5

ACTIONS TOWARDS BEST PRACTICE TO SUPPORT OUR KNOWLEDGE OUR WAY

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Our Indigenous knowledge connects us to our Country and our cultures. Our knowledge is owned by us as Traditional Owners and is diverse across Australia. Each of our knowledge systems has its own history, context and approaches to validation (knowing what is true). Traditional Owners have strong responsibilities to follow customary laws and protocols to keep our knowledge, Country and culture strong. These protocols are different across groups, and they govern who holds and shares knowledge, when and with whom.

Our vision of looking after Country our way, using our Indigenous knowledge, depends most of all on us continuing our cultural practices. Colonisation eroded our social, political, spiritual and economic well-being. Continuing to practise our knowledge, following our knowledge protocols, helps us build strength and heal. We face complex challenges to keep our cultural practices strong. We have highly varied access to cultural sites and Country, which is vital for maintaining ceremonies, songs, walking and dancing our songlines. We recognise and value other knowledge systems, such as biology and other scientific knowledge, pastoralists' knowledge, and technical knowledge. These knowledge systems also have their own history, context and approaches to validation. They can be woven together to give a richer picture of our world (Figure 5.1).

The options for action presented here focus first on options for strengthening Indigenous knowledge. We then consider options for creating strong and respectful partnerships. We follow with an overview of options for steps and tools that can support sharing and weaving knowledge in ways that are beneficial for all involved. Finally, we discuss how Indigenous knowledge networks can strengthen all our work through learning together.

Each of the previous chapters concluded with detailed summaries of options for action by Indigenous people, by partners, and by Indigenous people and partners working together. These summaries should be considered together with the more strategic-level options provided here.

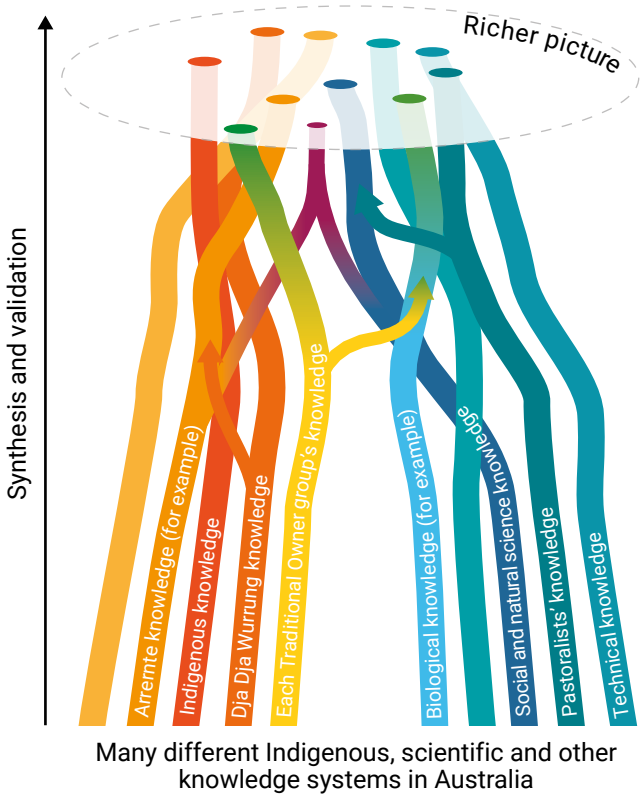

Figure 5.1. Many different knowledge systems exist in Australia (adapted with permission from Tengö et al. 2014[142]).

5.1 STRENGTHENING INDIGENOUS KNOWLEDGE

5.1.1 Keeping knowledge strong through access to Country

- Colonisation has severely impacted the ability of many Traditional Owners to continue to maintain their customary obligations to use their knowledge to manage Country
- The rights of Indigenous Australians to continue to access their Country are impacted by different Acts and land tenure arrangements of the states and territories (e.g. *NT Land Rights Act*, *Native Title Act* and other public lands, state and territory land rights and national parks legislation)
- The experiences of each Traditional Owner group, as a result of colonisation, is unique
- We are using many different strategies and partnerships to keep engaged with our Country.

Access to our land and sea Country is the foundation of keeping our Indigenous knowledge (IK) strong. The many case studies in these Guidelines demonstrate many different options for actions that keep our knowledge strong. They highlight how we need to be on our Country to sing, dance, tell stories, collect bush tucker, to practise art, and to speak our language to the plants, animals and ancestral beings in our landscapes and seascapes. It is important to remember that as Aboriginal and Torres Strait Islander Peoples, we have been creative in exploring a diversity of ways to keep our knowledge strong, some of which are not covered to any degree in the Guidelines. These include:

- Indigenous radio stations, media channels, and promotion of Indigenous culture through contemporary Indigenous music
- Running youth groups, men's groups, women's groups
- Multi-media, tourism, fishing and many other businesses.

