliance, and providing training on leadership and financial capacity for the conservancies to apply for funding directly themselves. The investment required for transition, particularly in areas that begin with extremely limited capacity, should not be underestimated.¹⁸⁰ The same considerations that are made for conservation finance around building community capacity to take over long-term finance once the NGO exits apply to natural resource governance in general. The goal is eventual transition of project management to communities (if not already the case), which requires an active and healthy leadership succession plan to maintain capacity when those in leadership roles transition.

I. The Amazon Fund is a Reducing Emissions from Deforestation and Degradation (REDD+) mechanism created to raise donations for investments in efforts to prevent, monitor, and combat deforestation, as well as to promote the preservation and sustainable use of the Brazilian Amazon.

➤ Policy

Community-led conservation often requires the coupling of policy change with natural resource management actions if the appropriate legal tools are not already in place.¹⁸⁴ In this case, shifts in policy at the local, regional, and/or national level are needed to provide the enabling conditions for community-led conservation—specifically, for Indigenous Peoples and local communities to formalize their rights over lands, waters, and resources, and to codify their authority in natural resource decision making. Such policies could include formal recognition of Indigenous sovereignty and institutions by the national government, those that result in devolution of rights and management responsibilities to communities, those that create co-management arrangements between communities and the government, and those that establish bodies for meaningful Indigenous and local community participation in natural resource management decision making.

For example, in Brazil, the country's 1988 Constitution set the stage for recognition of the differentiated rights of Indigenous populations, as well as promoted the creation of Indigenous Lands and Conservation Units.¹⁸⁵ The National Policy for Environmental and Territorial Management on Indigenous Lands (PNGATI) was passed in 2012 with the aim of strengthening territorial management so that Indigenous Peoples and their representative organizations could conserve, defend, manage, use, and govern their lands to maintain their conservation value and promote the collective well-being of their Peoples. Through this policy instrument, Territorial and Environmental Management Plans are developed by Indigenous Peoples and their representative institutions. This is completed via a participatory, multi-stakeholder process that maps and zones areas of environmental, socio-cultural, and productive relevance for Indigenous Peoples, based on their knowledge.

In another example, Kenya's 2013 Wildlife Conservation Act created a framework that legally defined and formally promoted the establishment of conservancies—a recognized land use offering communities improved land and resource rights and access to incentives as they engage in wildlife protection and other sustainable practices—providing a clear legal structure for community-led conservation.¹⁸⁶ This was paired with the establishment of the Kenya Wildlife Conservancies Association, a new association to represent conservancies in policy-making at the national level. The law was the culmination of over a decade of efforts to get comprehensive legislation in place and coordinate input of environmental civil society organizations, and was imperative to create a context favorable for community-led conservation in Kenya. In both the Brazil and Kenya examples, conservation organizations worked in partnership with Indigenous Peoples and local communities to advocate for the necessary policy changes, as well as to support Indigenous and local community leadership in the implementation of the policies.

Just as an enabling policy environment is necessary for securing rights and participation in decision making, it is also critical for many of the livelihood opportunities that communities might pursue. Payment for environmental services (PES) systems—carbon markets for example—require that property rights are reasonably well defined and permanent as a condition of entry. In addition to clear property rights, publicly-administered PES mechanisms require relatively sophisticated legislative and regulatory frameworks to be in place. Enabling legislation to allow parties to enter into transactions and a legal framework for enforcing agreements is a general prerequisite. Similarly, livelihood opportunities involving user fees require a claim to an area to charge others for use and may require legislation at the local or national level, as well as a legitimate body that can collect the fees and administer the funds.¹⁸⁰

Conservation practitioners partnering with Indigenous Peoples and local communities on shared human well-being and environmental goals should undertake a detailed review of local, Tribal, regional, and national policies in their situation analysis during strategy

development. This includes, but is not limited to, policies recognizing Indigenous sovereignty and differentiated rights; designating resource management and zoning jurisdiction; forming governance bodies, multi-stakeholder processes, and representative institutions; and establishing PES systems. With this knowledge, conservation practitioners are better positioned to determine whether the policy context is favorable for community-led conservation, and where advocacy might be required to strengthen these enabling conditions.

➤ Scaling and Diffusion

A challenge commonly faced by conservation organizations is how community-led conservation can be supported beyond the local scale. Scaling and diffusion of community-led conservation are important because they: 1) enable self-organization of Indigenous Peoples and local communities into higher-level governance groups for participation in rule and decision making at regional and national levels, and 2) ensure that the scale of the governance group matches the scale of the natural resource management challenge.¹⁸⁷ Self-organization starts at the local scale, and it is critical that the governance groups that emerge nest within those that develop at larger scales, building on the pre-existing trust that has been established and retaining their autonomy.⁷⁰ In this way, they also can leverage the capacity of higher level governance groups to manage issues that can be intractable at the local level, such as cross-boundary management and inter-group conflict.¹⁸⁷ Multi-stakeholder dialogue—which was covered in a previous section—is an important conduit for scaling and diffusion, as it offers opportunities for Indigenous Peoples and local communities to engage in higher-level governance and decision making forums, share knowledge, and resolve conflict.

Diffusion refers to the spread of community-led conservation from one group to another, impacting larger spatial scales. Much of the literature on diffusion pulls from “diffusion of innovation” theory. In short, information about a particular initiative disperses from successful adopters to potential adopters through learning exchange and influence. Early adoption rates are often sluggish, because the small number of initial adopters limits the diffusion of the information. Slow initial growth then changes to a rapid growth phase, as an increasing number of adopters share their experiences with a large pool of potential adopters. As time goes on, the rate of uptake slows again as the pool of potential and willing adopters declines. Eventually, a saturation point is reached where all individuals that have had exposure to the initiative have either adopted it, or have rejected the initiative in its current design.¹⁸² Nonetheless, it is difficult to predict how adoption will go and how strong uptake will be based on initial (slow) rates of uptake. In fact, a recent study of community-based conservation programs did not find any examples of initiatives that achieved both rapid uptake and large-scale adoption, revealing an apparent tradeoff between speed of uptake and the final proportion of adopters.¹⁸² This implies that broad uptake takes time, which aligns with what we know about the importance of and time it takes to build trust and relationships.

Rates and patterns of diffusion typically depend on three key factors: 1) the characteristics of the natural resource management practice, 2) the communities themselves, and 3) the context.¹⁸⁸ For example, diffusion appears to occur more rapidly with simple practices that are consistent with communities' values and beliefs systems, where they can be tested and adapted to fit local contexts, and where the relative advantage of the practice is substantial. Diffusion is also more likely where communities are already familiar with the practice, are well connected to the outside world and each other, and where there is competition to develop new practices. Finally, diffusion is more rapid where political enabling conditions exist to support the practice, and where the geographic and cultural context are well-aligned with the practice.^{69,188-189}

Table 8: Examples of activities to support factors of diffusion.⁶⁹

Key Factor for Diffusion	Example Activities
Natural resource management practice	Support design and implementation of practices in ways that are compatible with people’s values, needs, and lived experiences; Synthesize and mainstream information on practices in a way that is simple to understand and implement; Enhance visibility of or encourage communities to share information about practices and their results to facilitate social learning
Community	Facilitate inter-community learning exchange on natural resource management opportunities; Support the development of inter-community networks and communities of practice; Facilitate and build capacity for multi-stakeholder dialogue
Context	Support the adoption of legislation which enables the implementation of community-led conservation; Where possible, support identification of compatibility between practices and context ^m

Table 8 describes some of the actions that conservation practitioners might take to support scaling and diffusion of community-led conservation practices. Support of inter-community networks and learning exchange are worth highlighting, as they are important means of fostering scaling and diffusion that draw on the strong convening skills held by many conservation organizations. Thinking back to “diffusion of innovation” theory, investment in inter-community networks and learning exchange increases the odds that successful adopters come into contact with potential adopters and are able to share experiences, educate, and influence to ramp up the diffusion rate. This was the case in North America, where The Indigenous Peoples Burning Network (IPBN) began in 2015 with a single landscape in the combined ancestral territories of the Yurok, Hoopa, and Karuk Tribes of Northern California, and has since grown to include participants from multiple pueblos in New Mexico, land managers from the Leech Lake Band of Ojibwe in Minnesota, the Klamath Tribes in Oregon, and the Alabama-Coushatta Tribe in Texas. The IPBN is a support network among Native American communities that are revitalizing their traditional fire practices in a contemporary context. Activities include strategic planning for revitalization of fire culture, fire training including both federal qualifications and culturally-based controlled burning, and promoting intergenerational learning. First steps often include people from one tribe visiting another’s homeland. Others engage through events where cultural connections to fire are integrated into fire training. Rooted in self-determination, the IPBN leadership team is guiding network growth and adapting the network’s structure to welcome new tribal landscapes.

m. Note, some contextual characteristics cannot or should not be changed, so assessing the local ecological, cultural, and political conditions and applicability of the practices in those conditions during situation analysis is important.



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Case Studies

Durable Conservation Through Political Commitments, Regional Coordination, and Sustainable Finance in Micronesia



The Micronesia Challenge spans 2.5 million square miles (1 million hectares) of ocean, an area nearly the size of the continental US, and supports an estimated 450,000 people across 2,000 islands, 12 languages, and five jurisdictions. In 2006, the Chief Executives of five countries and territories in the region collectively committed to the Micronesia Challenge (MC), “to effectively conserve at least 30 percent of the near-shore marine resources and 20 percent of the terrestrial resources across Micronesia.” They marked 2020 as the target date to reach this collective goal, which has shaped regional conservation efforts over the past decade.

