CASE STUDIES REPORT:

CAPACITY STRENGTHENING INITIATIVES WITH INDIGENOUS AND LOCAL COMMUNITIES, GROUPS, AND ORGANIZATIONS

Twelve case studies to inspire dialogue and action on Indigenous-led conservation and stewardship in the land now known as Canada | **2024**

Photo credit: Overlooking Maasai grasslands by M. Nthiga, provided courtesy of Maliasili

CAPACITY STRENGTHENING INITIATIVES WITH INDIGENOUS AND LOCAL COMMUNITIES, GROUPS, AND ORGANIZATIONS – CASE STUDIES REPORT

TWELVE CASE STUDIES TO INSPIRE DIALOGUE AND ACTION ON INDIGENOUS-LED CONSERVATION AND STEWARDSHIP IN THE LAND NOW KNOWN AS CANADA | 2024

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Recommended citation: Eyzaguirre, J., Tamburello, N., Tam, J., Digiovanni, C. and Crew, A. 2024. Capacity Strengthening Initiatives with Indigenous and Local Communities, Groups, and Organizations – Case Studies Report. Report prepared by ESSA Technologies Ltd. for Nature United. 137 pp.

Credit for photo in inset: Rebuilding a traditional fishpond on the island of Moloka'i by S. Kanda, 2019, provided courtesy of KUA

TABLE OF CONTENTS

Introduction **2**
Approach to Case Study Development 2
Key Concepts 3
Case Study 1: International Ranger Federation **2**
Case Study 2: Tribal Air Monitoring Support Center **10**
Case Study 3: Kua'aina ulu auamo (KUA) **19**
Case Study 4: Maui Nui Makai Network (MNMN) **31**
Case Study 5: Fundación Pachamama **41**
Case Study 6: Centro para el Desarrollo del Indígena Amazónico (CEDIA) **52**
Case Study 7: Maliasili **61**
Case Study 8: The Nature Conservancy – Mongolia Grasslands Program **72**
Case Study 9: Sea Women of Melanesia **79**
Case Study 10: Mimal Land Management Aboriginal Corporation **93**
Case Study 11: Learning on Country **107**
Case Study 12: Vision Matauranga **121**
Appendix 1: Interview Questions **128**

INTRODUCTION

"Capacity" is the ability of individuals, organizations, and societies to perform functions, solve problems, and set and achieve their own objectives.[1] Decades of global and national efforts to strengthen capacities for community economic and social development, conservation, natural resource management, and local governance have led to lessons on what works and in what contexts[2], and have highlighted needed improvements.[3]

Commissioned to ESSA Technologies Ltd. (ESSA) by Nature United, this case studies report contains twelve detailed profiles of effective and inspiring capacity strengthening initiatives from around the world. It complements a report synthesizing factors that contribute to the effectiveness of leading capacity strengthening initiatives with Indigenous and local communities (available here). These case studies 1) describe approaches and delivery methods used to strengthen capacity, 2) identify success factors, and 3) detail context around initiatives' governance and operations. In this way, readers can decide for themselves if the approaches and delivery methods shared in these case studies could work for them, or what adaptations or additional enabling conditions might be needed.

APPROACH TO CASE STUDY DEVELOPMENT

Development of this case studies report involved qualitative methods and the following steps. In addition, the ESSA team worked with a strategic advisory group, which played an important role in scoping the research and advising on the relevance of results.

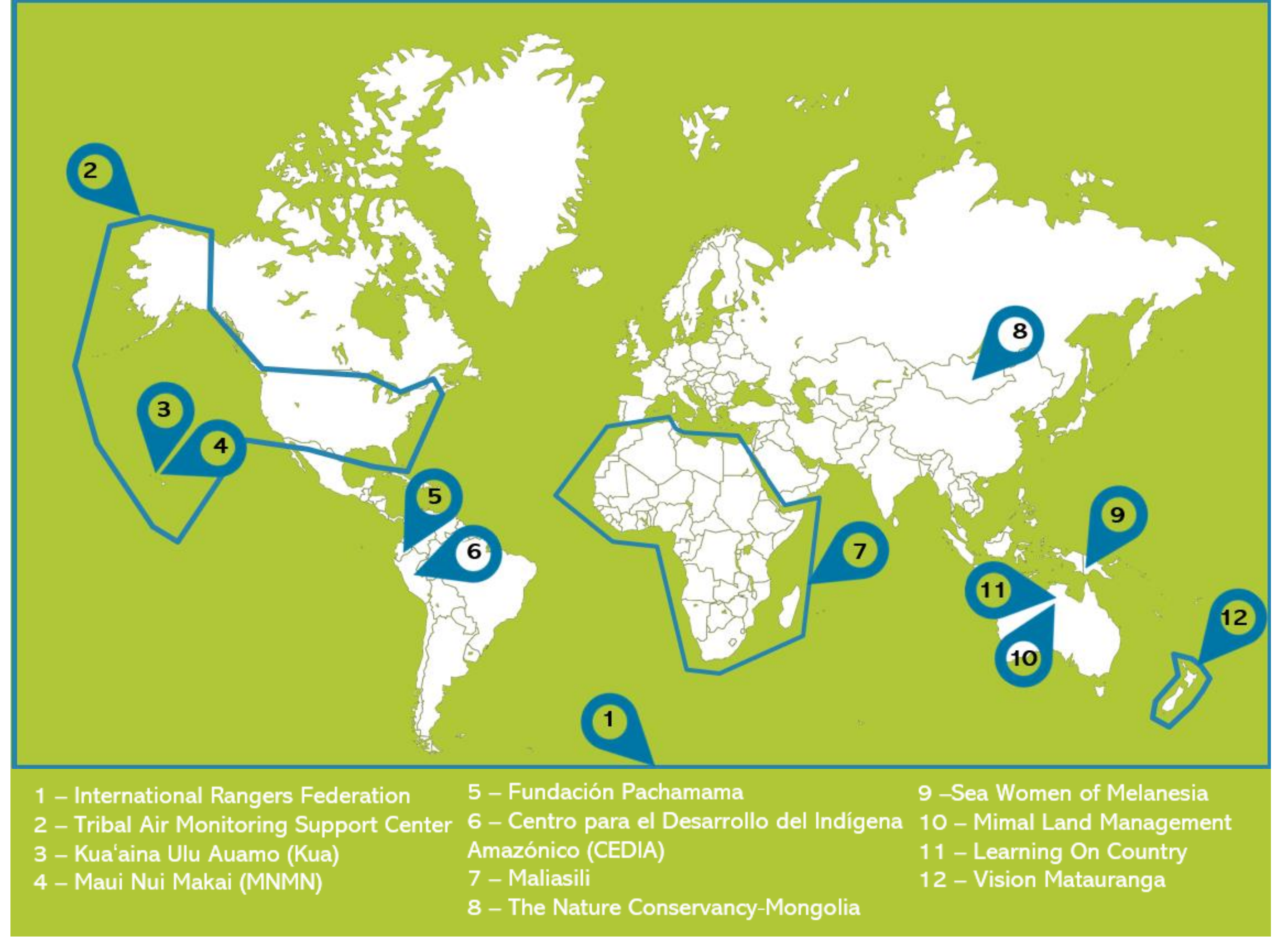
1. **Identification of case study objects**: Nature United and The Nature Conservancy networks, as well as the ESSA team complied a list of over 50 candidate initiatives sourced from our collective networks, web searches, and initiatives found in in published reports and journal articles. Focusing on initiatives outside of Canada, we generated a shortlist of initiatives based on a high degree of Indigenous and local community participation, scale (regional, national, or multi-country), potential applicability to the Canadian context, and novelty. The shortlist was verified by Nature United, with additions made to boost applicability, geographic diversity, and diversity of capacity-strengthening goals.

2. **Development of data collection and analysis tools:** as part of the overall project, ESSA developed an analytical framework with 28 attributes reflecting descriptive (e.g., country, sector, capacity strengthening objective) and evaluative fields (e.g., equity, trust, level of Indigenous participation, duration, and genesis), which informed the development of an interview guide template for semi-structured interviews (available in Appendix 1). The ESSA team also developed a consent form and process in line with Nature United's organizational protocols, while also respecting OCAP® principles.

3. **Data collection and information gathering:** we reached out to 20 initiatives or organizations. Twelve accepted participating in interviews to share experiences on capacity strengthening models and institutional conditions enabling their success. We conducted one-hour interviews with 13 individuals between October 25 and December 7, 2023.

4. **Synthesis and reporting:** the ESSA team synthesized interview data and supplementary literature and wrote case study narratives. All interviewees and the Nature United team had an opportunity to review and provide feedback on draft case studies, which the ESSA team addressed to the extent possible in this final report.

What follows are the twelve case studies, in order of geography, starting with the one global initiative, then eastward from the Americas, as outlined below:



Before presenting each case study in turn, we introduce our definition of key concepts used throughout.

KEY CONCEPTS

Levels and dimensions of capacity strengthening

Capacity resides within individual people, organizations, communities, and institutions, making capacity strengthening a multifaceted and broad concept. Figure 1 is a generalized framework to help put capacity strengthening initiatives (CSIs) into context and answer two key questions: whose capacity? and capacity for what?

- **Levels:** levels are the objects or targets of capacity strengthening, recognizing that capacity is present at different levels of human action, from the individual community, network / sector, to the wider enabling environment ("the who").

- **Dimensions:** dimensions are the subjects of capacity strengthening, ranging from individual skills to community governance capacity to institutional capacity for policy implementation ("the what").

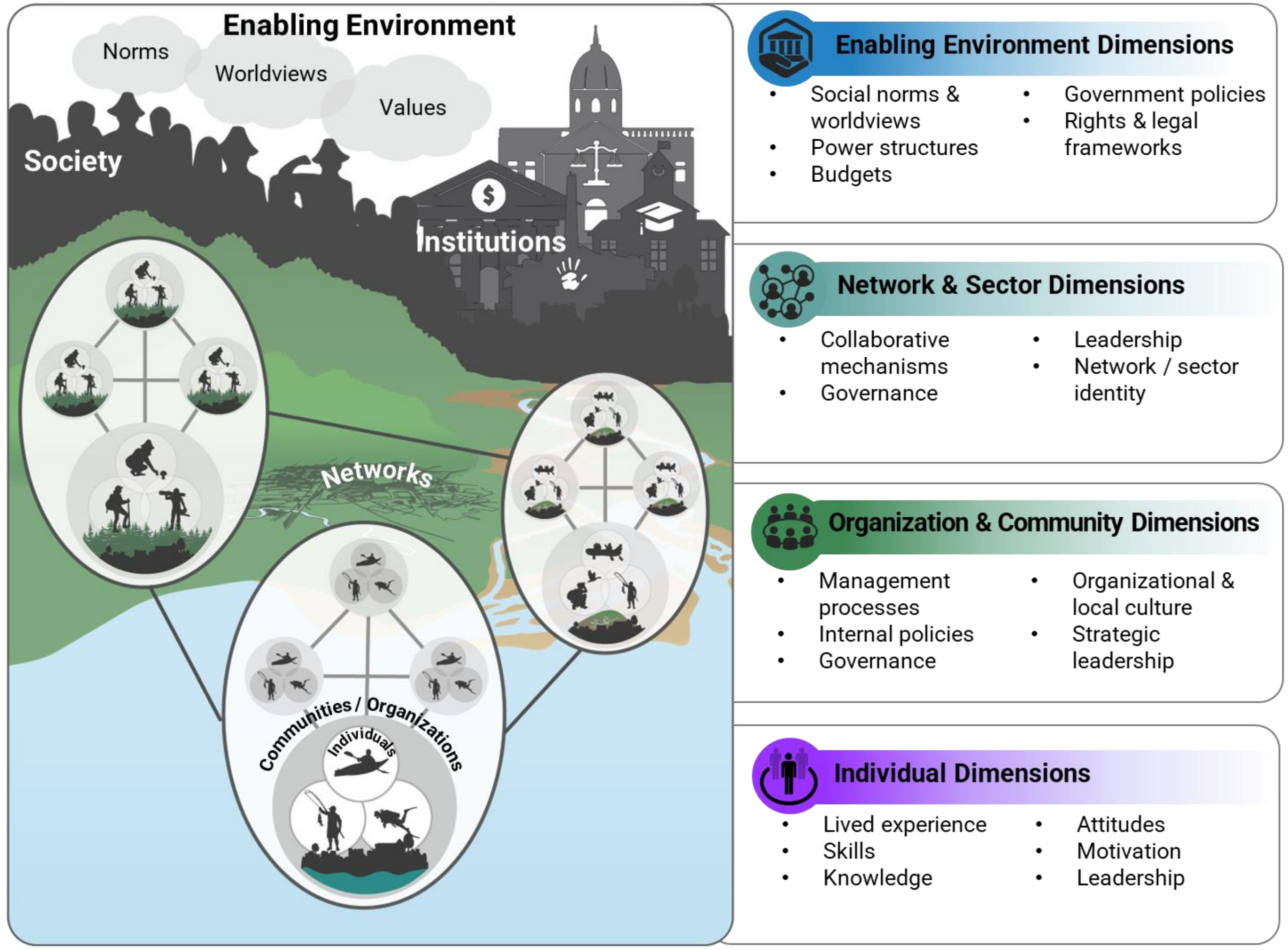


Figure 1: The levels and dimensions of capacity.

Capacity is present at multiple levels of human action (left side of the panel), which interact in multiple ways. Different dimensions of capacity (right side of the panel) are important at each level. The combination of levels and dimensions of interest shape the selection of capacity strengthening approaches and delivery models to pursue (Source: Authors' own creation based on Porzecanski et al. 2022[4]).

Capacity strengthening approaches and delivery methods

Several approaches and delivery methods exist to support capacity strengthening at different levels. **Capacity-strengthening approaches** provide the direction to plan specific interventions, which use one or more **delivery methods** to achieve agreed-upon goals.[5] Table 1 and Table 2 list common approaches and delivery methods supporting conservation and sustainable use of biodiversity. These lists illustrate the range of options to consider when designing capacity strengthening initiatives.

Table 1: Capacity-strengthening approaches commonly used in support of conservation and sustainable use of biodiversity. Based on a survey completed by parties to the UN Convention on Biodiversity, Indigenous Peoples and local communities, and other organizations in 2018 (Adapted from: UNEP-WMC. Nd, available here).

Name	Description	Strengths / challenges
Approaches		
Train-the-trainers	Strategic targeting of trainers who then train others and maximize the reach and impact of the initiative.	After the initial training the process can be self sustaining, although "refresher" updates are often necessary.
Peer-to-peer learning	Flexible approach to harness the power of peer relationships and exchange to maximize the relevance and acceptance of content and processes.	Potential to discuss and address actual challenges or opportunities with peers in similar situations. The proliferation of communities of practice increases the risk of duplication.
Regional hubs and centres of expertise	Institutions or organizations acting as focal points for specialized knowledge, resources, or activities within a particular geographic region.	An approach that has worked well through bilateral or multilateral cooperation agreements on a range of issues. Can play a role in aggregating demand for and catalyzing capacity strengthening efforts.
Participatory approaches	Design and implementation of a series of activities with selected communities, within a defined timeframe, clear goals, roles, and responsibilities.	High potential for community ownership and empowerment to achieve intended outcomes. Use of participatory approaches can be narrow (e.g., limited to assessment) or comprehensive, which needs to be clear from the outset.
Building relationships and long-term partnerships	Partnerships between institutions with the goal of strengthening capacities of one of them (e.g., twinning) or mutually enhancing capacities. Associated with coaching and mentoring.	Usually based on long-term cooperation. A regional focus enhances relevance, although cross-cutting themes can also be addressed.
Land / sea-based learning	An educational approach that incorporates the land, environment, and outdoor spaces as integral to the learning process.	Increasingly used in Indigenous education to promote cultural revitalization, intergenerational knowledge transmission, and livelihood opportunities for those doing the teaching.
Blended learning	The combination of different delivery methods to maximize impact. Typically programming that includes face-to-face workshops and e-learning modules.	Potential for rapid roll-out to large groups. The combination of delivery methods must be mutually reinforcing, requiring skillful design. Delivering of e-learning brings technological challenges.
Technical assistance	A specific scope of work usually delivered through a project (e.g., development and testing of a decision support tool for use by protected areas managers).	More effective when tailored to the specific context, which is not always the case if relying on external consultants.
Equipment and lab services	Loaned or subsidized access to technical equipment and lab services, often to perform environmental monitoring.	Reduces barriers to data collection, analysis, and use in decision-making. Reduces the need for each community to buy and maintain equipment and have lab services.
Direct aid	Financial, material, or other forms of assistance provided directly to individuals, families, or communities to address immediate, basic needs.	Recognizes the limits of capacity strengthening in the absence of basic needs being met. This is not a long-term approach.

Table 2: Capacity-strengthening delivery methods commonly used in support of conservation and sustainable use of biodiversity, based on a survey completed by parties to the UN Convention on Biodiversity, Indigenous Peoples and local communities, and other organizations in 2018 (Adapted from: UNEP-WMC. Nd, available here).

Name	Description	Strengths / challenges
Delivery methods		
Experiential learning	A learning approach that emphasizes hands-on experience, reflection, and active engagement in real or simulated environments (e.g., culture camps, study visits, fellowships).	Experiential learning that includes collaboration with peers that find themselves in similar situations is valuable. Implementation of this modality can be costly.
Workshops and training sessions	A gathering for selected groups of people to learn or improve skills on specific topics. A popular delivery method, often used in combination with others (e.g., guidance documents).	Face-to-face workshops promote peer exchange and are ideal for contexts where remote participation is unfeasible. They can be expensive to deliver, and one-off trainings may not lead to durable results.
Academic programs	Degrees, graduate or post-graduate courses, specialized diplomas.	Suitable when learning goals are complex, multifaceted, and require time to be achieved. Delivery by individuals with practical experience in the subject matter is helpful, as is incorporating peer-to-peer learning.
Professional and peer networking	Event-based opportunities for collaboration and knowledge sharing among groups with similar identities or affinities (e.g., community gatherings, professional forums, communities of practice).	Foster relationships among groups with similar interests, providing the basis for peer-to-peer learning. Catalyzes working trusted, relationships, which are critical to the sustainability of capacity strengthening.
Online tools, toolkits, and practice guides	Web-based promotion and dissemination of knowledge and expertise available, including distinct products and exchange enabled through web portals and online forums.	An efficient way to increase access to data, information, and knowledge to many, free of cost in many cases. The proliferation of online platforms and web-accessible knowledge products can be overwhelming, presenting barriers to uptake. Technological constraints can limit use.
Coaching	A personalized process between a coach and client that helps individuals or groups achieve specific goals through self-discovery and reflection.	The tailored support can increase self-awareness and help individuals take ownership of their own development. Coaches can introduce their own biases into the process, so cultural competency is critical.
Vocational education and training	Learning that focuses on gaining knowledge and skills required in specific occupations (e.g., rangers) or in the workplace more broadly	It plays an increasing role in adult retraining and upskilling, in alignment with labor market needs. A downside are challenges related to recognition of these programs compared to academic credentials.
Help-desk support	A department or person that provides targeted assistance and information in real time.	Help desks can be human resource intensive as a team of specialists versed in different aspects of the topic of interest and adept at navigating cultural contexts. They may suffer from underuse if they lack local / regional contacts.

The twelve capacity strengthening initiatives profiled in this report use a range of capacity strengthening approaches and delivery methods. The most frequently used approaches are peer-to-peer learning, relationships and long-term partnerships, and technical assistance (Panel A in Figure 2). The most frequently used delivery methods are training sessions and workshops, and networking (Panel B in Figure 2). These patterns are consistent with the use of capacity strengthening for conservation and sustainable use of biodiversity reported globally.

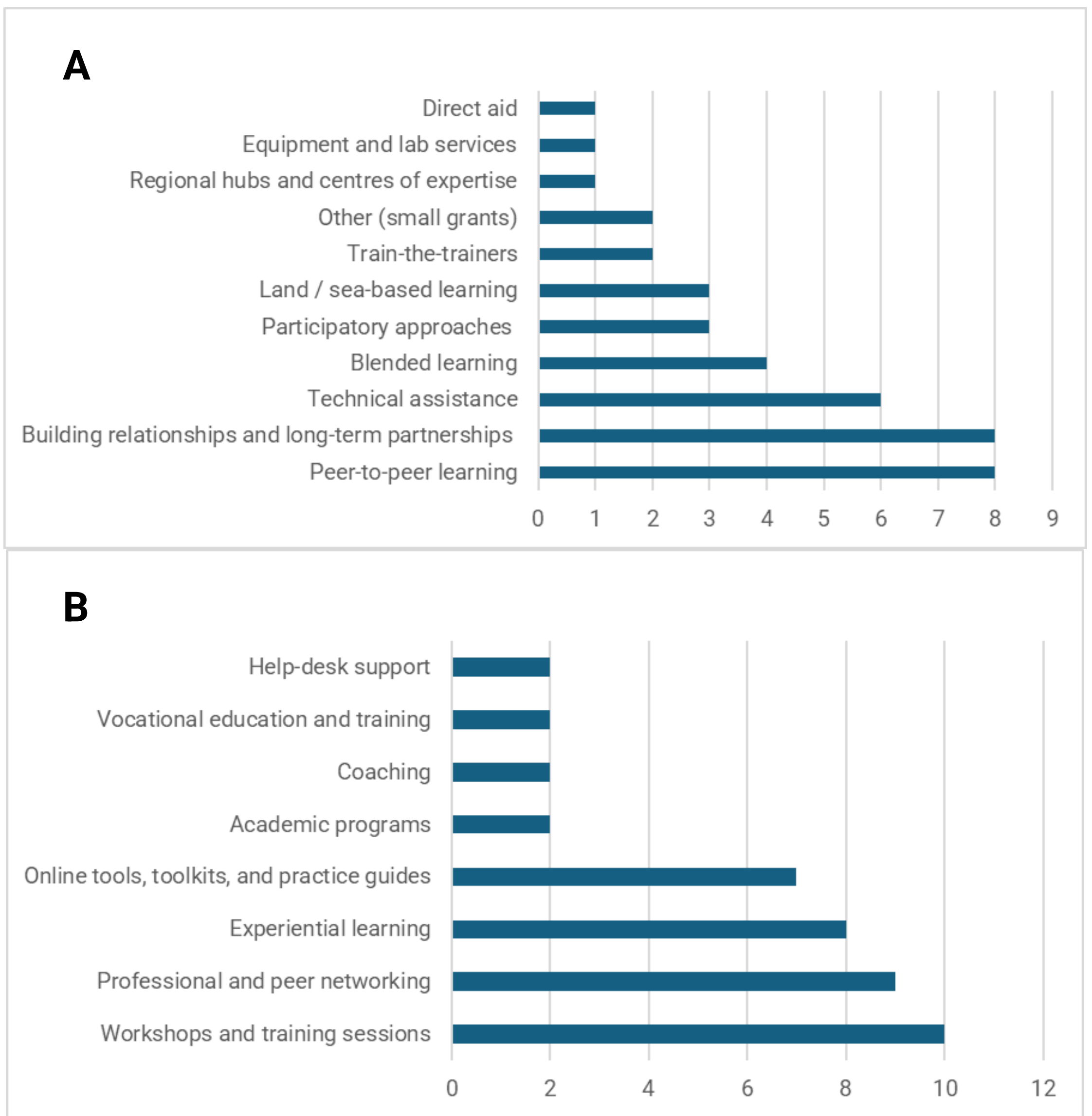


Figure 2: Capacity strengthening approaches (Panel A) and delivery methods (Panel B) used by the twelve initiatives under study. Initiatives use more than one approach and delivery method.

CASE STUDY 1: INTERNATIONAL RANGER FEDERATION

https://www.internationalrangers.org/

Geography:	Global, with 169 ranger associations as members from all global regions.
Level:	Ranger sector / network.
View of capacity strengthening:	An empowerment process.
Genesis:	Established in 2020 in response to the 2019 World Ranger Congress.
Goals:	**1)** To provide a global forum for rangers to share successes and lessons learned in their protection of natural, historic, and cultural heritage, **2)** to promote the exchange of information and technology among countries with varying levels of public and government support for protected area management.
Approaches:	Partnerships (e.g., The Thing Green Line), peer to peer learning, participatory approaches.
Modalities:	Workshops and training sessions; networking; online tools and guides.
Impact:	United voice for rangers; enhanced status of the ranger profession; empowered rangers; stronger ranger associations.
Success factors:	**1)** Hiring staff with on-the-ground and organizational experience in ranger affairs; **2)** providing practical and accessible guidance; **3)** building trust with rangers and communities; **4)** creating opportunities for co-developing knowledge resources for rangers with the ranger membership.

Introduction

The International Ranger Federation (IRF) was founded in 1992, as an agreement signed between national associations representing England, Wales, Scotland, and the United States. The IRF became a registered a U.S.-based non-profit in 2020, with a registered corporate branch in Australia. Their mission is to develop, advance, and promote, throughout the world community, the ranger profession, and its critical role in the conservation of natural and cultural resources. Rangers generally work in protected and conserved areas, landscapes, or seascapes; employers are usually those with tenure over the geographies where rangers operate (i.e. state, Indigenous Peoples, private owners, communities).[1.]

> *Rangers are individuals who are responsible for conserving biodiversity, safeguarding cultural and historical heritage, as well as protecting the rights and well-being of present and future generations* – International Ranger Federation

The IRF is an umbrella federation of a membership made up of individual rangers and ranger associations. It is a global forum for rangers to share their successes and best practices, in protecting the world's natural, historic, and cultural heritage. The IRF's goals include promoting the exchange of information and technology between countries in which protected area management enjoys broad public and government support and countries in which ranger work is less supported.

Focal geographies

The IRF includes members from all global regions, including 169 ranger associations:

- North America (17 members)
- Central America (8 members)
- South America (36 members)
- Europe (42 members)
- Africa (27 members)
- Asia (24 members)
- Oceania (15 members)

Sector

Ecosystem conservation

Level of capacity

Sector / network

Target populations

- **Direct:** Individual rangers, and/or ranger associations, who are IRF-members and staff from partnered organizations.

- **Indirect:** Organizations who are hiring rangers to work in and on their territories.

Operational context

The IRF is an umbrella organization with a mission to *"develop, advance, and promote throughout the world community, the ranger profession and its critical role in the conservation of natural and cultural resources"*[2]. The IRF has three levels of management: the Board of Directors and staff who are responsible for operations; ranger associations who contribute organizational best practices and challenges; and individual rangers who contribute their on-the-ground experiences. The IRF facilitates information sharing among these groups, each sharing a unique but complementary perspective, toward collective learning.

Rangers are critical to achieving global biodiversity and conservation targets. They generally work in protected and conserved areas, and wider land- seascapes, at the state, regional, communal, Indigenous, or private level. Rangers provide the following services on a global scale:

- Protecting, conserving and restoring natural and cultural values;
- Enforcing laws, maintaining area integrity, ensuring compliance, and managing visitors;
- Maintaining a safe, secure, and balanced environment for human communities and wildlife;
- Developing and maintaining trusting and respectful dialogue and relationships with key stakeholders;
- Empowering, collaborating with, engaging and supporting Indigenous Peoples as well as local communities;
- Providing education and awareness for communities, visitors, the younger generation, and society;
- Monitoring and researching wildlife, habitats, and features of cultural and historical importance;
- Managing and controlling environmental risks and providing assistance during emergencies.

To deliver on goals of the ranger sector, the IRF works alongside the Universal Ranger Support Alliance (URSA) and The Thin Green Line Foundation. All three partner organizations are committed to supporting capacity strengthening for the well-being and safety of all rangers. The IRF also partners with many global NGOs that work adjacent to rangers, as these partnerships present opportunities to leverage financial support.

- **URSA** focuses on addressing workforce challenges by advocating for rangers, developing resources and tools for the ranger workforce, improving ranger working conditions and welfare, while concurrently building trusting relationships with communities and ensuring the responsible conduct of rangers. URSA's goal is to build a professional, accountable, and competent ranger workforce, whose contributions are formally recognized and respected.[3]

- **The Thin Green Line** recognizes the threats rangers face, providing access to critical equipment, training, and professional development to protect rangers. The Thin Green Line offers resources, that can be accessed through IRF-membership, such as the train-the-trainer program (Africa-specific), critical equipment

funding, supporting families of fallen rangers, Amazon's Indigenous Protectors program, and Junior Ranger Programs.[10]

The IRF engages members across all levels of their organization, including to inform the federation's direction. This includes learning from rangers themselves and mobilizing targeted support through capacity strengthening programs.

Goals and objectives of capacity strengthening

The IRF's goals are to provide a global forum for rangers to share successes and lessons learned in their protection of natural, historic, and cultural heritage, and to promote the exchange of information and technology from countries where protected area management has broad public and governmental support to countries who do not have that support.

To achieve their goals, the IRF supports formal and informal communication across their membership. Formally, the IRF hosts the World Ranger Congress about every three years; Ranger Forums on all continents in which they operate; Ranger Roundtables; and the International Ranger Awards. Informally, the IRF supports communication through the proliferation of WhatsApp Ranger Groups and other social media, where rangers can make their concerns known, from the ground to the federation level.

In addition, the IRF pursues three interconnected pillars of work to strengthen skills at all levels of the federation:

- **People skills.** The IRF believes in the importance of training rangers to develop good communication, interpersonal, and leadership skills to support solutions-oriented thinking. An interview with an IRF representative emphasized that the ranger sector is like a "family", with much common interest across rangers despite the distances. Further, the IRF supports trust building between rangers on the ground and communities they work alongside, for the benefit of both. The IRF supports informal communication amongst rangers in their development of people skills.
- **Organizational skills.** The IRF supports member associations through producing, implementing, and delivering content to assist with organizational development. One approach to this is the co-development of guidance, such as their Code of Conduct, and delivery of companion training sessions to support the growth of regional ranger organizations and protection of rangers.[4] Documents like these include ranger-informed best practices – such as upholding human rights and safety –that associations adopt into their frameworks.
- **Technical skills.** Technical skills, such as deployment of technology for monitoring, are core to the conservation of biodiversity. Technologies are available to improve ranger safety, revolutionize ranger operations, and enhance wildlife protection and conservation outcomes cost-effectively. URSA aims to demystify technology and work with rangers through the IRF to clarify the role of technology and how it complements traditional knowledge and skills that are fundamental to rangers' work.

Specific objectives for capacity strengthening of ranger associations and rangers themselves are as follows:

- Frequently engaging their membership to share and develop examples of best practices and lessons learned from lived experiences. Engagement opportunities are spaces for rangers to offer mutual support and collectively create solutions. The results of engagement are used to update the professional standards of rangers.
- Promoting and supporting the creation of a global network of rangers *for* rangers.
- Encouraging and assisting in the establishment of ranger associations in countries that are not associated with the IRF, to increase the IRF's representation, and nurture the common bond of rangers throughout the world.
- Advancing collaborative partnerships that expand the IRF's reach and depth and fostering professional exchanges among rangers to create professional standards and other agreements.

Capacity strengthening approach

Peer-to-peer learning and participatory approaches are core to the IRF's approach to strengthen the capacity of regional ranger associations and rangers themselves. Membership engagement supports these approaches. The IRF values participatory, open processes that lead to capacity strengthening activities that are tailored to ranger-identified needs and preferences. The co-development process builds transparency and trust, forming relationships and facilitating adherence to guiding documents and training programs, and, therefore, collective success.[4]

Two global frameworks shape the IRF's capacity strengthening focus. One is the 2019 Chitwan Declaration, which came out of the World Ranger Conference in Chitwan, Nepal. Informed by 550 rangers across 70 countries, the Declaration is a universal benchmark for what rangers must do and how employers must support them in their work; it provides an overall roadmap for IRF's activities to 2025. The Declaration suggests an expansive role for capacity strengthening at three scales, which URSA has encapsulated in an action plan as follows: [5]

- **Individual capacity:** Most rangers are inadequately trained upon hiring. Employers must equip rangers with effective training and learning by identifying required competencies for the work, setting transparent performance standards, and using the proper learning methods and training protocols toward appropriate certifications. Learning must be accessible to rangers, using common language and terminology, as well as presenting materials in formats that rangers can understand. Finally, employers should align curriculum with common standards for their own organizational performance.
- **Organizational capacity:** Employers must commit to providing adequate staff, physical resources, systems and processes, leadership, sound management, and good governance. Further, technology can support rangers and their work by streamlining data collection, improving the effectiveness of field operations, enhancing decision making, and improving safety and security.
- **Systemic capacity:** Rangers and their employers need to operate in an "enabling environment", meaning their work is adequately supported by legislation, systems, and political, institutional, and public support. Rangers should not operate in areas where they can be charged or similar, for doing their work.

The other global framework is the Global Biodiversity Framework (GBF). The IRF's "Rangers for 30 by 30" framework supports delivery on Target 3 under the GBF via the development of a professional workforce to ensure the equitable and effective management of protected and conserved areas in at least 30 percent of the planet by 2030 (Figure 3). The Framework defines essential requirements for the conditions, conduct, and competence for an effective ranger workforce that is sufficient in numbers, diverse, and recognized.

The "Competence" element of the Framework places specific focus on clear job descriptions and training and continuous learning. The IRF's training programs are aimed at achieving an adequate and diverse ranger workforce that is proficient in conservation, monitoring, visitor services, fire management, law enforcement, education, community support, and regulation of sustainable use. Target ranger audiences for training include Indigenous rangers, state-employed rangers, community and voluntary guardians, and personnel of privately managed areas.[6]

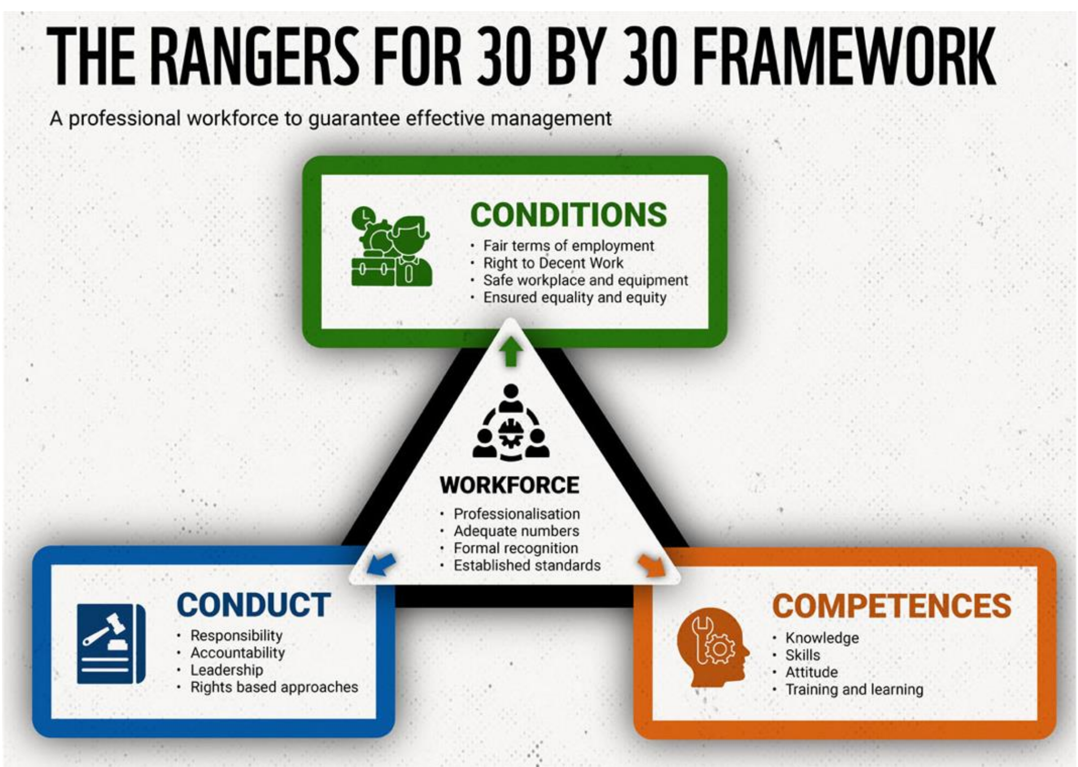


Figure 3: The International Ranger Federation's response to the Global Biodiversity Framework. The "Ranger 30 X 30 Framework" establishes the necessary ingredients for a professional ranger workforce to equitably and effectively manage protected and conserved areas in at least 30 percent of the planet by 2030.

Aside from training programs, the IRF hosts flagship events for rangers and ranger sector leaders to share, learn, and collaborate, and raise the profile of rangers as essential frontline conservation workers. These flagship events are collaborative efforts with URSA and The Thin Green Line.

- **Ranger Roundtables** [7]: these include focus sessions and webinars. By invitation only, focus sessions bring together leaders from the Ranger sector and global development, health, and conservation organizations to break down traditional silos and open new collaborative solutions to planetary crises, such as climate change, biodiversity loss, and zoonotic diseases. Held three times annually and open to the public, webinars bring together rangers, ranger organizations, and supporters, to work together on the professionalization of the ranger sector in alignment with the Chitwan Declaration. Webinars facilitate peer to peer knowledge transfer, create space to discuss challenges, and support Ranger-led collaboration on solutions.

- **IRF World Ranger Congress:** this congress occurs every three years and brings together rangers from all over the world, giving them the opportunity to learn new skills, share knowledge on how they are addressing regional challenges, and build comradery and partnerships. Congresses take place in different locations around the world, enabling host countries from each IRF region to raise the profile of their rangers locally and internationally.
- **World Ranger Day:** July 31st is World Ranger Day, virtually observed by the IRF and its partnering organizations. This day commemorates rangers killed or injured in the line of duty and to celebrates the work Rangers do to protect the world's natural, historic, and cultural heritage. The IRF provides World Ranger Day Toolkits to guide local associations to create their own events.

- **International Ranger Awards:** an event hosted by the IUCN and the IUCN World Commission on Protected Areas, in collaboration with the IRF and other partners, that celebrates and empowers rangers. The purpose

of these awards is to improve rangers' capabilities, raise awareness about the critical role they play in conservation efforts, and to help share unique stories and perspectives. Nine cash prizes are offered to rangers to support the purchase of essential supplies or equipment, access to training, contributions to the family of a deceased ranger, among others.

- **Asian Ranger Forum:** this forum is a new addition, having started in December 2023. It brings together the Asian ranger community to discuss key challenges faced by rangers and provides a platform to share experiences and showcase contributions. Specific topics of focus have included the roles of Indigenous People as well as Local Communities in the protection of biodiversity and the GBF. Asia has one of the highest ranger death rates in the world, marking the importance of ranger empowerment in this region.[4]

The IRF's capacity strengthening framework for rangers and ranger associations is approached at a high-level- but is informed by all levels of their membership- to create a collective of rangers that are prepared for the workforce, and a workforce that is prepared for rangers.[6]

Duration

The IRF's original goals were geared to creating a global forum, where rangers could learn from each other in their collective role of protecting the world's natural, historic, and cultural heritage. 20 years later, the federation holds a membership of 169 ranger associations worldwide.

Operational structure and financials

The IRF is incorporated in the United States as a non-profit, public benefit, charitable, and tax-exempt (U.S. (IRS) 501 (c)(3)) organization, with a registered branch of a corporation in Australia. These two administrative entities are governed by an eleven-member Board of Directors, including the President, Vice President, Secretary, Treasurer, and seven Regional Representatives from Africa, Asia, Central America, Europe, North America, Oceania, and South America. IRF's Board and regional representatives offer a variety of lived experiences and skills across several geographies to assist rangers in their work. The organizational structure is set up to equalize power and decision-making authority, ensuring that each of the regions they operate in are represented through the Board.

The Board also contracts an Executive Officer to support the IRF's day to day operations, and a Federation Development Officer to undertake work as directed by the Board. These board-supported positions are unique to the IRF, ensuring that ideas turn to action.[8]

The IRF is financed through external funding and membership fees. External funders include recognized partnerships solidified through the Chitwan Declaration: URSA, that is made up with many global NGOs that work adjacent to rangers, such as the WWF, Pantheara, Fauna and Flora, to name a few; The Thin Green Line contributes to the core administrative functions of the IRF. IRF membership fees are of six types, with dues ranging from US$20 to US$200, which may be waived by the Board:[9]

- **Full member:** national, state, provincial, territorial, community or area ranger association that is formally/legally constituted and registered in accordance with local in-country requirements.
- **Provisional member:** an individual ranger or group of rangers from a nation, state, province, territory, community, or area where there is no established ranger association. No dues apply.
- **Associate member:** an individual, group, or organization that directly supports the aims of the IRF or protected areas.
- **Supporting member:** individuals, organizations and/or businesses that wish to support the work of the IRF on an annual basis but are not directly related to rangers or protected areas.
- **Benefactor member:** organizations and businesses that wish to support the IRF with a one-off donation of a minimum of US$5,000.

- **Honorary member:** offered by the IRF Board to any individual, group, or organization that has made a significant contribution to the IRF. No dues apply.

The IRF does not publish comprehensive financial details on their levels of income from external funding or their membership base. Financial data do not appear on Propublica—a database of returns by U.S. tax exempt organizations –suggesting that IRF's gross revenue is less than US$50,000. Furthermore, IRF's membership structure is set up to broaden access, which is one of their main goals. For example, they promote the formation of ranger associations by providing access to support without charging dues. Additionally, each of the 169 member associations has their own member base; for example, the Game Rangers Association of Africa is a member of the IRF and comes with their own membership of over 2,500 rangers across 20 countries.

Results and impact

The IRF has fostered a shared global vision for the ranger profession and a global voice in advocating for the appropriate recognition and interests of rangers.[11] The indispensable role in protecting cultural heritage, natural resources, and ecosystem services in the geographies they work in is increasingly understood, supporting shifts in global attitudes toward rangers. By enhancing the reputation of the ranger profession and clarifying rangers' roles in effective conservation the IRF has provided enabling conditions for rangers to thrive.

The results and impact of the IRF can also be seen through their efforts to develop guiding frameworks and best practices that build on and directly address ranger needs and aspirations, including keeping rangers safe.

Success factors

The IRF's organizational culture and internally-consistent goals guide their success. The IRF has pursued the following to materialize their goals for the federation:

- **Hiring staff with on-the-ground and organizational experience in ranger affairs.** The IRF has a small staff of experts. Experience on the Board ranges from 40+ years working as a ranger, to expertise in commercial tourism and visitor experience, the natural sciences, experience with governance issues, capacity strengthening, anti-poaching strategies, among others. Staff are equipped with skills that rangers need on a daily basis. This kind of diversity in leadership is important to empowering others coming from a variety of backgrounds in the ranger sector.
- **Providing clear messaging, and practical and accessible guidance.** The IRF has produced several resources to share their message with rangers and the world. Importantly, the IRF makes the effort to translate their written documents into six main languages based on their worldwide operations. Essential resources such as the Ranger Code of Conduct and Chitwan Declaration have been translated into several languages. The IRF also supports ranger work by streamlining global direction from organizations like the United Nations, into their capacity strengthening programs and guidance.

In addition to supporting rangers through hiring the right staff and guiding ranger work toward meeting global conservation and biodiversity targets, the IRF's focus on relationship and trust building with rangers is an important success factor.

- **Building trust with rangers and communities:** In collaboration with URSA, the IRF created a two-volume series called *Building trust with rangers and communities*. This series aims to address the issues caused by rules, regulations, and restrictions designed to protect nature and ecosystems, as in some instances, they have serious adverse impacts on people's human rights. These documents define trust and outline a framework for building trusting relationships between rangers and the communities they operate in.
- **Creating opportunities for co-development:** The IRF is committed to co-developing resources for rangers with their ranger membership. The representative of IRF used the example of how the Code of Conduct was built alongside their rangers. Here, the process that IRF used to establish the Code of Conduct involved

engaging over 1,800 respondents to create a "Ranger Code of Conduct, developed by Rangers for Rangers".[4] They developed three different iterations of the Code of Conduct to ensure it was shared and edited by the people who participated. The IRF believes that if rangers are expected to follow their directives, they must be involved in their development.

Constraints

For the IRF, key constraints relate to **financial resources and staffing**. The IRF has a very limited staff of 13 people to carry out their various functions. A representative from the IRF commented that they would benefit from having more time to engage with people, to ensure better communication, and build stronger relationships.[4] The IRF is intent on increasing their internal capacity to increase efficiency and expand their programming to support the ranger workforce. The IRF is working to increase their geographic reach by funding more programming in certain regions, such as their first Asian Congress that was held this year (2023).