Colonisation has severely affected many of us seeking to continue to practise and maintain our customary obligations to Country. We are often locked out of our Country as a result of colonial constructs, including a complex system of land tenure, while access to, and interpretation of, land rights varies across the states and territories[156].

Each of our language and cultural groups have different experiences in keeping knowledge strong for Country. We have gained access and control of Country through various legal and agreement-making approaches including:

- Aboriginal land rights legislation in some states and territories
- Recognition of native title
- Purchasing of land
- Agreements to establish Indigenous Protected Areas
- Co-management of parks and protected areas
- Indigenous Land Use Agreements
- Traditional Use of Marine Resources Agreements
- Partnerships with local governments and natural resource management agencies
- Partnerships with state and territory natural resource agencies
- Partnerships with private sector and philanthropic organisations.

All of these are important ways to be able to access our Country.

Actions towards best practice

We, and our partners and allies, can **strengthen our access to and control of our Country:**

Partners can acknowledge and support our existing customary decision-making and natural resource management approaches through equitable agreements and sharing of resources.

Indigenous people can reposition and rebuild power as Indigenous societies with our own knowledge and futures through strategic agreement-making as well as using existing land rights and native title laws.

Together, Indigenous people and partners can promote new laws, agreements and treaties to give us greater access to our Country to keep knowledge strong.

Colonial oppression occurred in many and diverse ways, including through the historical narrative of *discovery* of our Country by explorers, of stories of wild places, and of parks being places that are only for the protection of biodiversity devoid of people[157]. The dominant views of development and enterprise in Australia[158] can also serve to marginalise or undermine our diverse interests in development of Country.

Aboriginal Land Councils and other statutory bodies, including Prescribed Bodies Corporate (in the case of native title), seek instruction from Traditional Owners and represent their interests in some partnership arrangements. We continue to engage in other ways (including via agreements) and promote our knowledge in environmental decision-making through our networks and alliances. Our case studies show: how we are building networks and alliances to promote our different stories about climate change; sustainable models of enterprise development; and our unique ways of communicating and teaching our knowledge.

Actions towards best practice

We, and our partners and allies, can **strengthen public understanding about our connections to our Country:**

Partners can recognise the diversity of our knowledge systems, and acknowledge and promote Australia's history of peopled landscapes and seascapes and our connections to Country over millennia as the way forward for sustainability.

Indigenous people can tell our stories of connection to Country through our cultural practices including art, story, song, dance and language.

Together, Indigenous people and partners can promote a new story of environmental management and enterprise development that recognises our connections with and caring for our Country over millennia.

5.1.2 Knowledge governance: keeping our laws and customs

- Decision-making about knowledge is determined by our customary governance: Traditional Owner groups follow their own cultural protocols which usually require collective decision-making by the appropriate people
- New institutional arrangements and associated governance structures that have resulted from government policies and other post-colonial processes, can weaken cultural norms of knowledge governance unless appropriate resources are available to support customary governance
- Indigenous cultural and intellectual property (ICIP) are based on customary laws that are not properly recognised in Australian or international legal systems
- Agreement-making between Traditional Owners and partners, based on Indigenous knowledge protocols, can provide for both customary law and Australian nation-state legal protection
- New laws are needed to provide protection for ICIP

Our knowledge is handed down from the Old People and embedded within diverse governance arrangements. It requires collective decision-making processes that follow each group's cultural protocols. Senior knowledge holders feel the significant responsibility of being a custodian of secret and sacred knowledge. Partners need to understand that sometimes knowledge is shared with you that cannot in turn be shared with others, or only with certain people.

Sometimes it is not evident or clear to outsiders who are the culturally appropriate people within the community to approach for discussion about forming a partnership or working together on a knowledge project. For example, it is the Traditional Owners who hold the primary rights for decision-making about significant projects or engagements related to Country and culture.

Many Traditional Owner groups are now establishing their own procedures or protocols that support potential partners to engage with the right Traditional Owners, to ensure culturally competent decisions are made (e.g. Box 1-3).

New institutional arrangements and associated governance structures which have resulted from government policies and other post-colonial processes, can also threaten cultural norms of knowledge governance, for example Prescribed Bodies Corporate (PBCs) as a result of native title. PBCs need to be adequately funded to seek out and bring together the appropriate people to make decisions according to our cultural protocols. We need strong cultural governance, as well as strong organisational governance (e.g. good governance in our PBCs) to keep our knowledge strong for caring for Country[159,160].