Regional Political Commitment

High-level political commitment to the MC enabled these small, dispersed, and remote island nations to unite under an overarching, funded initiative that increased visibility globally, provided a political commitment to drive priorities, and facilitated collective (and competitive) efforts to achieve conservation gains. This commitment has endured multiple political transitions and enabled organizations and institutions to provide more effective technical and financial assistance regionally than to each individual jurisdiction. Three of the five jurisdictions have institutionalized the MC through Protected Areas Network (PAN) policies, laws, or regulations and PAN offices to sustain the efforts of the MC. The other two are US protectorates and have employed an integrated coastal management approach aligned with US laws and systems.

ICON LEGEND
VCA Framework Biomes



TERRESTRIAL



FRESHWATER



COASTAL

Sustainable Financing at Regional and Jurisdictional Level

Along with the political conservation commitments, an endowment was established, and the Micronesia Conservation Trust (MCT) was designated to manage the endowment. The regional approach enabled a reduced management fee to be negotiated, generated more diversified options for investment, helped sustain engagement and commitment among the chief executives, and secured immediate pledges by TNC and Conservation International (CI) that built credibility in the effort. Sustainable finance plans were then developed for each jurisdiction that identified existing and potential sources of funding as compared to the total start-up and management costs to achieve the MC goals. It was determined that the gap could be filled by investment interest from a \$56 million endowment, to complement local sources to be developed or secured in each jurisdiction. As of December 2020, the total endowment fund grew to nearly \$25 million.

Each jurisdiction has pursued activities to secure additional funds. Palau has established a mechanism to disburse MC funds to PAN sites, typically managed by local communities, community-based organizations, or NGOs, if they meet certain criteria. Palau's tourism Green Fee was also established to generate additional funding. A similar model is under development in the Federated States of Micronesia and Republic of the Marshall Islands. Across the region, additional community-level finance mechanisms have been developed in specific project areas, such as a conservation easement and endowment fund, and nine "One Reef" conservation agreements that provide participating communities with on-going financial support for management of near-shore marine resources.

Since the launch of the MC, conservative estimates show that supporting NGO partners (MCT and TNC) leveraged approximately \$45 million in grant funds to support implementation of the MC across the region, and the jurisdictions leveraged approximately \$17.5 million in grant funds as well.

Progress and Outcomes

An evaluation conducted in 2020 identified several opportunities to strengthen progress and implementation of the MC. For example, more substantial investments towards the infrastructure of the MC would improve regional level coordination, communication, and collaboration. This includes dedicated executive leadership for the coordination mechanism, clearly defined terms and roles, strengthened governance processes across the regional platforms, and a more formally coordinated approach or plan to accomplish the goals of the MC among jurisdictional agencies, organizations, and partners. Additionally, a more bottom-up planning approach could increase engagement of jurisdictional leaders—including legislative/cabinet, agency leadership, and traditional leaders—in initial design and launch, strengthen alignment with local and community priorities, and speed institutionalization of the MC across jurisdictions. Finally, a more robust and transparent reporting system and communications related to sustainable finance that provides each jurisdiction an annual review of their endowment, benefits derived, and other fundraising and capacity development activities could help address frustrations in not meeting the goals of the sustainable finance plans locally and regionally.

Lessons learned for this case study are based on an evaluation of the Micronesia Challenge completed by lead author Meghan Gombos upon reaching the 2020 timeframe. The evaluation and summary document were funded by TNC and the Pacific Islands Managed and Protected Area Community, and are a product of the Micronesia Challenge Steering Committee.

Tools and Resources



TOOL 18: GUIDE—CONSERVATION FINANCE GUIDE

The Conservation Finance Alliance's (CFA's) Conservation Finance Guide offers detailed definitions of conservation finance mechanisms; detailed guidance on how to implement specific finance mechanisms, including strategic planning worksheet tools, feasibility assessment worksheet tools, financial mechanism design worksheet tools, and resource valuation information; case studies; and business planning guides, templates, and repositories. CFA's tools should be used in conjunction with the VCA Framework and TNC's Human Rights Guide.



TOOL 19: DIAGNOSTIC—KEY FEATURES AND ENABLING CONDITIONS FOR EFFECTIVE FINANCING

A number of enabling conditions as well as strategy and design features are key to effective Indigenous Peoples and local communities conservation finance. By producing responses to each item in the checklist, practitioners can use this tool to assess the presence of these key enabling conditions and features for effective financing. In turn this can support efforts to assess viability of financing opportunities, inform the design of financial strategies and mechanisms, and determine priorities to support appropriate capacity-building activities in partnership with Indigenous Peoples and local communities. This tool should be used in discussion and collaboration with the community, or its representative institutions, and relevant experts.

Appendix

Additional Resources

④ Secure Rights Over Lands, Waters, and Resources

LandMark

An online, interactive global platform hosted by World Resources Institute (WRI) and Rights and Resources Initiative (RRI) to provide maps and other critical information about lands that are collectively held and used by Indigenous Peoples and local communities. Includes data on formal vs. informal tenure, indicators of legal security of lands, development pressures, and other relevant information.

The Global Property Rights Index (Prindex)

A global indicator of citizens' perception of the security of property rights, a joint initiative of the Global Land Alliance and Overseas Development Institute. Intended to monitor and encourage good governance of property rights, and in focusing on perception, does not necessarily reflect legal status.

NAMATI Community Land Protection Facilitator's Guide: Mapping and Registration of Community Lands

Section titled "Harmonizing Boundaries and Documenting Community Lands," pages 133-176. This chapter describes how to support communities to make participatory sketch maps of their lands; resolve boundary disputes and land conflicts related to their community lands; then document the agreed boundaries with various forms of physical evidence, including signed agreements with neighbors, boundary trees or other markers, and location coordinates.

④ Strong Leadership, Governance, and Management Capacity

CARE Community Score Card (CSC) and Social Analysis and Action (SAA) Approach

These resources were suggested by multi-sector (health, education, and development) reviewers of the VCA Framework and Results Chain and Evidence Base project as potentially useful for programs to apply a community-driven accountability approach for the assessment and improvement of program delivery (CSC); and a participatory approach for exploring the social factors that negatively impact community members, with an eye toward fostering gender equity in program design and implementation (SAA). Such approaches can foster trust between communities and conservation practitioners by illuminating important considerations for project design and implementation such as: Whose priorities are valued and acted upon? Is there consensus on priorities among the entire stakeholder body? Do the priorities

identified resonate with the larger community? Are they inclusive of the diversity of needs and priorities expressed? Do they capture the needs and interests of the most marginalized and underrepresented in the community?

NAMATI Community Land Protection Facilitator's Guide

This resource contains best practice guidance on many of the potential actions suggested in the capacity-building (Pillar 2) tools and resources section, including how to work with community leaders, engage women and marginalized groups, conduct community visioning, support land use planning, document community lands, resolve conflicts, and pursue registration and formalization of community land claims.

Institutional Self-Assessment: A Tool for Strengthening Non-profit Organizations

In addition to community capacity-building, TNC has a long history of supporting the capacity of in-country civil society organizations and nonprofits whose work directly impacts Indigenous Peoples and local communities. This resource can be used to assess our own capacity as well as that of partner civil society organizations and nonprofits, including evaluation of their strategic vision and planning, leadership, organizational management, human resources, resource development, financial management, constituency building/ outreach, and programmatic capacity.

TNC Practitioner Resource of the Results Chains and Evidence Base (RCEB) Project: Interactive Results Chains and Narratives for Select Pillars of the VCA Framework

This resource provides three relevant results chains for capacity-building (as well as sustainable livelihoods), and contains additional detail, a menu of potential indicators, and suggested tools and resources for assessing and strengthening trust with and within communities (pages 24-33), as well as the effectiveness of community leaders and institutions (pp. 34-42).

TNC Governance Self-Assessment Tool

This resource provides a tool developed by TNC's Northern Australia Team for community partners to use in assessing the effectiveness of their own community leaders and institutions.

➤ Effective Multi-Stakeholder Dialogue and Decision Making

The MSP Guide: How to Design and Facilitate Multi-Stakeholder Partnerships

The guide offers a roadmap for designing and facilitating multi-stakeholder partnerships (MSPs). This is not a recipe book; rather, it provides a broad outline. The power of this guide comes from its underlying framework for understanding and facilitating MSPs. This framework links theory with practice and provides a model and set of principles to guide the design of MSPs, tips on facilitation, and a set of participatory process tools.

The MSP Tool Guide: Sixty Tools to Facilitate Multi-Stakeholder Partnerships

As a companion to the MSP Guide on how to design and facilitate effective multi-stakeholder partnerships, this tool guide offers 60 process tools serving different purposes curated by the authors as the ones they find especially useful to support MSP processes.

Towards New Social Contracts: Using Dialogue Processes to Promote Social Change

This toolkit is designed to stimulate a reflection around the potential and limits of multi-stakeholder processes in promoting socio-political change and provides practical tools and resources to facilitate the use of dialogue processes in new ways. This toolkit is primarily intended for civil society, particularly small organizations operating at the local level, and seeks to add a civil society perspective to multi-stakeholder initiatives. Also available for download in French, Spanish, and Arabic.