Replicability

The IRF is exemplary for their work in developing models for large-scale engagement, through a nested structure comprising a single global association, regional ranger associations that protect and support rangers in one or more countries, and the national and sub-national associations that operate across a country or at a sub-national scale defined within a country.[11] A nested structure such as this ensures that action plans, activities, and outputs address challenges at the different scales in which they manifest. At the global level, the IRF serves to spread and embed within the ranger profession principles and practices in their frameworks, which have been agreed upon globally and are non-negotiable through their regional, national, and local adoption (principally, rights-based principles and outcomes).[4] The IRF's structures (membership and governing) and ways of working through flagship events and consultative guidance development are replicable to other emerging professions that face widely diverging operating contexts globally.

Globally, networks of Indigenous Guardians and land defenders continue to consolidate and connect with each other. Of potential applicability to other burgeoning networks is IRF's approach to planning international forums and using them to generate knowledge to then feed back into their programming best practices offered to ranger associations. The IRF also supports Indigenous Rangers and any specific insights and practices gleaned concerning this group of rangers may be of interest to the Indigenous Guardians Network in Canada, or similarly-structured ventures.

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CASE STUDY 2: TRIBAL AIR MONITORING SUPPORT CENTER

https://www7.nau.edu/itep/main/tams/

Air quality program officers | Photo Credit: TAMS, Northern Arizona University

Geography:	Indigenous lands across the United States.
Level:	Individual.
View of capacity strengthening:	Help to do air quality monitoring projects that communities want to implement.
Genesis:	Multi-organizational partnership involving the Institute for Tribal Environmental Professionals, the US Environmental Protection Agency, and US Indigenous tribes, established in 1999.
Goals:	1) Support tribal priorities for air quality monitoring; 2) provide support for the long term; 3) enable data sovereignty; 4) expand offerings toward environmental monitoring; 5) increase education and empowerment of tribes to take control of their own air quality programs.
Approaches:	Regional hubs; partnerships (e.g., US EPA); blended learning (in person and virtual courses); technical assistance; equipment loans and lab services.
Modalities:	Workshops and training sessions; academic courses; online toolkits and guides; help-desk support.
Impact:	Nearly 2,000 professionals trained, from over half of all US tribes.
Success factors:	1) Changes to federal laws enshrining Indigenous rights to manage air quality leading to TAMS' creation; 2) focusing on local and regional priorities; 3) relying on long-term, established partnerships and funding; 4) sharing networks and resources.

Introduction

The Tribal Air Monitoring Support Center (TAMS) is a technical training center located in Las Vegas, Nevada, in the United States (US). TAMS is part of the Institute for Tribal Environmental Professionals (ITEP), which is based at Northern Arizona University. TAMS was created in 1999 though a multi-organizational partnership involving ITEP, the US Environmental Protection Agency (US EPA), and US Indigenous tribes.[1] The purpose of TAMS is to strengthen the capacity of Indigenous tribal communities in the US to monitor, care for, and improve local air quality, with the goal of improving environmental, health, and cultural well-being. This is accomplished by delivering technical training and education to tribe members (e.g., in air quality data collection and analysis); loaning equipment; providing technical support, including laboratory services; and creating and distributing educational and reference materials.

Focal geographies

- Indigenous lands across the United States

Sector

Air quality and human health

Level of capacity

Individual and community capacity

Target populations

- **Direct:** individual environmental quality professionals from local Indigenous tribes

- **Indirect:** community members working to improve local health, cultural, and environmental outcomes

Operational context

The origins of TAMS trace back to two key factors, the first legislative and the second institutional.

Amendments to the *Clean Air Act* in 1990 created the means for the US EPA to *"'treat tribes as states' for purposes of developing, administering, and enforcing air quality regulations within reservation boundaries"*.[2] This Tribal Authority Rule (TAR) provided the legal authorization for Indigenous tribes across the US to take greater control of air quality issues in their local environment. In 1998, the US EPA further developed the regulations that facilitated the implementation of the TAR.[2]

The creation of TAMS was further aided by the existence of ITEP (established in 1992), which pre-dated TAMS by nearly a decade. Specifically, the institutional and organizational foundation for TAMS had already been established, and work to promote ITEP (and the available supports) to tribes was already underway.[3] As such, TAMS was a direct response to the demands of tribal communities who had identified a need for training and support to take advantage of the legislative opportunity created by the *Clean Air Act* amendments.

TAMS operates in partnership with other well-established organizations, especially Northern Arizona University and the US EPA (for example, TAMS has ITEP and EPA Co-Directors). However, TAMS is only one of numerous other complementary initiatives and organizations housed under the umbrella of ITEP, including the American Indian Air Quality Training Program (AIAQTP; offering in-class education) and National Tribal Air Association (NTAA; a tribal interest advocacy group) (see **Operational structure and financials**, below).

The backdrop to these legislative changes and institutional initiatives is growing recognition of Indigenous sovereignty and rights,[4] and of the importance of Indigenous leadership and participation in resource management and conservation worldwide.[5] It has also long been known that Indigenous Peoples are often disproportionately exposed to environmental risk, and suffer worse health outcomes than non-Indigenous populations, including exposure to air quality hazards in the US.[6] As such, there is a growing desire on the part of communities to implement their own air programs. At the same time, few have the human resources or pre-existing knowledge to succeed from the start; this is where TAMS plays a crucial role.

Secured government funding and partnerships have been a major advantage to ITEP and TAMS but can also create challenges for the sustainability the TAMS program. Being tightly connected with the US Government and its funding cycles has also meant that TAMS may at times be at the whim of shifting government priorities.

Goals and objectives of capacity strengthening

The TAMS website articulates the mission of the initiative as follows: *"The Tribal Air Monitoring Support (TAMS) Center strives to develop tribal capacity to assess, understand, and prevent environmental impacts that adversely affect health, cultural, and natural resources."*[7]

Although there is no publicly available list of TAMS goals and objectives, program materials [8] and personal communications with a TAMS staff member helped identify some of them:

- **Supporting tribal priorities.** TAMS emphasizes meeting communities needs as determined by the communities themselves, including adapting to the needs of tribes as they change. For example, TAMS has developed an online Technical Needs Assessment form to *"help identify focus areas and support needs so that future technical training and support can be tailored to for [sic] Tribes"*.

- **Providing support for the long-term.** Linked to the above, TAMS endeavours to provide support that is durable rather than short-term, with timelines matching tribal needs rather than being determined by other factors.
- **Enabling data sovereignty.** One objective of TAMS is to give tribes the ability to control and interpret their own information for their own purposes. Although much of the information collected may be to meet federal air quality standards and guidelines, TAMS aims to put the power of data collection and interpretation in the hands of the tribes so that it can be trusted and utilized as necessary.
- **Expanding TAMS offerings.** TAMS adopts a holistic perspective of environmental and human health and recognizes that air quality is but one interconnected issue of environmental quality. In this vein, and as articulated in the TAMS Center Sterring Committee Charter, *"it may be appropriate to assume that the TAMS Center will eventually become the Tribal Environmental Monitoring Support (TEMS) Center"*.
- **Increasing education and empowerment of tribes.** Core to the mission and outreach activities of TAMS is the objective of ensuring that as many tribes as possible understand what opportunities and avenues of action are available to them to take control of their own air quality programs.

Capacity strengthening approach

The TAMS Center uses a multi-pronged approach to achieve its mission and strengthen the capacities of tribal environmental professionals and Indigenous communities. In TAMS materials and communications, these generally fall into four broad categories as follows:

- **Training and education.**[9] Foremost among TAMS activities are training and education, which are offered online and in person. In-person training takes place in different venues across the country, but also at the Virgil Masayesva Environmental Learning Center (aka TAMS Center, which is overseen by the US EPA), in Las Vegas, near the University of Nevada Las Vegas campus.

  Courses include those introducing the basics of air quality to more technical and specific instruction on grants and meeting air quality data standards, and are tailored for tribal audiences (e.g., they include relevant case studies and participation of Indigenous instructors). These courses are usually 3-5 days in length. Webinars have also been developed by TAMS, with the goal of creating more accessible training; some are informational while others are useful for certification. TAMS offers custom and individualized training upon request where possible. TAMS has also created numerous educational resources and tools that can be accessed online, including software, guidelines, worksheets, and maps.
- **Technical assistance.** In addition to training and courses, TAMS provides in-person and virtual technical support services. This has, in the past, included support for modeling work, monitoring, data management, permit reviews, equipment uses, emissions inventories, and tribal implementation plans.[10]
- **Equipment loans.**[11] Because air quality monitoring requires sensitive and specialized equipment, TAMS supports tribal capacities to manage their own air quality programs by offering this equipment on loan. This includes monitoring and measurement instruments for a variety of pollutants including particulate matter and ozone; gases like carbon monoxide and carbon dioxide; as well as detectors and calibrators for moisture, temperature, pressure, among others. These cover ambient and indoor air programs.
- **Laboratory services.**[12] To complement the training, assistance, and equipment support for tribal air quality programs, TAMS offers laboratory services (i.e., filter weighing for particulate matter), which are accessed by application and offered through a contractor. This service is intended to help kickstart tribal air monitoring projects.

Although the forms of assistance summarized above are the main ways that TAMS aims to strengthen the air-program capacity of tribal communities, TAMS's organizational goals, structure, and strategies may also be informative for current and future partners in Indigenous resource management and conservation.

Duration

Created in 1999, TAMS has now been providing support to tribal environmental professionals and communities for nearly 25 years. TAMS has benefitted from its partnership with a major government agency and being embedded within Northern Arizona University, both providing institutional knowledge and support. According to the TAMS website, *"over 1,900 tribal professionals have been trained by the TAMS Center, representing 298 tribes"*. (For context, there are 574 tribes that are recognized federally in the US.)[13] TAMS continues to see increasing demand for its core services and supports, which have remained constant features over the life of the initiative.[4] However, there is recognition at an organizational level that the environmental monitoring and management needs of tribes extend beyond air programs, and TAMS intends to expand its offerings in the future.[11]

Operational structure and financials

TAMS is one of several linked programs and organizations (Figure 1). Based out of Northern Arizona University, TAMS operates under ITEP alongside four other programs: the American Indian Air Quality Training Program (AIAQTP), Environmental Education Outreach Program, Tribal Solid Waste Education and Assistance Program and Tribal Waste and Response Assistance Program, and Tribes and Climate Change Program. The AIAQTP and TAMS operate in partnership and are the most closely aligned.[4] The former is focused on in-person education while the latter is focused on technical assistance.

Operating in parallel (as seen in Figure 1) are the National Tribal Water Council, National Environmental Information Exchange Network, Tribal Clean Transportation Program, Tribal Pesticide Program Council, and National Tribal Air Association (NTAA). These entities engage with and advocate for tribes and their interests. The NTAA's activities in particular support TAMS, the AIAQTP, and tribes operating and aspiring to operate their own air quality programs, for example, by advancing tribal interests with local, state, and the national governments.

The reach of TAMS and its successes belie its small number of staff. At present, TAMS consists of eight dedicated staff, including two co-directors (one from ITEP and one from the US EPA), an administrative assistant, a program coordinator, a research associate, and equipment manager, and two technical training analysts.[14]

Importantly, TAMS is guided by a rotating Steering Committee that helps to guide the program's direction and priorities, and interfaces with the US EPA.[3,15] The Steering Committee currently has seven members (who are regular, and two alternates in the event a position is vacated),[16] each serving three-year terms.[17] The make-up of the Steering Committee is intended to be broad and of balanced regional representation. Membership is eligible to any person *"affiliated with a federally recognized tribe or intertribal group and must be engaged in tribal environmental quality issues"*.[18]

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INSTITUTE FOR TRIBAL ENVIRONMENTAL PROFESSIONALS (ITEP)

Northern Arizona University
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Office of Native American Initiatives (ONAI)
Ann Marie Chischilly, Vice President

Institute for Tribal Environmental Professionals
Mehrdad Khatibi, Co-Director
Nikki Cooley, Co-Director

ITEP Advisory Board
Dr. William Auberle
Dr. Octaviana Trujillo
David LaRoche
Chelsa Seciwa
Juliette Jeanne

Acronyms

AIAQTP	American Indian Air Quality Training Program
EEOP	Environmental Education Outreach Program
NEIEN	National Environmental Information Exchange Network
NTAA	National Tribal Air Association
NTWC	National Tribal Water Council
TAMS	Tribal Air Monitoring Support
TCCP	Tribes & Climate Change Program
TSWEAP	Tribal Solid Waste Education & Assistance Program
TWRAP	Tribal Waste & Response Assistance Program
TCTP	Tribal Clean Transportation Program
TPPC	Tribal Pesticide Program Council

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Elaine Wilson Manager
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NTAA
Carolyn Kelly Manager
Vacant Program Coordinator Int.

NEIEN
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Vacant Program Coordinator Int.
Ashley Gries Program Coordinator Sr.

TPPC
Mark Daniels Manager
McKenna King Project Assistant

Figure 4. ITEP organization chart as of July 2023.
(https://www7.nau.edu/itep/main/docs/about/ITEP_Org_chart_July_2023-1.pdf)

A budget and a budget breakdown for TAMS is not publicly available. What is known is that TAMS is largely funded by the US EPA through State and Tribal Assistance Grant (STAG) allocations. According to the NTAA's 2021 annual report, funding of TAMS is funneled through the AIAQTP, which has "*over the past 15 years […] been funded using $1 million in STAG funds, supplemented by EPA with an additional $600,000, plus EPA contributions of facilities and salaries for a co-director and instructor*".[19]

More recently, public records show that five years of funding for the AIAQTP through the US EPA's Office of Air and Radiation was made available for applicants on January 10, 2020, to be awarded on July 1, 2020.[20] Total estimated funding was for approximately $8M for five distinct groups of activities, including AIAQTP workshops and the TAMS Center's suite of activities (two of the five). The latter's scope was to include individualized training, outreach, logistical support, support for participant attendance, professional assistance, maintenance and development of informational resources, mentoring, and national meetings. All of these activities flow from the four categories of capacity strengthening approaches described previously.

An interview with a TAMS staff member corroborates the broad strokes of this funding arrangement, namely that funding is provided by the US EPA as the AIAQTP Cooperative Agreement grant for the tasks above.[4] The interviewee also discussed new streams of funding from the US *Inflation Reduction Act* of 2022 that are being accessed by tribes to address climate change and greenhouse gases, increasing demands for TAMS support. It is unclear whether any of this new funding will be made available for TAMS directly.

Accountability

Little information about accountability was found or made available for this case study. However, US EPA grant funding comes with reporting requirements, including quarterly reports and a final report that summarizes *"technical progress […] and a summary of expenditures"*, with a final report required to be submitted *"within 90*

calendar days of the completion of the period of performance," including discussion of progress, problems encountered, and lessons learned from the project.[21]

The TAMS Steering Committee also helps to direct the activities and priorities of TAMS, which likely functions as another layer of accountability. However, it is not clear to what degree TAMS must adopt Steering Committee recommendations.

Results and impact

No recent impact reports summarizing program achievements (e.g., quarterly, or final reports submitted to the US EPA) were found during this research. Nonetheless, perhaps the greatest testament to the success of TAMS is its longevity and reach.

It is likely that few programs, especially those heavily reliant on government funding, have operated continuously for 25 years. There is little sign that demand for TAMS services are declining—in fact, all indications are that demand for TAMS supports are increasing (e.g., catalyzed by the US *Inflation Reduction Act* of 2022).[4.]

As for the reach of TAMS, nearly 2,000 professionals have been trained through the program, representing just over half of all US tribes.[14] The 2021 annual report of the NTAA further describes the combined impact of ITEP and the TAMS Center, stating,[20]

> *499 Tribes and Tribal organizations (and 9,960 individuals) received training through 2019 at either ITEP or the TAMS Center. When compared to the total of 574 federally recognized Tribes, this means that about 87% of Tribes (or Tribal organizations) across the nation have received some type of Tribally focused, air quality specific, environmental training.*

The experiences of the TAMS staff member interviewed for this study provide further evidence of the impact of TAMS. Although anecdotal, the interviewee identified various points of contact with TAMS supports over a period of years through their professional life as an air quality specialist, including obtaining technical support and equipment loans, before landing at TAMS.

Success factors

Based on the size of its staff, TAMS has an outsized influence in terms of impact. The factors contributing to TAMS's success in strengthening Indigenous capacities have been highlighted throughout this profile but are summarized here.

- **Legislative catalyst.** It is likely that ITEP, TAMS, and associated programs and organizations would not have existed without fundamental changes to federal laws. The Tribal Authority Rule that enshrined Indigenous rights to manage air quality through the *Clean Air Act* amendments opened the door for TAMS to operate.
- **Tribal priorities first.** A community-first focus is another reason why TAMS has succeeded and why its services are sought-after. This focus is apparent by regular needs assessments of target populations that provide a way to calibrate TAMS activities; TAMS has also worked to improve the accessibility of their services, including by offering on-demand one-on-one support. TAMS staff further recognize and respect tribal authorities and have employees and instructors that are of Indigenous descent with lived experience.

  The TAMS Steering Committee is another avenue through with TAMS ensures alignment with local and regional priorities. The importance of the Steering Committee as a guiding body was articulated by a TAMS staff member as follows:[3]

  > *"[The Steering Committee is] composed of seven tribal representatives from throughout the nation and they provide the perspective and the guidance on the types of support that are relevant to tribes throughout the nation. They give us the direction on the support that we're providing and help us ensure that what services*

that we provide are relevant to the issues that they're facing. And so that's the big part of the success of what we provide as well. [...] they're [the Steering Committee] actually doing the work on the ground. And so, we respond to what their needs are, and we do what we can to develop the strategies, the courses, the one-on-one support that that's necessary for them."

- **Long-term established partnerships and funding.** The importance of TAMS's institutional and funding partners has already been emphasized. The US EPA and Northern Arizona University are major organizations backstopping ITEP and TAMS. The former is also a relatively deep-pocketed champion, which has likely helped to safeguard the persistence of ITEP and its programs.

  That ITEP preceded TAMS cannot be discounted either; this was underlined by the interviewed TAMS staff member, stating, "*The Institute for Tribal Environmental Professionals has been providing training to tribes for longer than the TAMS Centre has been in existence*". As previously discussed, ITEP's work proved foundational to TAMS's genesis, being a venue through which the direct demands of tribal nations for a technical organization to provide training could become reality. Moreover, the activities of TAMS are complemented and supported by sister programs under the ITEP umbrella, which provide redundancy and institutional memory and learning, while other organizations like the NTAA advocate for the needs of tribes and programs like TAMS.

- **Networks.** A benefit of collaboration and being embedded in a multi-organizational partnership is the ability to share networks and resources. Although linked to the bullet above, the TAMS interviewee emphasized the significance, for example, of the US EPA tribal air coordinators and regional contacts, as well as conferences and regional meetings with tribes that help to broadcast TAMS's services.[3] In addition, associations like the Western Regional Air Partnership are venues for groups and planning organizations to *"work together to develop strategies to address issues that are affecting air quality,"* and are vital because air quality issues can only be solved by working collaboratively.[3]

Constraints

Organizations like TAMS working in the space of Indigenous capacity strengthening often face constraints to operational success that exist both within and outside of the organization. These limitations include staffing challenges, cost and funding shortages, equipment supply disruptions, and limited tribal capacities. Many of these are interrelated.

- **Staffing.** The interview with TAMS and available documents show past and ongoing challenges with securing sufficient staff to meet the demands of tribal environmental professionals and communities. TAMS is a small operation of staff with highly specialized technical knowledge. Although staff turnover (e.g., from retirement or other reasons) has been a problem before, the most pressing staffing issue is having enough people to meet the growing and continued demand for TAMS services.
- **Funding.** A consistent funding stream (through the US EPA) has been essential to TAMS's existence. However, the amount of funding allocated has not kept pace with the needs of the initiative or inflation. For example, a TAMS needs assessment report found that some aspects of the program were at capacity and unable to accommodate new demand, including the disruption of laboratory services due to funding constraints.[10] TAMS also reported in 2022 that funding for air monitoring equipment of more than $300,000 was needed to replace equipment, increase the capacity of its loan program, and provide training on new technology.[21]

  Ironically, new funding made available to tribes through the US *Inflation Reduction Act* of 2022 has also increased demand for TAMS's services (e.g., those seeking assistance to conduct emissions inventories for greenhouse gases). TAMS staff are struggling to meet this influx of demand.[3]
- **Equipment.** In addition to funding needs for equipment renewal and replacement, TAMS has also dealt with supply chain issues to obtain equipment.[21] Related to staffing, the equipment loan program has previously

been interrupted by staff vacancies. As reported in the TAMS needs assessment: "The equipment loan program has been a staple/backbone of the TAMS Center since its formation, and the equipment manager remains critical to this service and its continuation. The vacancy hindered equipment maintenance and loan services, resulting in decreased service reliability."[10] The needs assessment further describes challenges with maintaining properly functioning equipment in communities and in obtaining the necessary parts to conduct repairs, potentially impacting data consistency and quality.

- **Tribal capacities.** Despite the obvious successes of TAMS's outreach and training efforts, there remain serious ongoing challenges beyond the remit of the program to address that exist at the level of communities. For one, individuals and communities interested in implementing their own air quality programs are faced with stringent standards and governmental requirements, while at the same time needing to overcome competing priorities and a lack of funding.[3] This situation is described below in the words of a TAMS staff member.

  "Tribes typically have tougher economic conditions on the lands that they come from, the reservations, and that sort of thing. And so that tax base is not there for tribes to direct a lot of the funding to those environmental programs.

  There's a lot of other ongoing issues that tribes are dealing with and trying to spread those resources that aren't significant at all. So, when it comes to environmental issues primarily tribes are usually working off of grants, EPA grants, federal grants to do their work. And again, as I indicated before it, it's not as significant as the state and local programs.

  So typically, where you have multiple staff with any of these state and local programs, often with tribes you only have one- or two-man operations, they're trying to administer the grants, They're also trying to actually do the actual technical work. And so, it's a really tough process for them."

  Also tellingly, the NTAA 2021 annual report observes, *"that about 60% of the individuals trained [through ITEP and TAMS] are no longer in the Tribal air quality field. Only 10% of individuals who take an introductory air quality course go on to take five or more courses, indicating that overall Tribal air quality staff do not receive more than entry-level training."*[19] The report further elaborates that this pattern likely reflects *"high turnover rates in Tribal air programs due to stagnant and relatively low wages in comparison to state and federal counterparts. Many air programs also lose staff due to interruptions in funding year to year."* In other words, TAMS's successes are tied to the well-being of the communities they serve, and the many factors beyond TAMS's control.

Replicability

The TAMS initiative and associated ITEP programs are undoubtedly the product of unique circumstances, borne out of changes in federal laws in the US. Although unique, this context is not without analogue. For example, nascent interest in Indigenous Protected and Conserved Area in Canada may one day—given the appropriate legislative changes—lead to a need for a technical knowledge and training centre like TAMS. The TAMS model could theoretically be applied anywhere that specialized knowledge is needed and can be shared, and where funding is secured, and jurisdictional authorities devolved to local and/or Indigenous communities.

Outside of these simple but hard-to-obtain conditions, the TAMS experience is nonetheless instructive. This case study illustrates the merits of long-term partnerships that cut across sectors, community-focused and driven priorities, and strong networks that pair advocacy with on-the-ground action.

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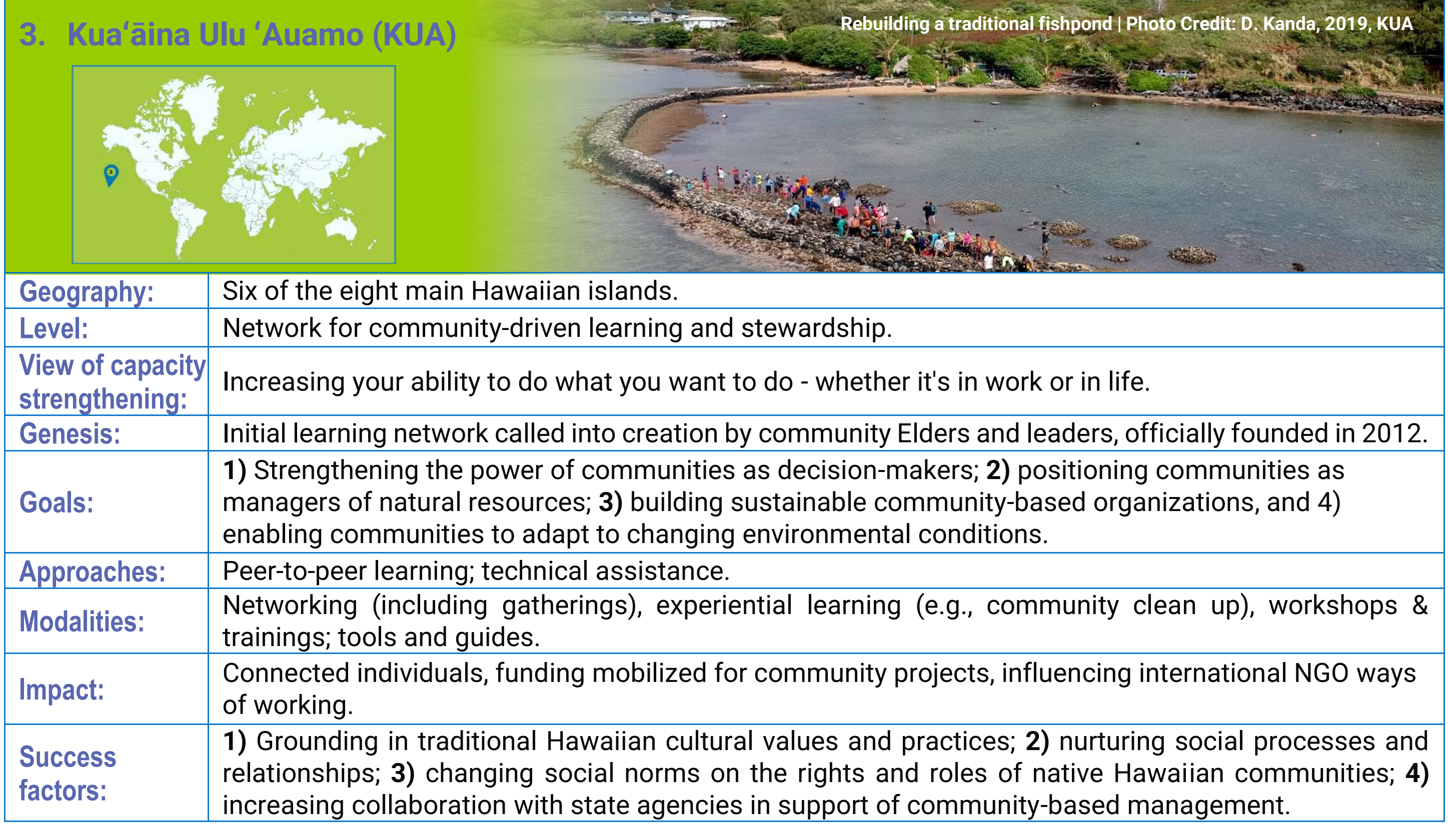
CASE STUDY 3: KUA'AINA ULU AUAMO (KUA)

https://kuahawaii.org/



Rebuilding a traditional fishpond | Photo Credit: D. Kanda, 2019, KUA

Geography:	Six of the eight main Hawaiian islands.
Level:	Network for community-driven learning and stewardship.
View of capacity strengthening:	Increasing your ability to do what you want to do - whether it's in work or in life.
Genesis:	Initial learning network called into creation by community Elders and leaders, officially founded in 2012.
Goals:	**1)** Strengthening the power of communities as decision-makers; **2)** positioning communities as managers of natural resources; **3)** building sustainable community-based organizations, and 4) enabling communities to adapt to changing environmental conditions.
Approaches:	Peer-to-peer learning; technical assistance.
Modalities:	Networking (including gatherings), experiential learning (e.g., community clean up), workshops & trainings; tools and guides.
Impact:	Connected individuals, funding mobilized for community projects, influencing international NGO ways of working.
Success factors:	**1)** Grounding in traditional Hawaiian cultural values and practices; **2)** nurturing social processes and relationships; **3)** changing social norms on the rights and roles of native Hawaiian communities; **4)** increasing collaboration with state agencies in support of community-based management.

Introduction

Kuaʻāina Ulu ʻAuamo (KUA) is a Hawaiʻi non-profit organization founded in 2012 at the behest of a small network of rural Native Hawaiian fishing community leaders called E Alu Pū (meaning "move forward together") to support a statewide grassroots network of community-based mālama ʻāina (care for that which feeds) efforts. The E Alu Pū Network as it is called today originally gathered in 2003.[1] KUA raises the resources necessary to convene network-wide gatherings for relationship-building, knowledge exchange, training, work projects, and strategic planning and advocacy to develop a context that helps take community mālama ʻāina efforts to greater levels. When feasible KUA also provides direct investment and fiscal sponsorship for community projects. Further. since its founding, KUA has taken on facilitation and coordination for two additional networks: the Hui Mālama Loko Iʻa, a network of organizations and practitioners of traditional Hawaiian aquaculture, and the Limu Hui, a network of individual practitioners of limu (seaweed). The supportive role of Kuaʻāina Ulu ʻAuamo is reflected in its acronym KUA, which means back or backbone.

ʻāina momona = abundant and healthy ecosystems in Hawaiʻi that contribute to community well-being

Aloha kekahi i kekahi = mutual respect

E Alu Pū = moving forward together

Kuleana = responsibility for place

Kua = back or backbone

Limu = seaweed

Loea =traditional experts

Loʻi =taro pond

Loko iʻa=fishpond aquaculture systems unique to Hawaiʻi

Mālama ʻāina = care for that which feeds

Wai ʻōpae=anchialine pool systems

In addition to the references noted, the following case study draws from a key informant interview with and some written contributions from Kevin Chang, Executive Director of KUA at the time of writing.

Focal geographies

- Hawai'i

Sector

Conservation, cultural revitalization, and food security

Level of capacity

Community capacity

Target populations

- **Direct:** Hawaiian community groups involved in community-led conservation and stewardship projects.
- **Indirect:** other community-led conservation network initiatives across the Pacific region.

Operational context

KUA is described as having been "called into creation" by local community elders and leaders of about a dozen grassroots fisheries management initiatives working in Hawai'i in the early 2000s. In 2003, these initiatives came together as part of a meeting catalyzed by a community leader and champion, Uncle Kelson "Mac" Poepoe of Hui Mālama o Mo'omomi, on the island of Moloka'i. Convened by the Hawai'i Program of an international conservation organization known as the Community Conservation Network (CCN) the goal of this meeting was to bring together practitioners of traditional stewardship from 12 communities around Hawai'i to build relationships and share knowledge about community-based resource management. Participants quickly realized how energizing such a gathering could be and felt the need to continue. This led to the birth of Hawaiʻi Community Stewardship Network (HCSN), a program of CCN.

In the early years, after HCSN was founded, participant organizations contributed informally to keeping the network going under the umbrella of CCN. In 2009, the CCN Hawai'i Program became an independent program and continued its work as HCSN. Over this period, participating community groups confronted the drawbacks of working within the prevailing operational models of national and international NGO partners working in Hawai'i. At that time multiple NGOs jockeyed to claim ownership over particular areas or conservation objectives, setting their own agenda, competing for a limited pool of donor funding, and bringing in a rotating cast of outsiders to direct local programs and take up resources without necessarily making meaningful investments in the community. Further, communities increasingly found the competition among these larger NGOs to be counterproductive and divisive.

These experiences, in addition to growing interest in participation from additional communities, clarified a need for more formal organizational support operated by and for Native Hawaiian and local communities to reassert local interests and decision-making authority, recapture resources for re-investing in local communities, support traditional ecological knowledge and values, transform conventional government conservation, and level the playing field with other NGOs working in the region. To this end, circa 2010- 2011, the network changed its name from HCSN to E Alu Pū, developed an Advisory Council and with its supporters undertook a process to formalize the network through the creation of an independent organization, and establishment of KUA in 2012. KUA secured its independent non-profit status in 2013.

Since KUA's founding, the networks it facilitates have grown: (1) E Alu Pū grew from around 12 to almost 40 mālama ʻāina community groups; (2) the Hui Mālama Loko Iʻa expanded to over 60 loko iʻa (fishpond aquaculture systems unique to Hawaiʻi) and wai ʻōpae (anchialine pool systems) sites in varying stages of restoration and development, with numerous caretakers, stakeholders, and volunteers; and (3) the Limu Hui grew to over 50 loea (traditional experts) and practitioners in all things "limu" or locally-grown "seaweed." Ecologically and geographically these networks span communities in marine and terrestrial ecosystems, which now touch over 70 regions across six of the eight main Hawaiian islands.[2]

Factors that have shaped KUA's establishment and operations included the following: [2]

- The degradation of natural ecosystems and concomitant loss of traditional Hawaiian cultural knowledge and practices.
- The desire to amplify a long-term movement to restore traditional Hawaiian management practices as part of broader efforts towards biocultural revitalization and community empowerment.
- The opportunities presented by a growing recognition of rights and roles of local communities and Native Hawaiians in natural resource management and use, enabling greater collaboration with state management agencies.
- A desire to shift the flow of limited financial and other resources for natural resource conservation and management away from large national and international NGOs and toward greater and more equitable investment in local communities.
- A desire to access more flexible unrestricted funding opportunities that more effectively support community-driven objectives and social processes, which are often incompatible with some funders' rigid deliverables or timelines.

Goals and objectives of capacity strengthening

KUA's work aims to empower communities to improve their quality of life through caring for their biocultural (natural and cultural) heritage in service of its broader vision, *"ʻāina momona — abundant and healthy ecological systems in Hawaiʻi that contribute to community well-being"*. KUA also emphasizes the creation of enabling conditions to achieve this vision, namely, empowered and connected communities that play active leadership roles in community place-based natural resource management, assuming their traditional role as caretakers of their lands and waters. KUA's Theory of Change (Figure 5) articulates specific goals in support of this vision across Hawai'i, including:

- **Strengthening the power of communities as decision-makers** by increasing capacity for participation in decision-making to achieve desired community outcomes.
- **Positioning communities as practitioners and managers of natural resources** by increasing the collective area under community-based management, development of new culturally-aligned management approaches, and achieving positive outcomes for biomass, biodiversity and threat reduction.
- **Building sustainable community-based organizations** to provide ongoing organizational and financial support to local initiatives.
- **Enabling adaptation to changing environmental conditions** through community-led monitoring and evaluation to inform decision-making.

Importantly, each goal is upheld through network activities, rather than by providing support for an individual community.

Capacity strengthening approach

KUA's central approach to capacity strengthening is through the coordination and facilitation of community learning networks and gatherings.

Each of the three statewide learning networks (E Alu Pū, Hui Mālama Loko Iʻa, and Limu Hui) convenes an annual multi-day gathering for community members and other invited guests to develop network governance; facilitate community exchange through focus groups, workshops; knowledge sharing and technical training sessions; and strategic and advocacy initiatives. A gathering is not only an event but a social process that participants go

through together to catalyze individual and community development and to build confidence in taking on and leading this work.

Each gathering takes place over three to four days and attracts from 40 to 200 attendees that camp, work, eat, and socialize together for the duration of the gathering, a deliberate choice and distinguishing feature meant to build relationships and trust that are the foundation for community-driven work.[1] This social process helps KUA and the networks listen, understand, support, pursue and adapt to emerging needs throughout the year and over the longer term.

Hosting responsibilities for gatherings rotate among member communities and the host community sets the detailed agenda within a standard four-part structure:

1. **Learning About the Community Context:** Each gathering starts with a welcome by the host community according to local customs, including sharing their story and cultural context, describing their territory, activities, and issues they may be facing. This helps to create a shared understanding, strengthen relationships, and surface similar challenges and solutions across communities.
2. **Working:** An important part of each gathering is devoting collective effort to a concrete project, such as cleaning, planting, or building (e.g., opening a well or *lo'i* (taro pond) or rebuilding the stone wall of a traditional fishpond). This nurtures a sense of reciprocity between communities, provides surge support for host communities, and opportunities for hands-on learning of practical skills.
3. **Sharing Status Updates:** Gatherings are opportunities to share updates on network initiatives, hear feedback, and share ideas on solutions.
4. **Discussing Governance and Emerging Themes:** Gatherings conclude with collaborative work on network governance issues and initiatives communities want to move forward on together as a network, including identifying a need for smaller gatherings focused on specific topics of interest to the community (e.g., technical training, additional workdays on collective projects, engaging with policymakers, etc.) outside of annual gatherings.

In between large network gatherings, KUA convenes smaller focused network or tri-network activities. Records and reflections on prior gatherings can be viewed on KUA's website.

Each network has a network coordinator who helps organize gatherings. Coordinators are supported by a team that engages in administration, fundraising and financial management, communications, evaluation and planning.

KUA also participates in learning exchanges and forums with Indigenous communities outside of Hawai'i. Early in KUA's history, individuals from other Pacific Island nations (e.g., Fiji, the Philippines) who were involved in the Locally-Managed Marine Area (LMMA) Network were invited to gatherings to share their experiences, which proved influential in KUA's own work. In addition, KUA is an Indigenous People Organization (IPO) member of the International Union for the Conservation of Nature (IUCN) and a member of Indigenous and Community Conserved Area Consortium. (ICCA). Participation in these efforts connects KUA and its networks to a larger global movement for empowered Indigenous People and Local Communities, providing opportunities to learn from and understand the context of peers, innovative community driven efforts, and supportive policies.

More recently, KUA has begun participating in a larger learning network, the Indigenous Aquaculture Hub. Through exchanges to Washington State, Alaska, and British Columbia to share knowledge and collaborate on local projects (e.g., rebuilding local clam gardens), KUA is extending its own reach and benefiting from knowledge shared by communities working on similar aquaculture issues elsewhere.

Figure 5: KUA's Theory of Change framework (Source: KUA).

Operational structure and financials

KUA is registered as a tax-exempt non-profit organization (a 501 (c) (3) organization) in the United States with offices on the island of O'ahu, Hawai'i. It is governed by a seven-member board of directors drawn from its

networks and the greater Hawaiʻi and Native Hawaiian community. Of the seven, five members are recruited from the community, based on subject matter expertise, knowledge, or other resources they bring to the work, and two members are elected by the larger E Alu Pū Advisory Council. The Advisory Council itself is selected annually by the communities within the E Alu Pū learning network, with two main representatives, one proxy representative, and one youth representative from each of the six Hawaiian islands within the network. Several board members are prior or current members of other local community non-profit organizations.

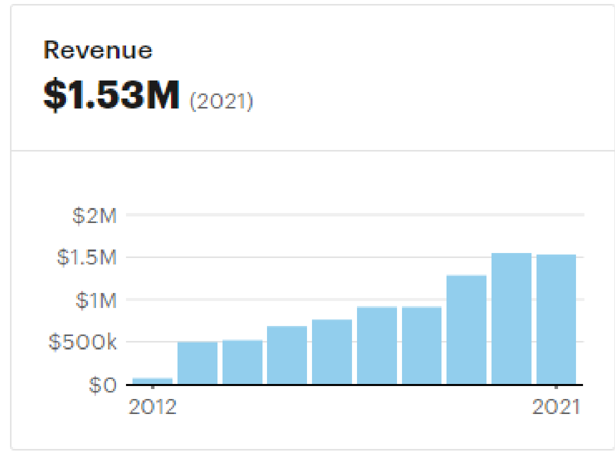
KUA's core facilitation and coordination activities are carried out by nine full time staff[2] who are local community residents. Staff have a blend of experience and skills in conservation, community organization and planning, non-profit administration and operations, technology, law, and the arts. Network participants are currently volunteers, but KUA seeks opportunities to compensate community members on community projects or through other avenues.

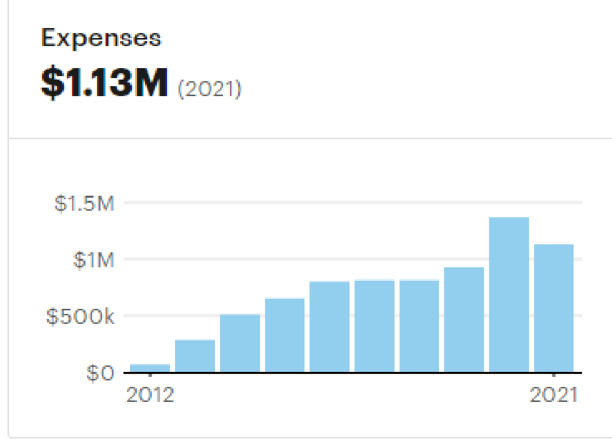
KUA's financial position has evolved since its creation with growing demand for services and increased capacity to mobilize preferred donor contributions (Figure 6). Nearly 90 percent of its revenue comes from charitable contributions, while roughly 10 percent is income from program service delivery. Service fees are earned from fiscal sponsorship and contracts (consultation, facilitation etc.) with values aligned organizations and initiatives.

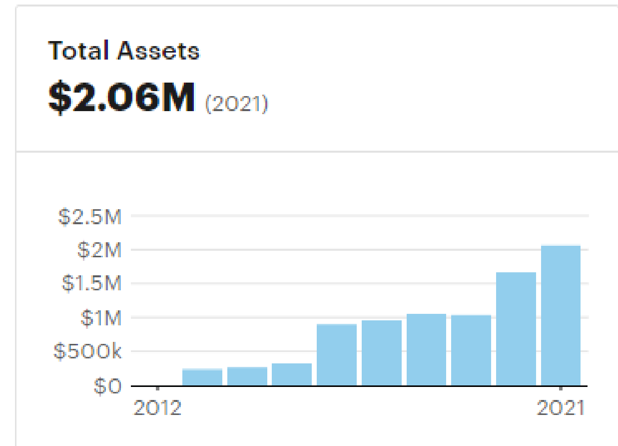
Earlier in its history, KUA relied more heavily on government and NGO grants, but found these funding sources restrictive. Grants presented a high administrative burden, narrow metrics of success, or unrealistic project timelines that are incompatible with community-driven work. Rather than deciding what communities should want, KUA's work is rooted in the development of a social process to enable communities to collaborate, discover their needs, and decide what they want. This is an organic, unpredictable, and long-term process. Government bureaucracy and politics often frustrate achieving community goals and these goals may also change mid-project as the surrounding context changes, making it challenging to predict outcomes in defined timelines. For example, in 1994, one of E Alu Pū's founding communities established a law that would allow community-based subsistence fishery management based on Native Hawaiian custom and tradition. It was not until approximately two decades later, after KUA was created to support the goals of E Alu Pū, that individual communities made collective progress on their fishery goals. Moreover, community goals and objectives at times conflict with traditional funder goals and objectives. As an example, a funder sought to support fishpond production as a social enterprise to meet commercial needs, which would require generating income and meeting commercial production targets. It was a well-meaning effort to support fishpond aquaculture revitalization. However, this approach raised tensions over values and priorities. Community members expressed the idea that "money's not the point," and that investment should prioritize building critical social and environmental infrastructure to support subsistence-based food security and biocultural revitalization.

For these reasons, KUA now makes a concerted effort to source most of its funding as long-term, flexible, general operating support from a diversified portfolio of private foundations with a strong interest in local conservation and community development.

Funds raised are spent on convening network gatherings, supporting smaller network and/or intra island and broader exchanges (i.e., local, national, and international) and workshops, operational costs and when feasible strategic direct investment in community projects.







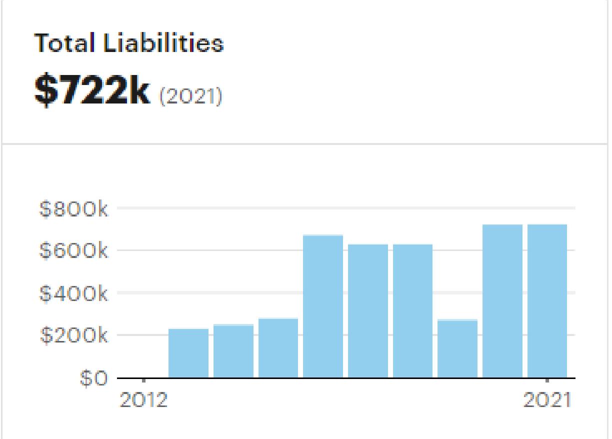


Figure 6: KUA's reported revenues, assets, liabilities, and expenditures across the years since its founding. Financial information is drawn from publicly available 501(c)(3) Form 990 tax filings compiled and summarized by the ProPublica Nonprofit Explorer platform for a wide range of U.S. non-profits, including KUA. All figures are in USD.