Actions towards best practice

We, and our partners and allies, can **strengthen our knowledge governance:**

Partners can recognise the need for cultural governance of knowledge and support collective decision-making with resources.

Indigenous people can work to ensure we have both strong cultural governance to make our decisions about our knowledge, and good organisational governance, e.g. of PBCs to support native title.

Together, Indigenous people and partners can support and promote strong cultural governance, to strengthen *Our Knowledge Our Way*.

5.1.3 Keep and revitalise knowledge, language and culture

- Colonisation has devastated the connection to culture for many Indigenous people, and inter-generational trauma continues to impact individuals' ability to engage with their culture and language. Where opportunity exists, our knowledge is being kept and is passed on through language, song, dance, art, story, through being on our Country, through hunting and harvesting, and through many other cultural practices
- Access to documented knowledge, including archival material, and the ability to continue cultural practices is essential for the survival of our culture
- We can create the space and tools to continue transmitting our knowledge in diverse ways, including via emerging digital communication tools. IK and related historical information is increasingly being accessed and disseminated online
- We are educating our youth through Indigenous-led bilingual education, learning on Country, and two-way science programs
- New and emerging digital technologies can facilitate engagement of youth, and assist in recording and revitalising knowledge, provided knowledge protocols are followed
- More Indigenous people should be supported to engage in archival research, data collection and dissemination, to enable re-engagement with language and culture.

We have kept our knowledge of Country alive through being taught by the Old People. This knowledge has been embedded in our songs, dance performances and rituals from time immemorial. Our biocultural knowledge of plants, animals, climate, astronomy and navigation has been passed on through song and dance across generations. Our songlines cross Australia, telling creation stories, handing down law and connecting people to Country and one another. Opportunities to continue practising and celebrating our traditions, music, song and dance, like the Garma Festival in the Northern Territory, and the Laura Dance Festival in Far North Queensland, are important events that bring clan and language groups together to keep our culture and knowledge strong.

We tell our stories of Country through paintings and artwork, whether through weaving, in the sand, on rock, modern canvases or other surfaces. Only people with the right connection to Country under our customary law can paint their stories. Painting and artwork can be particularly important ways of expressing knowledge and culture for groups who have had their language stolen from them, as their parents and grandparents were subjected to the insufferable pain and trauma of being forcibly removed from their mothers, families and Country.

We are the custodians of our languages. Language is our birthright inherited from our parents and grandparents: it is integral to our culture and the connection between us and our lands. We are leading diverse initiatives to both revitalise and keep language strong. The work of our language centres is as diverse as our communities and languages; they are important hubs supporting language protection and revival.

Clan and language groups have created cultural hubs on Country which enable immersion of children, their family, friends and others in learning through language. Other Indigenous communities have set up independent schools, language schools, radio stations, television shows and various other channels for their cultures and languages to be strengthened. There are many further organisations, language centres, communities and individuals working to maintain and preserve Indigenous languages, culture and knowledge.

Working with our school children to keep their knowledge of language and cultures strong is vital, and two-way science programs can bring the best of Indigenous and non-Indigenous knowledge and cultures into schools, linking curriculum and community. Indigenous-led bilingual education and learning-on-Country programs are important ways of passing knowledge on to future generations (see Case Study 2-8).

In some cases digital technologies, including language apps, are keeping language strong through their use as education tools. It is also important that our languages are included in national digital infrastructures and their workflows and metadata, to give them prominence alongside English. For instance, the Atlas of Living Australia is now including Indigenous language names alongside scientific names for species, and using the AIATSIS Austlang codes for languages[cs].

cs https://collection.aiatsis.gov.au/austlang/search

Digital databases can be used to record song, dance and other knowledge forms. Digital databases, seasonal calendars and illustrated books, created with attention to our cultural protocols, are some good ways to document and share our knowledge and keep it strong for the future.

We see opportunities to partner with agencies that can offer training and skills development that support our goals for revitalising knowledge. For example, the Tropical Indigenous Ethnobotany Centre acted as a cultural broker in bringing Mbabaram men and women together to conduct a survey of plants previously identified by Mbabaram Elders as being traditional medicines. Through this exchange, the group learned the skills necessary to identify plants, collect samples, and use Geographic Information Systems (GIS) to record plants of significance on Country (Case Study 3-2).

Other considerations:

- While language and culture are inherently linked, groups who have been denied their language through colonising processes continue to keep their knowledge and culture alive
- Language is a tool to support Stolen Generations and displaced individuals to reconnect with their families, ceremonies and Country
- It is important that language is used in culturally appropriate ways – knowledge appropriation can occur if words or language are used out of context and without the permission of the Elders
- It is important to consider who has the authority to make decisions about language and knowledge and what responsibilities come with this
- It is important to be mindful of who is capable of and/or entitled to teach Indigenous languages and which languages may be taught in which locations and settings.