Cross-Sector Collaboration to Tackle Tropical Deforestation

At the core of this document is a set of diagnostic questions to help jurisdictional programs design and assess cross-sector collaboration and its backbone support. The questions are divided into six sections: initial conditions, outcomes, collaboration dynamics, structure of the collaboration, backbone support, and accountabilities.

➤ Sustainable Livelihood Opportunities

Healthy Country Planning

Healthy Country Planning (HCP) is an adaptation of the Open Standards (OS) developed for use in participative and cross-cultural situations—typically with Indigenous communities. To better enable this, the language of the OS has been translated into simpler terms, a color-coding system adopted, and a flow chart of how all the steps fit together added for clarity. It has been developed and tested across Australia, and the most experienced coaches in its use are Australian, but it has been used very successfully in the Americas and Asia. The complete set of PowerPoint files and associated exercises for running an HCP training workshop can be accessed above.

Evaluation of Community-Focused Enterprises that Support Sustainable Livelihoods in Partnership with Indigenous Peoples and Local Communities

The objective of this study was to identify, evaluate, and synthesize lessons learned from examples of community-focused enterprises and investments that support economic livelihoods, human well-being, and environmental outcomes for Indigenous People and local communities in various parts of the world. Lessons learned from these examples provide guidance on designing and financing community livelihood models and help organizations that are seeking to strengthen existing efforts or start new initiatives related to sustainable livelihoods.

Sustainable Livelihoods Enhancement and Diversification (SLED) Manual

This manual provides a set of guidelines for development and conservation practitioners to support communities in enhancing and diversifying their livelihoods. SLED does this by working with Indigenous Peoples and local communities to identify and develop opportunities

for positive change in their livelihoods, based on their strengths and capacities, accounting for factors that help and inhibit livelihood change while reflecting people's aspirations and hopes for the future. Although the methodology is written with coral reefs and coastal fisheries in mind, it can be applied widely wherever natural resources are facing degradation due to unsustainable human use.

Community-Based Tree and Forest Product Enterprises–Market Analysis and Development Manual and Field Facilitator Guidelines

Market Analysis and Development (MA&D) is suitable for enterprises based on natural resource products that need to be protected or conserved, because it links participatory natural resource management and conservation activities to income generating opportunities. Thorough MA&D can provide a wide scope for understanding relevant market systems and thus help avoid business failure. While the methodology is written with forests as the focus, the approach has also been successfully applied to projects related to community-based tourism, agricultural products, livestock initiatives, and coastal fisheries.

Communities, Conservation and Livelihoods

This book reflects the results of over a decade of studies focusing on communities, conservation, and livelihoods, through the Community Conservation Research Network (CCRN), a global initiative that involves a wide range of Indigenous, academic, community and non-governmental organizations (NGOs). As will be seen in this book, the linkages of conservation and livelihoods arise within underlying 'social-ecological' systems, they are rooted in the varying meanings of and motivation for conservation, they are affected by issues of power and of governance, and they lead to a wide range of biodiversity and livelihood outcomes.

Good Practices for Engaging with Communities Impacted by Commercial Development Projects: An Internal Guidance Document on Lessons Learned for The Nature Conservancy

This report is intended to serve as an internal guidance document for TNC practitioners who are considering, or actively engaging, in Development by Design (DbD) projects or other community-based projects facing proposed or current development. The report consists of four primary sections including (1) an overview of the Conservancy's positions and commitments regarding human well-being and community engagement, (2) an abridged literature review highlighting the recognized best practices for engaging with communities on extractive projects, (3) representative Conservancy case studies summarizing experiences and lessons learned about engaging with communities during development projects, and (4) overall recommendations for conservation practitioners based on reviews of the leading literature and Conservancy experiences.

🔗 Equitable Benefits, Impacts, and Inclusion

International Institute for Environment and Development's Participatory Learning and Action manual on [Biodiversity and culture: Exploring community protocols, rights and consent](#). See especially section 16, pages 179-183, for an article on "Understanding and facilitating a biocultural community protocol process" by Holly Shrumm and Harry Jonas.

In addition to the three phases for gender integration in conservation, conservation staff should be aware of the prevalence of gender-based violence around the world, and informed on how to respond, as well as how to take equitable approaches that will not unintentionally create or exacerbate situations of violence. IUCN and the US Department of State have information on [What is Gender-Based Violence?](#), and RAINN provides information on [Tips for Talking with Survivors of Sexual Assault](#). Both resources are also available in Chinese, French, Indonesian, Mongolian, Portuguese, Spanish, and Swahili.

As emphasized throughout this document, taking a culturally responsive approach to gender equity integration is paramount, underscoring the importance of a robust, participatory gender analysis. There are other helpful resources on cultural responsiveness in gender equity integration as well, for example the [United Nation's Briefing Notes on Gender and Indigenous Peoples](#).

Regarding securing gender equity in lands, waters, and natural resources rights specifically: Rights and Resources Initiative's [Gender Justice website](#) includes legislative best practices for securing women's rights to community lands, outlines factors that contribute to successful strengthening of Indigenous and rural women's rights to govern community lands, and explains how to use international law to advance women's tenure rights in REDD+. World Resources Institute provides a [case study report](#) on enabling factors for women's security and collectively held land regulations, available in English, Spanish, French, Arabic, Indonesian, and Nepali.

➤ **Strong Connection to Knowledge and Place**

Living Tongues Institute for Endangered Languages

An organization that supports speakers who are saving their languages from extinction through activism, education, and technology. Research teams document endangered languages and cultural practices, publish scientific studies, run digital training workshops to empower language activists, and collaborate with communities to create language resources that will serve as a basis for language revitalization.

Guidelines for Considering Traditional Knowledges in Climate Change Initiatives

These guidelines are intended to examine the significance of Traditional Knowledges (TKs) in relation to climate change and the potential risks to Indigenous Peoples in the United States as an example for sharing TKs in federal and other non-Indigenous climate change initiatives. These guidelines should be used to inform the development of specific protocols in direct and close consultation with Indigenous Peoples.

Institute for Integrative Science and Health—Two-Eyed Seeing

This website includes articles, presentations, videos, and examples in understanding and applying Elder Dr. Albert Marshall's "Two-Eyed Seeing" framework. Two-eyed seeing refers to learning to see from one eye with the strengths of Indigenous knowledges and ways of knowing, and from the other eye with the strengths of Western knowledges and ways of knowing...and learning to use both these eyes together, for the benefit of all.

➤ Durable Outcomes for People and Nature

Conservation Financing for Conservation Programs with Indigenous People and Local Communities

The overall aim of this study is to explore options for generating sufficient levels of finance over sustained periods of time so that Indigenous Peoples and local communities have the financial capacity to continue to effectively steward their natural resources. The objective is to identify sustainable financing models and examples employed in conservation projects associated with Indigenous and local communities around the world and assess these examples to facilitate replication and adaptation. The study is also intended to share knowledge on successful sustainable financing models among Indigenous Peoples and local communities and provide guidance on the sources of both public and private investment in developing these models.

Additional Key Financing Resources

This folder offers a collection of additional resources to support Indigenous Peoples and local communities conservation financing. This includes training resources as well as libraries of information on financing solutions across a diversity of instrument types, geographies, ecosystems, and sectors. A summary document therein provides an overview of the offered resources.

R Package: Keyplayer

This resource provides a library of functions for R (a free programming software) users to conduct social network analysis as a means of identifying key network nodes among existing community leaders and critical injection points to promote the persistence and diffusion of conservation programs.

➤ Freshwater Community-Based Conservation

Freshwater Practitioner's Guide to the VCA Framework

Conserving the biodiversity of the world's freshwater systems is critically important for people and communities worldwide. Yet the very nature of freshwater resources poses unique challenges to their sustainable management, especially under conditions of stress. The sheer scale, variability, and unpredictability of the resources and those interacting with them is daunting. Adding to this fundamental complexity are such factors as competing resource claims, over-allocation of available resources, political and power dynamics, social and cultural disparities, and economic constraints. This guide aims to advance the understanding of how communities can sustainably manage freshwater resources by applying the VCA Framework. Note, this guide was incorporated in the writing of VCA 2.0 to ensure adequate coverage and inclusion of freshwater contexts and perspectives, and the main concepts are reflected within. Also available in French, Portuguese, and Spanish.

Evaluation of the Effectiveness of Community-Based Conservation of Freshwater Resourcesⁿ

This systematic review examines peer-reviewed literature to assess the effectiveness of community-based approaches within freshwater-related ecosystems. The review indicates that studies of freshwater community-based conservation are limited in number and representativeness. While positive outcomes for both biodiversity and human well-being are commonly reported, limitations due to study design constrain the ability to infer the significance or causality of these effects. Overall, the analysis indicates that there are several gaps in the available research: across geographic regions, freshwater ecosystem types, intervention types, and environmental and human well-being outcome types. Given the importance of freshwater resources to Indigenous Peoples and local communities, this review highlights the critical need to generate evidence across more diverse contexts to achieve greater clarity on whether and how community-based projects can be most effective.