Accountability

- **Upward accountability:** Accountability to the board and funders is rendered in part through compliance reporting. Because KUA focuses on mobilizing multi-year, unrestricted funding from foundations, upward accountability to funders is highly trust based. The board limits its input on programming beyond ethical and fiscal needs and compliance, with network communities in partnerships with the KUA team working to determine the programmatic objectives. KUA has a contracted Chief Financial Officer, does audits annually, works to update third party quality ratings, and has developed its own internal financial mechanisms to understand its financial position in real time.
- **Downward accountability:** Accountability to local communities is mediated partly through the E Alu Pū Council, as well as through reporting out on the status and progress of initiatives tasked to KUA at annual gatherings. The Hui Mālama Loko Iʻa (HMLI) and Limu Hui (LH) networks are evolving in their formalized governance. HMLI has a smaller annual leadership convenings and the LH (the youngest network) is in the nascent state of developing a similar structure.

Results and impact

KUA's work connecting efforts among communities has had an unprecedented impact in changing the culture of conservation in Hawaiʻi. KUA's support has led to the adoption of community-based subsistence fishery rules,

rules that despite hard but isolated community efforts had languished for two decades. Because of KUA's partnership efforts, the Hawai'i Department of Land and Natural Resources is now being restructured through jobs and internal policy to be more collaborative. The concept of community-based natural resource management has become more prominent in conventional conservation statewide.

Beyond community impact, KUA has played a role in shifting behaviour of national and international NGOs working in the region for the better. Today, these NGOs are transitioning to pursuing more equal partnerships where they make more local investments, hire more local people, and provide targeted technical capacity to support community-led conservation objectives and initiatives.

KUA is committed to ongoing evaluation. Evaluation currently involves financial tracking, pre- and post-gathering surveys of participants, regular calls with members of the network to reflect on experiences and lessons from the gathering, workshops. and exchanges.

Success factors

KUA's grounding in community driven input and traditional Hawaiian cultural values and practices are success factors woven through all their work. KUA fosters Native Hawaiian agency to support collaborative management built on traditional place-based stewardship and carried forward by elders. Examples of traditional principles and concepts are:

- *kuaʻāina* – people who actively lived Hawaiian culture and kept the spirit of the land alive, backbones of Hawaiian cultural preservation, and inspiration for KUA's name;
- *hoaʻāina* – all relationships that impart a kinship-based responsibility to a shared *kuleana* or responsibility to place, whereby land ownership is not a prerequisite for caring for Place;[3]
- *ahupuaʻa* – a traditional community-based unit of land focused on Place-based governance and resource management, stretching from the mountains (mauka) to the sea (makai);
- *ʻāina momona* – a state of sustainable resource abundance, a goal of traditional Hawaiian resource management systems, and
- *Lawaiʻa pono* – when fishing taking only what you need and harvesting with care and restraint.[3]

KUA's deliberate focus on developing social processes and relationships as the foundation for strengthening capacity is another important success factor that creates social infrastructure for sustainable outcomes:

- **Creating a social process supporting intimacy, relationship-building, and collaborative learning.** KUA convenes gatherings, but, more importantly, structured gatherings in ways that maximize opportunities for intimacy. This includes hosting by communities; camping, cooking, and eating together; sharing personal progress, struggles, and ideas on ways forward; and hands-on projects to provide an opportunity for inter-generational and inter-community knowledge transmission and also offer collective surge support to host communities.
- **Adhering to the principle of "sweat equity" by rotating responsibilities, leadership, and collective work effort.** KUA's work recognizes there is value in demonstrating community capacity and gratitude through actions in place – hosting, feeding, and working on physical tasks together – rather than only through talking about concepts in conference rooms. This is a critical factor in building relationships and credibility among partners, a theme that recurs in other Hawaiian community co-management contexts.[3]
- **Seeking out collaborators who embody the principle of *aloha kekahi i kekahi* or mutual respect, including emphasizing alignment of behavioural competencies over technical competencies in partners.** The ability of community members, staff, and collaborators to work successfully within a community context requires listening, patience, and humility, and it can be easier to seek out people for whom these qualities are ingrained than develop them in people through training or experience. Hawai'i and its resource management community is small, and it has been noted that those you oppose in one process can become your allies in another. This approach has facilitated garnering broader support for a new initiative in the wider community.

In addition to these internal factors, KUA's success and growth is facilitated by a movement of changing social norms around recognition of the rights and roles of Native Hawaiian communities in natural resource management enabling increasing collaboration with state agencies.

- **Shifting perceptions, attitudes, and social norms regarding traditional Hawaiian culture and practice among government agencies and legislatures:** Traditional Hawaiian culture and practices related to natural resource management were rapidly displaced or diminished by Western systems following colonization. However, a renewed interest in re-adoption of these practices and the re-evaluation of contemporary management regimes has occurred in the last few decades, creating an enabling environment for the revival of community-driven approaches.[4] This shift was gradual and sometimes sporadic, where turnover in government agency personnel with attitudes entrenched in the status quo makes way for more progressive thinkers who can catalyze rapid change by supporting and working closely with communities. Today, a representative of the state fisheries agency now joins almost all working groups calls for the Lawaiʻa Pono working group of E Alu Pū.
- **Long-standing formal recognition of Native Hawaiian approaches to natural resource management and evidence of successful outcomes:** The State of Hawaiʻi's Constitution makes clear that its natural and cultural resources, including nearshore marine resources, are subject to the public trust, and therefore must be managed and protected for the benefit of present and future generations. The Hawaiʻi State Constitution further requires the state to protect and enforce Native Hawaiian rights, including traditional and customary practices associated with, and dependent upon, carefully managed and abundant nearshore resources. The 1994 law authorizing the Hawai'i Department of Land and Natural Resources (DLNR) to create community-based subsistence fishing areas (CBSFAs) is one of few if not the only law that proactively affirms practices customarily and traditionally exercised for purposes of Native Hawaiian subsistence, culture, and religion. CBSFAs represent a more bottom-up approach to fisheries management that is place-based in nature and community-driven, as well as an avenue for the DLNR to fulfill its legal obligations.[5] Importantly, the collective support of long-standing grassroots community groups including E Alu Pū was critical in the State's adoption of this mechanism.[6] Subsequent formal evaluations of local CBSFAs have confirmed their ability to meet conservation objectives in as little as five years following designation, further enhancing their legitimacy.[7]

  Although there is room for improvement in meaningful sharing of power[3], this enabling legislation and evidence of successful outcomes have provided an avenue for the community-based practices and initiatives to be enshrined into state management frameworks with teeth, providing more incentive for participation, and creating a feedback loop enhancing governmental support of traditional stewardship practices.[8] In the words of KUA's Executive Director, *"we have worked with state administrators to draft new rules and then work to get those recognized with the state. We have a role in all stages of that. So tomorrow, there will be a hearing on community fisheries in Maui, and we'll be going to that."*

- **Collaborating with management agencies and partners to achieve a culture and infrastructure enabling more effective management.** Communities have long identified how the management and enforcement of fishing areas suffered from a lack of personnel who, along with being short staffed in rural areas, did not understand the local fishing context and customs. Since its founding, KUA and its network communities have worked on policy change to support this capacity. KUA has advocated for greater judicial and enforcement capacity and supported efforts to establish institutions like the environmental court and to increase personnel with proper training and community volunteers. KUA's work has supported policies to recruit locally so management and enforcement staff could be hired on the islands they serve. These efforts have resulted in the creation of three new positions across the state to support collaborative fisheries management that are staffed by local community members who *"know the resource and love it"*, two of which were previously involved with KUA. KUA's Executive Director has noted that *"it was a dream of some of our communities that their children could become the DLNR staff defending the resource."*

Constraints

For KUA, key constraints relate to financial resources, structural constraints, and entrenched values of opposition groups:

- **Structural constraints include a lack of housing, rising cost of living, and few or poorly compensated employment opportunities within communities.** These issues have led to difficulties in retaining individuals and particularly youth within their home communities to work on local conservation initiatives, where *"every year it gets harder to afford to stay".* Although KUA does invest in community initiatives, these do not always lead to stable jobs.
- **Entrenched models and mindsets of governance and politics.** Outdated views on conservation persist, favouring centralized, non-localized approaches that are myopic on issues of inclusion and shared power especially in regard to rural, isolated, and resource reliant local and Native Hawaiian communities. This is compounded by a lack of pathways for developing an overall spirit of citizen stewardship. This is supported or compounded by persistent weaknesses in state environmental management capacity (Hawai'i funds its Department of Land and Natural Resources at a little over 1 percent of its annual budget) and policymaker interference in the administrative process.
- **Ongoing opposition by other resource users pushing for a return to the status quo.** Some resource users, particularly within the commercial fishing sector, perceive community-based management through CBSFAs or otherwise as closures, restrictions, or an absolute ban on their rights to access fish. These sentiments recently led to the introduction of a State Senate bill (SB92) which aimed to establish a sunset date for all designated CBSFAs, arguably to reduce financial costs and restore access to fishing resources.[9] This bill faced overwhelming opposition and was ultimately rejected.[10] However, these attitudes continue to persist in the broader public opinion. These developments have led KUA to take defensive activities in recent years, including visits to the legislature and submitting collective testimony for or against proposed bills.

Replicability

The principles behind a community-driven learning network across a region to strengthen local relationships, knowledge transfer, and biocultural revitalization can be successful beyond KUA's operating environment. Indeed, before KUA began E Alu Pū had a vision of also supporting island-based networks. For several reasons, it proved difficult to develop statewide and local networks simultaneously. However, today local or island-based networks are burgeoning and working in tandem with KUA. These include the Maui Nui Makai Network (Maui and surrounding Molokaʻi, Lanaʻi and Kahoʻolawe), Kai Kuleana Network, and the Hui Loko (West Hawaiʻi).

This approach is in fact already reflected in Indigenous networks in the Canada too – from the regional (e.g., BC's Guardian Gatherings), to the national (e.g., the National Indigenous Guardians Network and Gathering), and international (e.g., the Clam Garden Network of Canadian and US First Nations and collaborators) – although these networks tend to be focused on individuals or programmatic initiatives rather than broader community participation.

The following factors are critical to enable successful replication or scale out of KUA's model:

- Emphasizing social processes that promote intimacy, relationship building, and cultural elements of community-based natural resource management alongside development of technical skills.
- Accessing unrestricted long-term funding to support evolving community-based processes and decision-making grounded in local cultural practices, and sufficient in scale to support travel for gatherings over the much greater distances that exist between Indigenous communities across Canada relative to Hawai'i.
- Ongoing work to recognize and enshrine the authority of local Indigenous communities to be active participants in the management and monitoring of their local resources, as is the case for legally-recognized CBSFAs in Hawai'i.

- Establishing enabling conditions within government to overcome barriers related to organizational culture, institutional structures and red tape, and capacity for meaningful engagement needed to rebuild trust, so that government can be a better partner in a co-management arrangement.[11]
- Recognizing the value of social and cultural outcomes of learning network programs in their own right for their ability to foster effective community decision making and natural resource management.
- Supporting the transition from participation in learning networks to paid positions by providing the appropriate complementary training for employment readiness and finding sustainable sources of funding to support fair compensation, contributing to local livelihood opportunities.

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CASE STUDY 4: MAUI NUI MAKAI NETWORK (MNMN)

https://www.mauinui.net/

Community planning session | Photo Credit: MNMN

4. Maui Nui Makai Network (MNMN)	
Geography:	Three of the eight main Hawaiian islands.
Level:	Network for community-driven learning and marine conservation.
View of capacity strengthening:	Something taught as a process that requires ongoing learning and adaptation.
Genesis:	Coalesced organically through prior partnerships and projects, officially founded in 2013.
Goals:	**1)** Connecting communities to care for and restore healthy ecosystems on which Hawai'i's people depend; **2)** learning from diverse experience of community-based management to help member site care for seaward areas.
Approaches:	Peer-to-peer learning; technical assistance.
Modalities:	Networking (including gatherings), experiential learning ("working with our hands"), workshops & trainings; tools and guides; coaching.
Impact:	Over 1,000 people connected and accessing activities and guidance; over 15 trainings hosted; local marine management strengthened.
Success factors:	**1)** Grounding in traditional Hawaiian cultural values and practices; **2)** nurturing social processes, relationships, and community cohesion; **3)** providing coaching to communities to avoid reinventing the wheel; **4)** formal recognition of community rights and roles in natural resource management.

Introduction

The Maui Nui Community Managed Makai Area Learning Network, more commonly referred to as the Maui Nui Makai Network (MNMN), is a non-profit organization formed in 2013 as the first community-based marine conservation network in Maui Nui, which encompasses nine community groups across the populated islands of Maui, Moloka'i and Lāna'i and the unpopulated islands of Kahoʻolawe and Molokini. The MNMN is primarily a learning network that aims to connect community groups working on place-based management and conservation through remote and in-person gatherings to share and learn from experiences that can help members care for specific makai (seaward) areas. In addition to network activities, MNMN also facilitates the Maui Hikina Huliāmahi Initiative, through which four partner communities are engaging in a participatory process to collaboratively develop a management plan for the marine areas across four districts of East Maui.

In addition to the references noted, the following case study draws from a key informant interview with Uncle Sol Kaho'ohalahala, a founding member of the MNMN representing the Maunalei. Ahupua`a, and Tate Keliihoomalu, the network's coordinator and sole full-time staff member at the time of writing

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Focal geographies

Hawai'i

Sector

Conservation, cultural revitalization, and food security

Level of capacity

Community capacity

Target populations

- **Direct:** Hawaiian community groups involved in community-led conservation and stewardship projects.
- **Indirect:** Hawaiian fishers and the broader community that relies on marine resources

Operational context

The MNMN coalesced organically over several years through prior partnerships and capacity-strengthening. Around the time of the network's formation, many Hawaiian community organizations had already been active in environmental stewardship for decades. There was an acknowledgement by elders that it may be beneficial for these groups to gather and support each other through a more formal organizational process. One significant driver for this was the ongoing loss of traditional knowledge, practices, and the elders that hold them, and the hope that a more formal network would be self-sustaining, thus ensuring the continuity and transmission of traditional cultural knowledge and practices for the stewardship of natural resources.

Support for this transition was provided in part through a partnership between two non-profit organizations, The Nature Conservancy (TNC) and the Maui Nui Marine Resources Council (MNMRC), who began working together in 2009 to advance marine conservation efforts alongside communities across Maui Nui. In 2010, these organizations convened a series of train-the-trainer workshops to share knowledge on community-based management in the region and discuss the value of learning networks. These training workshops fostered important relationship- and trust- building among participants and led to the formation of three new community groups interested in taking on this model in their own communities. In 2012, these new groups were introduced to three existing community groups, some of which had already been active in natural resource stewardship since the 1990s, and the six founding community groups agreed to work together. These groups spent the next few years engaging in further meetings, workshops, and collaborative projects with each other and with both TNC and MNMRC to further build trust and weigh the value of getting together in a culturally-appropriate manner.

This exploratory period was critical to the initiative's success and provided founding communities with the space for sharing differences and similarities about each others' resources, practices, cultural identities, and strengths, and engaging in discussions about how to organize themselves. These discussions also explored important areas of need and protection and how the network might be able to support their care using common sense and cultural practices inherited through parents and grandparents that had been applied in similar situations before their time. Beyond sharing information, this approach encouraged participants to be vulnerable, to extend themselves and build bridges to each other, and to achieve a sense of collective intimacy that is essential for successful collaboration. In other words, this process allowed participating communities to understand and define who they were both individually as well as collectively within the context of a network:

" 'Ka wa ma mua, ka wa ma hope' – If you want to move forward and grow and innovate, then you must look backward…It is a very cultural thing. You see a picture of yourself as you move in time, to get to where you are, and that helps you understand, where do we go?

The genealogy and chronology of our places became an important part of our organization – we each spent time looking at ourselves, places, names, stories, people and communities and elders, families. And then we looked at the important parts of who we are, and the important stories handed down that we could connect into the future.

Once we were able to do that, from each community, we had a good idea of who we were, each individually, and collectively." - Uncle Sol Kaho'ohalahala

These groups ultimately saw value in sharing challenges, successes, and support across organizations and agreed to form a network. The MNMN was officially launched in 2013 with a ceremony and signing of its founding agreement at the Maunalei Ahupua`a Community Managed Mauka-Makai Area, a site managed by one of its founding members (Figure 7).[2,3]

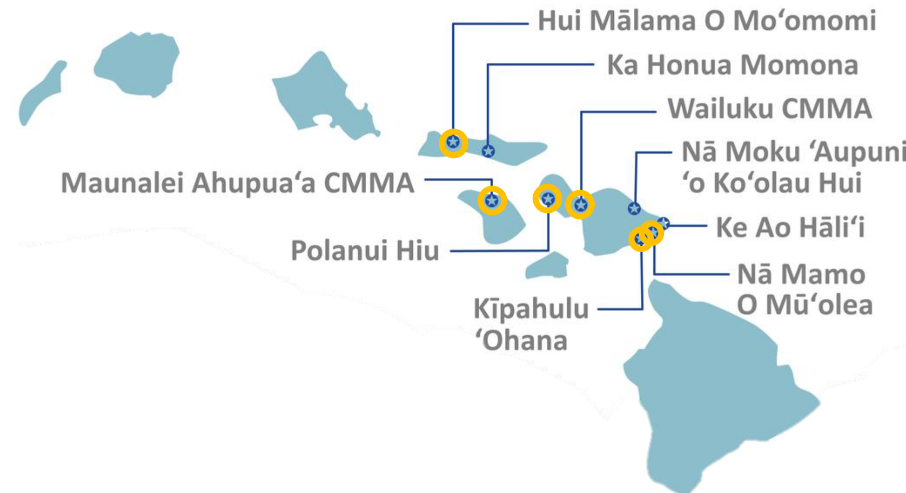

Figure 7: A map of the Hawaiian islands showing the 9 community groups that are currently members of the MNMN, with the network's original 6 founding communities highlighted in yellow (Image from the MNMN website).

In its early years, the network's non-profit partners provided direct support to help the organization grow and become self-sustaining, including providing nuts-and-bolts operational guidance, strategic communication training, and advice on strategic growth. After a few years of more intensive support to help members learn how to run the network, these partners stepped back to play a smaller supporting role. The founding members of this network aspired to continue *"casting our net in hopes of bringing into the gold other communities across Maui Nui."* Today, the network has grown to nine communities and continues to grow more quickly than originally anticipated (Figure 7).

Factors that have shaped the MNMN's establishment and operations included the following:[1,3]

- The degradation of natural ecosystems and concomitant loss of traditional Hawaiian cultural knowledge and practices they support.
- The need to incorporate traditional Hawaiian governance and natural stewardship principles and practices into the operation of a learning network to fulfil an intertwined dual purpose of supporting both cultural and ecological revitalization during our lifetime and for future generations.
- The desire to build capacity for and support broad public and government recognition of traditional, community-led Hawaiian land management systems.
- The desire to share, learn, and document important processes, best practices, and lessons learned for the benefit of other communities who wish to pursue similar goals.

Goals and objectives of capacity strengthening

The network's overarching goal is to *"to restore abundance to our ʻāina and kai (land and sea) by perpetuating the traditions of our kupuna (elders, ancestors), thereby conveying their extraordinary cultural and natural legacy to future generations."*[2]

MNMN mission is *to "connect communities across Maui Nui to care for and restore healthy ecosystems on which Hawai'i's people depend."* Its purpose is to *"share and learn from the diverse experiences, lessons, and best*

practices emerging from community-based management practitioners to help member sites mālama (care for) specific makai (seaward) areas".

Capacity strengthening approach

The MNMN's approach to capacity strengthening is through coordinating and facilitating community learning networks, gatherings, and special initiatives.

The organization hosts biannual gatherings across the network to share challenges, lessons, and culture. Each gathering is hosted by the member organization who is chairing the network in any given year (see section on Operational Structure and Financials for further details), providing them with an opportunity to set the agenda and share their own community's culture through a Huaka'i (trip). Participants might visit cultural places in the host community, contribute to a community project where they all hana lima (work with our hands) to accomplish something concrete, or participate in trainings, among other activities.

The MNMN also takes on initiatives at a network scale outside of gatherings. One of its flagship initiatives has been the development of the Mālama I Ke Kai Community Action Guide. Released in 2020, the guide builds on the prior Conservation Standards and Healthy Country Planning frameworks and tailors them for the Hawaiian context by weaving in knowledge and lessons gleaned from MNMN's many years of work on marine stewardship planning in the network's partner communities. The intent was to offer a roadmap and process for other communities to develop and implement community-based marine management plans that is grounded within the Hawaiian cultural context, so that other communities could build on lived experience and not need to start from scratch. The Community Action Guide walks communities through each step of a participatory, workshop-based plan development process and acts as both a facilitator's guide and a participant workbook. Where communities require more support in using this guide in a planning process, the network also offers coaching assistance. The guide has gone through several iterations and benefited from testing and feedback received through mock planning workshops hosted over several years at the Hawai'i Conservation Conference, which helped the network to further refine and improve its content.[2]

The Community Action Guide has recently been implemented in the Maui Hikina Huliāmahi initiative, which has sought to facilitate the development of a cohesive community-based makai (marine) management framework across the four moku, or districts, of East Maui: Koʻolau, Hāna, Kīpahulu, & Kaupō. This grassroots initiative began in 2019 when several communities in East Maui approached the network to help them come to consensus on a shared approach to management that still recognized the differences in needs and limited resources across districts. Community members participated in a series of planning workshops outlined in the Guide to develop a draft regional makai (marine) management proposal for East Maui that is currently out for public comment at the time of writing.[4] Notably, this planning work has occurred concurrently with and helped to inform and support a petition by the Kīīpahulu moku to designate a Community Based Subsistence Fishing Area (CBSFA) in part to better align the state-regulated fishing season with local knowledge of distinct spawning fish periods, a designation that was granted in 2023.[4,5] CBSFAs are being pursued by several member communities and represent a Hawaiian legislative designation that *"legally protects and reaffirms fishing practices customarily and traditionally exercised for purposes of native Hawaiian subsistence, culture, and religion"*.[6]

As the network and its accomplishments have grown, member perspectives have broadened to consider how the stewardship needs and network benefits experienced across the MNMN reflect a broader regional and even global need beyond the Hawaiian archipelago. This line of thinking has most recently inspired the network to engage with an international community of practice of Indigenous stewardship and conservation organizations. These efforts have included, for example, hosting a Canoe Peoples Exchange by inviting Indigenous people from California and the Federated States of Micronesia to Maui to build relationships and share knowledge from the starting point of a common canoe culture.

"These activities helped us to see that we're not alone, and that what we're doing here at home is what many others are doing across other parts of the globe that we will probably never ever see, but we're all doing it. That process

built within us a sense of identity and empowerment that is common across other Indigenous communities, and we began to see ourselves in them and, I hope, vice versa. We came back in awe of the kinds of things that we saw and learned, experiences we had, people we met, and stories that we heard, we could relate to that. That was very rewarding for all of us." - Uncle Sol Kaho'ohalahala

Finally, the network also aims to provide other helpful resources on its website to support community-based work. These include:

- a recurring monthly virtual speaker series to help share the latest knowledge and practices in marine management, including scientific advances, case studies of local and Indigenous marine management initiatives in other communities, and strategies for community engagement, and broaden access to these insights through recordings;
- guidance on applying for a CBSFA or other local management designations;
- guidance for common measures of success to be tracked alongside other monitoring metrics in each partner community to know if collective efforts are working;
- guidance and templates for developing data sharing agreements when collaborating on data collection with external partners such as scientists, resource managers, and government agencies; and
- general principles for pono (sustainable) fishing practices.

Records and reflections on prior network activities can be viewed on MNMN's website.

Duration

The seeds of the initiative were planted at community-based management trainings that occurred in 2010 while the MNMN itself was formally established in 2013. However, many of the community organizations that came together to form the MNMN have been working on their own local environmental stewardship initiatives since the 1990s or earlier.

Operational structure and financials

The MNMN is registered as a tax-exempt non-profit organization (a 501 (c) (3) organization) in the U.S. with offices based on the island of Maui, Hawai'i. The network's governance framework is laid out in a charter agreement signed by founding members. Although members of the network prefer a simpler and more informal operational structure, a certain degree of formality was required to meet the criteria for becoming an eligible for non-profit status. Member communities reconciled with this requirement by identifying and integrating corresponding traditional Hawaiian governance practices, concepts, and language into a culturally-aligned management structure. Although this intercultural mapping took some time to work through, it has supported a strong governance process that helps the organization remain grounded in the identities of its membership.

Network members appoint a chair on a rotating annual basis, with the order of succession set by drawing names from a bowl at the network's inception, such that the network rotates through six chairs over a six-year cycle. This structure allows each member community an opportunity to provide leadership to the organization with the support of other members, feature their own community projects and programs in the year of their tenure, and spreads the workload this entails across all members. The six founding member communities are Alaka'i (leader) Members, voting members with a leadership role. In contrast, the three new communities transitioning into the network are considered Haumāna (student) Members who have an interest in becoming Alaka'i Members but must embark on a two-year period of observation and learning to understand the network's mission and develop a sense of responsibility to the organization before eventually being granted a vote. This core group functions like a board and keeps the organization accountable to both its members and funders.

The network's activities are enabled by Kāko'o (supporter) organizations who provide perspectives as well as coordination and technical support to advance the vision of the network's leadership, but do not have a vote in the network's decision-making. All the Kāko'o are non-profit organizations who share similar objectives in

community-based natural resource management and conservation and who have a presence in Hawai'i – The Nature Conservancy Hawa'i, the Mau Nui Marine Resource Council, Kua'aina Ulu 'Auamo, and the Coral Reef Alliance.

Finally, this important work is supported by another non-voting group of Kōkua (helper) entities including foundations, government agencies, and other non-profit organizations who provide funding. The organization carries out its activities with a relatively small budget, with the latest available year of public financial information for 2021 indicating total revenues of approximately $90,000 USD, of which roughly one third goes towards staffing.[7] However, this reflects finances during the global COVID-19 pandemic, which may not be representative of its current financial profile since network gatherings have resumed.

Accountability

- **Upward accountability:** Accountability to network and funders is rendered in part through internal record-keeping of network meetings and decisions as well as compliance reporting to maintain non-profit status. Because MNMN focuses on mobilizing multi-year, unrestricted funding from foundations, upward accountability to funders is highly trust based.
- **Downward accountability:** Accountability to local communities is mediated partly through the network chair and member community leaders, as well as through reporting out on the status and progress of local and network-scale initiatives at biannual gatherings.

Results and impact

Over the last 10 years, the MNMN has convened biannual gatherings across the network, hosted over 15 trainings and workshops to empower communities to pursue place-based management and the development of local marine management plans, has handed out hundreds of physical copies of its Community Action Guide, and has reached over 1,000 people through its outreach activities and shared resources.

Success factors

As is the case for many other organizations working in Hawai'i, the MNMN's **grounding in traditional Hawaiian cultural values and practices** are success factors carried through all their work.

- **Collaboratively reimagining its governance structure from the ground up based on traditional Hawaiian governance practices and titles while still meeting organizational criteria imposed upon it by a colonial government.** The founding leadership of the MNMN made a concerted effort to develop an organizational management framework based on Hawaiian governance principles of shared responsibility, a graduated student to leader membership pathway, and unity of agreement, among others. Although this approach took time, it has allowed the MNMN to reclaim colonial management structures and recast them in the Hawaiian image, maintaining cultural continuity and empowering its leadership to govern in a way that works best for its members. These principles carry through all of the network's other initiatives.

MNMN's deliberate **focus on developing social processes, relationships, and community cohesion** as the foundation for strengthening capacity is another important success factor that creates the lasting social infrastructure needed to support long-term stewardship:

- **Creating a social process based on rebuilding intimacy, trust, responsibility, and accountability within and across communities, both as a valuable outcome in its own right and as a foundation for successful stewardship.** The early years leading up to the MNMN's formation were strongly focused on creating a space for a culturally-aligned social process of community-building to create a foundation that could support all the network's subsequent activities and objectives. Drawing on traditional principles of Hawaiian governance, this process sought to create intimacy through shared experiences and vulnerability to build a sense of responsibility, commitment, and accountability both within and across communities in the network.

Beginning this work by rebuilding community cohesion creates a broad level of baseline support for subsequent management or conservation initiatives and helps them to move forward more quickly. *"Our organization has been a process of building family, and that, to me, is the greatest reward that I can express." -* Uncle Sol Kaho'ohalahala

- **Adhering to the principle of "sweat equity" by rotating responsibilities, leadership, and collective work effort.** As with other organizations working in Hawai'i, MNMN's approach recognizes that there is value in demonstrating community capacity and gratitude through actions – hosting, feeding, and working on physical tasks together rather than only through talking, which is a critical factor in building relationships and credibility between partners. This concept helps to overcome common frustrations with endless planning by maintaining an ongoing sense of momentum and accomplishment, and is a recurring theme across many other Hawaiian community co-management contexts.[8]
- **"Paying it forward" though a concerted effort to document, compile, and share resources and lessons learned and providing active support for coaching other communities though a proven process.** The MNMN's work recognizes the value of knowledge hard-won through lived experience, and has gone to great lengths to document and share the processes, tools, and lessons they have learned along with their collaborators to help other organizations avoid reinventing the wheel and proceed more quickly to action in a time of environmental urgency. This work has included concerted efforts to pilot test and receive feedback from a broader community of practice to refine resources. In contrast to many similar guidance documents, these efforts are further backed by MNMN's commitment to coaching other communities through the process of applying these resources in their own planning process to improve outcomes.

In addition to these internal factors, MNMN's success and growth has been facilitated by existing pathways for formal government recognition of the rights and roles of native Hawaiian communities in natural resource management.

- **Long-standing formal recognition of native Hawaiian approaches to natural resource management and evidence for successful outcomes:** A recognition of the importance of subsistence fishing practices led to policy recommendations and, ultimately, the passage of legislation in 1994 giving the Hawai'i Department of Land and Natural Resources (DLNR) "*the authority to create community-based subsistence fishing areas (CBSFAs) to protect and reaffirm fishing practices customarily and traditionally exercised for purposes of native Hawaiian subsistence, culture, and religion*." CBSFAs represent a state recognized avenue for local community groups to mālama 'āina (care for the land) by proposing regulatory recommendations and management activities to sustain the health and abundance of marine resources for current and future generations. In this context, place-based knowledge, acquired through generations of observation, along with the cultural values and associated codes of conduct traditionally governing pono fishing practices, form the foundations of community proposed fisheries management strategies[9]. Although there continues to be room for improvement in the meaningful sharing of power[10], this enabling legislation and evidence of successful outcomes have provided an avenue for community-based practices and knowledge such as those of network members to be enshrined into state-recognized management frameworks with teeth and a sense of what to expect from their implementation, providing more incentive for participation, and also creating a feedback loop enhancing governmental support of traditional stewardship practices.[8]
- **Looking beyond its own backyard to share knowledge, resources, and lessons across the Hawaiian archipelago and broader global community of practice for community-based management.** By the nature of its geography, the MNMN recognized that the needs, principles, and practices that apply to its core islands are naturally scalable to the local Hawaiian archipelago, the regional Polynesian archipelago, and the broader global archipelago of continents. This small network has extended itself to become a part of a global community-based management community of practice to continue its mission of building relationships and sharing knowledge with other local and Indigenous-led initiatives for the benefit of all. Notably, the global COVID-19 pandemic has catalyzed the widespread rapid adoption of virtual meetings that has facilitated more inclusive and frequent sharing both within and outside of Hawai'i.

Constraints

Key constraints for the MNMN relate to structural constraints and administrative burdens, managing growth, and succession planning:

- **Rigid and reductive government structures and requirements for non-profit designation, funding applications, and compliance reporting.** The very nature of community-based organizations means that these will always be small, dispersed, and many in number to serve their home community's needs. However, this scenario naturally limits the growth of any one community-based organization to increase its administrative capacity and can also pit organizations with similar objectives against each other when pursuing limited funding from government agencies, who may consider their work redundant and prioritize funding a greater diversity of distinct initiatives. The MNMN has sought to overcome these structural barriers by forging close collaborative relationships or themselves becoming members of similar organizations working in this space, such as Kua'aina Ulu 'Auamo (KUA). This strategy helps to overcome the competitive mindset imposed on them and reinforce the idea that organizations who steer in the same direction are each valuable and often more than the sum of their parts.
- **Managing growth when demand outpaces the resources available to support it.** As noted above, scaling can be a significant challenge for community-based organizations which are typically small and largely volunteer-led. The addition of three new communities to the network and growing demand for engagement from further communities have far surpassed the network's expectations for growth at its inception and have led to unanticipated scenarios. This growth has required the network to consider new challenges it had not confronted before and determine how to adapt to rise to these challenges.
- **Confronting the limits of members and organizational capacity and creating a pathway for individuals and communities to rest or depart and pass the torch to others when the time comes.** As a relatively young organization, the early years of the network's work were filled with excitement, collaboration, and recognition that knowledgeable elders in the community had a lot to contribute to the process but did not consider that the time may come where they need to depart. Ten years later, founding individuals may be reaching the limits of their personal capacity to contribute to the organization, but may feel a personal commitment to continuing. Likewise, founding partner communities may have achieved the goal of self-sustaining community-based management that they set out to reach when they joined the organization, and are ready to make way for others. These scenarios were not considered at the network's inception, and its membership was confronted with crafting provisions for graceful departure and succession in the moment, and such provisions are now in place to address these needs in the future.

"One of the things that we never thought about at the birth of our organization, is – how do you bring closure? We never thought what it would be like to say – my time is finished, I think I've given all that I can, and now I need to rest. You have to acknowledge that you have elders that are knowledgeable, and it is important for them to be a part of your organization, but also important to know that they're not going to be there forever and ever. Find a place for them to gracefully be allowed to depart.

With communities, we thought we would grow and grow and grow, we didn't think about how we should take away. It's not about lessening the organization, it's about acknowledging the fact that you have grown and the contributions made by those communities have reached their pinnacle – and this makes the organization whole.

It is something we often do not think or talk about, but something that is necessary. We have now made a provision for that." - Uncle Sol Kaho'ohalahala

Replicability

The principles behind a community-driven learning network approach across a region to strengthen local relationships, knowledge transfer, and biocultural revitalization can be successful beyond MNMN's operating environment. This approach is in fact already reflected in existing Indigenous natural resource management networks in the Canada – from the regional (e.g., BC's Guardian Gatherings), to the national (e.g., the National

Indigenous Guardians Network and Gathering), and international (e.g., the Clam Garden Network of Canadian and US First Nations and collaborators) – although these networks tend to be focused on individuals or programmatic initiatives rather than broader community participation.

The following factors are critical to enable successful replication or scale out of this model:

- Greater emphasis on social process that the promotes intimacy, relationship building, and cultural elements of community-based natural resource management alongside development of technical skills.
- Long-term, unrestricted funding to allow for supporting evolving community-based social processes and decision-making grounded in local cultural practices, and sufficient in scale to support travel for gatherings over the much greater distances that exist between Indigenous communities across Canada relative to Hawai'i.
- Ongoing work to recognize and enshrine the authority of local Indigenous communities to be active participants in the management and monitoring of their local resources, as is the case for legally-recognized CBSFAs in Hawai'i.
- Recognizing the value of social and cultural outcomes of learning network programs as valuable in their own right for their ability to create the enabling conditions needed for effective community-based natural resource management.
- Considering succession planning strategies for both individuals and partner communities at the inception of the network both to reduce the burden of leadership on those who no longer have the capacity to engage as well as to allow for communities that have reached their goals to make way for new communities that are in greater need of support.

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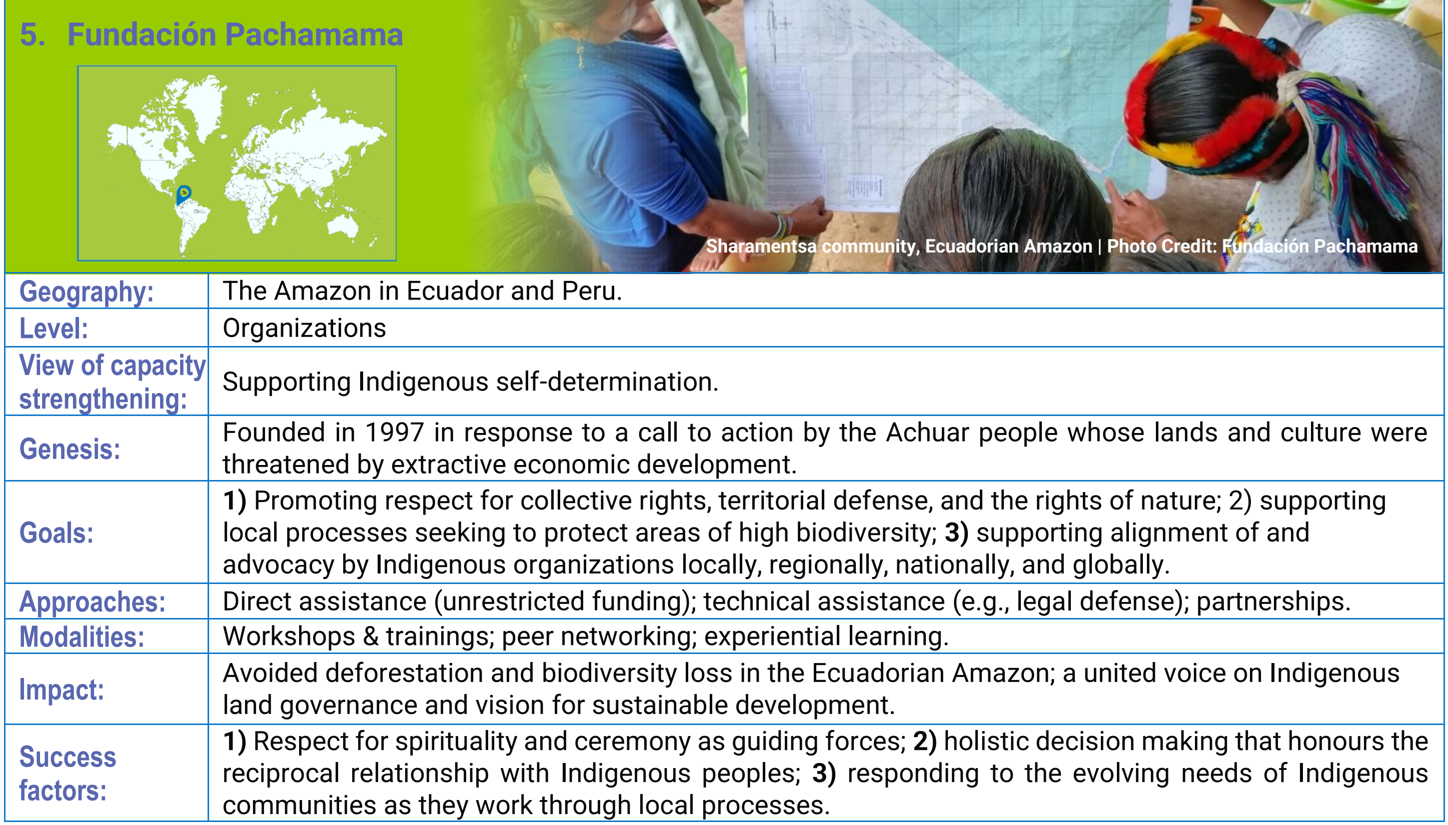
CASE STUDY 5: FUNDACIÓN PACHAMAMA

https://www.pachamama.org.ec/



Sharamentsa community, Ecuadorian Amazon | Photo Credit: Fundación Pachamama

Geography:	The Amazon in Ecuador and Peru.
Level:	Organizations
View of capacity strengthening:	Supporting Indigenous self-determination.
Genesis:	Founded in 1997 in response to a call to action by the Achuar people whose lands and culture were threatened by extractive economic development.
Goals:	**1)** Promoting respect for collective rights, territorial defense, and the rights of nature; 2) supporting local processes seeking to protect areas of high biodiversity; **3)** supporting alignment of and advocacy by Indigenous organizations locally, regionally, nationally, and globally.
Approaches:	Direct assistance (unrestricted funding); technical assistance (e.g., legal defense); partnerships.
Modalities:	Workshops & trainings; peer networking; experiential learning.
Impact:	Avoided deforestation and biodiversity loss in the Ecuadorian Amazon; a united voice on Indigenous land governance and vision for sustainable development.
Success factors:	**1)** Respect for spirituality and ceremony as guiding forces; **2)** holistic decision making that honours the reciprocal relationship with Indigenous peoples; **3)** responding to the evolving needs of Indigenous communities as they work through local processes.

Introduction

Sumak Kawsay = a “good life” or “life in harmony” in the Kichwa language. It is a concept rooted in Indigenous practices and beliefs encompassing i) an indigenous and nature-focused worldview, ii) community, iii) an economy based on solidarity, and iv) traditional knowledge.

Fundación Pachamama is an Ecuador-based non-profit non-governmental organization founded in 1997 with a mission to support self-determination of Amazonian territories and Indigenous Peoples and the permanent protection of the Amazon rainforest from accelerated destruction. Founded on the Indigenous cosmovision of wellbeing (*Sumak Kawsay* in Kichwa), Fundación Pachama promotes the transition to development models that respect all living beings and recognize human rights and the rights of nature. Through policy advocacy, legal defense, and programs that support organizational strengthening, bioregional planning, maternal and infant health, and sustainable forest-based economies, Fundación Pachamama works alongside Indigenous nations and native communities in the Ecuadorian and Peruvian Amazon to create the enabling conditions for Indigenous self-determination and governance. This case study focuses on Fundación Pachamama’s programming on organizational strengthening.

In addition to the references noted, the following case study draws from a key informant interview with Belen Paez, President of Fundación Pachamama at the time of writing.

Focal geographies

- The Amazon in Ecuador and Peru

Sector

Human rights, ecosystem conservation, climate change

Level of capacity

Organizational and community capacity

Target populations

- **Direct:** Indigenous and native human communities and local ecosystems throughout the Ecuadorian Amazon and the northern Amazon of Peru.
- **Indirect:** the global population benefitting from avoided deforestation of the Amazon and protection of forest and soil carbon stores.

Operational context

Although officially registered in 1997, Fundación Pachamama was established in 1996 as an environmental non-governmental organization in Ecuador in response to a call to action by the Achuar people whose lands and culture were threatened by mainstream worldviews of modernity based on the extraction of non-renewable resources. A year earlier, John Perkins (a best-selling author and former Peace Corps volunteer) and Bill and Lynne Twist (renowned social justice author) had co-founded Pachamama Alliance, a U.S. based non-profit, after travelling to Ecuador at the invitation of a group of young Achuar leaders, who, through ceremony, had shared their vision for self-determination and requested assistance to realize this vision. Since their founding, these sister organizations have played synergistic roles. Pachamama Alliance offers educational programming for audiences from the "Global North", spiritual retreats and biocultural journeys to the Amazon rainforest in partnership with Achuar and Sapara people, and fundraising to support the Pachamama Foundation's strategic programming in the Amazon rainforest and the protection of Indigenous lands and culture on their own terms.[1,2]

In direct response to the request from the Achuar people, Fundación Pachamama's initial focus was on supporting the Achuar people in asserting their title to their ancestral lands. Fundación Pachama supported the creation of an Achuar organization through legal statutes recognized by the State, provided funding to rent a small office with a typewriter and a desk, and to hire a lawyer. This initial support gave way to a longer-term process that included land surveying and mapping, discussions with neighbours regarding boundaries, and the development of an integrated management plan. Within two years of its founding, Fundación Pachamama extended their reach in the South-Central Amazon and began working with the Sapara and Shiwiar people.

Factors that shaped Fundación Pachamama's founding in the late nineties included the following:[3,4,5,6]

- The extractive neo-liberal development model pursued by Ecuador, with a modernization agenda that included unregulated oil extraction in the Ecuadorian Amazon region, mining, linear infrastructure expansion, and industrial agriculture.

- A narrative of the Amazon as a region to be conquered, with its inhabitants backward, untrustworthy, ill prepared to participate in Ecuador's modern industrial economy as obstacles to development. This narrative made it easier to invalidate Indigenous tribes' land claims.

- Growing social, environmental, and cultural costs related to oil exploration and extraction in Ecuador, including increased poverty rates between 1975 and 1992, with the most marginalized groups realizing the least gains in economic wealth even as national gross domestic product increased. In Napo and Sucumbios provinces of the Ecuadorian Amazon, for example, oil development activities resulted in extensive environmental damage from deforestation, water and soil contamination from oil spills. In addition, Indigenous peoples in oil development areas faced land displacement, migrated to urban areas, grew dependent on the global market, and saw their traditional relationships with the forest disrupted.