Power Sector Planning Framework

One of the most significant impacts to freshwater ecosystems and the people who rely on their ecosystem services is the construction of dams. We evaluated opportunities for communities to have a voice in energy sector planning and describe a framework for community participation.

Engaging with Communities on Freshwater Protected area Establishment and Management

This report was developed to review best practices in working with Indigenous Peoples and local communities in establishing and co-managing freshwater protected areas. It includes best practices in identifying and engaging stakeholders; establishing rules, monitoring, enforcement, and conflict resolution; developing leadership structures; and considering elements of water tenure security.

Community-Based Conservation in Water Scarce Areas^o

Half of the world's populations live in places at risk of water shortage. One-third of all rivers, lakes, and aquifers are being heavily exploited, with at least 75 percent of water extracted for human use. Colonization and dispossession of land and water access have disproportionately affected Indigenous Peoples and local communities. In this internal report we explore some of the unique attributes of water scarcity, and dive into five case studies from India, the United States, Peru, and Australia to identify best practices for elevating community voices in water scarcity decision-making and scaling equitable wins for people and nature. We conclude with an analysis of the lessons learned across these cases and key considerations for conservation practitioners.

n. A manuscript was submitted for publication as of January 2022. For latest draft, please reach out to Nathan Karres (nkarres@tnc.org).

o. For access to the full internal report, please reach out to Caitlin Doughty (caitlin.doughty@tnc.org).

References

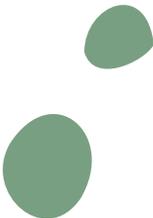
1. The Nature Conservancy. (2022). "Assessment of Local Community Characteristics in Priority Community-Led Conservation Geographies."
2. Martinez Cobo, J. R. (1982). *Study of the Problem of Discrimination Against Indigenous Populations*. UN Economic and Social Council; Commission on Human Rights. https://www.un.org/esa/socdev/unpfii/documents/MCS_v_en.pdf
3. United Nations. (2007). *United Nations Declaration on the Rights of Indigenous Peoples*. https://www.un.org/development/desa/indigenouspeoples/wp-content/uploads/sites/19/2018/11/UNDRIP_E_web.pdf
4. Garnett, S.T., Burgess, N.D., Fa, J.E., Fernández-Llamazares, Á., Molnár, Z., Robinson, C.J., ... Leiper, I. (2018). A spatial overview of the global importance of Indigenous lands for conservation. *Nat. Sustain.*, 1, 369–374.
5. Rights and Resources Initiative. (2020). Estimate of the area of land and territories of Indigenous Peoples, local communities, and Afro-descendants where their rights have not been recognized, 1–32.
6. Rights and Resources Initiative, Woods Hole Research Center, and World Resources Institute. (2016). *Toward a Global Baseline of Carbon Storage in Collective Lands: An Updated Analysis of Indigenous Peoples' and Local Communities' Contributions to Climate Change Mitigation*.
7. Sobrevila, Claudia. (2008). *The Role of Indigenous Peoples in Biodiversity Conservation: The Natural but Often Forgotten Partners*. Washington, DC: World Bank.
8. World Bank Group. (2012). *Hidden Harvest: The Global Contribution of Capture Fisheries (English)*. Washington, D.C. <http://documents.worldbank.org/curated/en/515701468152718292/Hidden-harvest-the-global-contribution-of-capture-fisheries>
9. Stevens, C., Winterbottom, R., Springer, J., & Reyntar, K. (2014). *Securing Rights, Combating Climate Change*.
10. Schuster, R., Germain, R. R., Bennett, J. R., Reo, N. J., & Arcese, P. (2019). Vertebrate biodiversity on indigenous-managed lands in Australia, Brazil, and Canada equals that in protected areas. *Environmental Science & Policy*, 101, 1-6.
11. Detoeuf, D., Wieland, M, Cowles, P. and Wilkie, D. (2020). *The Natural Resource Governance Tool - Version 2*. WCS Bronx, NY and USAID Washington, D.C. USA
12. Chaskin, R. J. (2001). Building Community Capacity. *Urban Affairs Review*, 36(3), 291–323. doi: 10.1177/10780870122184876
13. Moore, S. A., Severn, R. C., & Millar, R. (2006). A conceptual model of community capacity for biodiversity conservation outcomes. *Geographical Research*, 44(4), 361–371. doi: 10.1111/j.1745-5871.2006.00407.
14. Wongbusarakum, Supin, Erin Myers Madeira, Herlina Hartanto. (2014). *Strengthening the Social Impacts of Sustainable Landscapes Programs: A practitioner's guidebook to strengthen and monitor human well-being outcomes*. The Nature Conservancy. Arlington, VA.
15. Berkes, F., Folke, C., & Colding, J. (Eds.). (2000). *Linking social and ecological systems: management practices and social mechanisms for building resilience*. Cambridge University Press.
16. Fariss B, DeMello N, Powlen KA, Latimer CE, Masuda Y, Kennedy CM. (2021). Identifying Catalysts of Success in Community-based Conservation. *Conservation Biology*: In review.

17. Wildcat, D. R. 2009. *Red alert!: Saving the planet with indigenous knowledge*. Golden, Colo: Fulcrum.
18. First Alaskans Institute. (2017). 2017-2021 Strategic Plan. <https://firstalaskans.org/wp-content/uploads/2021/03/FAI-2017-2021-Strategic-Plan-files.pdf>
19. Schlager, E., & Ostrom, E. (1992). Property-Rights Regimes and Natural Resources: A Conceptual Analysis. *Land Economics*, 68(3), 249–262. <https://doi.org/10.2307/3146375>
20. Organization of American States. General Assembly. Regular Session. (46th : 2016 : Santo Domingo, Dominican Republic).
21. FAO. (2002). What is Land Tenure? In M. Cox (Ed.), *Land Tenure and Rural Development*. Rome: Food and Agricultural Organization.
22. FAO. (2012). *Voluntary Guidelines on the Responsible Governance of Tenure of Land, Fisheries and Forests in the Context of National Food Security*. Rome: Food and Agricultural Organization.
23. Sjaastad, E., & Bromley, D. W. (2000). The prejudices of property rights: On individualism, specificity, and security in property regimes. *Development Policy Review*, 18(4), 365–389. <https://doi.org/10.1111/1467-7679.00117>
24. Sikor, T., He, J., & Lestrelin, G. (2017). Property Rights Regimes and Natural Resources: A Conceptual Analysis Revisited. *World Development*, 93, 337–349. <https://doi.org/10.1016/j.worlddev.2016.12.032>
25. Arnot, C. D., Luckert, M. K. K., & Boxall, P. C. C. (2011). What is tenure security? Conceptual implications for empirical analysis. *Land Economics*, 87(2), 297–331. <https://doi.org/ISSN 0023-7639>
26. Masuda, Y. J., Kelly, A., Robinson, B. E., Holland, M. B., Bedford, C., Childress, M., ... Veit, P. (2019). *How do practitioners characterize land tenure security?*
27. Tseng, T.-W. J., Robinson, B. E., Bellemare, M. F., BenYishay, A., Blackman, A., Boucher, T., ... Masuda, Y. J. (2021). Influence of land tenure interventions on human well-being and environmental outcomes. *Nature Sustainability*, 4(3), 242–251. <https://doi.org/10.1038/s41893-020-00648-5>
28. Hajjar, R., Oldekop, J. A., Cronkleton, P., Newton, P., Russell, A. J., & Zhou, W. (2021). A global analysis of the social and environmental outcomes of community forests. *Nature Sustainability*, 4(3), 216–224.
29. Seymour, F., La Vina, T., & Hite, K. (2014). Evidence linking community-level tenure and forest condition: an annotated bibliography. *Climate and Land Use Alliance*.
30. Blackman, A., & Veit, P. (2018). d Amazon indigenous communities cut forest carbon emissions. *Ecological economics*, 153, 56–67.
31. Alchian, A. A., & Demsetz, H. (1973). The Property Rights Paradigm. *The Journal of Economic History*, 33(1), 16–27. <https://doi.org/10.1017/S0022050700076403>
32. Joireman, S. F. (2008). The Mystery of Capital Formation in Sub-Saharan Africa: Women, Property Rights and Customary Law. *World Development*, 36(7), 1233–1246. <https://doi.org/10.1016/j.worlddev.2007.06.017>