Fundación Pachamama's operational context has changed significantly in the past 25 years, with the organization's President highlighting three main trends:

- **Increased recognition of Indigenous peoples' right to self determination:** influenced by Indigenous peoples' movements and jurisprudence generated through high profile court cases, states in South America are increasing recognizing these rights, including the right to free, prior, and informed consent and collective land rights. Ecuador's 2008 constitution incorporated a suite of rights concerning Indigenous communities, peoples, and nations including the recognition of collective land ownership as an ancestral form of territorial organization.[7]

- **A growing movement of Indigenous environmental and land defenders:** since the 1980s, hundreds of Indigenous communities and their organizations in the region (Ecuador, Peru, Bolivia, and Brazil) have led different forms of resistance and negotiation against State-sanctioned extractive activities in pursuit of their right to self determination and to their vision for the future on their territories. Although having faced instances of repression,[8] over time, and with communities in Ecuador on the vanguard, these frontline communities have strengthened identities, gained political power and the ability to slow down and stop large scale mining, roadway, and hydroelectric projects on grounds of human and Indigenous rights violations.[9]

- **Increasing Indigenous visibility and engagement in international policy forums:** whether in biodiversity, climate, or other global summits where economic and social rights are under discussion, Indigenous peoples are no longer simply observers but active participants with increasingly louder voices and stronger clout.

Goals and objectives of capacity strengthening

The Pachamama Foundation's ultimate goal is to *"preserve tropical forests and develop a regenerative system"*, as a contribution to preserving all living beings on the planet. Through their programming, the organization promotes the protection of the rights of nature and the recognition of Indigenous worldviews, with their objectives including the following:

- **Supporting scalable economic alternatives to development:** created in 2017 in response to an urgent call by Indigenous peoples of Ecuador and Peru to protect 35 million hectares of the Amazon, the Sacred Headwaters Alliance program is working on implementing an Indigenous-led bioregional plan.

- **Enhancing maternal, infant, and reproductive health in the Ecuadorian Amazon:** the program works with Indigenous women to strengthen and amplify their collective voices, promoting the protection of their rights against domestic violence, inequality, and lack of access to health services.

- **Promoting forest economies:** the program promotes innovative economic initiatives based on the use of local biodiversity, with outcomes including decent jobs for Amazonian people, food sovereignty, and strengthened economic rights of communities.

- **Supplying legal defense for human rights and the rights of nature:** the program contributes to developing national and regional jurisprudence in the service of guaranteeing human rights and the rights of nature. The organization identifies precedent-setting cases of rights violations and pursues litigation strategies robust to national and international courts.

- **Advocacy on monitoring and forest protection in international policy forums:** with the aim of protecting Amazonian ecosystems, the program engages in advocacy against unsustainable national policies, including participating in forest-related and climate change discussions nationally and internationally.

- **Strengthening Indigenous organizations:** the program supports processes of Indigenous self-determination and governance in the context of the Sumak Kawsay (good life) worldview that promotes the harmonious co-existence of humans and nature.

This case study centres on the Pachamama Foundation's work on organizational strengthening.

Capacity strengthening approach

Organizational strengthening

Fundación Pachamama's organizational strengthening program integrates five mutually-reinforcing strategies that involve the following,[10] with capacity strengthening approaches including direct assistance (unrestricted funding), technical assistance (e.g., legal defense), and partnerships.

- Strengthening administrative, financial, and operational capacity of Indigenous organizations;
- Promoting training as a mechanism for sharing information for decision-making by Indigenous peoples and Nations;
- Supporting the convening of Indigenous congresses, assemblies, strategic meetings, and other fora for territorial governance and self-determination; and,
- Supporting alignment of and advocacy by Indigenous organizations locally, regionally, nationally, and globally.

Programming in support of organizational strengthening in Ecuador has not varied over the years, with a main component being the provision of yearly unrestricted funding to Nations. Via monthly payments, Fundación Pachamama supports the day-to-day operations of Indigenous Nations' offices. This funding ensures organizations can literally "keep the lights on" as well as maintain access to the Internet, purchase equipment, and hire specialized administrative services, such as an accountant or Monitoring & Evaluation specialist to assist with reporting.

Experience over the years suggested that access to unrestricted funding was important but insufficient, integrating the provision of targeted technical support on self-determined priorities. Indeed, Fundación Pachamama provides demand-driven technical support to a major Regional Indigenous Organization (Confederation of Indigenous Organizations of the Ecuadorian Amazon - CONFENIAE), the Kichwa, Achuar, Shuar, Sapara, Shiwiar, and Andwa Nations, among others. Topics covered include awareness raising on statutory rights; legal defense strategies against rights violations; surveying and land titling processes and requirements; dealing with illegal occupations, land, and resource uses.

Fundación Pachamama has now established thirteen interinstitutional arrangements with Indigenous organizations in the Amazon. These arrangements outline priorities of the Indigenous organizations, and mutual roles and responsibilities. Despite the close working relationship with Indigenous representatives from each Nation or organization, Fundacion Pachamama does not pay them a salary; these Indigenous representatives serve institutional strengthening roles voluntarily.

Beyond capacity strengthening of individual Indigenous organizations, Fundación Pachamama achieves scale through their work by supporting governance mechanisms and institutional structures of governing councils across Nations. It took Fundación Pachamama at least ten years to strengthen their own internal capacity to be of service to Nations at this high level, as staff learned how to work with the distinctions of each Nation and what delivery models were most effective for each situation.

Human rights and rights of nature

Linked to programming on organizational strengthening are the services Fundación Pachamama provides to strengthen the capabilities of Indigenous peoples to assert their rights.[11] Specifically, Fundación Pachamama delivers training to Indigenous Nations in the Ecuadorian Amazon in i) rights and justice, ii) democracy and strengthening of governance systems, and iii) leadership, advocacy, and communication skills. Additionally, their

advocacy work is aimed at strengthening democratic processes of local governments in the Amazon region. Their projects focus on capacity strengthening on Open Government, for increased transparency and participatory decision-making, and for the establishment of permanent accountability and anticorruption mechanisms.

Duration

Fundación Pachamama was founded in 1997 (Figure 8). From the start, the vision for their work included a focus on strengthening processes. Initially focused on immediate capacity strengthening needs of Indigenous communities and legal defense over rights violations, the organization's scope of work has expanded along with the needs of communities served. In addition to supporting the strengthening of Indigenous organizations and governance systems, Fundación Pachamama's services evolved to address the need for viable solutions to sustain local economies. Although the Organization has supplied services continually since its initiation, the Government of Ecuador dissolved Fundación Pachamama in 2013 due to security allegations in connection to protests against rights violations during oil lease auctions.

Operational structure and financials

Fundación Pachamama is a not-for-profit environmental organization, registered under Ecuador's Ministry of Environment. The organization has a President, two Directors (one for work in Ecuador and another for work in Peru), thirteen staff representing technical and administrative roles, and eight advisors. Fundación Pachamama's President sits on the executive team of the sister organization, Pachamama Alliance. Pachamama Alliance is a U.S. based, tax exempt (a 501 (c) (3)) not for profit organization. Aside from direct financial contributions to Fundación Pachamama, Pachamama Alliance coordinates special projects and plays an advisory role.

Fundación Pachamama's operations are guided by plans at several levels, and a schedule of staff meetings. The organization starts with setting a ten-year vision, identifying key aspirations, indicators of a decade "won", and a theory of change. Each program has its own objectives and targets, all contributing to the longer-term vision. Interinstitutional agreements between Fundación Pachamama and Indigenous Nations or Indigenous Organizations are also key planning tools. Organizational culture is important to Fundacion Pachamama, and they use a series of semi-annual, quarterly, monthly, and weekly meetings to bring staff together and check in on progress and plans. For example, program leads and staff gather in a virtual circle every Monday, with the purpose of fostering alignment across teams and strengthening relationships.

Fundacion Pachamama's staff is diverse in knowledge, skills, and identities. Because of the organization's focus on social issues and human rights, core staff commonly have backgrounds in law, anthropology, sociology, accounting, and administration. As programming evolved over Pachamama's 25 years, so did the technical backgrounds required, which have included agroforestry, water management, geography, and renewable energy. Staff also have diverse identities: about 50% of staff are Indigenous and 50% are under 30 years of age. Staff from Quito tend to work on policy advocacy, management, and administration in Pachamama's head office, whereas the rest of staff are deployed to the hinterlands, taking on activity implementation. Increasingly, implementation of activities is done in collaboration with other NGOs, local governments, and universities, which is important to Pachamama for two reasons: 1) to leverage capacity that exists locally and 2) to create ecosystems of collaboration and cut down on competition over scarce resources.

Fundación Pachamama has seen steady financial growth over its 25 years and has diversified its funding sources. For its first ten years of activity, Pachamama Alliance was the organization's sole funding source, which was raised from individuals' donations. Reliable and unrestricted funding through this arrangement gave Fundacion Pachamama the flexibility to incrementally develop program offerings in response to calls for support from Indigenous Nations and organizations. After twelve years of operations, Fundacion Pachamama diversified funding sources to include international NGOs, foundations, and international cooperation from The Netherlands, France, and Italy. This did not happen overnight. The organization first started working with smaller

international NGOs on a series of small projects and as Fundación Pachamama's credibility and capacity increased, the organization was in a position to expand their portfolio of work with multiple, larger, and more demanding funding partners.

Early 1990s - A call to action by Achuar elders and shamans who dreamed of life-threatening events in the Amazon and witnessed devastation from extractive resource development

1995 - John Perkins (once Peace Corps in the Amazon), Bill & Lynne Twist (renowned social justice author) visit Ecuador's Amazon at invitation of Achuar people and agree to co-found *Pachamama Alliance*

1996-1997 - The call to action by Achuar youth and their dreams for the future led to the creation of a sister organization, **Fundación Pachamama**

Fundación Pachamama starts organizational strengthening with the Achuar people

Over **10 years** Fundación Pachamama expands support to other Indigenous nations and native communities in the Amazon, increases program offerings. **2008** - new Ecuadorian constitution recognizes the rights of nature

2013 - Shutdown of Fundación Pachamama by Ecuadorian government on charges of policy interference and threats to state security linked to protests over FPIC violations prior to oil rights auction

2017 - Fundación Pachamama officially reinstated, with largely uninterrupted between 2014-2017, operating as Terra Mater

Present day operations, including 7 programs, notably supporting the Alliance of Sacred Headwaters of the Amazon and bioregional planning covering 35 million ha of continuous tropical forest

Figure 8: Fundación Pachamama's story, including events leading to its establishment and changes in status (Sources: interview B. Paez, November 2023; https://www.pachamama.org.ec/nuestra-historia/)

Detailed financial information for Fundación Pachamama is not publicly available. However, the organization's President remarked that Fundacion Pachamama's annual budget ranged between US$800,000 and US$1,300,000 for several years. Building on a solid foundation and track record, the organization is now projecting growth in the next five years to the tune of an annual budget of US$10,000,000.

Accountability

- **Upward accountability:** accountability to funders (donors) takes place through compliance with monitoring, evaluation, and reporting requirements. Beyond appeasing funders, Fundacion Pachamama sees the value of investing in their monitoring, evaluation, and learning system across program areas, as a tool to understand and demonstrate their management performance and impact. In addition to key performance indicators of interest to funders, Fundación Pachamama's monitoring framework is grounded in indicators reflecting the right to living well and the rights of nature in the Ecuadorian Constitution. The organization uses project-level indicators as well as these systems-level indicators to track their contributions to Ecuador's transition to a society that upholds those rights.

  Gaining donors' acceptance of funding organizational strengthening continues to be a work in progress, and grant applications and reporting templates generally exclude related line items. Throughout the years Fundación Pachamama has been able to include these costs by spreading them across accepted spending categories. Although many donors are uninterested in funding organizational strengthening, some are open to learning more and come to see organizational strengthening as more than overhead costs.

- **Downward accountability:** Fundacion Pachamama's origins emphasized their drive to be in service of Indigenous Nations in the Amazon. The organization's evolution, shaped by partners' shifting needs, has further cemented this commitment. Interinstitutional agreements and related work plans with Indigenous Nations and organizations formalize and operationalize mutual accountability.

Results and impact

Two inter-related results stand out for Fundación Pachamama's President:

- **Avoided deforestation and biodiversity loss in the Ecuadorian Amazon:** A key result of Fundación Pachamama's work is their longstanding ability to offer unrestricted funding to Indigenous organizations for organizational strengthening and the related impact stemming from locally-led action. To date, Fundacion Pachamama's work with Nations has reached some 89 Indigenous communities. Because their closest relationship has been with the Achuar people, more funding has flowed to them compared to other Nations, and their impact is remarkable as the Achuar have succeeded in conserving 785,000 hectares of tropical forest and in attracting allies with deep pockets. Indeed, the avoided deforestation and biodiversity loss in South-Central Ecuadorian Amazon is held up as an important milestone attributable to Fundacion Pachamama's funding for organizational strengthening and technical assistance.

- **A united voice on Indigenous land governance and a vision for sustainable development:** Back in 2015 some Indigenous Nations in the Ecuadorian Amazon supported oil extraction. Today, Indigenous governance over territories in the Amazon speaks with one voice, once vision, with very few exceptions. This alignment has yielded political power that has supported self-determination and strategic clarity on permissible activities on the land. The Alliance of Sacred Watersheds (*Alianza de Cuencas Sagradas*, in Spanish), made up of 30 Indigenous Nations and organizations in the Ecuadorian and Peruvian Amazon, is a tangible manifestation of a united Indigenous front toward permanent forest protection.[12]

Supporting Indigenous self-determination away from extractive economic development is not without risk and has made Fundacion Pachamama a political target at times. As mentioned previously, Ecuadorian President Correa dissolved the organization in 2013 for opposing the expansion of the fossil fuel frontier in the Amazon.

Success factors

Fundación Pachamama attributes their success and the effectiveness of their strategies to three factors related to their organizational values and strategy:

- **Respect for spirituality and ceremony as guiding forces:** the organization's genesis itself was a response to a vision delivered through ceremony with shamans. Since Fundacion Pachamama's founding, its leaders have held great devotion toward and have paid close attention to traditional spiritual knowledge and guidance provided by forest spirits. Throughout the organization's 25 years respect and loyalty toward that sacred space has remained strong, thanks, in part to the organization's institutional memory. Staff, including the organization's current President, were part of the inner circle of trusted advisors who answered the Achuar peoples' call to action. Fundación Pachamama has found the right balance between designing and implementing projects with robust methods and clear objectives and staying open to receiving guidance from beyond.

  For example, alongside elders in the Achuar communities, leadership at Fundación Pachamama partakes of Wayusa (*ilex guayusa*). This is a ceremony practiced by the Kichwa people in the Amazon involving communal sharing of sacred tea and interpretation of dreams. Such ceremonies help communities make sense of their current challenges and guide the collaborative work communities do with Fundación Pachamama. Although participating in such practices have left the organization open to criticism by other NGOs and funders at times, for Fundación Pachamama these practices provide a blueprint for their operations that interweaves Indigenous beliefs and ways of knowing.

- **A focus on social processes:** because of the organization's commitments to strengthening Indigenous governance and locally-led processes, Fundacion Pachamama's programmatic focus and breadth has shifted over time with local communities' evolving needs. An initial focus on legal defense and land rights has expanded to addressing other capacity strengthening needs such as those related to securing sustainable, viable, self-determined livelihoods such as through the creation of local bio-economies. The organization's focus on processes has also helped to detect and understand changes at broader scales, incorporating this knowledge into their strategies.

- **Holistic and collective decision making that honours the reciprocal relationship with Indigenous peoples:** part of the draw that younger staff see in joining and staying at Fundación Pachamama is the opportunity to belong to an organization that makes decisions holistically, taking into account the spiritual life of Indigenous peoples they work alongside, using program design approaches that support collaboration and are guided by a caring, respectful relationship with their Indigenous partners. Staff are not only exposed to these practices but also learn and grow the required skills and attitudes.

Enabling national policy and legal frameworks have also influenced Fundacion Pachamama's effectiveness. Their organizational strengthening and governance work with the Achuar people, with ancestral territories that transcend geopolitical borders across Ecuador and Peru illustrates differences in progress linked to national policy / political circumstances. Relative to Ecuador, which has enshrined several Indigenous rights and rights of nature in its constitution, rights-recognition in Peru is not as advanced and enforcement of environmental regulations not as strong. Therefore, even though Fundacion Pachamama's zone of influence is bi-national, as dictated by the Achuar people, their rate of progress and nature of their work differs whether on one or another side of the border.

Constraints

For Fundación Pachamama, constraints relate to external conditions and structural challenges:

- **Structural issues linked to extractive economic development:** the combined effect of ecological, socio-demographic, and economic trends linked to fossil fuel extraction, legal and illegal mining pose mounting threats to the health of the Amazon rainforest and Indigenous communities on these lands. New sources of funding are flowing to local governments for major infrastructure projects, Ecuador's Amazon region is facing high rates of population growth, with related environmental pressures, and global climate change is accelerating the change of reaching a tipping point whereby major a dieback of the Amazon rainforest is expected. These global and national trends have local impacts, including reduced food sovereignty and contamination of rivers used for drinking and other uses.[13]

- **Threats to cultural continuity:** intergenerational transmission of cultural practices, languages, and traditions in the Amazon is adversely affected by significant youth migration to cities in search of education for themselves and their children. Fundación Pachamama's President refers to this as a "cultural tipping point" and indirectly to sentiments of grief and resignation: *"…we face cultural loss, these stores of traditional knowledge, which are enormous and that is also a very big challenge to confront, which we would like to do to permanently preserve the Amazon and its traditions. So, there is nothing more than gathering in a big ceremony to ask that all these things can be faced in the best way."* Indeed, research underscores an uncertain future for Indigenous ways of life based on land and water stewardship, although suggest that they may be preserved.[14]

- **Lack of direct access to funding:** Fundación Pachamama regards the emergence of Indigenous-led funds and Indigenous alliances with the organizational capacity to manage finances as a positive step in advancing Indigenous self-determination in the Amazon. Nevertheless, at least two factors could slow down or deter fair, rapid, transparent, and direct access to climate and conservation finance. First, major international financial institutions and international NGOs channel funding through national and sub-national governments, who are then charged with disbursing funding more broadly. However, public sector inefficiencies can pose bottlenecks to this process. As well, according to Fundacion Pachamama's President, instead of pursuing allyships with Indigenous organizations toward shared goals elected officials lead with fear, thinking that well-funded Indigenous organizations will paralyze the country. Second, large conservation NGOs are not always well equipped to work with Indigenous peoples (e.g., adopting compressed consultation periods) and would do well to partner with local and national organizations like Fundacion Pachamama, which have decades of experience. For its part, Fundacion Pachamama is actively supporting "readiness" to absorb finance, with readiness exemplified by Indigenous organizations that are duly registered, with life plans, baseline assessments, and networks of youth guardians to support monitoring.

Replicability

The unique circumstances surrounding Fundación Pachamama's genesis and first decade of operations, with the channeling of unrestricted funding from its sister organization, make wholesale replication impractical. However, several elements of their approach can be replicated, such as offering yearly funding to Indigenous Nations for organizational strengthening, coupled with targeted technical assistance to overcome major barriers standing in the way of developing local governance processes. In politically-sensitive geographic areas that are hotspots for economic development, the ability to offer legal defense services and programs focused on generating or formalizing local economies is important.

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CASE STUDY 6: CENTRO PARA EL DESARROLLO DEL INDÍGENA AMAZÓNICO (CEDIA)

https://cedia.org.pe/es/

Community land titling in Loreto | Photo Credit: CEDIA

Geography:	The Peruvian Amazon.
Level:	Organizations
View of capacity strengthening:	Working with Indigenous Peoples to strengthen community institutions for the protection of land rights.
Genesis:	Founded in 1982 by a former Peruvian public servant who had worked on the Law of Native Communities and Agricultural Promotion.
Goals:	**1)** Fostering organizational capacities for land and natural resource management; **2)** supporting the development and implementation of community sustainability plans ("life plans"); and **3)** strengthening community capacity for their inclusion in protected areas planning
Approaches:	Training of trainers (community facilitators or *promotores*); technical assistance; partnerships.
Modalities:	Workshops and trainings; tools and guides.
Impact:	Improved natural resource and land management by 35 Indigenous communities, 450 native and “campesino” communities supported, over 20,000 people served (trained, advised), assisted 195 communities in developing life plans.
Success factors:	**1)** Investing in learning about Indigenous communities (history, visioning, language provenance, values, expectations); **2)** establishing and maintaining trusted relationships with communities; **3)** partnering with governments to support enforcement of laws and policies; **4)** social science capacity.

Introduction

Centro para el Desarrollo del Indígena Amazónico (CEDIA) is a Peruvian not-for-profit non-governmental organization founded in 1982 with a mission to promote and facilitate participatory processes for sustainable land use planning and management of the Peruvian Amazonian territory, strengthen institutions and capacities of Indigenous communities and the organizations that represent them, support participatory management of protected areas, and promote the fundamental right of Indigenous people in the Peruvian Amazon. Established by a former Peruvian public servant who had worked on developing the national *Law of Native Communities and Agricultural Promotion*, which recognized communal land rights, CEDIA works alongside Indigenous and native communities in the Peruvian Amazon to expand community forest management and biodiversity conservation by titling Indigenous communal lands and strengthening management capacity and organizational governance of these territories and resources. This case study focuses on CEDIA’s programming on organizational strengthening.

In addition to the references noted, the following case study draws from a key informant interview with Lelis Rivera Chávez, Executive Director of CEDIA at the time of writing.

Focal geographies

- The Amazon in Peru, principally Loreto, Ucayali, Madre de Dios, Cuzco, and Ayacucho.

Sector

Human rights, ecosystem conservation.

Level of capacity

Organizational and community capacity

Target populations

- **Direct:** Indigenous, native, and "peasant" communities and local ecosystems in the Amazon of Peru.
- **Indirect:** national and global population benefitting from biodiversity and cultural preservation in the Peruvian Amazon; the global population benefitting from avoided deforestation of the Amazon and protection of forest and soil carbon stores.

Operational context

Established in 1982, CEDIA is the result of the founder's experience as a Peruvian public servant working on native community land rights at a period in history marked by the aggressive incorporation of the Peruvian Amazon into national development processes. Globally significant for its biodiversity and large tracts of primary rainforest, the Peruvian Amazon also harbours 60 distinct groups of Indigenous peoples, including about 15 group living in voluntary isolation with no regular outside contact.[1] Between the 1960s and the 1980s the Peruvian Amazon saw a settlement boom that included road construction, expansion of the agricultural frontier, fossil fuel exploration and exploitation, and commercial forestry, affecting Indigenous-occupied lands and spreading unjust practices resulting in indentured labour.[1,2,3] The military government at the time passed the *Forestry and Wildlife Law (1975)*[4] and the *Law of Native Communities and Agricultural Promotion (1978)*[5], both emphasizing social policy objectives, including supporting the holistic, equitable use of renewable natural resources by native communities. CEDIA's founder, anthropologist Lelis Rivera Chávez, was involved in implementing the Law of Native Communities and Agricultural Promotion, playing a role in raising awareness of the recognition of Indigenous communities' right to claim legal personhood and title to their ancestral lands under Peruvian law. Political will to follow through on recognizing and granting land titles to Indigenous communities waned with the end of the military government. With his government experience and intimate knowledge of challenges faced on the ground by Indigenous communities in the Peruvian Amazon, Mr. River Chavez was determined to continue carrying the message on communal land rights and working with Indigenous peoples on community institutional strengthening in defense of those rights, although in a new role: as the head of an NGO.

Other factors that shaped CEDIA's establishment in the early 1980s included the growing Indigenous movement in the Peruvian Amazon. This movement and the (re)construction of Indigenous identities started in the 1960s and gained organizational strength with the Law of Native Communities and Agricultural Promotion[6] and the establishment of Indigenous federations at local, regional, and national levels.[7] Organization in federations, as a function of geographic and ethnic characteristics, was a strategy to defend Indigenous ways of life, territories, and self-governance systems, within a context of interculturalism or respect across cultures. A focus on land as identity also served to highlight the link between Indigenous communities' wellbeing, the health of the Amazon rainforest, and the relationships between communities and the forest, illustrating alternative models of development.[6]

Goals and objectives of capacity strengthening

CEDIA helps Indigenous and local communities achieve land ownership and management rights through Peruvian law, facilitates participatory spatial planning processes, promotes co-management of protected areas, and supports sustainable resource management by Amazonian communities. The principles underpinning CEDIA's work are as follows: i) rights recognition, ii) CEDIA's bridging role between the State and communities on legal personhood and land rights, iii) a watershed-based approach to their interventions.[8] CEDIA works through five interconnected strategic pillars:

- **Securing land tenure** through physical demarcation and legal titling of communal lands held by native, campesino ("peasant"), and riparian communities in the Peruvian Amazon. This work responds to communities' historical aspirations to gain statutory recognition over their traditional lands and governance systems, enabling the respectful treatment of forests and aquifers in support of community wellbeing.

- **Strengthening management capacities of communities and their organizations**. This work involves capacity strengthening for community management, based on the legal guidelines expressed in the law of native communities and the law of peasant communities. Through the development of management instruments, such as community statutes or "life plans", communities express the ways in which they function internally and what they hope to achieve to guarantee their wellbeing.

- **Designing and implementing livelihood alternatives** based on sustainable uses of natural resources. This work involves generating resource management plans for subsistence and commercial purposes, guided by community life plans as well as economic, social, ecological, and equity considerations.

- **Participatory protected areas planning**. CEDIA supports the declaration of protected areas as a way to guarantee sustainable stewardship of culturally-significant places. Although the purposes and contexts surrounding the protected areas that CEDIA has helped establish differ, the demand for the organization's involvement stems from local communities.

- **Supporting the protection of Indigenous peoples living in voluntary isolation and initial contact**. These groups are characterized by their immunological and cultural vulnerability, and their rights are protected by Peruvian law. CEDIA pioneered the establishment of reserves for Indigenous peoples living in isolation and initial contact and continues this work alongside the Ministry of Culture and Indigenous organizations now that a designated law exists.

CEDIA's projects often integrate at least two strategic pillars in their design. However, capacity strengthening of communities and their representative organizations crosscuts nearly all CEDIA's interventions. CEDIA's experience has shown that generating positive and durable changes is only possible if that change is locally led.[8] Capacity strengthening efforts pertain to three types of process: 1) fostering organizational capacities for land and natural resource management; 2) supporting the development and implementation of community life plans; and 3) strengthening community capacity for their inclusion in protected areas planning.

This case study centres on CEDIA's work on strengthening organizational capacities for land and natural resource management.

Capacity strengthening approach

CEDIA's approach to strengthening organizational capacities centres on technical assistance, training workshops, and partnerships.

Rights and title

CEDIA's service offerings began with technical assistance to physically demarcate and legally title communal lands. CEDIA's leadership saw statutory recognition and title of communal lands as a prerequisite for Indigenous and community-led natural resource management. However, the organization was demand driven and recognized that conflicts between clans in some areas could prevent the assertion of Indigenous land rights across vast territories. CEDIA worked alongside interested Indigenous and native communities for their communities to gain legal personhood under Peruvian law (the law of native communities). This involved providing technical assistance to a community to increase their capacity to register and control assets (property), including land surveying and legal advice to meet all regulatory requirements. Once the State recognizes the community as a legal entity, the community can hold the title to their land, which, according to Mr. Rivera Chavez is the territory upon which their economic activities depend.

Organizational strengthening

CEDIA's community organizational strengthening centres on the processes shown in Figure 9, which comprise three distinct training modules: internal community governance, knowledge of the State, and community planning. CEDIA's methodology was built and refined over their 40+ years of operations.

The first module covers community governance, addressing questions such as what is a community under Peruvian law, what are its component parts, where did the community come from and where is it going, what does land mean to the community? what are the community's decision-making processes? Building on traditional practices, this module addresses the creation or strengthening of institutions to address legal requirements and community decision-making, such as the need to elect a board, hold community assemblies and annual general meetings, create management instruments, among others. This module also includes specific training to enhance the capacity of individuals to serve community governance roles, such as board roles.

Figure 9: CEDIA's capacity strengthening processes targeting communities' organizational development for land and natural resource management (Source: Author's creation based on an interview with Mr. Rivera Chavez).

The second module focuses on the State and how it relates to the community. It covers questions like what are the levels of government? what is each level's jurisdiction? what services to communities and individuals does each level deliver? The objective is for communities to understand how governments work and to identify potential government allies with catchments in their watersheds (e.g., if the community is seeking electrification or needs a school).

The third module culminates in the development and roll out of a community life plan. Co-developed with CEDIA, a community life plan looks back at where the community has come from and looks forward 20 years into the future. The life plan is a concrete planning tool and an expression of community cultural beliefs, value systems, land and resource management practices, among others. The life plan also specifies implementation partners. The 20-year life plan is approved by the community assembly and guides the development of annual operating plans, which are then taken to government authorities to support implementation.

CEDIA capacity strengthening strategy relies on a team of Indigenous community facilitators or "promotores" in Spanish, through a form of training of trainers. CEDIA builds teams of Indigenous *promotores* that work in different watersheds and with distinct communities that speak their languages. CEDIA trains *promotores* to be permanent monitors at the community level, acting as a liaison between the technical team and community members to ensure key milestones are completed. While the technical team undertakes site visits at certain milestones (e.g., training on record keeping from community assemblies), leaving guidance on tasks to be completed, promotores emphasize learnings and support follow up by interacting in the languages community members speak. In delivering trainings, technical team members and promotores work together through intercultural dialogue to achieve the best possible cultural fit between organizational strengthening concepts and community worldviews. As noted by Mr. Rivera Chavez, *"it is important for us to get to know the cultures of each group we work with because if you do not talk to them in their own conception of the world, you are talking to*

them about such abstract things that they are not going to understand anything at all. Community members we work with are wise and pragmatic."

CEDIA's capacity strengthening program also relies on in-person workshops, frequent site visits by technical staff to the communities, and continuous monitoring and accompaniment by locally-based promotores. However, the global Covid-19 pandemic prevented the technical team from undertaking direct training and led CEDIA to develop kits for remote capacity strengthening, which included printed handouts and audiovisual aids with training content. These kits were distributed to communities and promotores' role centred on disseminating these materials, reviewing guidance on their use, and answering community members' questions. When safe to do so, CEDIA's technical team then made a site visit to evaluate the results of capacity strengthening and deliver refresher training, as needed.[8]

CEDIA works in partnership with government agencies and government-supported entities and currently has formal agreements with fourteen ministries, regional management authorities, municipalities, and research institutes. Each agreement has a different purpose but are all in service of the needs of the Indigenous and native communities CEDIA works with. Notably, CEDIA's role can include technical backstopping, supporting government entities in discharging their duties. For example, regional directorates of the Ministry of Agriculture are responsible for recognizing native communities as legal entities and their land claims but are severely understaffed and under-resourced (e.g., boats and equipment, fuel costs). CEDIA supports this process by delivering training workshops, loaning technical staff, or undertaking the technical work required, leaving the government entity to complete final sign offs.

Duration

CEDIA was established in 1982, with an initial focus on securing the recognition of native communities and their land rights. Programming to address organizational strengthening followed a few years later and over the organization's 40+ years of existence their offerings grown to address the five strategic pillars described under Goals and objectives of capacity strengthening. The organization's geographic reach has also expanded, having started with a focus on watersheds in Cuzco and Loreto, gaining a presence over time in Ucayali, Madre de Dios, and Ayacucho, in the Peruvian Amazon.

Operational structure and financials

CEDIA is a not-for-profit non-governmental organization registered in Peru. The organization is government by a three-member board of directors formed by CEDIA's executive team. Along with administrative support, external relations, and communications functions, CEDIA's team brings a diversity of specialisms, including capacity strengthening, natural resource management, sociology and social sciences, geographic information systems (GIS), field logistics, law, among others. CEDIA's headquarters are in Lima and the organization has three regional offices, in each of Cuzco, Iquitos, and Ucayali. CEDIA's 40 staff are distributed among these four offices.

Although structured as projects, CEDIA's operations are guided by a strategic, long-term vision to consolidate Indigenous and native land rights and land management capacity in the Peruvian Amazon, watershed by watershed. CEDIA's experience and demonstrated impact has shown that recognizing and securing communal land rights is beneficial for nature and people: not only is it an effective conservation strategy but the respectful treatment of forests and aquifers guarantees food security.[8] Despite CEDIA's long-term vision, financial constraints and reliance on short-term donor funding has forced the organization to break up their work program into bite-sized pieces to meet funder requirements and take adapt to fluctuations in funding flows. As explained by Mr. Rivera Chavez, *"things have been done in doses, but they have been sequential, until forming a whole. The perspective started from the beginning, we knew where we wanted to go, but there was no money, you have to make progress in doses. So, this is what has happened in many watersheds."* For example, between 2018 and 2021, CEDIA implemented nine projects overall, with five projects comprising follow up work supported by the same funders and implementation partners.[8]

CEDIA's reach has increased over its 41 years, enabled by greater diversity in funding sources and efficiencies obtained through replication, where appropriate. CEDIA's main funders have been and continue to be philanthropic organizations and environmental NGOs, with current funders including the Andes Amazon Fund, the Gordon and Betty Moore Foundation, Rainforest Trust, and Nouvelle Planète.[8] CEDIA has also raised funds for their institutional strengthening work through Conservation Allies, a U.S. based donation platform that connects U.S. donors and conservation organizations operating in the most biodiverse and at-risk areas of the world.[9] As the organization has matured, CEDIA's funding sources have grown to include international cooperation and development assistance, including the European Union and the U.S. Agency for International Development (USAID). CEDIA now has the capacity and reputation to be a technical member of consortia bidding to implement international development projects.

Detailed financial information for CEDIA is not publicly available. However, the organization's Executive Director remarked that current project budgets are around US$150,000 per year, with nine active projects amounting to a ballpark annual budget of US$1,350,000. In comparison, CEDIA's budget in its first few years of operations amounted to about US$12,000 (or US$39,000 in current day dollars).

Accountability

- **Upward accountability:** accountability to funders (donors) takes place through compliance with monitoring, evaluation, and reporting requirements. In addition, CEDIA maintains interinstitutional agreements and letters of understanding to support collaboration with national, regional, and local government entities, research institutes, and civil society organizations, with each agreement specifying mutual accountabilities. Finally, CEDIA published periodic results reports (called *"memoria institucional"* in Spanish) describing their priorities and activities over a five-year period and related results.
- **Downward accountability:** Accountability to Indigenous, native, and local communities and their representative organizations is woven throughout CEDIA's work in line with their five strategic pillars. In strengthening management capacities of both rights holders (native communities) and duty bearers (government) CEDIA supports the creation of a virtuous circle resulting from strengthening both the demand and supply side of rights. Additionally, CEDIA actively shares information on project progress, key milestones, and lessons, publishing a monthly bulletin and maintaining a Facebook group.

Results and impact

Over the past four decades, CEDIA has supported the registration of over 430 land titles to Amazonian native and "campesino" communities, amounting to nearly 5 million hectares of conserved lands in Loreto, Cuzco, Ayacucho, Madre de Dios, and Ucayali. Additionally, CEDIA helped improve natural resource and land management capacity by 35 of Peru's 55 Indigenous peoples.[10] CEDIA has strengthened organizational capacities of 450 native and "campesino" communities, directly serving over 20,000 individuals (trained, advised), and has assisted 195 communities in Loreto and Cuzco in developing life plans.

Aside from the number of hectares, communities, and individuals reached, three inter-related results stand out for CEDIA's Executive Director:

- **Avoided deforestation and illegal activities:** CEDIA's watershed-based approach and longstanding collaboration with communities in priority watersheds has had visible results in terms of limiting deforestation and illegal activities on community lands even in areas overlapping fossil fuel concessions and adjacent to major oil and gas projects (e.g., Camisea natural gas pipeline). CEDIA attributes this to the communities' agency, clear vision of and confidence in the future they want for themselves, and capacity to meaningfully participate in intercultural dialogue. Having gone through a process of legal recognition, obtaining a land title, organizational capacity strengthening, and community planning reduces communities' susceptibility to external manipulation and deceit.

- **Mainstreaming community life plans into local and regional planning.** CEDIA's advocacy efforts in Loreto have succeeded in the establishment of a 2018 bylaw that links community life plans with the regional planning system.[11] Loreto is the largest and most densely populated region in the Peruvian Amazon. This is considered a major achievement, as priorities in community life plans are considered alongside regional programs and plans as planning instruments. The organization is trying to replicate this achievement in Cuzco and Ucayali.

- **Supporting self-determined sustainable livelihoods.** CEDIA's track record of collaboration with some Indigenous and native communities has reached the point where capacity strengthening focuses on supporting sustainable livelihoods. Getting to this milestone does not happen overnight but is source of pride for the organization. As noted by Mr. Rivera Chavez, *"[w]e are now seeing the fruits of our labor, because we have gone from land surveys to land titling, to institutional strengthening, then developing community life plans, business plans, and natural resource management plans. Communities are seeing their earnings roll in. Communities have direct contact with domestic and international buyers. So, things are already looking different. But look at how much time has passed – more than 15 years."*

Success factors

CEDIA's longevity and growth as an NGO despite periods of social dislocation is the Peruvian Amazon (including political violence linked to the drug trade) is a testament to its effectiveness and resilience. Factors that have enabled the organization's success are as follows:

- **Having staff well suited to work with Indigenous and native communities.** Being comfortable and competent in an intercultural setting and being able to relate to Indigenous peoples and native communities are requirements of much of CEDIA's work. The knowledge, attitudes, and skills required to establish and maintain trusted and respectful relationships with the communities served are not easily acquired via short courses. In CEDIA's experience, staff with social science backgrounds and those who have spent time living in Amazonian communities are compatible with CEDIA's needs, presenting a greater aptitude for cultural awareness to permeate all aspects of work. Indeed, about 40% of CEDIA's professional staff has social science backgrounds. The responsibility of learning about community protocols, worldviews, and customs is firmly on CEDIA staff, and when recruiting contractors, CEDIA screens for prior experience working with the specific Indigenous peoples being served.

- **Investing in learning about Indigenous communities:** Prior to engaging Indigenous and native communities in the Peruvian Amazon in processes to formalize communities' legal status and land titles or to work on organizational strengthening, CEDIA invests in understanding communities' history, visions, values, beliefs, and aspirations for the future. This includes deploying staff to communities to spend time with and get to know community members, and once relationships have formed, walking the territory with community leaders and other knowledge keepers. By spending time in community, repeated interactions between CEDIA staff and community members provide proof that engaging with a national NGO focused on organizational capacity strengthening is free of adverse consequences, making community members more open to share information about their lives and aspirations.

- **Taking a long-term and broad perspective**: Although CEDIA operates through projects due to funding constraints the organization keeps the big picture in mind, both in time and space. Their ways of working rely on long-term relationships with rights holders and duty bearers (i.e., partnering with governments to support enforcement of laws and policies) and pursue outcomes at watershed or landscape scales.

Constraints

CEDIA's key constraints relate to local, national, and global operational contexts:

- **Rural to urban migration due to a lack of public services and the myth of progress:** CEDIA is concerned about youth migration from rural areas to urban and peri-urban areas, with migration drivers including a lack of public services and limited opportunities for post-secondary education and jobs. These demographic changes are also occurring in areas of the Peruvian Amazon with communal land titles. Broader norms on the status of professionals in society and expectations of living in a consumer society are also migration pressures. Demographic changes such as these shape community capacity to manage their titled land but are also an impetus for accelerating development of local conservation-based, regenerative economies.

- **Short-term funding:** CEDIA's main challenge is finding funders operating long-term grants. It is for this reason that CEDIA is experimenting with new funding streams, specifically carbon offset contracts to finance the management of protected areas and activities that local communities care about. Although private sector partnerships on market-based mechanisms involving land and community-based natural resource management are risky, their potential to offer long-term funding streams tied to outcomes serving communities is worth exploring.

Replicability

Wholesale replication of CEDIA's five strategic pillars is impractical due to unique operating conditions in the Peruvian Amazon and its legal and policy environment. Nevertheless. CEDIA's overall approach of working to strengthen capacities of rights holders to support self-determined land stewardship and capacities of duty bearers to meet their obligations is strategic and can help advance systemic change.

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CASE STUDY 7: MALIASILI

https://www.maliasili.org/

Team building | Photo Credit: Maliasili

Geography:	Africa, currently active in twelve countries.
Level:	Organizations
View of capacity strengthening:	Taking care of the nuts and bolts of what makes an organization effective with a focus on impact.
Genesis:	Established in 2010 as a result of the founder's experience living and working on conservation in Tanzania.
Goals:	**1)** Strengthening local organizations for optimal performance; **2)** catalyzing self aware, brave, and capable leaders; **3)** increasing funding to and influence of local organizations.
Approaches:	Partnerships; technical assistance; peer-to-peer learning; blended learning.
Modalities:	Workshops & trainings; networking; coaching; online toolkits and practice guides; help desk support; experiential learning (e.g., site visits, hikes).
Impact:	99 conservation leaders trained; 49 local conservation organizations strengthened; funding mobilized for local conservation; 350,000km2 of biodiverse landscapes reached.
Success factors:	**1)** Organizational culture that nurtures humility and supports partners find answers themselves; **2)** hiring staff with the right blend of technical expertise, critical thinking & people skills; **3)** providing practical guidance and clear messaging; **4)** instilling processes that build trust; 5) growing smartly.

Introduction

Maliasili is a U.S.-based non-profit founded in 2010 with a mission to accelerate community-based conservation through local organizations. Maliasili's work is designed to enhance the health of natural ecosystems—and their value for climate, biodiversity, wildlife, culture, and livelihoods. They do this by supporting talented and committed local organizations working in landscapes of critical conservation value and opportunity in Africa to become agents of change and optimize their community-based conservation success and impact.[1, 2]

Focal geographies

Malasili works with a portfolio of partner organizations Africa, and currently comprises Angola, Botswana, Kenya, Madagascar, Mozambique, Namibia, Rwanda, South Africa, Tanzania, Uganda, Zambia, and Zimbabwe.[3]

Sector

Ecosystem conservation

Level of capacity

Organizational capacity for community-led conservation

Target populations

- **Direct:** conservation staff from the local African organizations in Maliasili's partner portfolio; African conservation leaders.[4]
- **Indirect:** community members sustainably managing their forests, wildlife, rangelands, and waters.

Operational context

Maliasili is a result of the founder's experience living in and working on conservation in Tanzania.[5] Fred Nelson observed that, despite the positive impact and achievements on land rights and community-led natural resource management, local civil society organizations were underrecognized, underfunded, and undersupported. By founding Maliasili, he addressed a market failure characterized by the mismatch between the demand for and investment in solutions to environmental and social challenges in Africa and the efficient allocation of the attention and resources toward local African organizations with the knowledge, skills, and experience to address these problems.[6] In practice, he sought to support gains in the standing of local organizations in the conservation landscape to better secure long-term outcomes. Doing so meant departing from consulting-based capacity strengthening, which conventionally focuses on training delivered over short timeframes, in favour of an approach based on trusted, long-term partnerships centred on achieving the goals of local organizations.

Factors that shaped Maliasili's establishment, guiding principles, and operations included the following.[7,8,9,10] To some extent these factors describe the current context of the conservation field, but Maliasili's founding was based on an understanding of the critical role of local stakeholders in viable conservation outcomes— well before these were recognized trends.

- The rapid loss, degradation, fragmentation of ecosystems, and related biodiversity declines in Africa resulting from rapid development and urbanization, unregulated land-cover change, overharvesting, and population growth, all exacerbated by climate change.

- The growing recognition of the role local communities and Indigenous People play in addressing national and global biodiversity, climate change, and conservation challenges. In turn, this has stimulated a growing global dialogue on the links among conservation, equity, human rights, including valuing local and Indigenous knowledge, innovations, and practices, and securing access rights.

- The growing recognition of the important role stewardship of community lands play in sustaining wildlife habitats and ecosystem services in Africa and in durably supporting decent work, livelihoods, and other priorities of community members. Community lands are areas outside designated parks and protected areas.

- The momentum behind efforts to reconfigure relationships between local conservation organizations and international funders and international non-governmental organizations. This connects to the dialogue on "decolonizing development" and re-positioning international actors as enablers of locally-led work.

- Funders' prevailing focus on short-term project grants and underfunding of grantees' indirect costs, which can undermine an organization's impact by creating a "starvation cycle"[11] and by distorting the organization's focus by catering to interests of the funder. Indirect costs are expenses not tied to a specific project, like core organizational and administrative costs of program and service delivery.