33. Robinson, B. E., Masuda, Y. J., Kelly, A., Holland, M. B., Bedford, C., Childress, M., ... Veit, P. (2017). Incorporating Land Tenure Security into Conservation. *Conservation Letters*. <https://doi.org/10.1111/conl.12383>
34. Soto, H. de. (2001). The mystery of capital. *Finance and Development, a Quarterly Publication of the International Monetary Fund*, 38(1), 29–30. Retrieved from <http://www.imf.org/fandd>
35. Easterly, William. (2008). "Institutions: Top Down or Bottom Up?" *American Economic Review*, 98 (2): 95-99.
36. Jayachandran, S., De Laat, J., Lambin, E. F., Stanton, C. Y., Audy, R., & Thomas, N. E. (2017). Cash for carbon: A randomized trial of payments for ecosystem services to reduce deforestation. *Science*, 357(6348), 267–273. <https://doi.org/10.1126/science.aan0568>
37. Zhang, W., ElDidi, H., Swallow, K. A., Meinzen-Dick, R. S., Ringler, C., Masuda, Y. J., & Aldous, A. (2020). *Community-based management of freshwater resources: A practitioners' guide to applying TNC's voice, choice, and action framework*. <https://doi.org/10.2499/p15738coll2.133692>
38. Hale, L.Z. and J. Rude (eds.). (2017). *Learning from New Zealand's 30 Years of Experience Managing Fisheries Under a Quota Management System*. The Nature Conservancy, Arlington, Virginia, USA.
39. FAO and WorldFish. (2021). *Characteristics and performance of fisheries co-management in Asia; Synthesis of knowledge and case studies: Bangladesh, Cambodia, Philippines and Sri Lanka*. Bangkok. <https://doi.org/10.4060/cb3840en>
40. Northern Rangelands Trust. (2018) Northern Rangelands Trust Strategic Plan: 2018-2022. Kenya. https://static1.squarespace.com/static/5af1629f12b13f5ce97ca0b5/t/5bc5f774e2c483f6ec5eafd4/1539700631074/Strategic+Plan.2018-22.FINAL_LOWRES.pdf
41. Agrawal, A., & Ostrom, E. (2001). Collective action, property rights, and decentralization in resource use in India and Nepal. *Politics Adn Society*, 485–514.
42. Bodin, Ö. (2017). Collaborative environmental governance: Achieving collective action in social-ecological systems. In *Science*. doi: 10.1126/science.aan1114
43. Colfer, C. J. P. (2007). *Simple Rules for Catalyzing Collective Action in Natural Resource Management Contexts*. 19. Retrieved from <http://www.cifor.cgiar.org/Knowledge/Publications/Detail.htm?&pid=2252&pf=1>
44. Olson, M. (1965). *The logic of collective action: Public goods and the theory of groups*. Cambridge, MA: Harvard University Press.
45. Ostrom, E., Gardner, R., & Walker, J. (1994). *Rules, Games, and Common-pool Resources* (E. Ostrom, R. Gardner, & J. Walker (eds.)). Ann Arbor: University of Michigan Press.
46. Berkes, F., Folke, C., & Colding, J. (Eds.). (2000). *Linking social and ecological systems: management practices and social mechanisms for building resilience*. Cambridge University Press.
47. North, D. C. (1991). Institutions. *The Journal of Economic Perspectives*, 5(1), 97–112.
48. Brooks, J. S. (2017). Design Features and Project Age Contribute to Joint Success in Social, Ecological, and Economic Outcomes of Community-Based Conservation Projects. *Conservation Letters*, 10(1), 23–32. doi: 10.1111/conl.12231

49. Campbell, B. M., Sayer, J. A., & Walker, B. (2010). Navigating trade-offs: Working for conservation and development outcomes. *Ecology and Society*, 15(2), 2. doi: 10.5751/ES-03380-150216
50. Adams, W. M., Aveling, R., Brockington, D., & Dickson, B. (2004). Biodiversity conservation and the eradication of poverty. *Science*, 306, 1146–1149. Retrieved from <https://science.sciencemag.org/content/306/5699/1146.short>
51. Hartanto, H., Tomy, S., Hidayat, Y., & Hidayat, T. (2014). SIGAP-REDD+: Inspiring People Actions for Change in REDD+. Indonesia Program.
52. Tallis, H., Kareiva, P., Marvier, M., & Chang, A. (2008). An ecosystem services framework to support both practical conservation and economic development. *Proceedings of the National Academy of Science*, 105, 9457–9464. Retrieved from <https://www.pnas.org/content/105/28/9457.short>
53. Meinzen-Dick, R., Janssen, M. A., Kandikuppa, S., Chaturvedi, R., Rao, K., & Theis, S. (2018). Playing games to save water: Collective action games for groundwater management in Andhra Pradesh, India. *World Development*, 107, 40–53.
54. Wilkie, D. S., & Painter, M. (2021). Factors of success in community forest conservation. *Conservation Science and Practice*, e388, Manuscript submitted for publication. Retrieved from <https://conbio.onlinelibrary.wiley.com/doi/10.1111/csp2.388>
55. Agrawal, A., & Benson, C. (2011). Common property theory and resource governance institutions: strengthening explanations of multiple outcomes. *Environmental Conservation*, 38, 199–210.
56. Knight, R., Brinkhurst, M., & Vogelsang, J. (2016). *Community land protection facilitators guide*. Retrieved from namati.org/communityland
57. Persha, L., Agrawal, A., & Chhatre, A. (2011). Social and ecological synergy: local rulemaking, forest livelihoods, and biodiversity conservation. *Science*, 331, 1606–1608.
58. Tai, H. (2007). Development Through Conservation: An Institutional Analysis of Indigenous Community-Based Conservation in Taiwan. *World Development*, 35(7), 1186–1203. doi: 10.1016/j.worlddev.2006.09.015
59. Pretty, J., & Smith, D. (2004). Social Capital in Biodiversity Conservation and Management. *Conservation Biology*, 18(3), 631–638.
60. Olsson, P., Folke, C., & Berkes, F. (2004). Adaptive comanagement for building resilience in social-ecological systems. *Environmental Management*, 34, 75–90.
61. Ostrom, E., Gardner, R., & Walker, J. (2009). A General Framework for Analyzing Sustainability of Social-Ecological Systems. *Science*, 325(5939), 419–422.
62. Pretty, J. (2003). Social capital and the collective management of resources. *Science*, 302, 1912–1914.
63. Ferrin, D. L., & Dirks, K. T. (2002). Trust in Leadership: Meta-Analytic Findings and Implications for Research and Practice. *Journal of Applied Psychology*, 87(4), 611–628. doi: 10.1037//0021-9010.87.4.611
64. Lockwood, M. (2010). Good governance for terrestrial protected areas: A framework, principles and performance outcomes. *Journal of Environmental Management*, 91(3), 754–766. doi: 10.1016/j.jenvman.2009.10.005

65. Glowacki, L., & von Rueden, C. (2015). Leadership solves collective action problems in small-scale societies. *Philosophical Transactions B*, 370.
66. Stein, C., Ernston, H., & Barron, J. (2011). A social network approach to analyzing water governance: The case of the Mkindo catchment, Tanzania. *11th WaterNet/WARFSA/GWP-SA Symposium: IWRM for National and Regional Integration through Science, Policy and Practice*, 36(14–15), 711–1208.
67. Mascia, M. B., & Mills, M. (2018). When conservation goes viral: The diffusion of innovative biodiversity conservation policies and practices. *Conservation Letters*, 11(3), 1–9. doi: 10.1111/conl.12442
68. Valente, T. W., & Davis, R. L. (1999). Accelerating the diffusion of innovations using opinion leaders. *Annals of the American Academy of Political and Social Science*, 566, 55–67.
69. Mahajan, S. L., Arundhati, J., Glew, L., Ahmadi, G., Becker, H., Fidler, R. Y., ... Mascia, M. B. (2021). A theory-based framework for understanding the establishment, persistence, and diffusion of community-based conservation. *Conservation Science and Practice*, 3(1).
70. Ostrom, E. (1990). *Governing the Commons: the evolution of institutions for collective action*. New York, NY: Cambridge University Press.
71. Ostrom, E. (2010). Analyzing collective action. *Agricultural Economics*, 41(155–166). Retrieved from .
72. Manfredo, M. J., Teel, T. L., Sullivan, L., & Dietsch, A. M. (2017). Values, trust, and cultural backlash in conservation governance: The case of wildlife management in the United States. *Biological Conservation*, 214(February), 303–311. doi: 10.1016/j.biocon.2017.07.032
73. Stern, M. J., & Baird, T. D. (2015). Trust ecology and the resilience of natural resource management institutions. *Ecology and Society*, 20(2).
74. Dembling, S. (2019). Rivers Held a Spiritual Place in the Lives of the Cherokee. *Humanities*, 40(3).
75. Stevenson, G. (1991). *Common property economics: A general theory and land use applications*. Cambridge, MA: Cambridge University Press.
76. Berkes, F. (1989). *Common property resources: Ecology and community-based sustainable resource development*. London: Bellhaven Press.
77. Berkes, F., Feeny, D., McCay, B., & Acheson, J. (1989). The benefits of the commons. *Nature*, 340, 91–93.
78. McKean, M. A. (2000). Common property: What is it, what is it good for, and what makes it work? In C. Gibson, M. McKean, & E. Ostrom (Eds.), *People and Forests: Communities, Institutions and Governments*. Cambridge, MA: MIT Press.
79. Netting, R. M. (1997). Unequal commoners and uncommon equity: Property and community among smallholder farmers. *The Ecologist*, 27, 28–33.
80. Corrigan, C., Bingham, H., & Van Montfort, J. (2021). *A Technical Report on the State of Indigenous Peoples' and Local Communities' Lands: Their contributions to global biodiversity conservation and ecosystem services, threats to these efforts, and recommendations toward a call to action*. Gland, Switzerland.