Goals and objectives of capacity strengthening

Maliasili's ultimate goals are *"to address the damage and degradation of natural ecosystems — and their value for biodiversity, wildlife, and climate — that is accelerating around the world"*. Maliasili provides customized support to local African conservation organizations in pursuit of three core desired outcomes: stronger organizations, outstanding leadership, and greater resources and influence at the local level. Maliasili's Theory of Change is that *"empowered and effective local organizations will drive greater change and that an organization's empowerment stems from a combination of clear purpose, skilled team members, confidence in their impact, compassionate and capable leadership, sufficient resources, and connections to decision-makers" (*Figure 10*).*

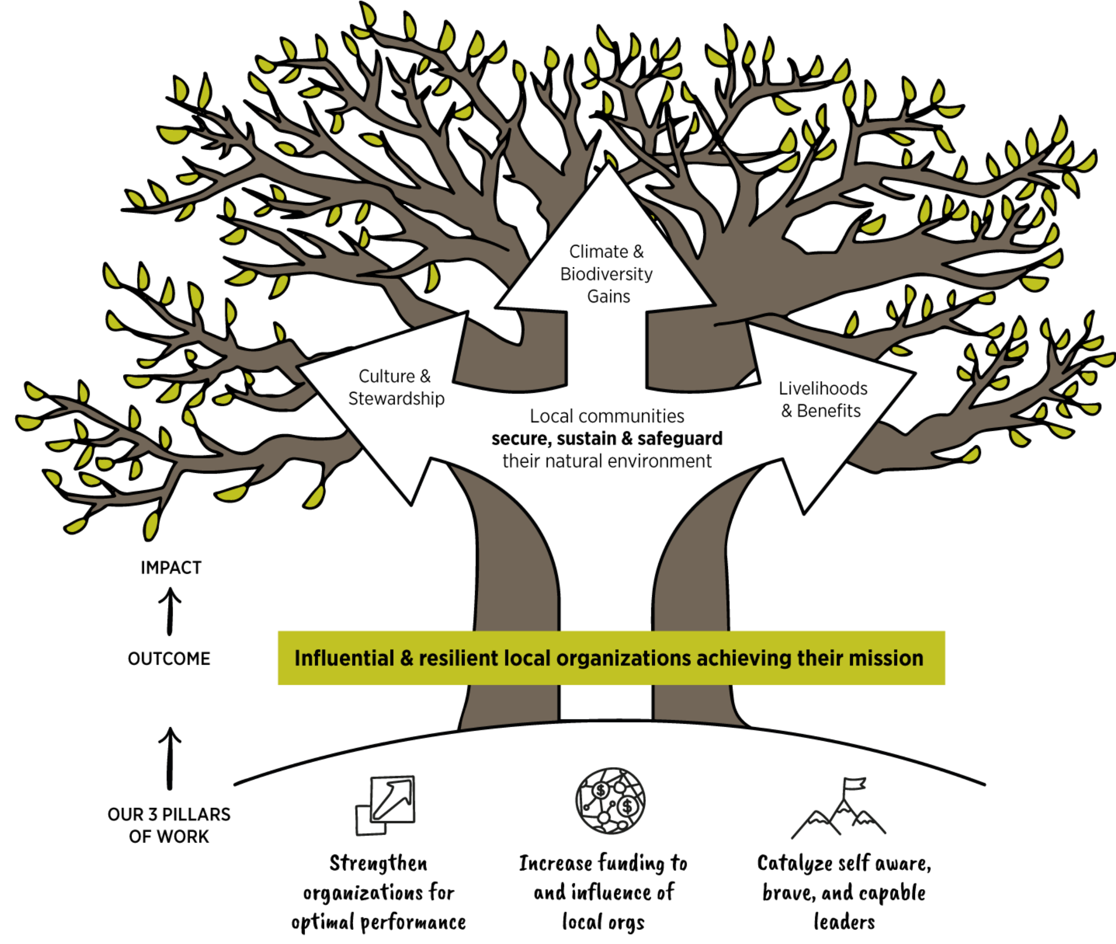

Figure 10: Malasili's Theory of Change for enhanced conservation action rests on influential and resilient local organizations, empowered by a combination of clear purpose, skilled team members, confidence in their impact, compassionate and capable leadership, sufficient resources, and connections to decision-makers. https://www.maliasili.org/about

Maliasili pursues three interconnected and mutually reinforcing objectives or pillars of work:[12]

- **Strengthening local organizations for optimal performance.** By 2025, the goal is to triple their portfolio of local organizations from 28 to 90 partners, working within current focal geographies and seeking expansions.
- **Catalyzing self aware, brave, and capable leaders.** By 2025, the goal is to train and support a growing cadre of at least 200 community-based conservation leaders across Africa and Madagascar.
- **Increasing funding to and influence of local organizations.** By 2025, goals include strengthened agency, influence, and grantmaking. Maliasili will 1) strengthen portfolio partners' position in the conservation field, increase their access to donors and decisionmakers, and amplify their voices and influence; 2) mobilize commitments of at least US$100 million in new funding commitments for community-based conservation; and 3) design new funding mechanisms to direct US$40 million in enabling funding to portfolio partners, representing a five-fold increase in grantmaking.

Figure 11 summarizes what Maliasili does.

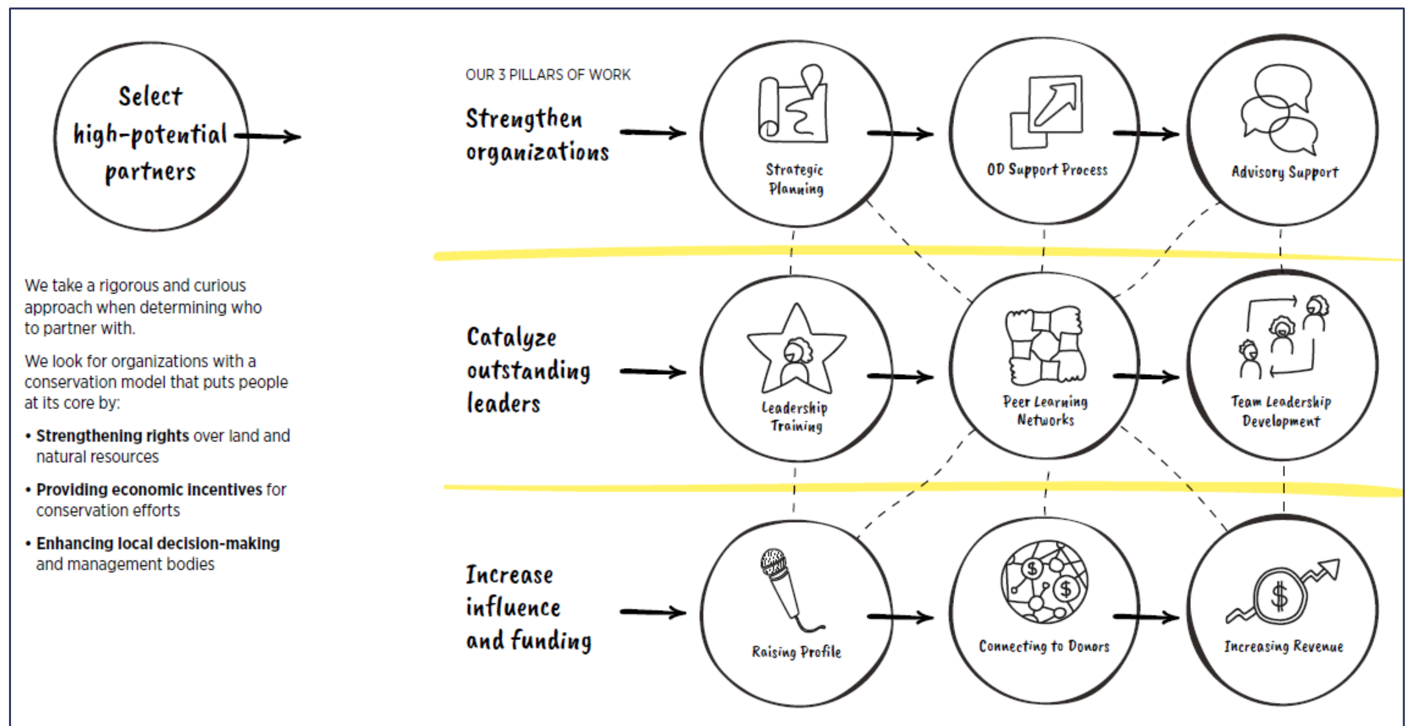

Figure 11: Maliasili's interconnected and reinforcing goals (Source: Maliasili).

Capacity strengthening approach

Core to Maliasili's approach to strengthening the capacity of local African civil society organizations are Maliasili's values, their service orientation, and customization. Maliasili exists to optimize the impact of partners and that is how success is measured. Consistent with their core value to put people first, Maliasili's work with local organizations is trust and relationship-based. Helping busy conservation leaders derive quick wins and tangible value from their organizational development efforts is key to building trust (see Maliasili's toolbox with organizational tips and tricks here). Additionally, Maliasili staff are not consultants or solutions providers but facilitators and coaches guiding local partners to find the answers for themselves. Key to this is the belief that local stakeholders/ organizations know their landscape and communities better than anyone else and have the knowledge and solutions for achieving conservation outcomes. Maliasili's support services for organizational development are underpinned by robust, researched, and tested frameworks and methodologies. Their application, however, is tailored to the unique needs and goals of local partners.

Maliasili is strategic and intentional about selecting partners and maintaining a diversified partner portfolio. The organization has an extensive due diligence process for identifying and taking on new partners (see Figure 12). Logistics and feasibility also factor into the decision, including considerations of staff resourcing and Maliasili's ability to provide support in the specific geography of a candidate partner. Furthermore, Maliasili strives to maintain a balanced portfolio of partners ranging from well-established organizations with a strong track record of impact to start-ups with a good idea and potential for impact.

Maliasili offers a program of tailored organizational development support to project partners, typically for an intensive period of three to four years. Maliasili works with new partners to do an organizational assessment, which involves a survey and then discussions, to 1) take stock of the local organizations' strengths, areas for improvement, 2) develop understanding of a highly-effective organization, 3) set goalposts of organizational development improvements, and 4) identify priorities that address critical needs. Yearly, Maliasili works with partners through a process to develop an organizational strengthening plan.

Scanning

- Identifying organizations actively working in target landscapes
- National contexts
- Putting out feelers, references from others
- Receiving requests

Discovery

- Ability to meet basic criteria:
- Africa-based
- Landscape of critical conservation value
- Theory of change focused on rights, governance, & incentives for conservation efforts
- Target community land (not protected areas)

Expression of Interest

- Written application
- Clear articulation of need for support, readiness for & willingness to invest in organizational development
- Reflecting humility and self-awareness

Figure 12: Summary of Maliasili's process for partner intake (Source: author's creation based on interview).

Maliasili offers partners support services in 12 functions that are critical for highly-effective organizations, which are listed below. The sequencing and timing of supports depends on partners' starting point, strengths, and weaknesses. In a partner's year 1, Maliasili almost always focuses on strategic planning, which is usually done in two to three in-person or hybrid workshops. Strategic planning helps partners articulate their purpose and theory of change, and the outputs drive other decisions within the organization. For Maliasili, strategic planning with a new partner is an opportunity to get to know the local organization better. Leadership training is also recommended in year 1, if possible, if not, in year 2. In years 2, 3, and potentially 4, Maliasili and local partners take stock of improvements, changes, and together discuss and agree on priorities for the coming year, resulting in a new or updated organizational strengthening plan.

- Strategic planning
- Leadership
- Communications
- Board governance
- Team development
- Relationships (partnerships & networks)
- Management
- Work planning
- Financial management
- Budgeting
- Fundraising
- Monitoring & Evaluation

Partnerships between Maliasili and local organizations are long term, but the nature of the partnership and support services provided evolve. As local organizations mature, have bigger teams, or expand their scope they become different organizations. It is not unusual for partner organizations to kick off another strategic planning process upon hitting year 4 or 5 with Maliasili.

Maliasili's active and intensive organizational development support can give way to support in an advisory or consulting capacity (i.e., continued support but a lighter touch). In other cases, partners can go through big

growth spurts and their support needs actually increase. Portfolio managers on Maliasili's team manage partner relationships, providing a sounding board to conservation leaders, who can experience a sense of loneliness as their decisions can have far-reaching consequences.

Maliasili's leadership training programs tend to run between 10 and 12 months, offering a mix of personal leadership exploration, training on technical skills to run an effective organization, and opportunities for networking with peers and organizations in the broader system. Curricula focus on the three levels of leadership noted below. In 2016, Maliasili and The Nature Conservancy launched the African Conservation Leadership Network as a peer network supporting cohort-based programming (see the network charter here). Maliasili continues to coordinate the network. Both through the network and independently, Maliasili has run at least eight leadership programs to date.[13]

- **Individual Leadership**: focused on individuals' personal skills and characteristics as leaders, developing self-awareness of personal preferences and tendencies, managing relationships, and personal wellness.
- **Organizational Leadership**: focused on managing for results; building, managing, and retaining teams; organizational strategy; communications and fundraising.
- **Systems Leadership**: focused on influencing change across multiple organizations to achieve large-scale, systemic change.

To help channel finance and influence to their partners, Maliasili brokers connections to funders, facilitates new funding structures, and leverages research, strategic communications, and their convening power to uplift community-led action as part of the African conservation agenda. Noteworthy was the creation of the Maasai Landscape Conservation Fund (MLCF) in 2019. Set up as a pilot venture, the MLCF was a pooled fund composed of grant revenue from multiple private foundations, and managed and administered by Maliasili. Investments went to building core elements of successful community-based conservation, including land securement, improving accountability mechanisms, and developing nature-based enterprises.[14] Compared to other conservation funds, the MLCF was unique in that it supported core organizational capacity within the grant structure and aligned grant funding with local organizations' self-determined goals. The MLCF is now closed as a fund and Maliasili has launched a new fund, Maliasili Conservation Fund, that builds on the lessons learned from MLCF, expands to include two additional geographies, and makes core operating grants to partners in these landscapes as well as providing funding for continued organizational development support.

Duration

Maliasili was established in 2010, with an initial phase dominated by learning about effective approaches to organizational development of local African conservation organizations through trial and error. Over its 10+ years of existence, organizational development programming grew to include leadership training in peer cohorts in 2016, and finally adding amplification and funding work in 2019. The evolution and refinement in support services were in response to partner needs as well as Maliasili's own maturation process. The organization's geographic reach has also expanded, having started with a focus on the East African rangelands in Kenya and Tanzania, Malaisili now has partners in 12 countries (Kenya, Tanzania, Uganda, Rwanda, Mozambique, Zambia, Zimbabwe, Botswana, Namibia, Angola, South Africa, and Madagascar). They also just launched a leadership program in the Congo Basin with participants from the Democratic Republic of Congo, Gabon, and Cameroon. Nevertheless, throughout the years, Maliasili's multi-year partnership-based support strategy has remained intact and core to its work.

Operational structure and financials

Maliasili is a tax-exempt non-profit organization (a 501 (c) (3) organization) in the U.S. with a registered branch of a corporation in Kenya. These two administrative entities are governed by a five-member, U.S. Board of Directors. The Board's remit includes oversight, asset management, financial policies and procedures, and internal audits. Growing and diversifying the board with lived experience is a priority for Maliasili, having added

the Chief Executive Officer of the Kenya Wildlife Conservancies Association (KWCA) this past year. KWCA is a past portfolio partner now in the advisory phase. The African Conservation Leadership Network, an outgrowth of Maliasili's leadership program, has its own committee, with members of each cohort serving as liaisons between Maliasili and the network.

Maliasili's team brings a blend of technical skills in conservation and direct experience leading or working alongside local African conservation organizations. The team currently consists of 41 staff and is set to grow, with four positions open at present and the goal of doubling the team size between 2022 and 2025. The team is distributed across North America and Africa, with five staff based in North America, the largest hub of staff in Kenya, and staff in Madagascar, Zimbabwe, South Africa, Namibia, Mozambique, and Uganda as well. Maliasili's growth as an organization has changed the makeup and demographics of the team over the years. Recent changes to their organizational structure, including the promotion of two African senior staff to the executive team, are motivated by the drive to put more power and decision-making of the organization in Africa.

Maliasili's financial position has evolved over time, with growing demand for their services and increased capacity to mobilize finance (Table 3). Fundraising for both conservation work and ongoing investments in organizational development is part of the partnership relationship between Maliasili and local African organizations. In engaging portfolio partners, Maliasili asks for a cost share, although that is not a limiting factor. Maliasili observes that funders are more willing to invest in strategic planning than in general organizational development or unrestricted funding overall; the grant funding they attract tends to come from private, family-owned foundations. As an organization focused on organizational development, Maliasili invests in talent recruitment and retention, with staff salaries as among the biggest expenses, in addition to investments in ongoing research to improve their methodologies and upskill team members. That overhead is part of the cost of doing business. The cost to deliver support services to partners varies considerably based on factors like their geographic location and remoteness.

Table 3: Maliasili's reported assets, revenues, and expenditures, comparing between their position in 2015 and 2021.

	2015	2021	Growth (2021/2015)
Total assets	$599,840	$4,153,598	7
Grants and contributions (restricted)	$400,000	$2,167,834	5
Grants and contributions (unrestricted)	$618,702	$1,455,874	2
Revenue (program service fees and other)	$20,274	$230,356	11
Expenses (program services)	$555,059	$2,673,931	5
Expenses (management, general and fundraising)	$67,143	$833,862	12
# of portfolio partners	9[a]	29[b]	3

Financial information is from Maliasili's financial statements available on their website. [a] 2015 Annual Report; [b] Accelerating Impact for People and Nature - 2021. All currency in nominal US$.

Accountability

- **Upward accountability:** Accountability to the Board and funders is rendered in part through compliance reporting. Maliasili supplies quarterly reports to grant providers and publishes annual reports and audited financial statements on their website. Maliasili's annual reports roll up results from grant recipient (portfolio partner) reporting, which details progress against the milestones and objectives in their strategic plans. Because Maliasili focuses on mobilizing multi-year, unrestricted funding from foundations, upward accountability to funders is highly trust based. Funders take time to understand Maliasili's risk management practices and both parties go through a process of intentional relationship building.[15]
- **Downward accountability:** Accountability to local African organizations (and by implication communities in Africa) is woven throughout Maliasili's ways of working. Driven to pursue partners' success and bring value to them from the start, Maliasili engages the local organizations they work with as equal partners,

customizing their program of work to the cultural context, goals, and needs of each organization. Testimonials from portfolio partners illustrates the many ways in which Maliasili delivers on their promise, for example: *"What distinguishes Maliasili from other organizations is how they really walk the journey with you as an organization- well beyond any individual project or activity. (CEO, Kenya Wildlife Conservancies Association)"*.[2]

Results and impact

According to a recent impact report, as of 2022, Maliasili worked with 29 local African conservation organizations, with the reach of this portfolio of partners extending to 350,000 km^2 of biodiverse landscapes in east and southern Africa; enabling communities to safeguard iconic mammal species like elephants and lions, and supporting over US$12 million / year in community livelihoods linked to the sustainable management of forests wildlife, rangelands, and waters. Additionally, Maliasili's leadership training since 2016 has contributed to making 99 leaders from 13 countries, and 49 conservation organizations more effective. In 2021, alone Maliasili facilitated access to US$1.8 million in grants to strengthen their partners' conservation efforts.

Maliasili is investing in their own monitoring and evaluation systems, which build on the key performance indicators for organizational development and partners' impact used in annual reporting (Table 4). Proxies for organizational success and growth that Maliasili uses to assess their effectiveness are i) changes in organizational budgets, ii) changes in team sizes, iii) percentage of revenues from a single donor, and iv) diversity of funding sources. Unless local organizations are very geographically focused, growth and scale are good proxies for success. Diversifying funding sources is a strategy to manage financial risk. Maliasili also tracks impact metrics specific to the work of each portfolio partner, which tend to include at least one area-based measure.

Table 4: Examples of the growth journey of Maliasili's portfolio partners (Source: Maliasili, 2021 – Accelerating Impact, available here)

Metrics / Portfolio Partner	Maasai Mara Wildlife Conservancies Association	Mwambao Coastal Community Network	Ujamaa Community Resource Team	Integrated Rural Development and Nature Conservation
Timeframe of support	2016-2020	2015-2020	2015-2020	2015-2020
Sequence of support services (Y=year)	**Y1:** strategic plan & leadership development; **Y2:** budgeting, leadership development, HR systems; **Y3:** board training, fundraising strategy; **Y4:** team performance, communications, strategic review; **Y5:** fundraising, new strategic plan	**Y1:** fundraising, communications; **Y2:** work planning, HR manual; **Y3:** strategic plan, annual budgeting, monitoring & evaluation (M&E); **Y4:** fundraising, networking; **Y5:** communications, work planning, fundraising; **Y6:** leadership development, team optimization	**Y1:** team performance, fundraising, communications, M&E; **Y2:** leadership development; **Y3:** strategic plan, board strengthening, work planning; **Y4:** communications, fundraising; **Y5:** strategy review, coaching; **Y6:** advisory support	**Y1**: strategic plan; **Y2:** communications; **Y3**: fundraising, leadership development; **Y4**: work planning, team performance; **Y5**: strategy review; **Y6**: M&E
Change in annual expenditure	US$1.1 M to US$2.7 M between 2016 and 2020 (145% increase over 5 years)	US$160k to US$730k between 2015 and 2021 (356% increase over 6 years)	US$800k to US$1.5M between 2015 and 2020 (87% increase over 6 years)	US$1.3M to US$1.8M between 2016 and 2020 (54% increase over 6 years)
Impact measure (example)	970 km^2 to 1,500 km^2 in area under conservancies between 2015 and 2020	1.5 km^2 to 16 km^2 in area of community managed fishery closures between 2016 and 2020	900 km^2 to 9,000 km^2 in community titled land area between 2015 and 2020	512 to 1,313 people employed by IRDNC-supported conservancies between 2015 and 2018

The dynamic nature of partners' organizational capacity creates challenges for monitoring and evaluation of Maliasili's own work. Maliasili has observed that portfolio partners move the goalposts with heightened understanding of what is means to be an effective organization. This heightened understanding causes partners to score themselves more harshly over time. It is not unusual for partner organizations to score themselves on an organizational assessment lower in a second or third year than they did upon onboarding with Maliasili.

Success factors

Maliasili's **organizational culture and values** are success factors carried through all their work and reinforced through hiring practices and performance management. Effective practices include the following:

- **Hiring staff who centre partners' success and carry themselves with that mindset.** Practitioners in the "global south" and in communities are often exposed to consultants and experts with PhDs with an attitude of *"I am the technical expert, listen to me, I have the answers"*. Maliasili's approach is facilitative, and staff keep to this role, helping partners find answers for themselves, even if staff have specialized subject matter expertise.
- **Getting the balance of community conservation experience, critical thinking, and people skills right.** Maliasili's 10+ years of experience has shown that having staff knowledge of and experience in conservation in context is important. But conservation knowledge and skills can be learned. What's proven to be more important are critical thinking skills, compassion, and empathy. These latter competencies are essential for diagnosing the strengths and weaknesses of an organization and in helping an organization with their problem solving.
- **Making the complex simple.** This value is exemplified by the critical thinking and diagnostic skillsets staff apply to reveal practical, tangible solutions that bring value to partners and funders alike. This value also carries through Maliasili's toolkits and strategic communications, with clear messaging supported by both analytical and experiential evidence, and use of beautiful graphics and photography.

Maliasili's situational awareness and attitude toward growth and scale further support their success.

- **Understanding whether an enabling environment for local organizations exists.** Step one in scoping out expansion to new geographies is understanding whether the creation, registration, and functioning of local organizations is sanctioned and encouraged by government. Step two is mapping the policy environment for community-led conservation, and determining whether the environment is favourable.
- **Growing to fill a gap and be of service.** Maliasili does not grow for growth's sake or seek to set up operations is another organization is already delivering services comparable to Maliasili's. Prior to expansion, Maliasili carefully considers their impact potential and value added in the conservation landscape.
- **Putting systems in place in anticipation of growth:** Recognizing the gap they fill in support organizational development and strategic finance for locally-led conservation, Maliasili has ambitious growth goals for 2025. In anticipation of this growth, the organization has increased focus on refining their code of conduct and professional standards for Maliasili staff and partner teams. This is not a reaction to adverse experiences but a thoughtful approach to continuing to create safe spaces for Maliasili's team and partners' teams to work, even if growth happens quickly.

In addition to having the right staff in place and an enabling environment for their work, Maliasili's **focus on trust and building trust with partners** is an important success factor. The "strategic-intimate" balance illustrates the essence of their approach:

- **Achieving the "strategic-intimate" balance as an approach to build trust:** Working with partners is not all about strategy, execution, and reliability (i.e., doing what you said you would do). Taking the time to consider people's feelings and to see people as individuals is also important. The following sentiments from

Maliasili's Senior Advisor, Elizabeth Singleton, highlight why rushing this process is counterproductive: *"we're essentially asking organizations to show us their dirty laundry so we can help them get it clean. If they don't really trust you, they're only going to give you a partial picture."*[5]

- **Creating opportunities for intimacy:** Nothing beats in-person interaction to build intimacy, including through face-to-face workshops, office visits, field trips, and hikes. The design of Maliasili's workshops and their facilitation approaches are dynamic, draw people's voices into the room, and take people out of their comfort zones. Showing vulnerability in this way builds trust with other workshop participants and with Maliasili. In addition to organized interactions, spontaneous, small actions can go a long way to sustaining relationships over time. These include unplanned phone conversations to check in on leaders and doing partners small favours (e.g., bringing a laptop or smartphone over from the U.S.).

Constraints

For Maliasili, key constraints relate to **technical and financial resources**:

- **A lack of African-led content to draw on for organizational development and leadership programming.** Maliasili's frameworks and methodologies stem from Western, and more specifically U.S.-based, research. Organizational development research and management good practice led by African scholars and practitioners is starting to emerge so this challenge may decrease in prominence in the coming years.
- **Finding more and better funding for Maliasili and for partnered work.** Despite some success, making the case to donors to invest in both i) unrestricted, core operating funds for organizations and ii) in organizational development continues to be a challenge. The need for Maliasili's work and for stronger local conservation organizations is recognized but corporate philanthropy and other big donors are reluctant to invest in institutions, which is inherently a trust-based venture. Donors and bigger international NGOs have commitments to localizing conservation but the mechanisms to get money on the ground, into the hands of those local organizations are missing. These structural constraints can end up driving founders of local conservation organizations and conservation leaders to burnout as they end up spending a considerable amount of time on fundraising.

Talent acquisition and retention is one of the biggest challenges faced by Maliasili's portfolio partners. Issues include the following:

- Access to qualified talent pools at all levels. Finding the right board members can be challenging for many organizations.
- Steep competition for staff with functional expertise like accountants and communications. Local conservation organizations compete with the private sector, NGOs, and the public sector for these professionals, highlighting the importance of compensation benchmarking, retention strategies, and succession planning.
- "Poaching" of conservation leaders and staff by larger, better funded, often international organizations.

Replicability

The principles behind a trusted partnership-based approach over multiple years to strengthen Indigenous organizational and leadership capacity can be successful beyond Maliasili's operating environment. The following factors are critical to enable success replication or scale out of Maliasili's model:

- A nuanced understanding of local culture, local context, and ability to draw in local staff.
- Making a case that local and Indigenous organizations deserve to be invested in, that they are critical in ensuring long-term and sustained conservation impact.
- Making a case that investing in local and Indigenous organizations as institutions and in individual leaders are effective strategies to achieve conservation outcomes and additional outcomes valued by communities.

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CASE STUDY 8: THE NATURE CONSERVANCY – MONGOLIA GRASSLANDS PROGRAM

https://www.nature.org/en-us/about-us/where-we-work/asia-pacific/mongolia/stories-in-mongolia/mongolia-s-amazing-grasslands/

Mongolian grasslands | Photo 34566958 © Jingaiping | Dreamstime.com

Geography:	Mongolia, supporting herder communities in the Eastern Steppe.
Level:	Community capacity through organizational development.
View of capacity strengthening:	Using rights in legal frameworks and applying appropriate methods for communities to use soil and land for their own conservation purposes.
Genesis:	Following amendments to environmental laws TNC started working on grasslands conservation in the early 2000s, launching the Mongolia Grasslands Program in 2017.
Goals:	**1)** Establishing community-based organizations; **2)** pursuing self-sufficiency through conservation-related economic activities; **3)** advancing protected areas management.
Approaches:	Train-the-trainer; peer-to-peer learning; technical assistance.
Modalities:	Workshops & trainings; networking; vocational education.
Impact:	Establishment of 230 CBOs covering 18 million ha, reduced grazing intensity, enhanced stewardship capacity of herders and rights assertion.
Success factors:	**1)** Recruiting local coordinators to support implementation; **2)** tapping into the resources and expertise of the TNC global team; **3)** amendments to environmental laws enabling the formation of CBOs with authority over natural resource management.

Introduction

For the past two decades, The Nature Conservancy (TNC), a U.S.-based non-profit organization, has actively engaged in Mongolia's conservation efforts to prevent further pastureland degradation. One initiative, known as the Mongolian Grasslands Program, uses a Community-Based Natural Resource Management (CBNRM) to support this objective. CBNRM involves the full participation of Indigenous Peoples as well as local communities in decision-making, incorporating local institutions, customary practices, and knowledge systems in management.[2] Though a CBNRM approach, TNC's grassland program supports the development of Mongolian herder Community-based Organizations (CBOs). Amendments to Mongolian environmental laws recognizing communal pastureland rights enabled these efforts.[1]

By fostering community cohesion, the grasslands program facilitates collective decision-making on pastureland management, empowering communities to effectively combat grassland degradation and explore new conservation-oriented, sustainable economic opportunities. This is achieved through measures such as controlling access to pasturelands, developing sustainable herd size management plans, and collaboratively pursuing alternative business ventures to enhance income generation.

Focal geographies

- Mongolia, with a focus on supporting herder communities in the Eastern Steppe, particularly around the Toson Khulstai Nature Reserve.

Sector

- Ecosystem conservation

Level of capacity

Community capacity through organizational development

Target populations

- **Direct:** Herder communities and community members
- **Indirect:** Mongolian government

Operational context

The operational context of TNC's program in Mongolia is deeply rooted in the history of land use and land tenure rights in the country.

Historically, pastureland rights in Mongolia underwent significant changes, initially granted by Chinggis Khan and later influenced by Tibetan Buddhism in 1586.[3] During the socialist collective era (1950s to 1990s), state-regulated pasture use was successful in maintaining ecological conditions.[4] However, the democratic transition in 1990 led to a shift to a free-market economy, replacing state herding collectives with privatized livestock ownership and an influx of new, inexperienced herders.[5,6] This change resulted in unregulated development, increased livestock concentration, out-of-season grazing, and coupled with climate impacts, significant overgrazing and pastureland degradation.[6,7] The 1992 constitution included strong provisions for environmental protection. With Mongolia subsequently enacting the Environmental Protection Law in 1995 (amended in 2005), to reflect the country's environmental values. Additionally, the amended law promoted public participation in conservation, empowering local communities with rights over natural resources.

In response to the formidable challenges facing Mongolia's pasturelands and recognizing a deficiency in institutional capacity, TNC began working on conserving the nation's grasslands in the early 2000s. In alignment with the amended environmental law, TNC developed the grasslands program to focus on working closely with herder communities to recognize their communal pasturelands and assert their resource management rights. In 2017 TNC launched the program in 28 locations, actively supporting herders in establishing CBOs.[9] These CBOs are enhancing herders' capacity for collective decision-making on pastureland management and, concurrently, they serve as platforms to explore new opportunities for economic development. This strategic approach not only addresses environmental concerns but also empowers local communities to actively participate in sustainable resource management and economic growth.[1]

Goals and objectives of capacity strengthening

Three interconnected and mutually reinforcing objectives or pillars guide TNC's work. Through these three pillars, the organization pursues a holistic and collaborative approach to conservation, where local communities are core to the preservation of Mongolia's natural heritage while simultaneously improving their own economic well-being.

- **Establishing CBOs in Mongolia:** Establishment of CBOs involves developing comprehensive pastureland management plans, aiming to empower local communities to actively participate in and lead conservation efforts within their regions. TNC assists CBOs in applying research to pastureland management. For example, ecosystem health monitoring within communities helps herders to collect scientific data showing how they have improved grassland health through their interventions, supporting CBOs to periodically revise and improve their pastureland management plans.[9]
- **Pursuing self-sufficiency:** A crucial objective for TNC is fostering self-sufficiency at the individual level within these partnered communities.[1] By promoting diverse, conservation-oriented economic activities, TNC aims to enhance community resilience and sustainability. This includes facilitating the creation of self-reliant small businesses that align with conservation goals, and co-developing income diversification opportunities to supplement sustainable grazing, giving herders greater financial security to alter their grazing practices and reduce herd sizes.[9]

- **Advancing protected areas management:** As part of the CBO program, an objective is to incorporate CBOs within designated protected areas.[1] The Mongolian government does not have sufficient resources to implement sustainable land management practices, and local herding communities who rely on these lands are not always involved in the decision-making process about how lands will be managed. By incorporating CBOs within protected area management, it eases the burden on state resources to manage these areas on an on-going basis.

Capacity strengthening approach

The approach deployed by TNC Mongolia Grassland Program has three tiers[1]: rights, organizational development, and income diversification.

- **Educating herders about their rights.** TNC will begin by first visiting communities and educating them about their rights and their ability to establish CBOs.[1] Under Mongolia's environmental law, herder communities can obtain formal recognition of their communal pasturelands and resource management rights. Communities can use these rights to reduce grassland degradation by keeping other herders out, creating natural resource management plans focused on sustainable herd sizes, and working together on alternative businesses to supplement income.
- **Training community coordinators to support CBOs.** Once a community has expressed an interest in establishing a CBO, TNC delivers training to community coordinators, including how to organize community meetings, how to develop meeting notes, and what to do to facilitate community decision-making during meetings.[1] Additionally, TNC regularly invites community coordinators to do capacity strengthening trainings offered by TNC to bring back to their community (i.e., a "train-the-trainers" approach).[1]
- **Connecting CBOs through the organization of nomadic festivals within *soums*.** *Soums* (administrative divisions, like counties) are brought together to introduce CBOs to each other and provide opportunities for CBOs to share information about their successes, economic initiatives, and lessons learned.
- **Supporting herders in income diversification to enhance financial security and reduce grazing impact.** This includes testing new livestock management approaches for sustainable land use, supporting CBOs in creating additional income streams through handicrafts, dairy/meat production, and tourism, providing felt-art handicraft training with connections to wool manufacturers, emphasizing sustainable sheep wool production, assisting in establishing eco-camps with a commitment to allocate 30 percent of income for conservation, and implementing a strategy for healthy livestock growth through nutrition-rich food for lambs to benefit both the environment and herders' profits.[9]

Duration

TNC launched the grasslands program in 2017, with its pilot phase completed in 2021. Based on the successes of the pilot phase, TNC has developed a vision and strategy for the next 10 years of conservation work, recognizing the important role and leadership of the local communities in achieving ambitious and durable conservation results for Mongolia's grasslands.

Operational structure and financials

The financial details and operational structure of the program are not publicly available.

TNC's work in Mongolia is driven by a commitment to help the government and Mongolians achieve their goal of protecting 30 percent of the country's lands by 2030, with a particular focus on the collaborative conservation initiative, Enduring Earth[11] (see here), involving partnerships among TNC, The Pew Charitable Trusts, World Wildlife Fund, and ZOMALAB, and a Project Finance for Permanence (PFP) model to protect and conserve vast areas of land. PFP is a novel form of conservation finance "*that secures important policy changes and all funding necessary to meet specific conservation goals of a program over a defined, long-term timeframe with the ultimate aim of achieving the ecological, social, political, organizational, and financial sustainability of that program*".[18]

TNC's Mongolia Grasslands Program is supported by local coordinators, contract staff, rural development officers of the Mongolian government, engagement consultants and protected area consultants who are operating at a local level in 28 soums in 5 provinces.[1] In addition, the program has benefitted from operational support from the TNC global team and the TNC regional team, through enhanced understanding of the project and its needs, requirements, and conditions.[1]

Accountability

As a non-profit organization, the initiative is funded through several foundations.

Results and impact

From 2017 to 2023, TNC has supported the establishment of over 230 CBOs covering almost 18 million hectares in 28 target soums of five provinces (Khovd, Khentii, Dornod, Khuvsgul and Govi-Altai). However, with roughly 340 soums in Mongolia, this program covers a small part in Mongolia, with substantial room to grow[1].The next phase of the program aims to expand to 38 soums by 2030[1].

Via improved management practices among herders, the program contributes to reducing grazing intensity, which is enhancing grasslands' potential to mitigate the impacts of climate change in these pastoral communities by improving carbon sequestration and storage in the soil.[11]

According to TNC Mongolia staff, some of the most significant program impacts are the shifts in community mindsets and the assertion of Mongolian herders' rights. These in turn have increased the capacity of communities to act as environmental stewards. Community capacity and conservation objectives have also been achieved, in part, through diversified economic opportunities catalyzed by the initiative.[1]

Success factors

There are several factors that have contributed to the program's success, these include:

- **Amendments to environmental law:** The most significant factor influencing the program's success lies in the amendment to Mongolia's environmental law[1]. The Environmental Protection Law of 1995 initially aimed to regulate relationships between the State, citizens, and businesses, ensuring the human right to a healthy environment. Covering diverse topics such as environmental assessments, natural resource ownership, monitoring, research, and funding, the law underwent substantial reforms in 2005. This amendment placed a heightened emphasis on public participation in conservation and resource management.[8] Notably, it empowered local communities to establish user groups with privileged rights over specific natural resources within their territories. This legal amendment enabled the formation of CBOs, granting them the authority to control and manage natural resources to meet the needs and aspirations of Mongolian communities.
- **Recruiting local coordinators to support implementation.** Local coordinators, residing in target communities, play a crucial role in supporting both recruitment efforts and fostering a deep understanding of the program's outcomes and goals among community members.[1] The presence of local coordinators enables TNC to establish a continuous feedback loop, regularly inviting them to participate training sessions and other activities.[1] This collaborative approach not only empowers local coordinators with the necessary knowledge and skills but also enhances their capacity to disseminate this information within their communities. Ultimately, the engagement of local coordinators contributes significantly to the success of the initiative by strengthening conservation efforts at the grassroots level.
- **Support and commitment from the TNC global team:** The support and commitment from the global team of The Nature Conservancy (TNC) means the team in Mongolia can tap into essential resources and expertise. It also ensures a cohesive vision and strategy by TNC, reinforcing the program's impact on a broader scale and helping to sustain the program's momentum and effectiveness both within Mongolia and within the larger context of TNC's global conservation goals. [1]

Constraints

- **Tensions between collectivist and individualistic values, traditional ways of life, and modern conservation:** The transition from collective ownership under a communist regime to personal responsibility meant that individuals had to adopt a new decision-making approach and be accountable. For some, this shift resulted in heightened stress and anxiety due to economic pressures in a market-driven system. Establishing new social structures within the community presents challenges in fostering trust and effective communication between herder communities and the TNC, all while striking a balance between traditional nomadic lifestyles and modern conservation practices.[1]
- **Growing international demand for the country's gold, coal and copper is undermining current conservation efforts.** As Mongolia's abundant natural resources, including one of the world's largest copper and gold mines (Oyu Tolgoi)[12] face increasing exploitation, mining activities impact protected areas through licensed and unlicensed mineral activities, buffer zone disturbances, and hindrance to the establishment of proposed protected areas. Efforts to enhance the ability of local communities, conservation organizations, and other stakeholders to effectively manage and mitigate the environmental impacts of mining on protected areas are critical.[13]
- **Growing demand for meat, wool and cashmere is resulting in the industrialization of Mongolia's livestock sector, impacting traditional grazing practices.** The substantial growth in the livestock industry since 1990, marked by a tripling of the livestock population, poses challenges for Mongolian herder communities.[14] Overgrazing, primarily attributed to this demand, remains a critical factor in grassland degradation, particularly in the Eurasian Steppe[15]. With 77 percent of Mongolia's land being degraded and over 20 percent facing extremely severe desertification, overgrazing and land use changes emerge as significant contributors.[16] Addressing these challenges requires a focus on capacity strengthening, empowering local communities and stakeholders with the skills and knowledge needed to adopt sustainable livestock management practices, ensuring the preservation of traditional grazing methods, and mitigating the environmental impact on Mongolia's vast landscapes.
- **Climate change.** In addition to overgrazing and land use changes, climate change exacerbates the threats to the health of grassland ecosystems and to the wellbeing of human and wildlife communities. The region has experienced warming at a rate three times the global average, leading to a crisis that fuels poverty and various socio-economic issues.[17] In addition, periodic dzuds—bone-chillingly cold weather events—kill livestock and wildlife alike. These extreme weather events present formidable challenges for Mongolian herders and CBOs in maintaining effective operations. The harsh climatic conditions exacerbate vulnerabilities, with periodic dzuds causing significant livestock losses, exceeding 21 million since 2000.[17] This underscores the risk that future extreme weather events could impose on the continuity and success of the CBO initiative. Addressing the implications of climate change becomes integral to building the resilience of herder communities and CBOs, emphasizing the importance of capacity strengthening for adapting to and mitigating the effects of evolving environmental challenges.

Replicability

The formation of CBOs is not a groundbreaking concept. Yet the program's replication in Canada is challenged by prevailing land governance regimes. The limitations arise from historical land injustices and the insufficient recognition of Indigenous land rights within existing legal frameworks. Despite these limitations, the potential for replication exists, especially as there is a growing acknowledgment of Indigenous land governance laws. Adapting and apply community-based organizational models to support and drive Indigenous-led conservation at the landscape level in Canada is possible. The key lies in fostering collaboration, ensuring legal reforms, and promoting cultural inclusivity to enhance the success and sustainability of such initiatives beyond Mongolia.

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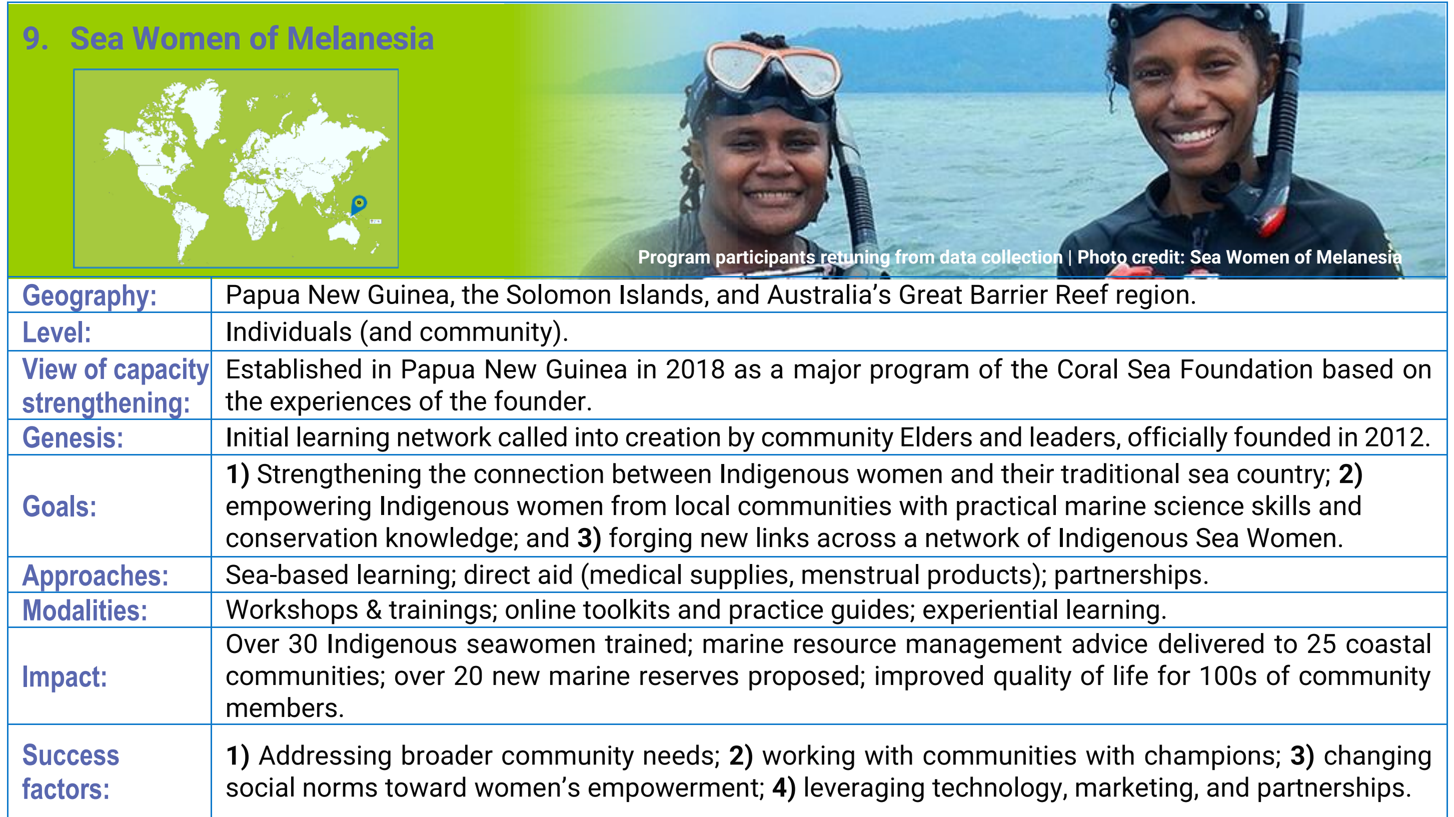
CASE STUDY 9: SEA WOMEN OF MELANESIA

https://www.seawomen.net/

9. Sea Women of Melanesia



Program participants retuning from data collection | Photo credit: Sea Women of Melanesia

Geography:	Papua New Guinea, the Solomon Islands, and Australia's Great Barrier Reef region.
Level:	Individuals (and community).
View of capacity strengthening:	Established in Papua New Guinea in 2018 as a major program of the Coral Sea Foundation based on the experiences of the founder.
Genesis:	Initial learning network called into creation by community Elders and leaders, officially founded in 2012.
Goals:	**1)** Strengthening the connection between Indigenous women and their traditional sea country; **2)** empowering Indigenous women from local communities with practical marine science skills and conservation knowledge; and **3)** forging new links across a network of Indigenous Sea Women.
Approaches:	Sea-based learning; direct aid (medical supplies, menstrual products); partnerships.
Modalities:	Workshops & trainings; online toolkits and practice guides; experiential learning.
Impact:	Over 30 Indigenous seawomen trained; marine resource management advice delivered to 25 coastal communities; over 20 new marine reserves proposed; improved quality of life for 100s of community members.
Success factors:	**1)** Addressing broader community needs; **2)** working with communities with champions; **3)** changing social norms toward women's empowerment; **4)** leveraging technology, marketing, and partnerships.