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81. Garnett, S. T., Burgess, N. D., Fa, J. E., Fernández-Llamazares, Á., Molnár, Z., Robinson, C. J., ... Leiper, I. (2018). A spatial overview of the global importance of Indigenous lands for conservation. *Nature Sustainability*, 1(7), 369–374. doi: 10.1038/s41893-018-0100-6
 82. Kothari, A., Corrigan, C., Jonas, H., Neumann, A., & Shrumm, H. (2012). *Recognizing and Supporting Territories and Areas Conserved by Indigenous People and Local Communities: Global overview and national case studies*. Montreal, Canada.
 83. Fa, J. E., Watson, J. E. M., Leiper, I., Potapov, P., Evans, T. D., Burgess, N. D., ... Barnett, S. T. (2020). Importance of Indigenous Peoples' Lands for the Conservation of Intact Forest Landscapes. *Frontiers in Ecology and the Environment*, 18(3), 135–140.
 84. Frechette, A., Ginsburg, C., & Walker, W. (2018). *Toward a Global Baseline of Carbon Storage in Collective Lands: Indigenous Peoples' and local communities' contributions to climate change mitigation*. Washington, DC. Retrieved from https://rightsandresources.org/wp-content/uploads/2018/09/A-Global-Baseline_RRI_Sept-2018.pdf.
 85. Walker, W. S., Gorelik, S. R., Baccini, A., Aragon-Osejo, J. L., Josse, C., Meyer, C., ... Schwartzman, P. (2020). The role of forest conversion, degradation, and disturbance in the carbon dynamics of Amazon indigenous territories and protected areas. *Proceedings of the National Academy of Science*, 117, 3015–3025.
 86. Zander, K. K., & Garnett, S. T. (2011). The Economic Value of Environmental Services on Indigenous-held Lands in Australia. *PLoS ONE*, 6(e23254).
 87. Hardin, G. (1968). The Tragedy of the Commons. *Science*, 162(3859), 1243–1248.
 88. Dodds, Felix and Emily Benson. (2015). *CIVICUS Participatory Governance Toolkit: Multi-stakeholder Dialogues*. Johannesburg, South Africa. http://www.civicus.org/images/PGX_D_Multistakeholder%20Dialogue.pdf
 89. Ros-Tonen, M.A.F., M. Derkyi, and T.F.G. Insaído. (2014). From Co-management to Landscape Governance: Whither Ghana's Modified Taungya System? *Forests* (5): 2996–3021.
 90. Kusters, K., L. Buck, M. de Graaf, P. Minang, C. van Oosten, and R. Zagt. (2017). Participatory Planning, Monitoring and Evaluation of Multi-stakeholder Platforms in Integrated Landscape Initiatives. *Environmental Management* (Mar. 21): 1–12.
 91. Warner, Jeroen. (2005). Multi-stakeholder Platforms: Integrating Society in Water Resource Management?. *Ambiente & Sociedade* 8(2)(July/Dec.): 4–28.
 92. International Union for Conservation of Nature (IUCN). (2012). *Collaboration and Multi-Stakeholder Dialogue: A Review of Literature*. IUCN, Gland, Switzerland. https://www.iucn.org/sites/dev/files/import/downloads/collaboration_and_multi_stakeholder_dialogue.pdf
 93. Kahane, Adam. (2017). *Collaborating with the Enemy: How to Work with People You Don't Agree with Or Like Or Trust*. Oakland, California: Berrett-Koehler.
 94. Lawlor, Kathleen, and Brooke Lovingood. (2016). *Participatory Conservation Strategies: Understanding What Works for Nature and People*. Report Prepared for The Nature Conservancy.
 95. Chiaravalloti, R., and M. Dyble. (2019). "Limited Open Access in Socio-Ecological Systems: How Do Communities Deal with Environmental Unpredictability?" *Conservation Letters* (October 2019): 1–7.

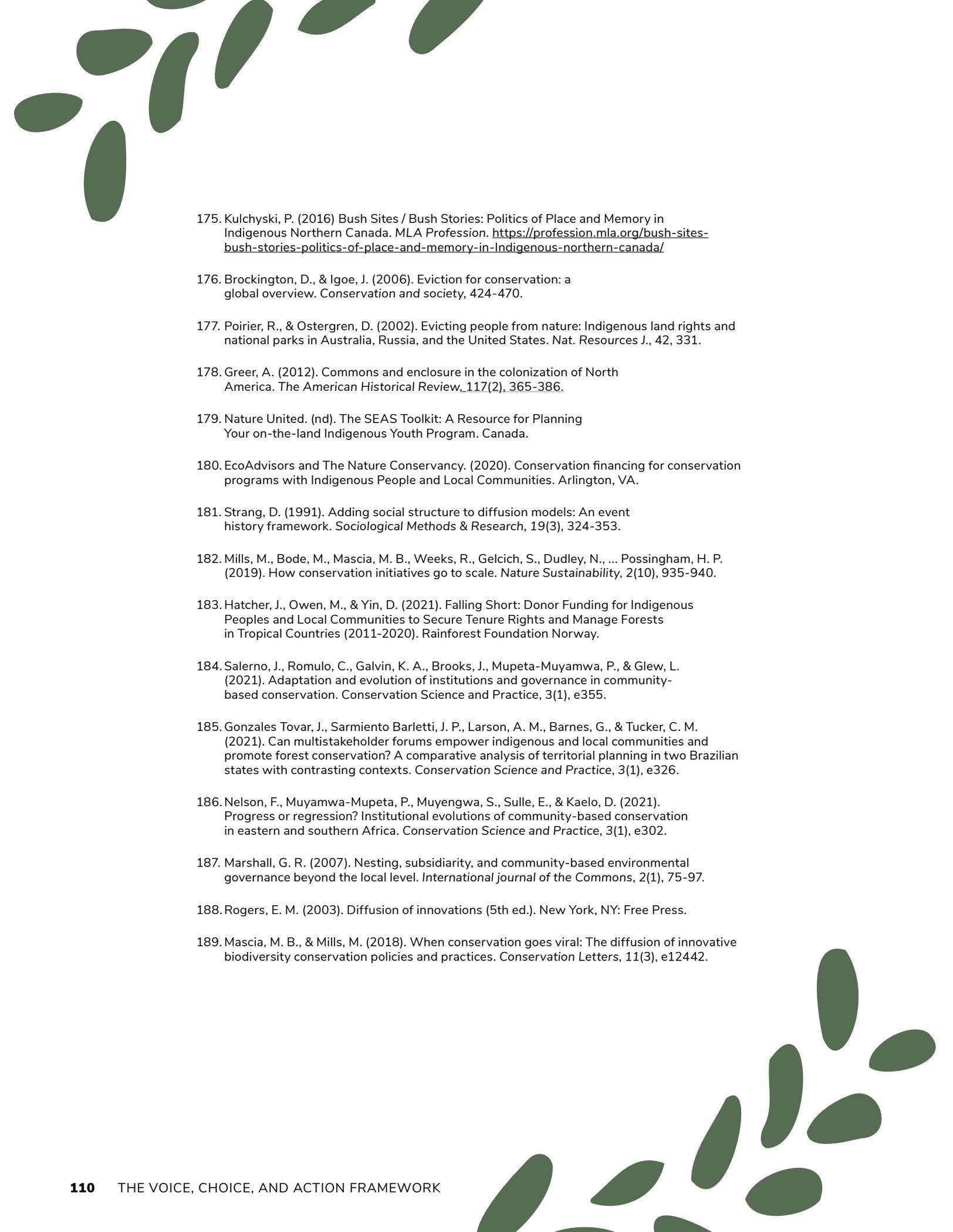
96. Shirley, E., and M. Gore. (2019). "Trust in scientists and rates of noncompliance with a fisheries rule in the Brazilian Pantanal," *PloS one* 14 (3).
97. Reos Partners. 2013. *The Reos Change Lab: Addressing Complex Challenges with Social Innovation*. For the Innoweave Knowledge Sharing Platform and the J.W. McConnell Family Foundation.
98. Meyers, D., Bohorquez, J., Cumming, T., Emerton, L., Heuvel, O. v., Riva, M., & Victorine, R. (2020). *Conservation Finance: A Framework*. Conservation Finance Alliance. doi:10.13140/RG.2.2.14186.88000
99. EcoAdvisors. (2020). *Conservation Financing for Conservation Programs with Indigenous Peoples and Local Communities*. Report prepared for The Nature Conservancy, July 2020.
100. Namati. (2016). *Community Land Protection Users Guide*. Namati: Innovations in Legal Empowerment.
101. Bonine, Kim, Natalia Sanin, Erik Wallsten, and Thais Vilela. (2020). *Evaluation of Community-Focused Enterprises that Support Sustainable Livelihoods in Partnership with Indigenous Peoples and Local Communities*. Report prepared for The Nature Conservancy.
102. Wright, J.H., N.A.O. Hill, D. Roe, J.M. Rowcliffe, N.F. Kumpel, M. Day, ... E.J. Milner-Gulland. (2016). Reframing the Concept of Alternative Livelihoods. *Conservation Biology* 30(1): 7-13.
103. Fauna and Flora International (FFI). (2013). *Why Not 'Alternative Livelihoods'? Reasons We Support the Development of Sustainable Livelihoods Rather Than the Promotion of 'Alternative Livelihoods' within Our Conservation Programmes*. Report by FFI Conservation, Livelihoods and Governance Programme.
104. Torell E., B. Crawford, D. Kotowicz, M.D. Herrera, and J. Tobey. 2010. Moderating Our Expectations on Livelihoods in ICM: Experiences from Thailand, Nicaragua, and Tanzania. *Coastal Management* 38: 216–237.
105. Lindsay, A. R., Sanchirico, J. N., Gilliland, T. E., Ambo-Rappe, R., Taylor, J. E., Krueck, N. C., & Mumby, P. J. (2020). Evaluating sustainable development policies in rural coastal economies. *Proceedings of the National Academy of Sciences*, 117(52), 33170–33176.
106. Li, B. V., Kim, M. J., Xu, W., Jiang, S., & Yu, L. (2021). Increasing livestock grazing, the unintended consequence of community development funding on giant panda habitat. *Biological Conservation*, 257, 109074.
107. Cundill, G., Shackleton, S., and Larsen, H.O. (2011). Collecting Contextual Information. In Larsen, H. O., Lund, J. F., Smith-Hall, C., & Wunder, S. (Eds.), *Measuring Livelihoods and Environmental Dependence* (pp. 71). Earthscan.
108. Lund, J. F., & Saito-Jensen, M. (2013). Revisiting the issue of elite capture of participatory initiatives. *World development*, 46, 104–112.
109. Friedman, R. S., Law, E. A., Bennett, N. J., Ives, C. D., Thorn, J. P., & Wilson, K. A. (2018). How just and just how? A systematic review of social equity in conservation research. *Environmental Research Letters*, 13(5), 053001. <https://iopscience.iop.org/article/10.1088/1748-9326/aabcde/pdf>
110. Office of the UN High Commissioner for Human Rights. What are human rights?