Introduction

The Sea Women of Melanesia is a non-profit organization based in Papua New Guinea (PNG) that works with traditional landowners to build capacity for proactive stewardship of their local marine resources. The program's activities focus on training local women in marine monitoring, conservation, and leadership skills, creating locally-managed marine areas (LMMAs) that enhance fisheries and biodiversity, and improving the basic quality of life in local communities through humanitarian aid. The organization is managed by and for local communities by a team of all-Indigenous women directors, who themselves have come through the Sea Women of Melanesia training program, and works closely with partner organizations to achieve its objectives. The Sea Women of Melanesia began its work in PNG in 2018 as a major program of the Coral Sea Foundation, which was itself founded in Australia in 2016. The success of the initial venture has recently led to the creation of a spin-off program, Sea Women Great Barrier Reef, in 2022 to deliver more comprehensive training to a wider community and begin to build a learning network of Indigenous women from across the Coral Sea arc to accelerate the impact of this work.

In addition to the references noted, the following case study draws from a key informant interview with Dr. Andy Lewis, Executive Director of the Coral Sea Foundation at the time of writing.

Focal geographies

- Papua New Guinea, the Solomon Islands, and Australia's Great Barrier Reef region

Sector

- Conservation, community-based management

Level of capacity

- Individual and community capacity

Target populations

- **Direct:** Individual women trained through the program, partner rural and remote communities that rely on marine resources for subsistence and cultural uses
- **Indirect:** Broader regional public through dissemination of educational materials on marine conservation and best practices through social media channels, media coverage, and talks

Operational context

The seeds of this work were planted during the early experiences of founder Dr. Andy Lewis, who worked in vessel-based ecotourism across the Coral Sea for over a decade. Spending time in ecosystems and communities across the region led him to recognize the conservation value of the exceptionally healthy reefs in this area, emerging environmental issues threatening these reefs, and strong interest from local communities, and particularly women, to restore marine ecosystem health for the long-term benefit of their families and communities. Dr. Lewis left the tourism sector to found the Coral Sea Foundation in 2016 and fulfil a vision for supporting community-based management of marine resources in this region. The work began by inquiring with communities who were seeing a decline in fish catches and seeking help to reverse the trend, and identifying a woman in one such community who was interested in leading this effort. This first Sea Woman was trained as a diver and coral reef surveyor and went back to her community and successfully advocated for and collected the information needed to formally designate a LMMA in PNG. This model proved successful, and the program gradually recruited more Sea Women, promoted those with leadership potential to form an all-Indigenous female directorate, and incorporated the program as its own entity in PNG in 2021.

The geographic and cultural context of the Coral Sea region has played a significant role in shaping the program's approach in ways that are aligned with local cultural practices to increase the likelihood of successful outcomes. Communities in the expansive geographic region are often small, remote, and strongly reliant on marine resources to sustain their livelihoods. This reliance is both threatened and exacerbated by climate change, which can directly impact coral reefs, but also contributes to water scarcity that limits the production of food crops and requires communities to rely more heavily on fishing and trading seafood with larger island communities for vegetables and other food staples needed to survive.[1] The vulnerability of these communities to a shortage of food, water, and other staples such as basic medical supplies has strongly influenced the addition of a humanitarian aid component to the Sea Women of Melanesia program.

Cultures in this region also have a strong tradition of customary stewardship practices, including designating community-enforced restricted zones where no fishing, hunting, or gardening is allowed to support ecosystem recovery, providing strong cultural alignment with the establishment of formal LMMAs. These practices exist within a broader framework of customary land tenure. In contrast with other countries sharing a colonial history, most of the land in Melanesia was neither registered or alienated through the process and remained under customary title and controlled by clans and families. This status persists to this day and is enshrined in the constitutions of several countries in the region, including PNG, the Solomon Islands, Vanuatu, and Timor Leste. although various economic pressures and alternative land use models are disrupting this system in some places.[2]

Customary land and stewardship practices are strongly influenced by gender norms. Roughly half of PNG was once under a matrilineal land tenure system where women owned the land and reef and made decisions about how it was used. Unlike women in patrilineal societies, women in matrilineal societies did not leave their home communities upon marriage and maintained longer-lasting and intimate relationship with the land:[3,4], *"over the course of their lives they have studied their land and come to understand its value well. In this sense [women] maintain the longest relationship with the land, as they become one with it. They understand that their chief responsibility is to use the land in such a way that it continues to provide for them and their clan.[3]"* However, the traditional roles of female landowners in these societies have been subverted in recent decades with the arrival of colonists and modern cash economies and a new women's empowerment movement is just beginning to gain traction.[5] Despite the erosion of traditional roles of women, it is notable that seven of the program's nine operational sites in PNG and both of its sites in the Solomon Islands are within regions that have a history of matrilineal descent and thus a cultural context of women playing more active roles in stewardship and decision-making.[4] The organization avoids communities where Sea Women might face pushback from men that do not like seeing women working, driving boats, or telling them how to fish.

In addition to being a biodiversity hotspot, Melanesia is also recognized as a linguistic diversity hotspot that encompasses around 1,500 local languages belonging to between 20 and 40 distinct language families.[6] This linguistic diversity further underscored the need to develop conservation leaders drawn from within local communities who would be able to explain the program's goals, activities, and benefits to the broader community in their local language.

Factors that have shaped the Sea Women of Melanesia's establishment and operations included the following:

- Witnessing the degradation of local marine resources because of rapid population growth, overfishing, unsustainable land use practices, and climate change in a region that is one of the last global refuges of exceptionally healthy coral reefs that are relatively understudied and underprotected.
- Recognition of the need to strengthen capacity for locally-based and culturally-aligned conservation efforts across a vast region of small, dispersed, and remote coastal communities that would be difficult to reach through centralized conservation programs based outside the region.
- Recognition that partnerships need to be initiated by communities to ensure the support required for self-sustaining community-based management programs.
- Opportune timing of program activities to positioning women as skilled and effective leaders in their local communities and add momentum to the broader women's empowerment movement in Melanesia.
- An interest in leveraging multimedia storytelling and social media to showcase program activities and outcomes to extend the reach and impact of its educational, advocacy, and fundraising efforts.

Goals and objectives of capacity strengthening

The overarching mission of the program is to raise awareness of the ecological and social value of the Coral Sea and Eastern Coral Triangle and support proactive approaches to community-based management of fisheries and other marine resources. The program works towards this mission by pursuing three goals across all of its Sea Women initiatives:

- **Strengthening the connection between Indigenous women and their traditional sea country** by providing opportunities to spend time in and on the water.
- **Empowering Indigenous women from local communities with practical marine science skills and conservation knowledge** to enable community-led monitoring that can inform decision-making and to help them act as more effective advocates for sustainable management of marine resources within their communities and across the region.

- **Forging new links across a network of Indigenous Sea Women** from across the region to catalyze learning and extend the reach and impact of this work.

Capacity strengthening approach

The Sea Women of Melanesia approach capacity strengthening through three mutually-reinforcing core activities: (1) individual training and leadership development, (2) supporting the assessment, establishment, and ongoing monitoring and stewardship of LMMAs, and (3) giving back to communities through humanitarian aid.

(1) Training in Marine Conservation and Survey Skills

This involves skills and leadership training so that individuals can bring these skills back to local communities and become advocates for and enablers of long-term community-based marine resource management.

Recruitment into training programs begins through an application process. Recruitment targets both women completing post-secondary studies at one of the universities in Port Moresby, who come from all over the region, as well as women from within partner villages, for training in mixed cohorts. Women can apply to become part of a membership database by submitting their resume, academic qualifications, and a letter of interest outlining where they're from, why they're interested in marine conservation, and their view on the role of women in this space. Roughly 10 applications are shortlisted ahead of each training program based on potential skills, close ties to areas of high coral reef conservation interest, and genuine interest in the work beyond the paycheque. Shortlisted candidates are invited to one or more one-on-one interviews to exchange information on the different aspects of the program and on candidates' existing field, computer, or administrative skills. Successful interviewees are invited to travel to and participate in the hands-on field training session. Training itself acts as a final filter, where some participants discover field work does not suit them or drop out to pursue other opportunities, and the ones that remain are most committed to ongoing participation.

In the Sea Women of Melanesia program, training sessions have typically been organized opportunistically as funding and human resource capacity allows. Training sessions with village members are organized when funding becomes available to carry out surveys in a particular community, and a further two to three higher-level training sessions are generally hosted each year for women who want to further advance their careers. Training typically begins with basic field work and transitions into organizational management training. However, increased demand for similar trainings from other communities in Australia, the Torres Straits, and Papua New Guinea provided an impetus to expand the program through the creation of the Sea Women Great Barrier Reef (GBR). This initiative has condensed all of the core skills initially taught through the Sea Women of Melanesia program to establish a Sea Women Level One Standard, an associated library of training manuals and videos, and a comprehensive marine conservation training program.

The Sea Women of GBR program delivers full-time, six-week marine science and conservation intensive courses at Magnetic Island and the nearby areas of the Great Barrier Reef with the support of the Coral Sea Foundation team and its vessel fleet. This program was delivered for the first time in spring of 2023 by three instructors to a cohort of eight women.

The training covers a wide range of activities, including:

- Reliably identifying major groups of fishes, corals, and other invertebrates
- Performing the traditional belt transect survey methods as well as the camera-based Sea Women Reef Survey methods
- Data management and analysis of reef survey images with the web-based automated Reefcloud.ai system
- Achieving scuba diving certified to Advanced Diver level
- Achieving First Aid Certified to Advanced Resuscitation level
- Achieving boat driving certification with the Queensland Transport Marine License
- Using GPS and Google Earth for marine conservation and navigation
- Maritime expedition planning and risk assessment

- Indigenous community engagement and marine conservation leadership

A key distinguishing factor of this program is pairing traditional visual transect survey methods with a camera-based reef survey method, which leverages modern technology to democratize the data collection and analysis workflow so that it can be accomplished by surveyors with relatively little technical training (Figure 13).

- At the data collection stage, this method takes advantage of **GPS-enabled cameras** to enable Sea Women to instantaneously capture geolocated images of a coral reef. Each image instantly captures a wealth of essential, high-fidelity information about coral biodiversity, condition, and cover that can be analyzed after leaving the field, eliminating the need for traditional manual survey methods that rely on expertise and observation, which are much slower and prone to error or observer bias.
- At the analysis stage, the method takes advantage of emerging **automated data analysis platforms**. Such platforms can help to overcome the weak link in many community-based monitoring programs whereby large volumes of data are collected by communities but languish in notebooks or on hard drives due to reliance on external technical experts for analysis and ultimately constrains timely use for decision-making. In this case, Sea Women are trained to analyze their own data using ReefCloud.ai, a digital tool developed by the Australian Institute of Marine Science and its partners that uses machine learning and advanced image analysis to rapidly extract and share data on coral reef cover and composition from images and summarize results through user-friendly dashboard reports. Work is now underway to adapt the platform to generate reports that are more accessible for reporting out to communities (e.g., through more visual reporting and emphasis on traditional knowledge elements such as particularly important species or periods of the year).

(2) Local Monitoring for Locally-Managed Marine Areas

The primary objective of providing Sea Women with marine surveying and conservation training is to provide essential information needed to submit a proposal for the designation of a local reef as a Locally Managed Marine Area (LMMA), a type of Regional Protected Area gazetted at a Provincial or Local government level under Papua New Guinea's protected area policy. LMMAs are defined as near-shore protected areas managed or co-managed by local communities with an emphasis on conservation and preserving sustainable traditional use practices (e.g., fishing for subsistence and local sales). LMMAs also support the designation of internal zones including special management zones such as livelihood zones, cultural zones, restricted or "tambu" zones, and permanent no-take zones[7], and participating communities are encouraged to not fish one third of their reefs.[5] Commercial use by outside parties is restricted, helping to protect the resources they offer from activities that could threaten community livelihoods.[7]

Sea Women act as advocates to educate their communities about the benefits of designating an LMMA and build support for developing a proposal. Where communities are supportive, Sea Women begin the task of employing their reef survey training to collect essential information on the ecological importance of the reef that is needed to support the proposal for designation (e.g., coral cover and condition, biodiversity, and the presence of any endangered or otherwise notable species). They must also continue working with the local community to gather information on the cultural importance and ownership of the site, the local clan's leadership, and individuals named to a management committee that will be responsible for managing the LMMA.

In addition to providing ongoing remote or in-person support for field work, the Sea Women of Melanesia program also provides administrative support to gather clan information and navigate the process of completing and submitting a proposal for the designation of an LMMA. This is particularly important as many villages have low rates of literacy and little or no access to computers to complete the process.

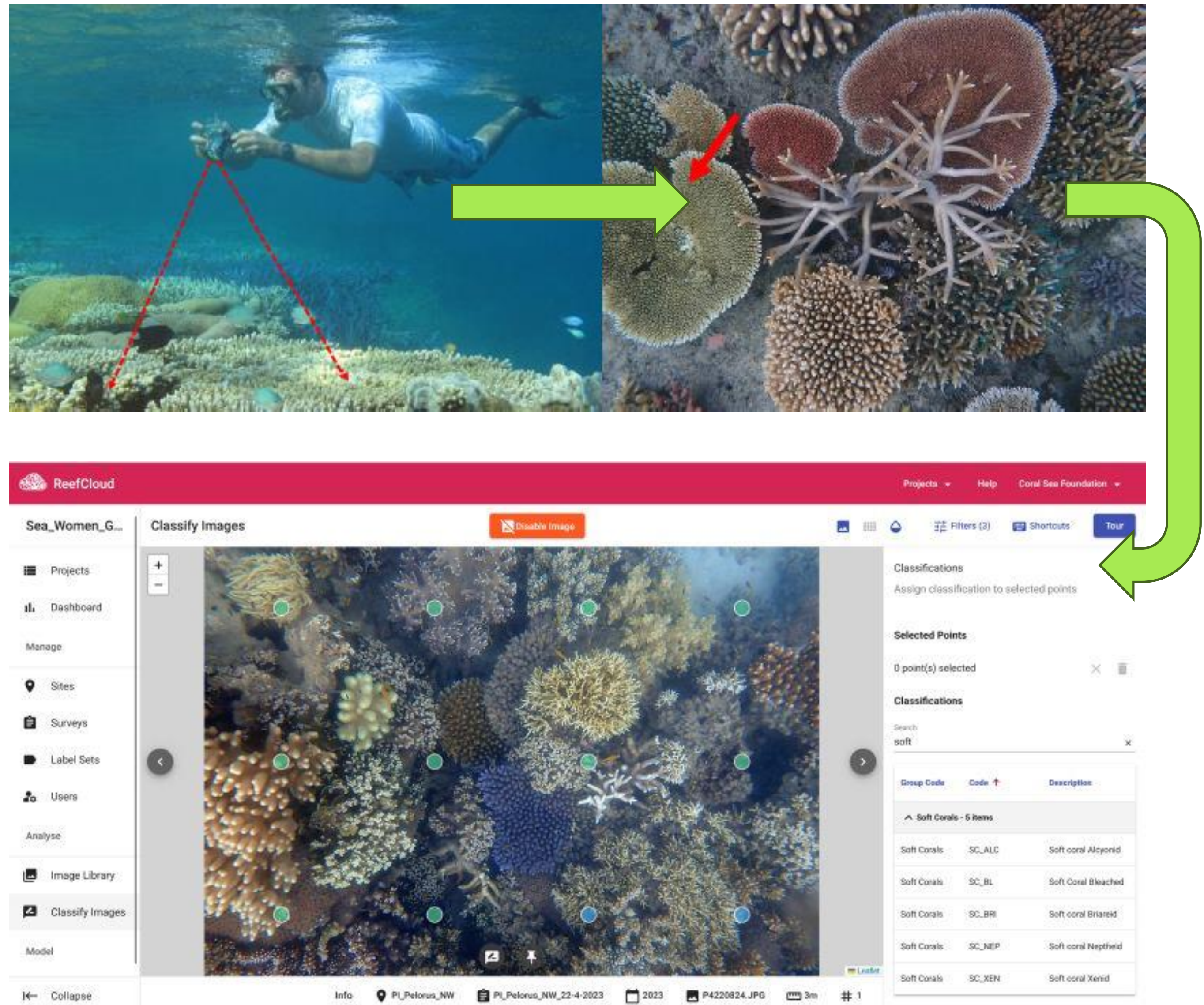


Figure 13: The Sea Women of Melanesia survey method uses modern GPS-enabled cameras as part of a standardized protocol to capture geolocated images of coral reefs (top panel), which can then be uploaded into the ReefCloud automated image analysis platform (bottom panel) to classify corals and generate dashboard reports.

(3) Humanitarian Aid

Since its inception, the Sea Women of Melanesia program recognized the need to pair conservation activities with humanitarian aid to reduce barriers to program support and participation in its partner communities, many of which struggle with poverty, tropical diseases, and limited access to essential resources (Figure 14). The program works with women leaders in its partner communities to identify their most pressing needs and has helped improve basic quality of life through the provision of aid including basic medical and health supplies and services (e.g., bandages, medicines, reusable menstrual health products, reproductive health education, organizing field medic visits), infrastructure (e.g., tools, materials, water catchers and storage tanks to improve access to clean water), and school materials for children (e.g., schoolbooks and basic school supplies).

Figure 14: Examples of humanitarian aid delivered as part of the Sea Women of Melanesia program, including provision of health supplies such as period products (left), organizing remote medic visits (center), and installing water catchers and storage tanks to improve access to clean water (right). Courtesy of the Coral Sea Foundation.

Giving back to the community in this way establishes a more equitable distribution of program benefits and helps to incentivize overall community support for changing fishing behaviour within LMMAs to improve conservation outcomes.

Duration

The overarching Coral Sea Foundation was founded in 2016 and incorporated as a not-for-profit in 2019, with the training of Sea Women beginning in this same year and continuing to the present day.

Operational structure and financials

The Coral Sea Foundation, under which the Sea Women of Melanesia and Sea Women of Great Barrier Reef programs operate, was registered as a charity in Australia in 2019, a few years after its founding. The Sea Women of Melanesia initially operated as a program of the Coral Sea Foundation, but was more recently registered as its own non-profit entity in Papua New Guinea in 2021.

The Coral Sea Foundation program is governed by three Directors and a seven-member Board of Advisors (including two Indigenous representatives) with a broad range of backgrounds and expertise relevant to the organization's work, including marketing and brand development, maritime operations, Indigenous engagement, health, security, humanitarian aid, and philanthropic partnerships. The governance practices and procedures of the organization are transparently laid out in its public governing document.

The Sea Women of Melanesia program itself is governed by two Indigenous female Directors, one of whom also sits on the Coral Sea Foundation's Advisory Board to provide a linkage across these initiatives. Directors play dual roles as part of a broader all-Indigenous team of seven full-time, regional leadership staff. Staff responsibilities are divided across the regions served by this initiative, with its Director and Community Engagement staff working out of the initiative's home base in Port Moresby, four working in Milne Bay Province, and one working in New Britain and Manus Province. Regional leadership staff are supported by a further two or three other regional full time team members and around ten more women working part time out of partner villages who are paid hourly or daily stipends at a rate above the average wage for completing discrete tasks.

Despite being a very young organization, the Coral Sea Foundation has improved its financial position in a few short years, growing its revenue base from a reported $170,000 AUD in 2020 to $320,000 AUD in 2022 (Figure 15). Based on the most recent available financial reporting from 2022, most of its revenues are from grant income (~$270,000 AUD or 80 percent) with a small contribution from donations (~$50,000 AUS or 15 percent) and other minor sources. A large share of these revenues (~$120,000 AUD or 40 percent) is diverted to expenses related to its Sea Women programs for salaries, stipends, training, and other expenses. Given the nature of its work, the program also holds physical assets including a 5-metre boat with outboard engine on trailer, computing

equipment, dive gear, and underwater cameras. The organization also partners with another non-profit, the Olgeta Foundation based in PNG, for use of a larger expedition vessel called The Golden Dawn. This level of financial resourcing is considered just sufficient to support the current extent of program activities, but the organization anticipates that it would require significant additional long-term investment to achieve its vision of regional growth to service the remaining unmet need for this type of work in communities. Any significant future funding would be directed towards opening regional offices in an additional five candidate locations across the region to expand training and community partnership programs.

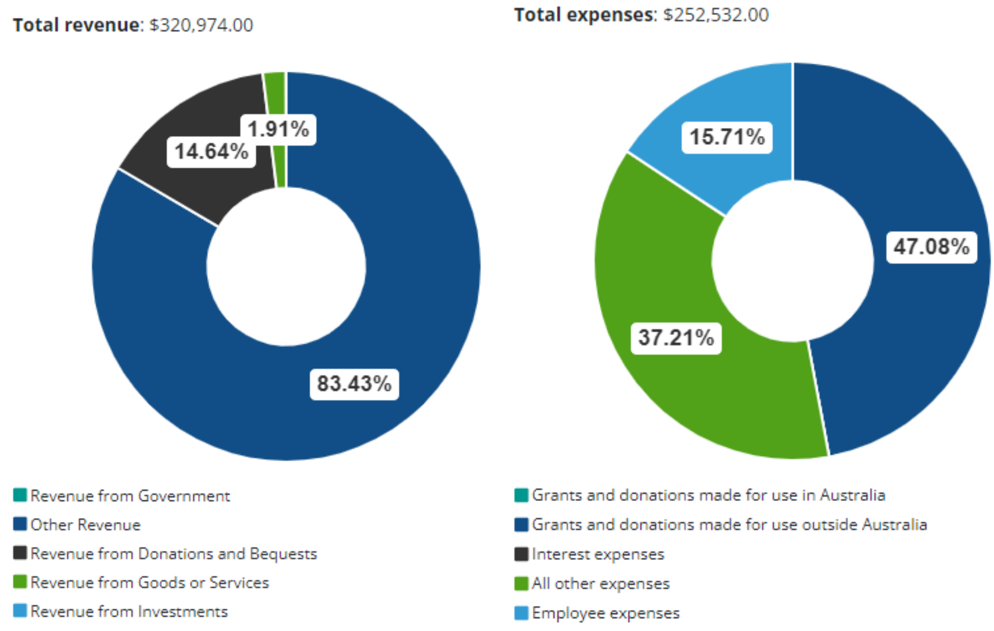


Figure 15: Summary of 2022 financial information for the Coral Sea Foundation, parent organization of the Sea Women of Melanesia, reflecting financials for all its programs. (Source: Australian Charities and Not-for-profits Commission (ACNC). All figures in Australian Dollars (AUD).

The Sea Women of Melanesia program is notable for its diverse mix of funding sources. In addition to grants and contributions from foundations and philanthropies, it has successfully leveraged corporate sponsorships and partnerships with value-aligned organizations. For example, it recently secured a multi-year funding contribution from a local shipping company operating in the region, partners with local yacht ecotourism operators to invite paid "voluntourism" participants to join its training programs and offset the costs of attendance for Sea Women themselves[8], solicit donations from high-net-worth individuals who visit the region on their own private yachts, and receive donations of gear needed for the program from manufacturers. As for all non-profits, recruiting and maintaining donors and corporate sponsors is an ongoing process of recruitment, relationship development, and relationship maintenance.

The pursuit of corporate sponsorships and partnerships leverages the growing interest of businesses in participating in Corporate Social Responsibility (CSR) activities to help meet Environment, Social, Governance (ESG) standards that socially conscious investors use to screen investments.[9] Whereas investing in actions supporting the "E" or environment is conventional, corporations are now giving more priority to the "S" or social factors of global issues, including social equity, diversity, income inequality, and racism.[10] An important part of the relationship between organizations and corporate sponsors is supporting the ability of sponsors to demonstrate their contributions through corporate communication to stakeholders, particularly consumers, investors, and civil society.[11] To this end, the Coral Sea Foundation and its Sea Women of Melanesia program have deliberately invested in brand development, documentation, and exposure of its activities through photo and video-rich program news updates, media coverage, and nomination for national and international ocean conservation awards. The organization's focus on branding and development of high-quality multimedia

products to communicate about its work play a central role here and is woven throughout all program activities. For example, recent training programs have been designed to weave in a series of mini-workshops, social science surveys, and interviews for a documentary series to learn more about and educate others about the barriers that Indigenous women face in the marine conservation space.

However, corporate sponsorships can also come with strings attached and it is important for organizations to carefully evaluate prospective partners to ensure their values and ethics align. The Coral Sea Foundation and its Sea Women programs avoid corporate partnerships with companies involved in the oil and gas sector, a history of violating Indigenous land rights, unsustainable supply chains, or a lack of financial transparency surrounding their investors. They have also been careful to avoid entering into partnerships where the corporate sponsor imposed too much administrative overhead or sought control over operations. Although these partnership principles can "leave money on the table", they protect the organization's reputation with its community partners as well as with other ethically-minded donors and corporate partners.

Accountability

- **Upward accountability:** Accountability is ensured through reporting to the board via established processes, reporting to funders through detailed biannual activity reports posted on the Coral Sea Foundation's website, and public financial reports submitted to and made publicly accessible by Australian Government's Charities and Not-for-profits Commission.
- **Downward accountability:** Accountability to local communities is mediated first through Sea Women who act as liaisons within communities to ensure that program activities are aligned with community needs and goals and who also regularly report out on program outcomes using accessible means including visual storytelling using photos and videos.

Results and impact

The Sea Women of Melanesia program has provided marine resource management advice to thousands of people across over 25 coastal communities, directly trained over 30 Indigenous women as Sea Women, led to more than 20 new marine reserve areas being proposed and surveyed in high conservation-value locations in the Coral Triangle marine biodiversity hotspot, and has helped deliver humanitarian aid into partner villages and hospitals to improve quality of life for hundreds of community members. These outcomes have raised interest in starting a similar program to benefit Indigenous communities in Australia who are interested in community-based marine management. This has led to the creation of a spinoff program – Sea Women Great Barrier Reef – in 2022 to facilitate training and networking of Indigenous women from around the Coral Sea arc. This program operates from the Coral Sea Foundation base on Yunbenun (Magnetic Island) with the consent of the Wulgurukaba traditional owners.

The success of The Sea Women of Melanesia in establishing a network of local people trained in marine surveying and in leveraging multimedia storytelling to raise the visibility of its work at an international level has also garnered several international conservation awards and opened doors for new collaborations. For example, the organization has recently established Memoranda of Understanding with several different government agencies in PNG and with the United Nations Development Program to carry out marine field work in the region, such as baseline surveys of coral reefs or to assess the impacts of vessel groundings on reefs.

Success factors

A core factor in the success and growth of the Sea Women of Melanesia program has been a community-driven approach to partnership and program activities that extends beyond conservation.

- **Taking the lead from communities to initiate contact with a request for assistance.** Focusing on communities that are already aligned on the desire to engage and have a clear champion who wishes to participate in the program helps to accelerate program implementation and provides a starting foundation

of ownership that is essential for successful community-based management. For initial pilot communities, interest was accompanied by skepticism that required program leads to travel to and spend time in communities to build trust and meaningful relationships, whereas demonstrated successes with existing partners in more recent years have streamlined this process.

- **Addressing broader community needs through fair compensation and humanitarian aid to achieve 'win-win' outcomes.** It is well known that the conservation activities are often more likely to benefit the global community while disbenefits are more often felt by local communities through displacement or restricted access to natural resources that can exacerbate existing poverty.[12] By seeking advice on broader community needs (e.g., household staples, healthcare supplies, school supplies, and basic infrastructure) when engaging, this program helps to provide more equitable benefits while also lowering the barriers to sustained ongoing support and participation. As a small organization, the Sea Women of Melanesia have pursued this pillar of their work in part by engaging in successful partnerships with other health-based NGOs working in the region (e.g., Days for Girls for menstrual health products and Backpacker Medics for basic healthcare services).

Another key success has been its focus on capacity strengthening of women, which has both been facilitated by and is itself contributing to changing social norms around the recognition of women's rights, equity, and empowerment in the broader Melanesian archipelago.

- **Elevating women as a catalyst for broader environmental and social change.** In the words of one program director, *"When you train a woman, you train a society."* [13] Program leadership has observed that women in the community tend to be more invested in long-term outcomes, more motivated to effect change, and more likely to involve their children in program activities for multigenerational benefits. This program's focus on women helps to respond to broader calls to support gender mainstreaming into sustainable development efforts across the Pacific and the globe through means including strengthening leadership, entrepreneurship, and involvement in decision-making.[14,15]
- **Targeted leadership development and opportunities for advancement.** This program has also greatly benefited from a deliberate approach to identifying individuals with leadership potential through its basic training programs and further developing this potential by providing higher-level training with the possibility of advancement to full-time management positions. This process has facilitated the recruitment of an all-Indigenous female directorate for the Sea Women of Melanesia program, many of whom began as trainees in its basic training program.
- **Recognizing the importance of stepping back to build confidence and self-reliance in participants for supporting the long-term sustainability of program activities.** Many capacity-strengthening initiatives struggle to determine when to scale back direct support to allow individuals to take over. In the case of the Sea Women of Melanesia, the global COVID-19 pandemic brought many challenges, but also presented a silver lining when international travel halted and provided the Sea Women in training a chance to take over field program activities themselves and become self-sufficient sooner than may have occurred otherwise.

The technical aspects of the program's work have also taken advantage of new technologies to democratize the data collection, analysis, and interpretation process to help overcome common bottlenecks in community-based monitoring programs.

- **Leveraging existing automated data collection and analysis technology to reduce workloads and increase autonomy among program participants at low cost.** There is growing interest in the use of digital data collection (e.g., using GPS-enabled cameras, mobile apps, and tablets) as well as automated scripts, workflows, and intuitive web-based platforms for rapid processing standardized MPA monitoring data and generating outputs to reduce barriers to analysis associated with the need for complex technical knowledge of statistical tests and software. Such innovations include standardized R coding scripts[16], simple web-based graphical user interfaces (e.g., MAREA).[17] In one 15-year retrospective of lessons learned from a

global MPA effectiveness monitoring program, the development of standardized monitoring protocols and data management procedures, a user-friendly interface for indicator analysis, and dashboards of indicators were cited by participants as among the most valued practical outcomes.[16]

Enabling environmental conditions and demonstrable results from program activities has provided a powerful 'business case' for the recruitment of additional partner communities and funders.

- **Relatively healthy starting environments and high marine productivity in the region have contributed to quick wins,** with fish populations rebounding in just a few years' time in places where the program has been successful in establishing community-based LMMAs. These conditions have helped to overcome long delays between protected area establishment and fish population recovery in less productive ecosystems.

Finally, this program has pursued a deliberate approach to branding, marketing, and multimedia storytelling to extend the reach of its outreach activities, raise its visibility to potential funders, and pursue successful partnerships with the private sector.

- **Leveraging corporate partnerships and sponsorships for funding in a competitive non-profit funding landscape.** The Coral Sea Foundation and Sea Women of Melanesia has been successful in cultivating an alternative and diversified funding model that relieves some of the competitive pressure inherent in seeking funding uniquely from foundation and government grants. The programs have secured corporate sponsorships, partnerships, and donations of field equipment from a diverse range of value-aligned companies.
- **Investing in high-quality branding, marketing, and multimedia storytelling across all program activities.** Because corporate partnerships often demand high visibility of the activities they support to benefit their own brand exposure, they have no doubt played a role in increasing the overall visibility of the program's work to other funders that are now further expanding its base of corporate supporters. Beyond the value of corporate sponsorships for supporting the program's operational costs, the program has maintained close relationships with the luxury yacht ecotourism industry from which its founder emerged. As local reefs recover, there is an opportunity to draw ecotourism into partner communities to provide added incentive for ongoing management through purchasing, direct donations, or delivery of essential humanitarian supplies that can yield ongoing benefits to the community and maintain good relationships for future visits.[5]

Constraints

As relatively newly established organizations, the Coral Sea Foundation and its Sea Women of Melanesia program have faced the common constraints of stabilizing funding sources, scaling up activities, and managing growth to meet demand.

- **Establishing a reliable funding model to transition from startup to sustainable growth.** Like many nascent initiatives, the Sea Women of Melanesia faced the initial hurdle of establishing reliable cash flow and remaining persistent through moments of doubt with little left in the bank and facing the prospect of closure. By remaining persistent and exploring the alternative funding models noted above, the organization successfully weathered this period to secure long-term funding that allowed the organization to grow and gain momentum.
- **Managing growth when demand outpaces the resources available to support it.** As the program gains momentum and its successes accumulate, increased demand from additional partner communities follows, which brings with it the risk of growing too fast. The Sea Women of Melanesia are trying to manage this risk through focusing on maintaining existing partnerships as resources allow, while still laying the groundwork for future growth through ongoing leadership development, developing a framework for division of labour, and proactively identifying the most promising regions and communities for future expansion when additional donor funds allow.

- **Achieving the challenging goal of progressing community-led initiatives to a point of long-term self-reliance without external support.** Although the program's model has been successful to date, it must develop robust strategies for program benefits to become self-sustaining to avoid repeating the mistakes of similar programs in the past. For example, The Nature Conservancy previously established a very successful cooperative program in Papua New Guinea over a decade ago based on a similar model of establishing community-based LMMA's. However, a subsequent evaluation of this program concluded that LMMAs had delivered ecosystem and livelihood benefits but that enthusiasm waned rapidly after the NGO left the area and that sites were no longer actively managed – no fees, fines, or tourism income was being collected to support ongoing management, communities were not willing to discipline each other for breaches of the rules without higher-level intervention, and that illegal harvesting increased, and costs were generally perceived to outweigh benefits.[18, 19]

Regarding the program's activities themselves, additional constraints are related to ongoing refinement of approaches within the capacity and cultural context of program participants to improve program benefits and outcomes.

- **Reconciling cultural norms and organizational norms in a cross-cultural environment.** The organization has had to navigate ways of working together at times when local cultural norms may run counter to good organizational governance. For example, criticizing friendly acquaintances or colleagues is considered impolite in Melanesian culture, which can lead to a reluctance to provide feedback on tasks and protocols, ensure accountability across teams, or correct others engaging in inappropriate behaviours.
- **Calibrating an appropriate pace and level of difficulty in training, tasks, and roles.** When programs recruit new participants, assign new tasks, or trial new training programs, there is always a learning curve and period of adjustment to ensure that participant abilities and tasks are well-matched. Recent efforts to scale up training as part of an intensive training program have provided valuable insights into aspects of the program that need adjustment for participants to get the most out of their experience, including feedback on the duration and pace of training, culturally aligned approaches, and a desire to have more Indigenous women leading instruction. The organization is working to provide higher-level train-the-trainers education to the most successful participants in the initial program so that they may return as mentors or instructors in the next session.
- **Staff turnover as investment in training opens up more lucrative employment opportunities.** As with many capacity-strengthening programs, this one has also faced the challenge of investing a lot of time and money in training its team members and then losing those individuals to more lucrative employment opportunities in other sectors. Although these losses are felt, the organization considers being "an incubator of talented women" a form of success in their broader mission to give women the skills needed to take a lead role in conservation in Papua New Guinea whether as part of this organization or another.

Replicability

The principles behind targeted environmental monitoring and leadership training to support a community-driven protected area approach resonate within the Canadian context, where interest in community-based monitoring programs and Indigenous Protected and Conserved Areas (IPCAs) has surged in recent years.[20] For example, Coastal First Nations operate the similar Stewardship Technicians Training Program (STTP) to develop capacity within communities for community-based monitoring and management of traditional lands and waters as well as emerging IPCAs. Additional elements of the Sea Women of Melanesia program that could provide added value to such Canadian initiatives include leveraging emerging technology not only to facilitate data collection, as is currently underway using drones remotely operated underwater vehicles, and satellite imaging, but also to democratize data analysis which has led to bottlenecks and limited access to data for decision-making in many such programs. Moreover, pairing these activities with work to address basic needs in communities that pose barriers to active engagement and staff retention (e.g., competitive compensation, addressing shortages in housing and supplies, childcare in the case of women, etc.) continue to be relevant even in a country like Canada.

The following factors are critical to enable successful replication or scale out of the Sea Women of Melanesia's model:

- Identifying suitable technical partners for the collaborative development, testing, and implementation of fit-for-purpose automated data analysis platforms.
- Acceptability of values-aligned corporate partnerships to Indigenous communities to replicate the diversified funding model.
- Investing in building multimedia communication capacity for raising the visibility of these activities across a broader audience to build support and attract prospective supporters, partners, and funders.

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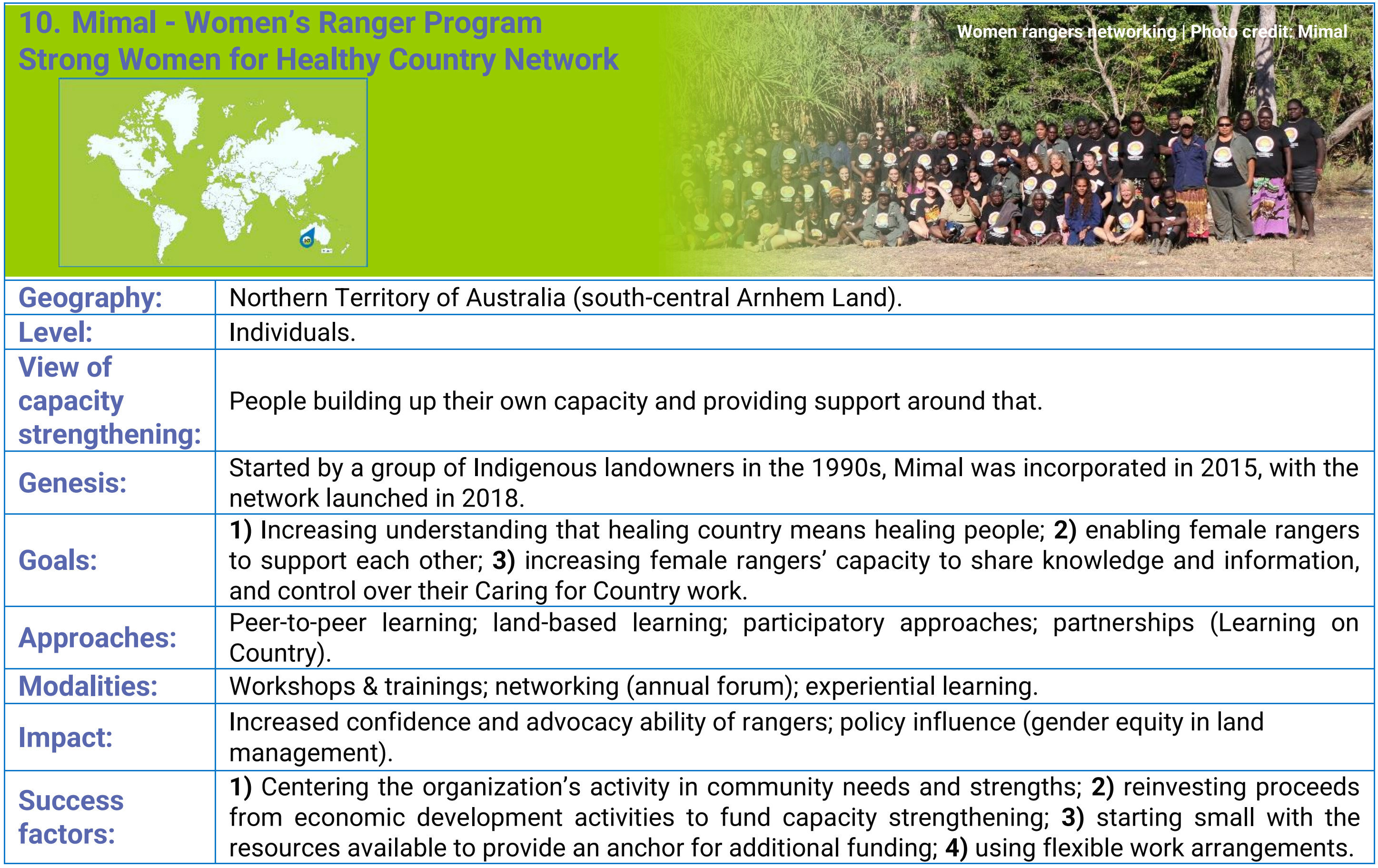
CASE STUDY 10: MIMAL LAND MANAGEMENT ABORIGINAL CORPORATION

https://www.mimal.org.au/



Geography:	Northern Territory of Australia (south-central Arnhem Land).
Level:	Individuals.
View of capacity strengthening:	People building up their own capacity and providing support around that.
Genesis:	Started by a group of Indigenous landowners in the 1990s, Mimal was incorporated in 2015, with the network launched in 2018.
Goals:	**1)** Increasing understanding that healing country means healing people; **2)** enabling female rangers to support each other; **3)** increasing female rangers' capacity to share knowledge and information, and control over their Caring for Country work.
Approaches:	Peer-to-peer learning; land-based learning; participatory approaches; partnerships (Learning on Country).
Modalities:	Workshops & trainings; networking (annual forum); experiential learning.
Impact:	Increased confidence and advocacy ability of rangers; policy influence (gender equity in land management).
Success factors:	**1)** Centering the organization's activity in community needs and strengths; **2)** reinvesting proceeds from economic development activities to fund capacity strengthening; **3)** starting small with the resources available to provide an anchor for additional funding; **4)** using flexible work arrangements.

Introduction

Mimal Land Management Aboriginal Corporation (hereafter, Mimal) is an Indigenous owned and operated charity and not-for-profit organization that focuses on *"bringing benefits to country and culture"* for traditional landowners, as well as all residents of Arnhem Land in the Top End of Australia's Northern Territory.[1] Mimal supports economic development opportunities by supplementing traditional land stewardship techniques with recent technologies for effectiveness and safety. Local residents are hired to carry out these land stewardship services (e.g., fire management). To staff these initiatives, Mimal runs capacity strengthening programs to train locals as rangers, for careers in land management in their own territories.[2] This model redistributes earnings from economic development ventures to the community itself, as well as to fund capacity strengthening initiatives. Mimal works hand in hand with landowners, taking advice from both *balanda* (settler-Australian) and *bininj* (Indigenous-Australian) worlds, to develop and deliver strategies that keep the land and culture healthy.[3] Supported by a balanda staff, Mimal's Board of all-Indigenous membership, with representation from clans across the organization's catchment area, selects and approves all activities. Initiated by a group of Indigenous landowners in the late 1990s, Mimal was incorporated in 2015.

In addition to the references noted, the following case study draws from a key informant interview with Dominic Nicholls, Chief Executive Officer of Mimal at the time of writing.

Focal geographies

- Northern Territory of Australia, specifically nearly 18,000 km^2 of territory in south-central Arnhem Land that include the homelands of some 34 clan groups.

Sector

- Land management, ecosystem conservation, ranger sector.

Level of capacity

- Individual and community capacity

Target populations

- **Direct:** Indigenous rangers, local residents, and traditional landowners.
- **Indirect:** Indigenous youth, schools, and land-based state-certified educational programs that partner with Mimal to learn from rangers.

Operational context

Mimal was born from a series of land management workshops held from 1998 and 2001. Participatory planning techniques from Central Australia guided workshops alongside traditional landowners, which resulted in clear directions for Indigenous-led land management in south-central Arnhem Land. Booklets documenting feedback from traditional landowners were among workshop outputs, which fed into the Bulman Regional Land Management Strategy. By 2001, the local government of the area (the Bulman and Weemol Community Council) had integrated caring for country activities as part of the Community Development Employment Program, which supported the establishment of the Mimal rangers group with their own identity and work plan in that same year.[2] "Caring for Country" describes practices and approaches that view land and its inhabitants holistically, contributing to the sustainable use and protection of natural heritage and the promotion of cultural continuity of Australia's Indigenous communities. Mimal rangers were housed within the Northern Land Council (NLC) – an independent statutory authority of the Commonwealth –for years.

The erosion of NLC support of program growth toward Caring for Country activities, such as the maintenance of ranger outstations and the prospect of earning income from offering traditional fire management services, led traditional landowners to pursue full independence. Traditional activities were incorporated into Mimal Land Management Aboriginal Corporation in 2015, with the gradual transition of Mimal rangers from NLC to Mimal Land Management. The broader community was engaged in participatory planning between 2015 and 2017 to identify priorities and construct a common vision for the organization, which culminated in Mimal's Healthy Country Plan 2017-2027. Although Mimal's roots reflect an unfavourable shift in local governance, the product is an empowered, Indigenous run-and-led, land management organization. This management structure reinvigorates the goal of shifting power to local people to come together and decide on the things that are important to them, including how to deal with threats and seize opportunities, as a community.[2]

Factors that shaped Mimal's establishment and operations included the following:

- Community concern regarding the degradation and loss of aquatic and terrestrial ecosystems, and related biodiversity declines in their territories, as a result of feral animals, invasive plant species (specifically weeds and grasses), loss of bird species, loss of woodlands and forests, and loss of grassy plains.

- Community concern regarding the loss of cultural activities and how these manifest as social problems like gambling, drug use, bullying at schools, among others. Factors underlying these problems include unwanted foreign visitors, history of colonialism and resulting migration

patterns, destruction of outstations because of mismanagement and unstable funding leading to migration, a lack of transportation options to get out to Country, a lack of jobs, and lack of access to schools and education that supports two-way learning leading to idleness and migration.

- More recently, there is a growing international recognition of the critical role Indigenous ecological knowledge plays in sustainable land and sea management, as well as biodiversity protection and climate action. This includes government recognition of the importance of controlled burns, a traditional practice, to prevent late dry season uncontrollable wildfires and the loss and damages they cause.

- Tied to this recognition is the growth of Indigenous land and sea management as an economic sector, creating viable revenue streams and local employment opportunities that reduce dependency on government, or other grant funding, and directly support aspirations of local youth to stay in their homelands.

Goals and objectives of capacity strengthening

Mimal's vision brings together people, country, and culture; it includes *"people on their country with families, living on outstations and working to take care of country", "businesses on country are successful, sustainable, and providing jobs for our people", "country is clean and safe", and "strong ceremony, language, dance, and song connecting families, country, and culture, …with people sharing knowledge with younger generations who have two-way education about culture and country."*[4] Mimal's articles of incorporation outline its objectives:

- to assist traditional landowners and people with customary management responsibilities on natural and cultural resource management;
- to operate an Indigenous ranger program;
- to support Indigenous people's access to vocational, secondary, and post-secondary education;
- to conserve and promote Indigenous Knowledge; and
- to advise landowners developing economic activities that dovetail as Indigenous employment opportunities.[5]

Mimal's entire remit is in service of capacity strengthening to bolster caring for country and culture, with its work spanning multiple sectors (e.g., education and training, heritage and culture, tourism, land and water management, and municipal services). This case study focuses on **Mimal's Women's Ranger Program and their Strong Women for Healthy Country Network**. The Strong Women for Healthy Country Network promotes the understanding that healing country means healing people. As self-determined by women rangers, the Network seeks the following outcomes:[6]

- **Collaboration:** women in communities and organizations across the Northern Territory have more opportunities to support each other.
- **Advocacy:** women have more support for their Caring for Country values, aspirations, and needs.
- **Communication:** women in communities and organizations across the Northern Territory have more capacity to share knowledge and information.
- **Governance:** women have more control over their work to heal their countries, communities, families, and peoples.

Capacity strengthening approach

Mimal's capacity strengthening centres on needs identified by Indigenous community members; they use individualized training and work plans and a facilitative approach that supports people

building up their own capacity. These tenets are illustrated across programming for rangers and as part of the organization's governance.

Strong Women for Strong Country Network

Although Mimal's ranger program had existed for decades, building a Women's Ranger Program became a priority for the Board within the past five years. Recognizing the importance of setting up focused structures beyond what currently existed in the Rangers Program, an initial step for Mimal was to employ a Women's Ranger Coordinator and a group of seven or eight women rangers to complement the broader Ranger Team. A key gap identified by the Coordinator and Women's Rangers that resulted in feelings of isolation in their roles was the lack of a support network, which differed from male rangers' situation as long-standing participants in the sector. A second step was to learn from the experiences of existing support networks in Queensland and Western Australia, which identified challenges to sustaining network activities; initial enthusiasm catalyzed start-up conversations with little follow through. The Strong Women Healthy Country Network (SWHCN) emerged as a commitment by Mimal to a five-year long journey to support a series of three forums in the area. Championed by female Board Directors of Mimal, 2019 marked the first forum in the series, which brought together over 140 women from 32 ranger groups across the Northern Territory to gather and form a network to *"help strengthen the voice, role, and support structures for women working for healthy Country"*.[7]

Regional in-person forums are core to the SWHCN. Consisting of *forum preparation* –where women's ranger groups in the region are consulted to shape the forum structure, funding sought, and cultural protocols of hosts learned— *forum delivery*, and forum *follow up*, events held between 2019 and 2022 have iteratively shaped the network's purpose and ways of working (Figure 16).[7] Although the 2020 global Covid-19 pandemic disrupted the scheduled of in-person forums, momentum for network activities persisted.

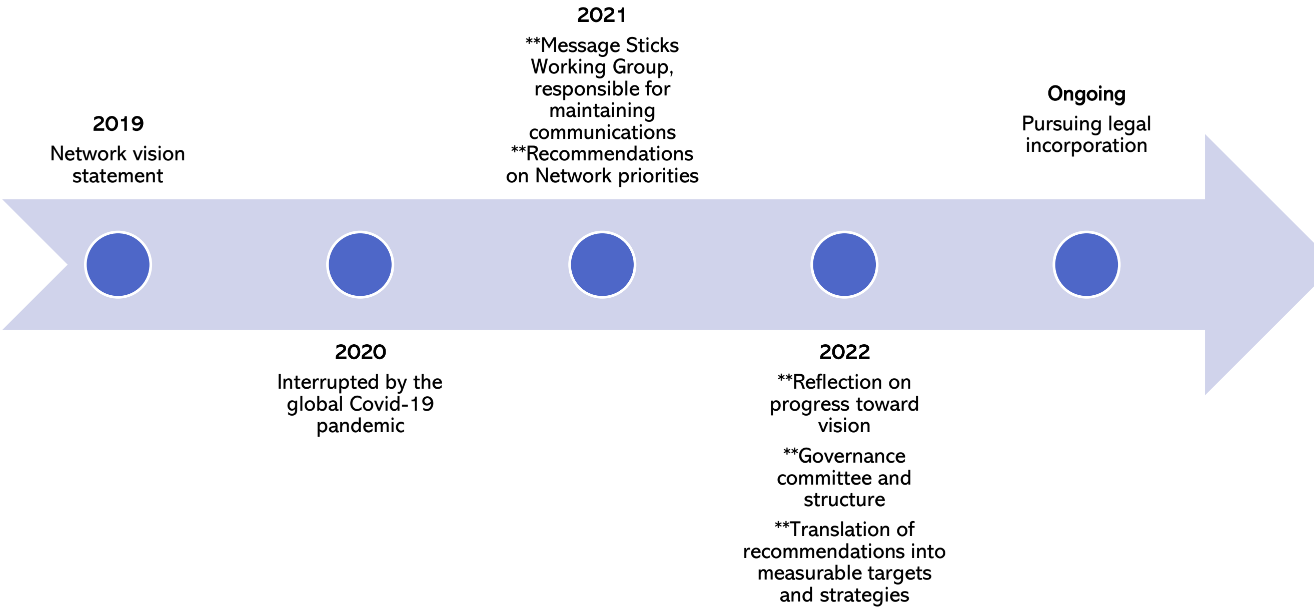


Figure 16: The evolution of the Strong Women Healthy Country Network (SWHCN) (Source: Author's creation from information in the Strong Women for Healthy Country Forum 2021 report).

Forums involve a combination of facilitated sessions, artistic, and biocultural experiences on the land, all intended to grow relationships among women rangers, share skills and knowledge, and build

a sense of solidarity. Over three to four days, Indigenous women rangers from across Australia participate in facilitated and trauma-informed[8] healing spaces involving dance, song, “yarning” circles (i.e., storytelling practice of Aboriginal Australians[9]), one-on-one healing sessions, visual arts, making traditional medicines, fishing, and walking on Country. Importantly, this bridges the divide between Indigenous women who were at risk of losing their land-based knowledge and those who were raised learning traditional practices; a healing journey for displaced knowledge, taught by Indigenous women. Targeted training is built into the program alongside the space that is created for women rangers to advocate for themselves. Knowledge and perspectives shared during forums are synthesized into outputs such as that shown in Figure 17 and used to inform subsequent activities.

About six years since the initial idea emerged, the Strong Women Healthy Country Network represents over 40 ranger groups in the Northern Territory, who have grown in their own capacity and organization, and are pursuing legal incorporation of the Network as its own entity.

Workforce development

Mimal offers bespoke training and flexible work arrangements to ensure that rangers (male and female) are fully equipped for their careers in land management, including local, social, and cultural skills that communities need people to have to become leaders.

Mimal’s approach to onboarding is sensitive to the needs, attitudes, and behaviours of local youth and those aspiring to earn livelihoods as rangers. New entrants to the ranger work force, as part of Mimal programming, are unaccustomed to various duties, the pace of work, and implied time commitments. Ranger work involves a combination of physical activities, like weed spraying, welding and fixing cars, and more academic tasks like working with GIS and plotting data. Youth joining the program have mixed levels of education and little to no employment experience. Some aspire to work two or three days a week, others full time, yet others might be interested in working two days every two weeks or less. To respond to these aspirations and keep participants motivated, Mimal develops and implements work plans tuned to the pace of people, providing the opportunity for people to identify the work level that suits them: *“it’s about challenging people to grow and pushing them, but at a pace that doesn’t crush them”.*

Informal mentorship is a main component of Mimal’s approach, with regional and national ranger and natural resources management conferences as key delivery vehicles. Over multiple years, Mimal staff create opportunities for rangers to represent themselves and their work in regional and national fora: rangers go from observers in presentations delivered by Mimal staff to main speakers at conferences. Quotes from a Mimal representative illustrate the gradual shift in rangers’ self-confidence and Mimal’s supporting role: *“with a cohort of women that came through, it probably took about three or four years and then a couple of those women were then presenting! So, they were comfortable with talking about the work that they've been doing for the last four years and had heard the content a few times, so they were comfortable to say, ‘here’s what we are doing’.”*

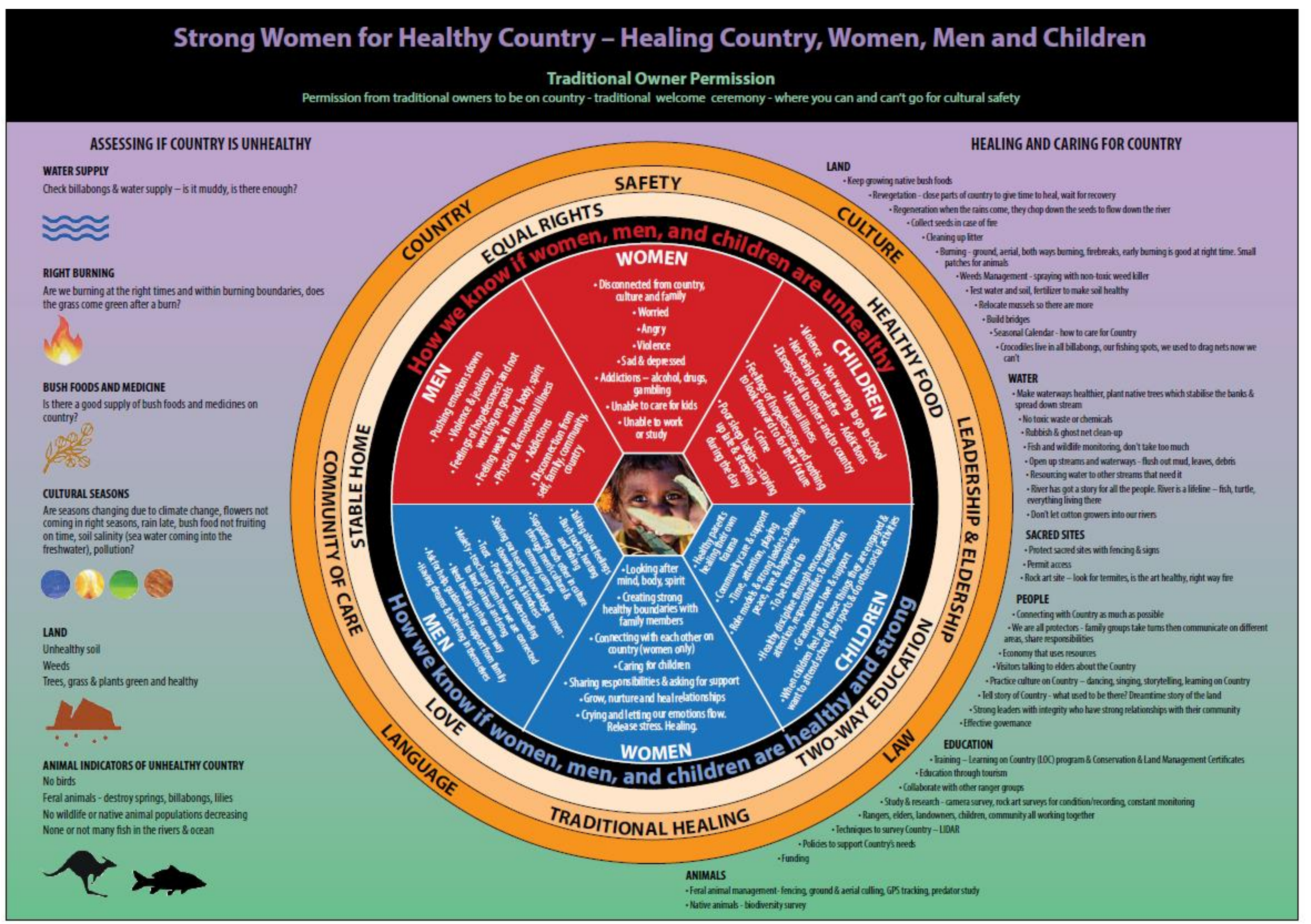


Figure 17: A visual representation of the data shared during the Healing Country Yarning Circle during the 2021 Strong Women for Healthy Country Network Forum (Source: Strong Women for Healthy Country Forum 2021 report)

Mimal works to broker connections with values-aligned partners, including to financially benefit from stewarding the territories. For example, Mimal supports the Learning on Country program (see Case Study 11). This program works in partnership with schools, the community, and rangers to enhance educational attainment among Indigenous youth and workforce readiness through a two-way learning approach that couples ranger and land-based activities with official school curriculum. Elders and Indigenous Rangers are compensated to share their Indigenous knowledge and their experience in caring for country.

Board capacity

Mimal is committed to capacity strengthening of the Board[2], embracing strong governance and an ability to adeptly meet Western rules without losing fidelity to community goals. Meetings of the Board of Directors take place over three days, with one of those days focused on training and development on governance. Results of third-party governance reviews every two years and Directors' own goals guide training plans, which can include topics like legislative requirements, roles and responsibilities as a Director or staff member or both, and corporate finances. Special projects can arise from those trainings, including a project underway entitled "The Money Story", a tool for Board members, whether experienced or new, to better understand what accounting is, where to look for problems, and how to interrogate the accounts and finances. Strengthening this aspect of Board governance stands in contrast to a more classical approach of simply receiving reports in specialized, and largely incomprehensible, accounting terms.

Duration

Initiated by a group of Indigenous landowners in the late 1990s, Mimal was incorporated in 2015. Mimal has shown significant growth over their eight years of operation as a registered Aboriginal corporation. The organization started by running five to six projects and is currently at 80 projects, requiring more staff, external contractors, and research partners.

Operational structure and financials

Mimal is a charitable nonprofit registered with the Australian Charities and Not-for-profits Commission (ACNC). Mimal operates with a governance board of Indigenous membership. In addition to oversight of Mimal's financial and legal responsibilities, the Board provides guidance and oversight over the implementation of Mimal's vision, policies, and procedures.[3] The Board is comprised of nine Indigenous directors; three directors are elected from each of the three clan groups of Mimal's operating area. The Board may choose to accept members with other kinds of affiliation, but they must have a connection to one or more of the represented clans.[10] Directors earn a sitting fee of $250 Australian Dollars (AUD) per day per Board meeting, in their capacity as Board members.[11]

Mimal's staff, including a Chief Executive Officer and rangers, oversee the day-to-day operations of the organization, maintaining relationships with the Board and landowners.[3] Prior to incorporation, Mimal functioned with one coordinator and six rangers. At present, the organization has five coordinators, and manages the work of numerous external consultants and ninety positions for Indigenous people in the community. These positions are a mix of full time and part-time roles, including compensation for Elders who spend time as advisors or in day programs with the school kids. In a community of about 350 people, 90 of them working at Mimal in some capacity is having a transformative effect.

Mimal's funding comes from grants and contributions of governments and philanthropic organizations, but it is their reinvestment model that has enabled the growth and development of the Ranger programming, in particular. Mimal's economic development services include fire management. The demand for these services in Arnhem land has seen incredible growth, translating

into financial success for Mimal and granting the organization the flexibility and capacity to pursue self-determined initiatives. Resources from fire management projects have enabled internal reinvestment, including kick-starting the Women's Ranger program at a time when communal support for its launch was high. The Board committed to funding the Women's Program for three years through this approach, fully intending to find alternate resources in the longer term. Mimal has copied that reinvestment model with other service-delivery programs, specifically, Learning on Country and Feral Animal Management.

Although a breakdown of financials related to the Women Ranger's program is not available, Mimal's annual operating expenses for the past three financial years have averaged about $ 4 million AUD (Table 5). Annual expenses for 2023 come close to $ 5 million AUD to cover rising costs, with employee and travel expenses as two line items that have increased relative to previous years. According to Mimal's CEO, producer contracts linked to the organization's fire services plus grant funding make up about 60% of Mimal's income, with philanthropic and government funding each representing about 20%. Bush Heritage and Australian Federal Government and Northern Territory Government as examples of funding partners.[10]

Table 5: Mimal's reported assets, revenues, and expenditures between 2021 and 2023.

	2023	2022	2021
Total assets	$8,699,346	$3,865,807	$3,439,357
Total current assets	$7,662,743	$2,983,944	$2,760,704
Total liabilities	$1,226,903	$628,109	$579,908
Surplus for the year	$4,511,256	$378, 049	$641,046
Revenue and other income	$9,455,195	$4,156,557	$3,988,625
Operating expenses	$4,943,939	$3,778,508	$3,347,579

Financial information is from Mimal's financial statement for 2023 and their 2022 Annual Report (all currency in nominal AUD).

Accountability

- **Upward accountability:** Aside from compliance with reporting requirements, Mimal's commitment to transparency, accountability, and organizational strengthening is evident by the joint work undertaken by the Board of Directors and staff to monitor collective progress on eight themes: leadership and two-way governance; meetings and decision making; compliance and rule books; organizational planning; roles and responsibilities; risk management; staff development and succession planning; and financials (Figure 18).[10] Building Board capabilities for good governance has broader spillover effects for strengthening overall governance in the territory. Several Board members are senior leaders in the community and often hold seats on boards and committees for health organizations, land councils, and local councils. As different board members rotate from the wider clan membership base, overall capacity for doing governance better increases.

  Grant funding comes with monitoring and reporting requirements, often focused on quantitative metrics related to outputs such as the number of trained individuals and the number of new hires. Mimal considers results such as these as a low bar, as the organizational measures success in terms of durable outcomes. As noted by the CEO, *"it's easy enough just to promote someone up into a job and go 'look! We've got a new Indigenous Coordinator' and then a year later, they've disappeared off into the night because it was too hard and there were too many barriers. So, it's about: how do we break down all of those before we get there?".*

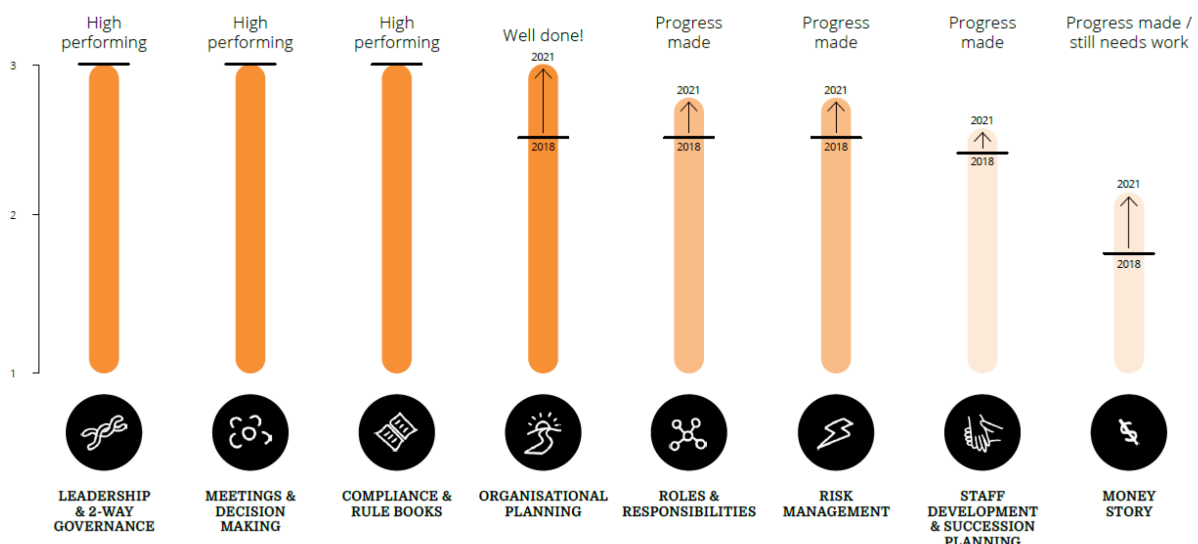


Figure 18: Results of two third-party reviews undertaken on Mimal, focusing on eight categories of healthy governance (Reproduced from Mimal's 2022 Annual Report, "Blazing a Trail").

- **Downward accountability:** A fact of operating in a small community is the fewer degrees of separation among everyone; talking to the Board and senior community members is part of staff's jobs and people are all family and friends as well. In addition to formal monitoring and evaluation, Mimal Board members and staff hold active conversations with community members to hear about what is and is not working. This process of ongoing feedback helps Mimal stay on track, ensuring that the work they are doing is what the community wanted to see projects achieve for their people.

Results and impact

Mimal's Women Ranger Program and the Strong Women's Healthy Country Network that the organization hosts have had significant impact at the individual level. Mimal's approach to working with rangers described previously is effective at building (female and male) participants' confidence levels, their ability to advocate for themselves and to take on leadership roles. The Strong Women's Health Country Network has reinforced the need for and impact of a wider circle of peers in building up that confidence. According to Mimal's 2022 Annual Report, the *"Network does so much to open conversations and support the women living and working in the Mimal [territory]."* Such is the Network's impact that it continues to hold Board support[10], with Network members now working to formalize it to become its own legal organization.

Beyond impact at the individual level and among the group of women involved, the Network's advocacy is influencing gender equality in land management practices. At their 2022 Forum, Network members collaboratively developed best practice principles for employing Women Caring for Country (Figure 19, also available here). Targeting government agencies and other groups, the practices Network members advocate for encompass training needs, systems, and structures to set up and maintain to support women in the workplace. By identifying best practice principles and specific actions mapped to them, the Network helps keep governments and other organizations accountable to strengthening women's participation in the workplace. The best practice principles have attracted media attention[12] and Mimal's CEO claims that government, both state and federal, is putting some of the recommendations from the Network into practice.

Success factors

Community and Board support is the foundation of Mimal's success, including with respect to Women's Rangers programming. This support is cultivated through the following two strategies:

- **Grounding the activity of the organization in community needs and strengths:** The heart of the organization are the instructions on needs and aspirations that come from the ground up; without that, the organization has no clear direction of travel. As noted by Mimal's CEO, *"If you don't have community support, then you need to have some other very strong evidence as to why you would be pursuing something, because that support translates into the whole organization. You might be able to find the money, the partners, and everything else, but if you don't have the actual crew to deliver it on the ground—that's where that community support is very important—it just won't happen, and you'll have wasted a lot of time and energy."* Not only do the needs come from the community but so do the solutions, which requires creating opportunities to actively listen to community members on a continuous basis.

- **Drawing clear boundaries:** Strategic clarity from the Board, based on community needs, gives Mimal staff license to chase funding and partnership opportunities with conviction. Clear boundaries are drawn, engendering trust: the CEO knows what the organization is trying to achieve, what to stand for, and how hard to push to advance organizational priorities, confident of the Board's support. Equally, a mutual understanding exists on activities, topics, and partnerships that are unsupported.

Mimal's **attitude toward the pursuit of new programming** is an additional success factor, encompassing an ability to couple good ideas supported by the community with capacity to find funding.

- **Starting small, with the resources available:** instead of waiting for adequate levels of resourcing, the set up, and support structures to be in place, Mimal's approach is to seize on the momentum behind community support and just start. This approach gave rise to the Women's Rangers program, which was a Board and community priority and so the organization decided to re-direct funding from their economic development activities to make it happen. According to Mimal's CEO, funding is critical to delivering sustainable and effective programming, but it is not an insurmountable barrier. Although it is important to be aware of and identify funding pathways, scaling activities to the level that is affordable until more resources are found is a strategy that works.

- **Using proof-of-concept to attract funding:** Mimal's experience suggests that philanthropic organizations and other funders are more attracted to funding initiatives that they can add value to rather than channeling funding to a brand-new concept with zero funding. This is another reason supporting Mimal's "just start" attitude. Specifically speaking about the Women's Rangers program, Mimal's CEO emphasized that *"talking about the concept of having some Women rangers doing something really doesn't bring people on board. Philanthropists are people giving their money for something that they care about. Having smiling, happy rangers doing amazing things in incredible Country and seeing photos of that makes it far easier to generate that sort of support and interest."*

Principles to uphold	Practices that have helped women caring for Country feel safe and supported at work
Respectful workplaces	- Uphold people's diverse cultural and gender identities. - Provide cultural awareness training for new support staff and managers. - Make space for cultural protocols in workplace policies, processes, inductions, dress codes, and codes of conduct. - Develop and implement a domestic violence policy. - Ensure all staff know how to recognise and report different forms of abuse both inside and outside of the workplace.
Dedicated resources	- Have dedicated infrastructure in place for female staff, such as a women's bathroom, office, meeting space, and storage facility. - Ensure women have equal access to a safe and functional vehicle. - Employ female support staff and mentors.
Dedicated training	- Provide a range of training opportunities for women in all aspects of caring for Country beyond land management. - Engage female trainers. - Support women to do training together and bring their Elders and mentors. - Have childcare and meals in place during training. - Provide training opportunities in remote communities to reduce time away from family. - Support women in remote communities deliver on the job training to each other. - Include women's families in celebrating their training achievements.
Flexible work schedules	- Provide flexible workhours, as well as part-time and casual positions. - Consider important events such as school holidays and ceremony during work scheduling. - Provide childcare. - Give women opportunities to include their children and Elders in their work activities. - Provide safe and legal ways to transport children of different ages in work vehicles.
Representation in decision-making	- Support women to join steering committees, boards, planning groups, and other decision-making groups. - Include gender quotas into the Terms of Reference of decision-making groups. - Allow women to speak their truth and maintain their cultural integrity at meetings. - Listen to women when they speak. - Include women in planning and decision making within work teams. - Support women to make decisions in private where this is cultural protocol. - Recognise women as experts of their own Country and follow their direction in decisions that impact on their Country.

Figure 19: Best practice principles for employing women caring for Country developed by the Strong Women for Healthy Country Network at their 2022 Forum (Reproduced from this document.)

Addressing the problems within Mimal's remit requires working with partners to help bring advice and support from like-minded organizations. Success factors in this regard include patient networking and outreach via attendance at conferences.

- **Cultivating partnerships through conversations:** Mimal recognizes that partnerships stem from conversations and the connections engendered, and sometimes these conversations take time to bear fruit. For example, a coffee chat with a production company in London by the CEO lead to the production of a mini-documentary on Mimal's work four years later.

- **Attending conferences:** undertaking outreach on Mimal's work at conferences brings professional development opportunities to Mimal's staff and crew, but this is also a business development strategy. Conference attendance helps build new partnerships and relationships with other groups and organizations, which has translated into project ideas, funding, free marketing, which in turn generates more support.

Regarding program's activities themselves, an important success factor is Mimal's flexible work arrangements to meet the cultural context of staff and crew.

- **Reconciling cultural norms and organizational norms in a cross-cultural environment.** The organization navigates ways of working of rural Bininj, who are unaccustomed to a 5-day, 40-hour workweek and consider cultural obligations as an overring priority. Practices such as absences after having worked three days of the week are not uncommon and would not be tolerated in most Western workplaces. Based on constant communication, Mimal enables Indigenous staff to calibrate their position to match their physicality and other needs, such as family responsibilities like helping to care for elderly relatives and children
- **Building onramps to support seasonal work.** Mimal recognizes that community members often need a break from Ranger work, choosing to take on another job in the community or fulfilling cultural or family priorities. Mimal maintains an "open door" policy, supporting the ability for people to take a break. Since going out on Country is a core value, Mimal finds that community members tend to come back and resume their duties as rangers.

Constraints

Mimal's main challenges pertain to both internal operations and the external environment.

- Although flexible work arrangements are a success factor for the organization, meeting the diverse needs of this dynamic workforce while trying to deliver a work program provides challenges as an employer.

- As with many organizations, financial controls and management is an area of weakness with respect to governance (Figure 18). Finance is complex and the financial position of entities like Mimal can change relatively quickly if risk tolerance, due diligence, and external funding conditions are misaligned. The Money Story project underway is an effort to build capacity to confront this challenge.

- The pursuit of flexible grant funding is a continuous challenge. Government grants are a main source of funding, but they do not offer the flexibility to experiment or work emergently, which is often what is needed in Mimal's context. Compliance reporting often requires funding recipients to identify intended results at the outset and deliver on them.

- Youth and families in the region are underserved with respect to services, supporting infrastructure, and employment opportunities, which drives migration to urban areas. Mimal operates in a remote area of Australia that supports traditional ways of life but does not offer the basic services and amenities of urban centres. Indigenous-Australian community members generally want to live with their families on their homelands. However, migration to urban settlements is a common response. For example, young parents move to be closer to educational facilities for their children. Mimal works alongside their community to find solutions for long- and short-term challenges, but this is not their area of expertise, and it requires additional internal capacity strengthening and building dedicated partnerships.

Replicability

Although Mimal's socio-ecological context, history, and current operating conditions are unique and defy replication, the organization's approach of using proceeds from economic development projects to kick start capacity strengthening programs to support ranger land caring and culture can be successful in other operating environments. The following factors are critical to enable successful replication or scale out of this model:

- A defined territory with authority to manage it and governance that includes representation from all traditional tribes or clans in the territory.

- Ongoing work to recognize and enshrine the authority of local Indigenous communities to be active participants in the management and monitoring of their lands and natural resources.

- The ability to provide land caring services that are in demand by government and land managers in the territory, such as fire management, management of pests and invasive species, and reforestation.

- Recognition of the value of providing tailored support to women rangers, providing the enabling conditions for women rangers to identify their needs and priority actions to address them.

- The ability to find ongoing funding once the initial commitment period to demonstrate the proof of concept of a program comes to an end.

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CASE STUDY 11: LEARNING ON COUNTRY

https://learningoncountry.com/

11. Learning on Country (LoC)

GunBulanya group shot| Photo credit: Learning on Country

Geography:	Northern Territory of Australia.
Level:	Individual (and community).
View of capacity strengthening:	Maintaining culture and students' connection to where they come from, and the value of that.
Genesis:	A model piloted by Indigenous communities in 2010, formally established via government funding in 2013.
Goals:	**1)** Increasing intergenerational transmission of Indigenous knowledge and customary practice; **2)** developing partnerships between ranger groups, schools, and local community; **3)** improving school attendance and learning.
Approaches:	Partnerships; blended learning; peer-to-peer learning.
Modalities:	Experiential learning (camps, field trips), vocational training, networking (forums).
Impact:	3,273 Indigenous students have participated in LoC activities, 173 Indigenous staff employed, improved school retention.
Success factors:	**1)** Indigenous ownership and direction; **2)** policy commitments and government funding, **3)** integration of vocational training and pathways to jobs; 4) commitment to evaluation and learning.

Introduction

The Learning on Country Program (LoC) is a joint initiative between Indigenous Ranger groups and 17 schools across the Top End of Australia's Northern Territory that aims to engage Indigenous students in this remote region through land-based learning integrated within their secondary school curriculums. The program emphasizes a "two-way learning" and "two-toolbox" approach that incorporates both Western and Indigenous knowledge systems to deliver culturally aligned learning opportunities that meet national curriculum standards, support intergenerational transfer of traditional knowledge and culture, and provide pathways to employment. The teaching and learning programs are developed collaboratively between each partner community's school and Ranger staff, with a focus on on-country learning that is planned and delivered in partnership with Traditional Owners and Cultural Custodians from the local Indigenous community. This program places a strong emphasis on Indigenous governance and community ownership of the program to ensure that activities and outcomes meet community needs, which is ensured by an overarching all-Indigenous Steering Committee in collaboration with local leadership committees within each of its member communities. This initiative began in 2013 and recently celebrated its 10th anniversary of successful program delivery for the benefit of Indigenous students from across the region.

In addition to the references noted, the following case study draws from key informant interviews with and some written contributions from Hugh Kneebone, LoC Program Manager, and Shane Bailey, LoC Program Coordinator.

Focal geographies

- Northern Territory of Australia

Sector

Education and vocational training

Level of capacity

Individual and community capacity

Target populations

- **Direct:** Participating schools, students, ranger organizations, and Traditional Owners
- **Indirect:** Broader communities within partner sites who benefit from engaged youth, employment of local people, and increased capacity for land stewardship

Operational context

The Northern Territory where this program operates encompasses a high degree of cultural and language diversity across many remote and predominantly Indigenous communities. Many Indigenous students in this region live in communities that have retained a strong degree of traditional cultural identity and customs relative to the rest of the country, which can sometimes clash with state educational objectives. Students' lives and status in the community still often revolve around family, ceremonial, and other cultural commitments that may take them out of school for long periods of time and their native language is often still the first language spoken at home rather than English, the conventional language of instruction.[1,2] These strong cultural and family ties can also make youth reluctant to leave home to find employment, and a lack of local employment opportunities along with educational institutions that lack the resources, understanding, and readiness to engage with Indigenous learners further reduces incentives to attend.[3] Educational outcomes for these students are also influenced by broader risk factors often referred to as "social determinants of education", including erosion of cultural identify and community, poor physical and mental health, few local employment opportunities, and endemic poverty, as well as high levels of substance abuse, incarceration, and suicide which are increasingly affecting youth themselves. These factors are often further exacerbated by the ongoing impacts of colonization, including inter-cultural conflict, miscommunication, and institutional racism.[1,2]

The Australian Government has sought to address these issues through its National Agreement on Closing the Gap, which brings together federal, state and territory governments to develop policies, programs and initiatives that aim to address the disparity between Indigenous and non-Indigenous education, wellbeing, and opportunity. As part of this initiative, all levels of government are increasingly directing investment towards community-based programming that can help to achieve these objectives, with a particular interest in on Country- and culture-based programs that draw on local culture, knowledge, and skills and are increasingly recognized for their potential to enable improved learning outcomes for Indigenous students.[4,5] Such programs also support the growing development of Indigenous land and sea management as an economic sector with its own skill competency and training requirements, which is increasingly providing employment and economic development opportunities in remote regions.[4]

The LoC program emerged from the confluence of two unrelated policy currents concerned about the low engagement and performance of Indigenous students in remote community schools and the emergence of Indigenous Land and Sea Ranger programs to meet the needs for natural resource management in remote parts of Northern Australia over the last twenty years. The growth in Indigenous employment opportunities through significant funding for Ranger programs close to remote community schools created the right circumstances for teachers to partner with Rangers to provide educational experiences that engage students and the wider community in a new mode of learning – one that recognises and values the importance of Indigenous culture and connections to

"country" as well as customary practices. Early experiences in incorporating traditional knowledges and practices into the mainstream education models revealed multiple benefits to school attendance and educational outcomes. The involvement from local Elders and Traditional Owners in this emerging two-way educational approach has also opened up more local employment opportunities. Increased community support for this more relevant educational approach helped to improve attendance rates, literacy, numeracy, and Western scientific knowledge outcomes.

As these benefits were being realized, a group of four Indigenous communities in the Northern Territory came together in 2011 to develop a model that they called "Learning on Country" (LoC) and secure government funding to support a two-year pilot program. The LoC program emerged through an organic and non-linear process. It was originally conceived as a Junior Ranger Program at two sites through a collaboration between the Australian Government, local Northern territory education department staff, and the Dhimurru Aboriginal Corporation. Additional collaborative engagement in the region led to its evolution into the LoC Program model and secured government funding to support a further two-year pilot program beginning in 2013.[1] Following an independent evaluation of the program in its early years, the LoC program was refunded and expanded. By 2018, the program had expanded to nine sites. Overarching governance was run by the all-Indigenous LoC steering committee which consisted of representatives from each of the LoC sites as well as key Traditional Owners, educators, and Ranger personnel from participating communities. This program has since expanded across the Northern Territory to encompass 17 community sites and engage thousands of participating students each year with demonstrable success and continued government investment. Although program participation, activities, and governance have evolved over time, its core design and guiding principles remain unchanged.

Factors that have shaped LoC's establishment and operations included the following:

- Erosion of cultural practices and traditional knowledge transmission following colonization, accelerated by the ongoing loss of elders and cultural custodians across communities.
- Historical and ongoing context of significant disadvantage and disenfranchisement of Indigenous communities, contributing to low school attendance, levels of completion, employment prospects, and broader adverse socioeconomic outcomes.
- Failure of conventional western "one-size-fits-all" academic programming that does not reflect or recognize the importance of the learning inherent in culture, language, and Country and its capacity to improve Indigenous student engagement.
- Increasing recognition that community-led program design and implementation ensures locally and culturally responsive activities that build community support and improve Indigenous student outcomes.
- An enabling national educational framework that facilitates integration of program activities with curriculum requirements through linkages to a national Indigenous cross-curriculum priority and the flexibility for land-based activities to contribute to accredited vocational training certificates that help to meet requirements for secondary school completion.
- Growth of Indigenous land and sea management as an economic sector, supported by shifting cultural norms, government policy, and multilateral investments, creating local employment opportunities that provide a business case for sustained funding and a stronger incentive for student participation in and completion of secondary schooling.

Goals and objectives of capacity strengthening

The LoC Program's overarching vision is to *"empower communities to deliver integrated cultural and educational opportunities that will see young indigenous people walking strong in two worlds."* There is also an emphasis on vocational training and workforce development to allow the program to act as a talent incubator and to provide a job-ready cohort with skills transferrable to the region's natural resource sector, including through guardian and conservation management programs as well mining, pastoralism, forestry, tourism, fisheries, horticulture, wildlife utilization, and artistry.[4] The key objectives of the LoC Program are articulated in its funding agreements and include:

- **Increasing intergenerational transmission of Indigenous knowledge and customary practice** to help meet the dual pedagogical expectations of Indigenous and non-Indigenous educators and to ensure the maintenance of traditional knowledge, culture, and ceremony.
- **Developing strong partnerships between ranger groups, schools, and local community to deliver a culturally responsive secondary school curriculum** with a particular focus on natural resource and cultural management but increasingly identifying local employment pathways including entrepreneurship and new business opportunities.
- **Increasing school attendance** to support the broader goals of course completion and transition rates to further education, training, and employment.
- **Improving student learning through culturally-integrated 'both ways' curriculums** delivered with adequate support by trained support staff and coordinators. The measure of this objective is evidenced through a strong monitoring and evaluation framework centered around the number of students involved with the LoC program, increased attendance at participating schools and the number of educational and employment outcomes directly attributed to the LoC program.

Expected program inputs and outcomes supporting these objectives are further articulated in the LoC Program logic model or theory of change (Figure 20).

Capacity strengthening approach

Land-Based Educational Programming

LoCs primary approach to capacity strengthening is through community directed and school run educational programming that aims to integrate 'both ways' learning into secondary school curriculums. The program partners schools with Indigenous Ranger groups and Indigenous leaders and elders from the broader community to provide role models and develop skills through a "two toolbox approach". This approach incorporates both Western and Indigenous knowledge systems to deliver culturally appropriate education and training *"to build the skills, capacity, and confidence of students to walk strong in both worlds."*[4] The intent is to incorporate LoC into the learning culture of both the school and the community to achieve multiple outcomes for all involved.