111. Chaudhury, A., & Colla, S. (2021). Next steps in dismantling discrimination: Lessons from ecology and conservation science. *Conservation Letters*, 14(2), e12774. <https://conbio.onlinelibrary.wiley.com/doi/pdfdirect/10.1111/conl.12774>
112. Worell, J. (Ed.). (2001). *Encyclopedia of women and gender, two-volume set: Sex similarities and differences and the impact of society on gender* (Vol. 1). Academic Press. Chapter on "Social Identity" by Kay Duex. <https://www.rhnet.org/site/handlers/filedownload.ashx?moduleinstanceid=5006&dataid=24349&FileName=social%20identity.pdf>
113. USAID. (2015). Guidelines for Learning and Applying The Natural Resource Governance Tool (NRGT) In Landscapes And Seascapes," <https://rmpportal.net/biodiversityconservation-gateway/projects/closed-global-projects/scapes-1/guidelines-learning-applying-nrgt-landscapes-seascapes/view>.
114. TNC. (2016). "Conservation by Design 2.0. Guidance Document—Version 1.0." <https://www.conservationgateway.org/ConservationPlanning/cbd/Pages/default.aspx>.
115. Leisher, C., Temsah, G., Booker, F., Day, M., Samberg, L., Prosnitz, D., Agarwal, B., ... Wilkie, D. (2016). Does the gender composition of forest and fishery management groups affect resource governance and conservation outcomes? A systematic map. *Environmental Evidence*, 5(6). <https://doi.org/10.1186/s13750-016-0057-8>
116. Agarwal B. (2009). Gender and forest conservation: The impact of women's participation in community forest governance. *Ecological Economics*, 68(11), 2785-2799. <https://EconPapers.repec.org/RePEc:eee:ecolec:v:68:y:2009:i:11:p:2785-2799>
117. Crenshaw, K. (1989). Demarginalizing the intersection of race and sex: A Black feminist critique of antidiscrimination doctrine, feminist theory and antiracist politics. *University of Chicago Legal Forum*, 1989(1), Article 8. <http://chicagounbound.uchicago.edu/uclf/vol1989/iss1/8>
118. United States Agency for International Development. (n.d.). Fact Sheet: Land tenure and women's empowerment. LandLinks. <https://www.land-links.org/issue-brief/fact-sheet-land-tenure-womens-empowerment/>
119. Landesa. (2012). *Women's Secure Rights to Land: Benefits, Barriers, and Best Practices*. Seattle, WA.
120. The Nature Conservancy. (2020-a). Glossary of key terms. The Nature Conservancy's Human Rights Guide for Working with Indigenous Peoples and Local Communities. <https://www.tnchumanrightsguide.org/appendix-ii-glossary-of-key-terms/>
121. The Nature Conservancy (2020-b). "Respect, reciprocity, and integration:" Elevating Indigenous leadership in conservation. <https://www.nature.org/en-us/what-we-do/our-insights/perspectives/elevating-indigenous-leadership-conservation/>
122. The Nature Conservancy. (2020-c). *Free, Prior and Informed Consent*. The Nature Conservancy's Human Rights Guide for Working with Indigenous Peoples and Local Communities. <https://www.tnchumanrightsguide.org/module-2-free-prior-informed-consent/>
123. Boyce, J.K. (2002). *The Political Economy of the Environment*. Edward Elgar, Cheltenham.
124. The Nature Conservancy. (2020-e). *Conflict Resolution*. The Nature Conservancy's Human Rights Guide for Working with Indigenous Peoples and Local Communities. <https://www.tnchumanrightsguide.org/module-3-conflict-resolution/>
125. Kusters, K., L. Buck, M. de Graaf, P. Minang, C. van Oosten, and R. Zagt. (2017). Participatory Planning, Monitoring and Evaluation of Multi-stakeholder Platforms in Integrated Landscape Initiatives. *Environmental Management* (Mar. 21): 1–12.

126. Maynard, Bill, and Dawn Robinson. (1998). Ethical Trade and Sustainable Rural Livelihoods: Quintana Roo Forest Certification Case Study. Report by Natural Resources Institute and Natural Resources and Ethical Trade.
127. Kariuki, J. & Birner, R. (2015). Are market-based conservation schemes gender-blind? A qualitative study of three cases from Kenya. *Society & Natural Resources*, 29, 432-447. <https://doi.org/10.1080/08941920.2015.1086461>
128. Westholm, L. & Arora-Jonsson, S. (2015). Defining solutions, finding problems: Deforestation, gender, and REDD+ in Burkina Faso. *Conservation & Society*, 13(2), 189-199. DOI: 10.4103/0972-4923.164203.
129. Bandiaky-Badji, S. (2011). Gender equity in Senegal's forest governance history: Why policy and representation matter. *International Forestry Review*, 13(2), 177-194. <https://doi.org/10.1505/146554811797406624>
130. World Health Organization. (n.d.). Social determinants of health: Women and gender equity.
131. World Bank. (2011). World development report 2012: Gender equality and development. <https://doi.org/10.1596/978-0-8213-8810-5>
132. Ardoin, N. M. (2006). Toward an interdisciplinary understanding of place: Lessons for environmental education. *Canadian Journal of Environmental Education (CJEE)*, 11(1), 112-126.
133. Kukutai, T., & Taylor, J. (2016). *Indigenous data sovereignty: Toward an agenda*. ANU press.
134. Fernández-Llamazares, Á., & Cabeza, M. (2018). Rediscovering the potential of indigenous storytelling for conservation practice. *Conservation Letters*, 11(3), e12398.
135. Cajete, G. (2000). *Native science: Natural laws of interdependence*. Clear Light Pub.
136. Proshansky, H. M., Fabian, A. K., & Kaminoff, R. (1983). Place-identity: Physical world socialization of the self. *Journal of Environmental Psychology*, 3, 58-83.
137. Semken, S., & Brandt, E. (2010). Implications of sense of place and place-based education for ecological integrity and cultural sustainability in diverse places. In *Cultural Studies and Environmentalism* (pp. 287-302). Springer, Dordrecht.
138. Low, S. M. (1992). Symbolic ties that bind. In *Place attachment* (pp. 165-185). Springer, Boston, MA.
139. Relph, E. (1976). *Place and placelessness*. London: Pion Limited.
140. Twigger-Ross, C. L., & Uzzell, D. L. (1996). Place and identity processes. *Journal of Environmental Psychology*, 16, 205-220.
141. Clayton, S. (2003). Environmental identity: A conceptual and an operational definition. *Identity and the natural environment: The psychological significance of nature*, 45-65. MIT Press, Cambridge, Massachusetts.
142. Low, S. M. (1990). Cross-cultural place attachment: a preliminary typology. In Y. Yoshitake, R. B. Bechtel, T. Takahashi, & M. Asai (Eds.), *Current issues in environment-behavior research*. Tokyo: University of Tokyo.

143. Muhar, A., Raymond, C. M., van den Born, R. J., Bauer, N., Böck, K., Braitto, M., ... & Mitrofanenko, T. (2017). A model integrating social-cultural concepts of nature into frameworks of interaction between social and natural systems. *Journal of Environmental Planning and Management*, 61(5-6), 756-777. <https://doi.org/10.1080/09640568.2017.1327424>
144. Schultz, K., Walters, K. L., Beltran, R., Stroud, S., & Johnson-Jennings, M. (2016). "I'm stronger than I thought": Native women reconnecting to body, health, and place. *Health & place*, 40, 21-28. <https://doi.org/10.1016/j.healthplace.2016.05.001>
145. Turner, N. J., & Turner, K. L. (2008). "Where our women used to get the food": cumulative effects and loss of ethnobotanical knowledge and practice; case study from coastal British Columbia. *Botany*, 86(2), 103-115.
146. Barbaro, N., & Pickett, S. M. (2016). Mindfully green: Examining the effect of connectedness to nature on the relationship between mindfulness and engagement in pro-environmental behavior. *Personality and Individual Differences*, 93, 137-142. <https://doi.org/10.1016/j.paid.2015.05.026>
147. Beery, T. H., & Wolf-Watz, D. (2014). Nature to place: Rethinking the environmental connectedness perspective. *Journal of Environmental Psychology*, 40, 198-205. <https://doi.org/10.1016/j.jenvp.2014.06.006>
148. Davis, J. L., Green, J. D., & Reed, A. (2009). Interdependence with the environment: Commitment, interconnectedness, and environmental behavior. *Journal of environmental psychology*, 29(2), 173-180. <https://doi.org/10.1016/j.jenvp.2008.11.001>
149. Geng, L., Xu, J., Ye, L., Zhou, W., & Zhou, K. (2015). Connections with nature and environmental behaviors. *PLoS one*, 10(5). <https://doi.org/10.1371/journal.pone.0127247>
150. Kals, E., Schumacher, D., & Montada, L. (1999). Emotional affinity toward nature as a motivational basis to protect nature. *Environment and behavior*, 31(2), 178-202. <https://doi.org/10.1177/00139169921972056>
151. Mayer, F. S., & Frantz, C. M. (2004). The connectedness to nature scale: A measure of individuals' feeling in community with nature. *Journal of environmental psychology*, 24(4), 503-515. <https://doi.org/10.1016/j.jenvp.2004.10.001>
152. Rosa, C. D., Profice, C. C., & Collado, S. (2018). Nature experiences and adults' self-reported pro-environmental behaviors: the role of connectedness to nature and childhood nature experiences. *Frontiers in psychology*, 9, 1055. <https://doi.org/10.3389/fpsyg.2018.01055>
153. Schultz, P. W., Shriver, C., Tabanico, J. J., & Khazian, A. M. (2004). Implicit connections with nature. *Journal of environmental psychology*, 24(1), 31-42. [https://doi.org/10.1016/S0272-4944\(03\)00022-7](https://doi.org/10.1016/S0272-4944(03)00022-7)
154. Tam, K. P. (2013). Concepts and measures related to connection to nature: Similarities and differences. *Journal of environmental psychology*, 34, 64-78. <https://doi.org/10.1016/j.jenvp.2013.01.004>
155. Vaske, J. J., & Kobrin, K. C. (2001). Place attachment and environmentally responsible behavior. *The Journal of Environmental Education*, 32(4), 16-21. <https://doi.org/10.1080/00958960109598658>
156. Whitburn, J., Linklater, W., & Abrahamse, W. (2020). Meta-analysis of human connection to nature and proenvironmental behavior. *Conservation Biology*, 34(1), 180-193. <https://doi.org/10.1111/cobi.13381>
157. Kellert, S. R., & Wilson, E. O. (1993). *The Biophilia hypothesis*. Washington, D.C: Island Press.

158. Hay, R. B. (1998). A rooted sense of place in cross-cultural perspective. *Canadian Geographer*, 42, 245–266.
159. Hernández, B., Hidalgo, M. C., Salazar-Laplace, M. E., & Hess, S. (2007). Place attachment and place identity in natives and non-natives. *Journal of environmental psychology*, 27(4), 310-319.
160. Thornton, T. F. (2011). *Being and Place among the Tlingit*. Seattle: University of Washington Press.
161. Ellis, N. R., & Albrecht, G. A. (2017). Climate change threats to family farmers' sense of place and mental wellbeing: A case study from the Western Australian Wheatbelt. *Social Science & Medicine*, 175, 161-168. <https://doi.org/10.1016/j.socscimed.2017.01.009>
162. Big-Canoe, K., & Richmond, C. A. (2014). Anishinabe youth perceptions about community health: Toward environmental repossession. *Health & Place*, 26, 127-135. <https://doi.org/10.1016/j.healthplace.2013.12.013>
163. Cunsolo Willox, A., Harper, S. L., Ford, J. D., Landman, K., Houle, K., & Edge, V. L. (2012). "From this place and of this place:" Climate change, sense of place, and health in Nunatsiavut, Canada. *Social science & medicine*, 75(3), 538-547. <https://doi.org/10.1016/j.socscimed.2012.03.043>
164. Gosling, E., & Williams, K. J. (2010). Connectedness to nature, place attachment and conservation behaviour: Testing connectedness theory among farmers. *Journal of environmental psychology*, 30(3), 298-304. <https://doi.org/10.1016/j.jenvp.2010.01.005>
165. Berkes, F. (1999). *Sacred Ecology: Traditional Ecological Knowledge and Resource Management*. Taylor & Francis.
166. Sangha, K. K., Preece, L., Villarreal-Rosas, J., Kegamba, J. J., Paudyal, K., Warmenhoven, T., & Rama Krishnan, P. S. (2018). An ecosystem services framework to evaluate Indigenous and local peoples' connections with nature. *Ecosystem services*, 31, 111-125. <https://doi.org/10.1016/j.ecoser.2018.03.017>
167. Turner, N. J., Ignace, M. B., & Ignace, R. (2000). Traditional ecological knowledge and wisdom of aboriginal peoples in British Columbia. *Ecological applications*, 10(5), 1275-1287.
168. Kimmerer, R. W. (2013). *Braiding sweetgrass: Indigenous wisdom, scientific knowledge and the teachings of plants*. Milkweed Editions.
169. Gadgil, M., Berkes, F., & Folke, C. (1993). Indigenous knowledge for biodiversity conservation. *Ambio*, 151-156.
170. Wane, N., & Chandler, D. J. (2002). African women, cultural knowledge and environmental education with a focus on Kenya's indigenous women. *Canadian Journal of Environmental Education (CJEE)*, 7(1), 86-98.
171. Oraftik, C. (2020). *An exploration of the intersection of Indigenous language and environmental stewardship*. The Nature Conservancy.
172. Smith, L. T. (2021). *Decolonizing methodologies: Research and indigenous peoples*. Zed Books Ltd..
173. Kimmerer, Robin. (2018). "Mishkos Kenomagwen, the Lessons of Grass" (p. 35) in *Traditional Ecological Knowledge: Learning from Indigenous Practices for Environmental Sustainability* by Melissa K. Nelson and Dan Shilling.
174. Pember, M.A. (2019). Death by Civilization. *The Atlantic*. <https://www.theatlantic.com/education/archive/2019/03/traumatic-legacy-indian-boarding-schools/584293/>

- 
175. Kulchyski, P. (2016) *Bush Sites / Bush Stories: Politics of Place and Memory in Indigenous Northern Canada*. *MLA Profession*. <https://profession.mla.org/bush-sites-bush-stories-politics-of-place-and-memory-in-Indigenous-northern-canada/>
176. Brockington, D., & Igoe, J. (2006). Eviction for conservation: a global overview. *Conservation and society*, 424-470.
177. Poirier, R., & Ostergren, D. (2002). Evicting people from nature: Indigenous land rights and national parks in Australia, Russia, and the United States. *Nat. Resources J.*, 42, 331.
178. Greer, A. (2012). Commons and enclosure in the colonization of North America. *The American Historical Review*, 117(2), 365-386.
179. Nature United. (nd). *The SEAS Toolkit: A Resource for Planning Your on-the-land Indigenous Youth Program*. Canada.
180. EcoAdvisors and The Nature Conservancy. (2020). *Conservation financing for conservation programs with Indigenous People and Local Communities*. Arlington, VA.
181. Strang, D. (1991). Adding social structure to diffusion models: An event history framework. *Sociological Methods & Research*, 19(3), 324-353.
182. Mills, M., Bode, M., Mascia, M. B., Weeks, R., Gelcich, S., Dudley, N., ... Possingham, H. P. (2019). How conservation initiatives go to scale. *Nature Sustainability*, 2(10), 935-940.
183. Hatcher, J., Owen, M., & Yin, D. (2021). *Falling Short: Donor Funding for Indigenous Peoples and Local Communities to Secure Tenure Rights and Manage Forests in Tropical Countries (2011-2020)*. Rainforest Foundation Norway.
184. Salerno, J., Romulo, C., Galvin, K. A., Brooks, J., Mupeta-Muyamwa, P., & Glew, L. (2021). Adaptation and evolution of institutions and governance in community-based conservation. *Conservation Science and Practice*, 3(1), e355.
185. Gonzales Tovar, J., Sarmiento Barletti, J. P., Larson, A. M., Barnes, G., & Tucker, C. M. (2021). Can multistakeholder forums empower indigenous and local communities and promote forest conservation? A comparative analysis of territorial planning in two Brazilian states with contrasting contexts. *Conservation Science and Practice*, 3(1), e326.
186. Nelson, F., Muyamwa-Mupeta, P., Muyengwa, S., Sulle, E., & Kaelo, D. (2021). Progress or regression? Institutional evolutions of community-based conservation in eastern and southern Africa. *Conservation Science and Practice*, 3(1), e302.
187. Marshall, G. R. (2007). Nesting, subsidiarity, and community-based environmental governance beyond the local level. *International journal of the Commons*, 2(1), 75-97.
188. Rogers, E. M. (2003). *Diffusion of innovations* (5th ed.). New York, NY: Free Press.
189. Mascia, M. B., & Mills, M. (2018). When conservation goes viral: The diffusion of innovative biodiversity conservation policies and practices. *Conservation Letters*, 11(3), e12442.



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