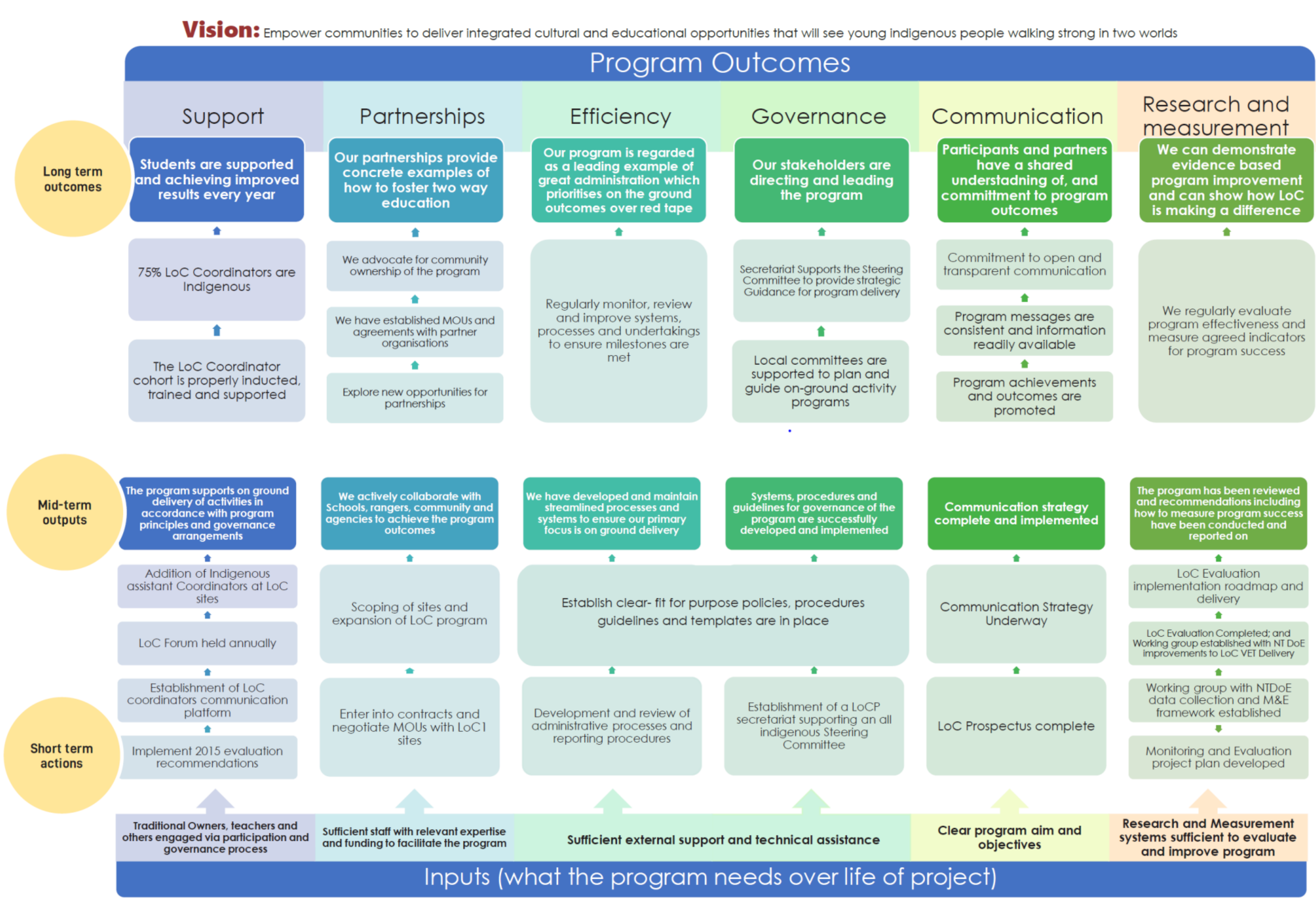

Figure 20: The Learning on Country Program's draft logic model or theory of change, subject to endorsement of the LoC Steering Committee.[4]

The core elements of the program are standardized and mandated in the individual funding agreements with a Local Learning on Country Committee (LLoC) providing guidance and connectivity to all the key entities involved in the delivery of the LoC program. This committee is vital in creating collaborative ownership of its LoC program and has the flexibility to tailor the design of program activities to address local community needs and aspirations. This allows for each LoC site to develop activities that are specific to their priorities and therefore vary from site to site. This flexibility allows for communities with larger ranger programs that have greater employment opportunities to emphasize vocational training pathways. Communities with fewer Rangers and greater concerns about cultural loss may choose to emphasize cultural revitalization through storytelling, artistry, and traditional resource gathering. In addition to educational programming, the local LoC Committee seeks to mentor youth who are emerging as community leaders through participation in the Committee process.

LoC programming is run for a minimum of one full day per week at each site as in-class workshops, day field trips, or extended activities such as week-long cultural camps, with activities on country varying by day and by each site. Some days may focus on Ranger-based activities that include land and sea management projects and responsibilities modelled on cultural knowledge as directed by Traditional Owners. These activities may include bushwalks, biodiversity studies, water quality testing at swimming holes, animal trapping, weed eradication, cultural burning, beach cleanups, and learning about vehicle maintenance, camera trapping, and other technical tools. Other days may be spent with Traditional Owners sharing cultural practices through organic learning activities such as gathering of medicinal, dye, and food plants from the bush, making fish spears, visiting rock art, creating fiber art and other traditional crafts, kinship mapping, and sharing cultural stories and learning about traditional songlines and dances. Although the target cohort is middle and senior secondary school students, younger students often participate in programming as well.

On other days of the week, lessons learned on the land are carried back into the classroom through explicit linkage of LoC activities to existing school subjects and curriculum components. For example, exploring the science of materials (e.g., tempering) and physics (e.g., throwing velocity and angle) associated with traditional spear-making or teaching chemistry (e.g., volumes, solutions, and concentrations) through vocational programming associated with water testing or the use of herbicides in weed management.

Classroom integration is facilitated by the development of territorial educational plans[6], implementation guidelines[7], and curriculum resources tailored to Indigenous students, such as the Northern Territory Department of Education's Indigenous Languages and Cultures Curriculum.[8] This curriculum was collaboratively developed by Indigenous educators and elders drawing on decades of practical teaching experience to help improve Indigenous student engagement and outcomes and emerged around the same time as the creation of the LoC Program.[3] The Cultural Knowledge and Content portion of this curriculum provides teacher guidance on concepts, content elaborations, and achievement standards across years to help situate core concepts in the context of Indigenous culture, make learning more relevant and engaging for Indigenous students. Parts of this curricula were explicitly designed to be taught through excursions on country under the tuition of Elders. It also highlights shared links and common content for meeting key requirements of the broader Australian Curriculum and its Aboriginal and Torres Strait Islander Histories and Cultures cross-curriculum priority.[9] Integration with the territorial curriculum helps to distinguish the LoC program from similar initiatives such as Junior Ranger programs that focus only on activities taking place on the land. There is also growing interest from the LoC program in taking this work further by supporting the development of locally tailored curriculum resources that better support the LoC activities in participating communities.

Vocational Training and Work Experiences

Activities at some LoC sites also include an embedded Vocational Education and Training (VET) component. VET comprises accredited courses and certificates that prepare students for the workforce and can contribute to completion requirements of the Northern Territory Certificate of Education and Training (NTCET) awarded to students who complete their secondary education.[10] This includes students in the LoC program who complete Conservation and Land Management (CLM), Maritime Studies, and First Aid VET certificates aligned with the

ranger work program. This program component is a big draw to students. Program managers *"…look at the program as an incubator for land and sea ranger-based work. It's about developing the next generation of Rangers. They've got one of the best jobs, cool toys, and are very well funded by the federal government, so a lot of our kids aspire to come through that. We do what we can to build the capacity of those students in schools."*

The graduations of students who complete their secondary education through the program are widely celebrated and a significant source of community pride, helping to establish new cultural norms and expectations about the value of completing secondary education and vocational training that can encourage more students to participate in the program. Additionally, some students pursuing this path have transitioned into full-time employment as Rangers following completion, although few positions are available each year. Skills acquired through the LoC program are also transferrable to a wide range of other employment sectors and students also find work in other natural resource sectors, tourism, arts, or community services.

Local Governance and Leadership Development

The LoC program also provides learning opportunities for staff, committee members, and collaborators. This type of learning occurs organically as part of program governance and delivery, and as part of biannual **Learning on Country Forums**. These multi-day forums bring together up to 70 participants to share and learn, with participants comprising core staff and representatives from the local LoC Committees, all members of the all-Indigenous Steering Committee, and other program participants, partners, funders, and guests. Activities include presentations from each LoC program site, practitioner workshops, and dedicated meetings of the LoC coordinators, the LoC Steering Committee, an expert Monitoring and Evaluation Committee, and other working groups. Forums provide a rare and valuable opportunity for members of the team distributed across a large part of the Northern Territory to gather and see what others are doing. This enables collaborative sharing and fosters a sense of collectivism and belonging, by helping members from remote communities feel like they are part of an important movement.

Duration

The LoC program was formally established in 2013 among four communities and has since grown to currently encompass 17 communities. The program has recently celebrated its 10th anniversary with a gathering of over 250 attendees to share stories, successes, and the important announcement of six additional years of funding to secure the program until 2028.[11]

Operational structure and financials

LoC operates under a multi-tiered co-governance model. The program's core management and administrative team is small and includes four staff housed within the Northern Land Council's main offices in Darwin. These staff work to facilitate and support LoC Local Learning on Country Committees (LLoCC) in their operational programming planning and design. This group is comprised of a local LoC Program Coordinator as well as key stakeholders from schools, Ranger groups, and other community representatives as deemed appropriate. The work of each local LoC Committee is guided by a Memorandum of Understanding (MoU) between local partners and the LoC organization that collectively establishes roles, responsibilities, and activities. Each committee meets at least four times a year to conduct its business.

Part of committee business includes nominating an Indigenous LLoCC Chairperson, whose role includes participation in the overarching all-Indigenous LoC Steering Committee. The LoC Steering Committee provides cultural and strategic guidance to the Darwin based LoC program management team who provide administrative support to all participating program sites in accordance with the directions from the Steering Committee and each individual LoC site's needs. Representatives elected to the Steering Committee are supported in their roles, including governance training. Staff and members of all committees attend biannual LoC Forums.

Although LoC is an independent and community-driven initiative, it has been entirely supported by long-term operational funding provided by the Australian National Government. Program funding was initially drawn from a few different agencies until the establishment of the Indigenous Advancement Strategy (IAS) in 2014, which consolidated funding for Indigenous programs. The IAS has since acted as the conduit for program funding through its Children and Schooling Stream and Remote Australia Strategies Stream, with funds administered by the Northern Land Council since 2018. The program's annual operational budget has historically been roughly $4.5 million Australian Dollars (AUD) but has recently increased to between $5 and 5.5 million AUD to cover rising costs and ensure the program is managed effectively and to a sustainable level.

Of LoC's annual budget, roughly three quarters goes directly to site funding for community-based operations while the remainder is divided among staffing, program management, and strategic project costs (Figure 21). Direct funding is supplemented by an estimated additional $1.8 million AUD in value via in-kind support from ranger groups, the Northern Land Council, Indigenous organizations and corporations, and the Northern Territory Department of Education (NTDoE) in the form of staffing, administrative and operations support, and access to resources, such as school equipment and residential accommodation. Detailed breakdowns of administrative site expenditures are available in the program's recent prospectus document.[4] The program recently received a commitment of six additional years of funding from the NIAA to support ongoing operations until 2028, expand the initiative to 19 sites, and widen the target cohort to incorporate more middle and senior school students.[11]

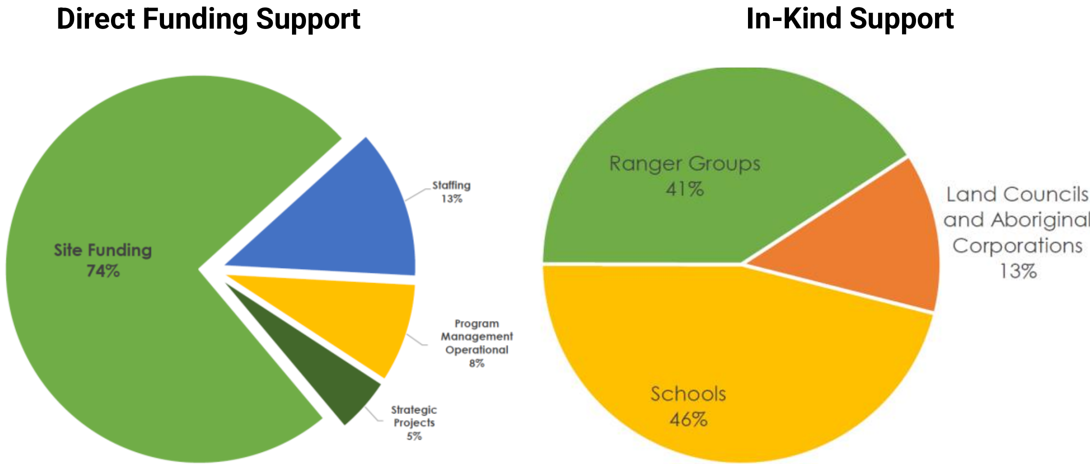

Figure 21: Anticipated breakdown of direct annual LoC program funding for the next eight years (left) and typical breakdown of in-kind support (right), per a recent program prospectus report.

Accountability

- **Upward accountability:** Accountability to the program's core funder, the National Indigenous Australian Agency, occurs through monitoring and evaluation of Key Performance Indicators (KPIs) stipulated in LoC's funding program agreements. These KPIs are primarily related to national educational outcomes (i.e., school attendance rates, secondary school completion rates, and similar metrics).
- **Downward accountability:** Accountability to participating students and communities is mediated through the Local Learning on Country Committees at each site as well as through the all-Indigenous Steering Committee.

Results and impact

Program outcomes are tracked and documented as part of reporting to funders and provided in biannual performance reports posted on the organization's website. Performance reporting covering January to June 2023 provides a sense of the scale of impact across all partner communities.[12]

- 580 days of on-country camps, field trips, and ranger activities were delivered; 3,273 Indigenous students participated in LoC activities in some capacity; 1,208 Middle and Senior school students engaged in weekly LoC activities as a core component of their studies (comprising roughly 70% of all students enrolled), and 260 were enrolled in vocational training courses.
- Of the students engaging in vocational programming, 52 achieved certificates in Conservation and Ecosystem Management, Maritime Studies, and First Aid, 49 engaged in work experience programs, and 14 transitioned into employment building on these skillsets.
- The LoC program employed 173 Indigenous staff (with a roughly equal gender ratio and comprising roughly 95 percent of those employed in delivery of LoC activities) including five full-time Coordinators.

Beyond results aggregated "by the numbers", program managers have also reported that school attendance typically rises on the days of the week when LoC programming occurs, that the program has improved overall student retention, and that broader engagement has been a stabilizing factor in the communities where activities occur. This sentiment illustrates the program's relevance and impact: *"I think it's really critical because it not only provides us with the next generation of rangers and land managers in the Top End, but it makes sure that young people, whether they choose to stay with us or not, understand country and culture properly, and most importantly are finishing school.- Matthew Salmon, Caring for Country (a branch of the NLC providing support for ranger groups and co-management)"*

In addition to annual performance reporting, the program has benefited from two comprehensive evaluations carried out by program partners in the Centre for Aboriginal Economic Policy Research. The first evaluation, in 2015[1], was done two years after program inception and sought independent evidence on the value added of LoC programming relative to comparable schools without it, provide advice to guide implementation and improvement across the program, and inform scaling decisions. Many key recommendations from the first evaluation have been implemented to shape the program into what it is today, and work is ongoing to address those that remain. The second evaluation was initiated in 2019 after the NLC took over program administration and worked to stabilize and revitalize the program following a brief funding gap. This evaluation sought to ascertain program effectiveness, inform the development of a standardized Monitoring and Evaluation Framework for ongoing program evaluations, feed a communications strategy to standardize intra-program and external communication, and guide the establishment of working groups between the LoC Management Team and partner agencies.[4]

Work on a holistic Monitoring and Evaluation framework for the program is underway. Data and information sources will include school performance data, targeted interviews, and community consultations, which will be conducted on a three-year rolling cycle.[4] These efforts include the creation of a dedicated Analytics Project Officer within the organization, establishment of a data and analytics working group, and a collaborative process with LoC's Indigenous committee members to develop additional KPIs that reflect outcomes related to Indigenous values, which can complement government-mandated educational KPIs. A version of the monitoring and evaluation framework is being trialed at select sites to obtain feedback and further refine the framework to best suit community needs. There is also interest in incorporating longer-term monitoring of longitudinal outcomes over the decades following completion of secondary education to understand whether program participation in youth improves overall quality of life and other outcomes through adulthood.

Success factors

LoC's commitment to the primacy of Indigenous ownership and direction of the program in partner communities is a foundational success factor that extends through all aspects of its work in ways that are aligned with best practice principles for the education of Indigenous youth.[2]

- **Indigenous leadership within local LoC Committees and the overarching all-Indigenous Steering Committee.** Indigenous leadership at both local and regional levels of the program ensure that activities respond to evolving community needs and aspirations in ways that centre culture and Country, helping to increase community support for and engagement in the program.
- **Flexibility allowing communities to tailor LoC program activities to the needs and aspirations of each community in ways that can still meet core curriculum and funder requirements.** This approach acknowledges past failures of "one-size-fits-all" educational programming models and increases the relevance of programming to communities, who are in turn more likely to support the program and encourage their youth to attend.
- **Emphasis on intergenerational learning with participation from youth, working adults, and elders in multiple facets of programming.** This format provides reciprocal learning opportunities along multiple dimensions that supports cultural revitalization and community cohesion.

Another major success factor has been an enabling policy and institutional environment that is committed to investing in and improving education and employment opportunities for Indigenous communities across Australia.

- **Policy commitments and long-term core funding provided entirely through the Australian National Government.** Meaningful long-term core funding provided by government as part of meeting its commitments under the National Agreement on Closing the Gap is without a doubt one of the main drivers of this program's success. Long-term funding has provided the time, space, and security for this program to engage in long-term relationship-building, planning, and strategic visioning that have underpinned ongoing program delivery, growth, improvement, and successful outcomes. These activities would have been difficult if not impossible to achieve under more tenuous short-term funding cycles that are a major operational constraint for many similar programs.[4]
- **Flexible national educational framework that facilitates integration of LoC activities to meet core educational standards.** National and territorial educational frameworks facilitate integration of program activities with curriculum requirements through linkages to a stated, national Indigenous cross-curriculum priority. These frameworks enable the recognition of land-based activities to contribute to accredited vocational training certificates that help to meet core secondary school completion requirements.

The program's deliberate integration of vocational training and pathways to local and culturally-aligned employment opportunities helps to create incentives for secondary school attendance and completion and contributes to broader socioeconomic stability in partner communities.

- **Emphasis on program activities supporting pathways to existing local job opportunities that can keep youth in their own communities and contributing to community and cultural revitalization.** This includes employment of community members by LoC or compensation for services provided to LoC in some capacity, which can create a significant and stabilizing economic lift for the community as a whole.

Finally, LoC's strong commitment to evaluation and learning supports continual improvement of program activities and outcomes.

- **Commitment to rigorous and participatory evaluation frameworks carried out by independent evaluators.** Since its inception, the LoC program has worked closely with collaborators from the Centre for Aboriginal Economic Policy Research at the Australian National University to develop a rigorous monitoring and evaluation framework and methodology with input from program stakeholders. Evaluation activities employ mixed methods approaches, including collaborative face-to-face engagement with program participants and communities and the collection and analysis of academic data from educational institutions. These approaches are time and labour intensive but engagement with program beneficiaries on their own terms and in a culturally appropriate way was a priority to increase participation and improve evaluation outcomes. Evaluation teams have included university and community-based researchers, both Indigenous and non-Indigenous, boosting the credibility of evaluation findings and recommendations.[1] The evaluation framework is evolving to better capture cultural outcomes important to partner communities.[4]
- **Accountability and action on recommendations emerging from evaluations.** A shortcoming of many program evaluations is a failure to act on their outcomes. In contrast, the LoC Program's strong accountability pathways and meaningful funding support have enabled action on, and public reporting of progress on, recommendations in ways that have led to significant program adjustments.[4]

Constraints

Key constraints of the LoC Program relate to both local and national operational contexts:

- **Remote locations, cross-cultural context, and at times challenging working environments contributing to difficulties with the recruitment and retention of qualified staff.** To help address these issues, the program is exploring ways to better set expectations of the challenges and rewards of each role and its working conditions during recruitment (e.g., video testimonials by existing coordinators) and developing a more formalized and supporting induction or onboarding process (e.g., education in community protocols, relationship building, mentorship, mental health supports).
- **Limited number of employment opportunities within partnering Ranger programs themselves that requires looking further for more diverse employment pathways drawing on the program's transferrable skills.** Work is ongoing to map program activities to a broader range of employment pathways in communities and beyond Ranger-based land and sea programs, with particular attention to exploring opportunities in the arts.
- **Operating in a context of significant historical and ongoing Indigenous disadvantage and disenfranchisement.** Although this program's innovative work has been meaningfully supported by enabling national policy frameworks and funding, the broader cultural context of Australia remains deeply divided on recognition of the rights of Indigenous peoples. This was most recently reflected in a majority of Australians voting in a national referendum held in 2023 to reject the proposed creation of constitutionally enshrined representation of Indigenous people in Parliament to provide it with expert advice about laws and policies that affect Aboriginal and Torres Strait Islander peoples.[13, 14]

Replicability

The overarching approach of experiential and land-based learning programs are widely replicable and are increasingly implemented across many Indigenous communities in Canada.

However, these programs rarely benefit from long-term funding or adequate resources for evaluation and documentation of lessons learned through practical implementation.[15] Although some progress has been made in raising the profile of Indigenous culture and experiences in national and provincial core curricula, concerns remain that this learning is siloed into a few subjects and primarily meant to improve cross-cultural understanding in non-Indigenous students rather than improve academic relevance and engagement for Indigenous students.[16] Similarly, government programs focused on workforce development and wage subsidies

for Indigenous secondary students also exist. However, these tend to focus on work experiences separate from the school setting (e.g., summer jobs, co-ops) without an explicit focus on cultural alignment and outcomes.[17] Despite some bright spots, this broader context in Canada has contributed to many of the same challenges in the secondary education of Indigenous students that are observed in Australia, including poorer resourcing, academic outcomes, and completion rates than in non-Indigenous school settings, particularly on reserves and in remote regions.[18] Many Canadian educational organizations are working to change the status quo through advocacy, critical analysis, creation and implementation of toolkits and action plans, and development of a community of practice to support alternative educational models to improve outcomes for Indigenous learners.

The following factors are critical to enable successful replication or scale out of LoC's model:

- Enabling educational curriculum and policy frameworks that facilitate mainstreaming of land-based learning approaches and culturally-relevant connections designed to increase relevance for and engagement of Indigenous students throughout the core curriculum.
- Long-term funding for land-based learning programs that is channeled to and directed by communities, including funding the continuation and expansion of existing initiatives.
- Parallel investments in the development and growth of Indigenous land and sea management as an economic sector, as linking land-based learning to local employment pathways creates incentives for participation and allows students to remain in communities and contribute to cultural and socioeconomic revitalization, should they wish to.
- Collaborative development of program theory of change models and rigorous, holistic, and culturally-relevant evaluation frameworks to document outcomes and inform continual improvements.
- Encouraging gathering, sharing, and professional development among and between the land-based education community of practice and land-based stewardship practitioners to strengthen the readiness of practitioners and educational institutions to deliver these culturally-relevant learning opportunities at scale.

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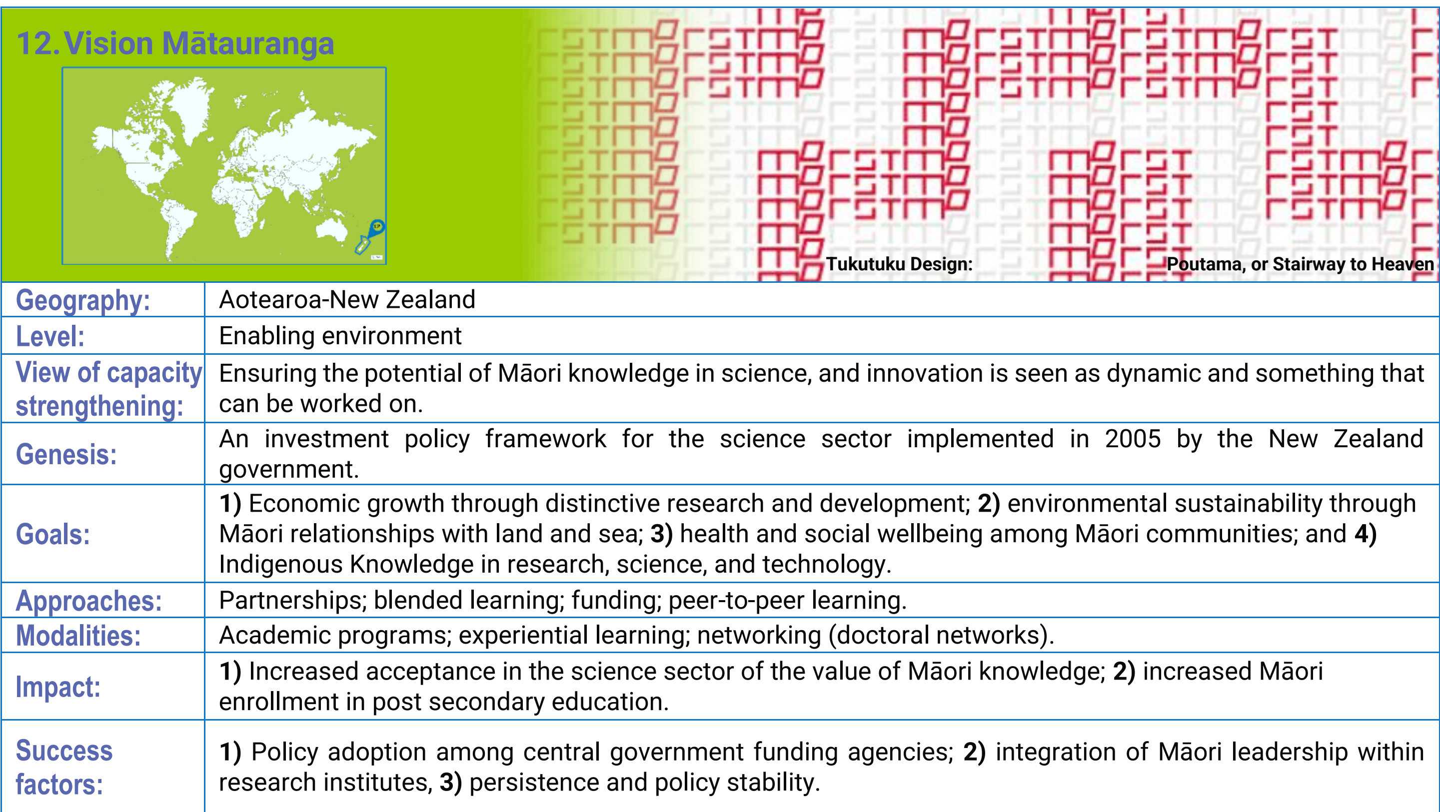
CASE STUDY 12: VISION MATAURANGA

https://www.mbie.govt.nz/science-and-technology/science-and-innovation/agencies-policies-and-budget-initiatives/vision-matauranga-policy/



Geography:	Aotearoa-New Zealand
Level:	Enabling environment
View of capacity strengthening:	Ensuring the potential of Māori knowledge in science, and innovation is seen as dynamic and something that can be worked on.
Genesis:	An investment policy framework for the science sector implemented in 2005 by the New Zealand government.
Goals:	**1)** Economic growth through distinctive research and development; **2)** environmental sustainability through Māori relationships with land and sea; **3)** health and social wellbeing among Māori communities; and **4)** Indigenous Knowledge in research, science, and technology.
Approaches:	Partnerships; blended learning; funding; peer-to-peer learning.
Modalities:	Academic programs; experiential learning; networking (doctoral networks).
Impact:	**1)** Increased acceptance in the science sector of the value of Māori knowledge; **2)** increased Māori enrollment in post secondary education.
Success factors:	**1)** Policy adoption among central government funding agencies; **2)** integration of Māori leadership within research institutes, **3)** persistence and policy stability.

Introduction

Vision Mātauranga is a New Zealand investment policy framework implemented in 2005 with a mission to unlock the innovation potential of Māori knowledge, resources, and people to create a better future.[1] The policy clarified that research conducted in Aotearoa-New Zealand must recognize and support Māori knowledge, support Māori within the science sector, and engage with Māori meaningfully in research design.[2] Vision Mātauranga remains the guiding policy for the Ministry of Business, Innovation and Employment (MBIE) in New Zealand. Subsequent to the policy's roll out, the government put in place a number of strategic initiatives, programs, and dedicated funds to support achievement of its policy objectives and address the systemic barriers that Māori individuals and communities in the country's mainstream research, science, and technology sectors, including a hostile academic environment, competitive funding, and siloed ways of working.

Iwi = Māori tribe descended from a common named ancestor or ancestors and is usually comprised of several hapū.

Hapū = A sub-tribe; most iwi are comprised of two or more hapū, although a number of smaller iwi have marae (a meeting ground) but no hapū.

Kaitiakitanga = The exercise of guardianship. In relation to a resource. Kaitiakitanga includes the ethic of stewardship.

Te Puni Kōkiri; Ministry of Māori Development, 2023

Focal geographies

- Aotearoa-New Zealand

Sector

- Industry, Innovation, and Infrastructure (SDG #9), Quality Education (SDG #4), Decent Work and Economic Growth (SDG#8).

Level of capacity

- System capacity / enabling environment

Target populations

- **Direct:** Māori researchers, Māori communities.
- **Indirect:** Non-Māori researchers, students, and the public.

Operational context

The genesis of the Vision Mātauranga policy can be traced back to Dr. Charles Royal, its primary author, and Māori researcher, who joined the Ministry of Research, Science and Technology (MoRST) in 2003. Driven by a desire to counter prevailing negative perceptions of Māori, Dr. Royal aimed to create a positive and aspirational policy within the research, science, and technology sector.[3] Dr. Royal conceptualized Vision Mātauranga to highlight Māori distinctiveness and unlock the innovation potential of Māori knowledge and resources for the benefit of the nation. The Vision Mātauranga policy guided the development of a Māori-relevant framework within the ministry, fostered a broader vision for Māori contributions to the sector that surpassed mere participation and needs, and created a policy emphasizing positive Māori development, positioning Māori as a "net national opportunity" rather than a "net national problem"[3]. The Ministry of Business, Innovation and Employment (MBIE) is the current iteration of the MoRST, with Vision Mātauranga remaining as a guiding policy to deliver on the ministry's mission.

Goals and objectives of capacity strengthening

The Vision Mātauranga policy aimed to achieve three objectives for the benefit of Māori and New Zealand: first, to contribute to **economic development** by unlocking the potential of the emerging Māori Economy during a period of Treaty settlements and asset reorganization; second, to promote **environmental sustainability** by leveraging Māori knowledge and community relationships with the natural environment to address challenges facing New Zealand; and third, to enhance **health and social wellbeing** by addressing Māori health disparities and incorporating Mātauranga Māori views into research and decision-making.[3] Additionally, the policy emphasizes the importance of *distinctiveness* in two ways: 1) the distinctive contributions arising from any combination of the innovation potential of Māori knowledge, resources, and people, and 2) the tailored responses to address needs and priorities that are distinctive to the Māori community.[1] Flowing from these key objectives, the Vision Mātauranga policy has four interconnected and mutually reinforcing themes:[1]

- **Indigenous Innovation: Contributing to Economic Growth through Distinctive Research and Development.** This theme concerns research and development (R&D) for the commercialization of products, processes, systems, and services from Māori knowledge, resources, and people. Of particular interest are products that may be distinctive in the international marketplace.
- **Taiao: Achieving Environmental Sustainability through Iwi and Hapü Relationships with Land and Sea.** Healthy environments are important to Māori communities. Environmental research is broadly relevant to Māori. However, distinctive environmental research arising in Māori communities relates to the expression of iwi and hapü knowledge, culture, and experience – including kaitiakitanga – in New Zealand land and seascapes.
- **Hauora/Oranga: Improving Health and Social Wellbeing.** Māori communities continue to face challenges to health and social wellbeing. This theme promotes research to address ongoing needs and aspirations.

- **Mātauranga: Exploring Indigenous Knowledge in Research, Science and Technology.** This theme aims to develop a body of knowledge, at the interface of Indigenous Knowledge – including mātauranga Māori – and the research, science, and technology sector.

Capacity strengthening approach

To gain an understanding of the capacity-strengthening approach aimed at unlocking the potential of Māori contributions, it is essential to recognize the significant barriers that Māori have faced and continue to overcome, along with the challenge of ensuring implementation is effective. These barriers include:

- **Hostile Academic Environments:** Māori have historically experienced academia as a hostile environment, with significant reports of implicit and unconscious bias, harassment, and institutional racism.[3,5]
- **Competitive Funding Structures:** Traditional funding approaches characterized by intense competition and rigid structures create suboptimal conditions for enhancing Māori capacity in research, science, and technology sectors.
- **Need for a Collaborative Approach:** Achieving the full potential requires a collaborative and inclusive capacity-strengthening approach, uniting diverse stakeholders, policymakers, funders, and Māori across disciplines, institutions, and borders.
- **Lack of a Shared Purpose:** Effective collaboration requires the establishment of a shared purpose, aligning everyday ideas with scientific concepts to drive transformative changes in the scientific ecosystem, encompassing policy, funding, organizational structures, and individual researchers.

To address these challenges, several capacity strengthening approaches have been deployed. The MBIE introduced the **National Science Challenges (NSCs)**—a strategic initiative comprising eleven challenges across disciplines. These challenges are a focal point for New Zealand's top scientists to collaboratively address significant science-based issues and opportunities, with the freedom to experiment with creative funding approaches to address topics relevant to Māori interests. The government's investment of over NZ$680 million over ten years underscores the importance of these challenges, aligning with the Vision Mātauranga policy to ensure that research effectively incorporates Māori perspectives and benefits Māori communities. As a result of the policy, research institutions have actively hired Māori staff, including in senior positions, and **created structures** to enhance understanding, facilitate implementation, and support Māori students. Examples include Māori portfolio leads, individuals in leadership roles within research institutions, the development of Māori doctoral networks, and the design of Māori language courses for non-Māori.[5,6]

Research programs have emerged that push the boundaries to achieve the intent of Vision Mātauranga. Concurrently, various support initiatives, such as **scholarships, grants, networking opportunities, and other funding programs**, have been instituted to assist Māori students at all education levels in strengthening their capacities.[6] An illustrative example is the Discovery Scholarship Programme for Māori and Pacific Island students in post-secondary science. This program encompasses several awards, including the Te Kainga Rua Award, or Second Chance Learner Award, designed for mature students returning to education or those embarking on post-secondary courses for the first time.[7]

Concurrently, MBIE established a Vision Mātauranga Capability Fund specifically tailored to Māori organizations. This Fund aims to enhance capabilities, skills, and networks between Māori and the science and innovation sector, fostering a better understanding of how research aligns with Māori organizations' aspirations and contributes to New Zealand's benefit.[9] These funding avenues aim to empower Māori to actively engage in and lead research that holds significance for them.

Duration

The Vision Mātauranga policy has been in place for over 15 years. It has seen wide adoption across the sponsoring Ministry, across New Zealand investment priority areas, and throughout research institutions in New Zealand.[8]

Operational structure and financials

Total government funding for implementation of the Vision Mātauranga Policy is not publicly available. However, its enactment has led to substantial investments, include the NZ$680 million investment in research through the NSC where a portion of funding is committed to Vision Mātauranga activities. Other funding initiatives embed the policy, such as the Royal Society Te Apārangi Marsden Fund, and the Health Research Council's (HRC's) Rangahau Hauora funding. Māori responsiveness in HRC Rangahau Hauora funding stands out through its requirement for Māori Principal Investigators and Māori Associate Investigators to play key roles in funded projects. Additionally, in 2011 the Vision Mātauranga policy was incorporated into Crown Research Institute's (CRI's) Statements of Core Purpose. This made it compulsory for CRIs to enable the innovation potential of Māori knowledge, resources, and people as part of their operating principles.[10]

Substantial human resources support policy implementation through a top-down approach. This involves adequately resourced operational staff who understand and endorse the policy, Māori individuals in leadership and decision-making roles with a deep understanding of the Māori community perspective and trusted relationships within the community, as well as non-Māori researchers and collaborators who appreciate and understand the policy's significance and value.[5,6] Without the integration of Māori expertise and respect for their Indigenous Knowledge across the research and science sector, the policy's intent is vulnerable to be compromised. Indeed, a 2016 evaluation of NSCs revealed a disconnect between the NSCs and the core principle of "Māori involvement and mātauranga" outlined in the NSC mission. The evaluation found that the program sidelined Māori researchers.[3] In response, Rauika Māngai, consisting of Māori researchers from NSCs and Ngā Pae o te Māramatanga (Māori Centre of Research Excellence), was established. Rauika Māngai collaborated with the Challenges to enhance partnerships with Māori communities and implement the Vision Mātauranga policy to a fuller effect, emphasizing the pivotal role of operational capacity in maintaining the policy's integrity.

Accountability

- Clear articulation of Vision Mātauranga objectives and outcomes is imperative for competitive MBIE fund applications. This involves explicitly detailing how these objectives will be achieved within the timelines of research projects, encompassing standard output measures, publications, and evidence of effective partnership approaches, which is outlined through a Vision Mātauranga statement.[5,6]
- Accountability extends to researchers assessing the impacts generated for communities as a requirement for funding, emphasizing tangible changes in the lives of individuals resulting from the conducted research. This includes outcomes that are highlighted and tracked, requiring researchers to describe the actions that are going to be taken, and how they are going to achieve these actions.[5,6]
- Iwi and Hapū Management Plans are legislated under the *Resource Management Act* 1991 and provide a safe space for Māori to express their issues, challenges, priorities, and plans. These planning documents are resources for researchers to use to inform research and engagement with iwi and hapū communities.[2] This ensures accountability in aligning research efforts with the articulated needs and priorities of these communities.

Results and impact

- The Vision Mātauranga policy has allowed for a space where funding and research proposals could be assessed from a Māori lens and aligned with Māori interests. *"Prior to the enactment of the policy, this did not exist and has allowed for a lot of opportunity for building and strengthening Māori capacity within the science, technology, and research sector in New Zealand"* according to Dr. Shaun Ogilvie, Professor of Ecology and the Environment, University of Canterbury (New Zealand).
- Māori academics interviewed for this case study highlight the increase in acceptance among the scientific and research communities within New Zealand about the value of Mātauranga and Māori indigenous knowledge. They also emphasize that the policy has helped legitimize Indigenous Knowledge and ways of knowing across research disciplines in New Zealand.
- More Māori than ever are studying at the tertiary level. As of 2020, Māori constitute 11 percent of all Bachelor level students. Yet just 5 percent of researchers working in universities and CRIs are Māori, and only 7 percent of PhD graduates are Māori[3]. However, efforts are underway to continue enhancing the levels of participation.

Success factors

- **Adoption of the policy by central government funding agencies.** MBIE is the central government organization that houses government funding for research across New Zealand and central government funding is the highest quality funding available for research. Underpinning MBIE funding on the Vision Mātauranga policy enabled and legitimized a space for Māori researchers and for the assessment of the quality of research from a Māori point of view.
- **Integration of Māori leadership within research institutes:** Second to policy adoption itself, a key success factor has been the structural changes in research organizations to include Māori in leadership positions. Several CRIs and universities now have Māori portfolio leaders and have taken a partnership approach with Māori rather than considering themselves as solely entities of "the crown", which carry negative perceptions.[5]
- **Consistency and persistence.** Nearly two decades have elapsed since the Vision Mātauranga policy was first enacted. One factor that has been attributed to the success of the policy has been its longevity and persistence. *"I think that it's been effective because it's been allowed to exist for so long" said Dr. Shaun Ogilvie. "At one point, I thought, it must be time for a review of this thing, but in hindsight, I think the fact that it has had that consistency and persistency is probably a factor that's helped it to be effective".* Nonetheless, the author of the policy, Dr. Charles Royal hopes that the government, together with the whole RS&T sector, revisits the Vision Mātauranga policy, adjusts it, and then gives it stronger incentives to ensure genuine and fruitful implementation over the coming years.[3]

Constraints

- **Perverse and misaligned incentives:** Conversations with Māori researchers, who play a vital role in the execution of the policy, reveal the pervasive influence competitive funding can have on implementation of the policy. The competitive landscape of government research funding, especially the funding allocation dedicated to advancing Mātauranga, introduces challenges for Māori researchers. These challenges manifest in what can be described as "tick box" exercises, where non-Māori researchers may seek to fulfill policy directives with minimal engagement with Māori researchers or communities, driven primarily by the prospect of accessing the sizable, dedicated funding. Notably, instances have been reported where researchers find themselves included in proposals without their prior knowledge.[5,6]

  Moreover, a potentially concerning practice has emerged that involves the enlistment of Māori students to support research led by non-Māori principal investigators, aimed at meeting funding obligations. However, the collaborative approach can come with restrictions for Māori students, potentially limiting their ability to

explore research areas aligned with their personal interests.[6] This can have prolonged effects as Māori academics are more likely to be employed within their institution's Māori faculty rather than in their subject area of expertise.[3] There is substantial room for improvement to make collaboration more inclusive and respectful.

- **Overburdening Māori researchers:** The implementation of the Vision Mātauranga policy revealed a limited number of Māori researchers in New Zealand prior to its enactment. As requirements for engagement and collaboration have increased, Māori researchers often face an overburden of requests, leading to overloaded schedules and burnout.[5,6]
- **Crown control on Mātauranga:** An inherent constraint within the Vision Mātauranga policy framework lies in the control exerted by the Crown over Mātauranga by virtue of policy sponsorship. Despite the policy's implementation through MBIE, it is crucial to recognize that ownership and control of Mātauranga primarily reside with whānau, hapū, Iwi, and the broader Māori community. Mātauranga, te reo Māori, and tikanga form the core of Māori culture and identity, emphasizing that, while the Crown is involved in advancing Mātauranga through policy implementation, it does not own these essential elements.[4] This distinction underscores the imperative for collaboration and respect for the autonomy of Māori in preserving and advancing their unique knowledge and heritage.

Replicability

As a capacity-strengthening initiative, the Vision Mātauranga policy holds potential for application in Canada and other jurisdictions, with adaptations for context. Policy development itself is insufficient without widespread support and commitment through ample funding and investment through major research funding institutes, such as the Canadian Institute of Health Research or the Natural Sciences and Engineering Research Council. Policy clarity and the availability of funding supports creating a conducive environment for Indigenous ways of knowing to significantly contribute to the science, research, and technology sectors.

It is crucial to recognize that the policy's underlying purpose is *"to unlock the innovation potential of Māori knowledge, resources, and people to assist New Zealanders in creating a better future."* Therefore, policy in Canada should be crafted with this intent in mind, emphasizing its value as a national priority rather than exclusively for Indigenous communities, in order to garner mainstream support and facilitate its implementation.

References and further resources

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APPENDIX 1: INTERVIEW QUESTIONS

1. As you heard in the description, this research is seeking to learn more about different approaches to strengthening capacity as well as enabling conditions for success. Based on your experience with [the initiative], what are the key elements of capacity strengthening?
   - Prompts
     1. What does capacity strengthening mean and why is it important?

2. Can you describe how [the initiative] started?
   - Prompts
     1. Where and how was the need for [the initiative] identified? Who identified the need?
     2. Are there any particularly important internal or external factors to [the initiative] that made it possible for [the initiative] to get started?
     3. To what extent did [the initiative] consider and plan for the potential influence of external (i.e., external to the organization) factors on its effectiveness (E.g., political, social, economic, environmental, and cultural factors and contexts)? How did the initiative account for these external factors in its origins and design?

3. Can you briefly describe the goals/objectives of [the initiative] and how [the initiative] was meant to achieve these goals/objectives?
   - Prompts
     1. Did the approach to achieving these goals/objectives change over time?
     2. How did you decide what the goals and objectives of the initiative would be?
     3. How did you decide what approach you would take to achieve the goals and objectives?
     4. What groups/populations do you serve and how did you identify that group?
     5. What was your role in [the initiative]?
     6. Where did / does [the initiative] operate? Was it in more than one location?
     7. Who and/or what other organizations were involved? How?
     8. How long has [the initiative] been operating?

4. Can you describe the core capacity-strengthening activities of your initiative and its results?
   - Prompts
     1. Was capacity strengthening an explicit focus of [the initiative]? What kinds of capacity did you focus on (e.g., network building, train-the-trainer) and why?
     2. What was the overall strategy, explicit or implicit, for strengthening capacities?
     3. What core activities were delivered? Which of those were most successful?
     4. What were the results of the initiative? E.g., impact on the groups being served?
     5. How did the initiative consider issues of equity in its planning or operations? For example, differential access or impact on diverse populations?
     6. What do you think makes this initiative unique? What is the “secret sauce”?
     7. How have you measured/evaluated/tracked the impact of this work?

5. What factors or conditions within your organization contributed to the success of this work?
   - Prompts
     1. What partnerships or financial commitments were secured? When?
     2. What were [the initiative’s] capital and operational costs?
     3. What human resources were needed or required for the initiative?
     4. How was [the initiative] governed?

v. What mechanisms or practices were in place to ensure transparency and accountability of [the initiative] with respect to finances, performance, and decision-making?
vi. How did [the initiative] adapt to shifts in the broader, external context?

6. What was [the initiative's] approach to working with and including Indigenous peoples and perspectives?
   - Prompts
     i. Was this approach explicit or conscious?
     ii. Did [the initiative's] approach change over time? How?
     iii. Did [the initiative] consider the unique histories/beliefs/worldviews of Indigenous peoples? How?
     iv. To what extent were Indigenous peoples involved in [the initiative]? E.g., genesis, design, implementation, monitoring, etc.

7. How would you describe the relationships between those delivering the initiative and the groups served?
   - Prompts
     i. Could you describe the experience of someone accessing/participating in the initiative?
     ii. What did the initiative do to build and maintain relationships with the groups they served? With other stakeholders? With other partners?
     iii. How did these relationships change over the life of the initiative and why?

8. In your opinion, what were the most influential factors or conditions that impacted the effectiveness of [the initiative] for better or worse?

9. What advice would you give others starting or engaged in capacity strengthening initiatives related to Indigenous-led conservation in Canada?

10. Do you think [the initiative] could be duplicated successfully elsewhere?

11. Are there any questions we should have asked?

12. Do you have any final questions for us?

Endnotes

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