Actions towards best practice

We, and our partners and allies, can **strengthen Indigenous languages:**

Partners can make sure that their work fosters activities that keep language strong, for example by providing opportunity for multiple generations to go out on Country together.

Indigenous people can continue efforts to keep language alive by supporting the work of language centres and identifying opportunities for teaching younger generations, for example through engaging with digital language applications. We can inform external partners when interpreters should be used.

Together, Indigenous people and partners can help to strengthen and revive languages by ensuring Indigenous people have access to Country and digital language technologies for engaging youth, and promoting language names for plants, animals and land and sea management techniques alongside English terms.

Keeping our Indigenous knowledge strong and vibrant requires:

- Access to our Country
- Strong cultural governance of our knowledge
- Continued practice by Traditional Owners of their knowledge, and engagement of Indigenous families who have experienced intergenerational cycles of trauma, and who want to reconnect and learn about their heritage
- Following our cultural protocols.

Practice and revitalise our knowledge and culture

Access to Country

Cultural governance and protocols

Traditional Owners

Figure 5.2. Foundations for strengthening Indigenous knowledge.

5.2 BUILDING STRONG PARTNERSHIPS

- Partnerships that enable the building of respect and appreciation for Indigenous knowledge (IK) are desired – particularly where they support an Indigenous voice in decision-making processes that affect us
- Many of us are seeking partnerships that can support alternative funding models that reduce reliance on government funding
- Respect for Indigenous knowledge, culture and Country are critical for the development of trust and relationship-building, which underpin strong partnerships.

Indigenous Peoples' voices are growing louder in decision-making processes, and we are seeking roles in governance that are meaningful and that create outcomes that reflect local, traditional, cultural and spiritual values. Strong partnerships can support us in raising the profile of our knowledge, and our contributions, beyond our communities.

We see the strengths in having knowledge and we need to be mindful of how we share this knowledge. When we make agreements with our partners there must be strong attention to our Indigenous cultural and intellectual property and benefit-sharing arrangements for Traditional Owners. There are risks in sharing knowledge – as not all knowledge is equal or should be treated the same way. Increasingly, there is outside interest in the potential of Indigenous knowledge to generate commercial opportunities, including enterprises derived from plant and animal knowledge. In the past Elders have been approached by companies offering incentives to obtain quick approvals for the use of our IK, in lieu of appropriate protocols of engagement. We should be the beneficiaries of the use of our knowledge.

5.2.1 Principles for strong partnerships

The development of strong respectable partnerships requires prior recognition and understanding of the huge diversity that exists within Indigenous Australia. This requires that the Indigenous partner takes the lead, because the arrangements for working together will be unique to that individual, community, corporation, Land Council or other entity.

Co-design methods that support equitable collaboration between Indigenous people and partners provide a strong foundation for knowledge-related partnerships. Such partnerships can support our exploration of Indigenous knowledge for enterprise development.

We are increasingly taking a lead in determining the kinds of research of most importance and use to our people and our communities. Where we feel collaborative research is the preferred approach to doing knowledge work, we can lead a discussion with our partners and ask: What is a good path forward? What might the different research governance arrangements look like? Is it a collaborative research partnership and/or should it be Indigenous-driven or led?

Further, to engage meaningfully requires effective communication between partners, which can be complex in cross cultural contexts. Where partners don't speak the same mother tongue, the complexity increases, and the potential for miscommunication and misunderstanding shouldn't be underestimated.

Figure 5.3. Key elements of good partnerships.

Actions towards best practice

We, our partners and allies, can **strengthen our partnerships**:

Indigenous people can support strong corporate and cultural governance arrangements as a foundation for protocols and agreements that enable transparency, ensure mutual benefit and protect ICIP.

Partners can commit to ethical research protocols and agreements to create transparency, ensure mutual benefit, and protect ICIP.

Together, Indigenous people and partners can support and promote strong cultural governance, to strengthen *Our Knowledge Our Way*.

5.2.2 The role of trust and relationships in knowledge work

Our culture and our knowledge define us and connect us with our kin and with all other Indigenous people. We hold our culture and our knowledge close.

As we have discussed in these Guidelines, we see the benefit of partnerships to promote and keep knowledge strong. However, partners need to understand that there is a risk to knowledge sharing – for example, of knowledge being appropriated or inappropriately used including for financial benefit outside of our control.

We seek engagements and partnerships where we think our knowledge that we share with you will be treated the right way. For some groups, this means taking a very slow approach to building a partnership, and testing partners to see if they are respectful and trustworthy, before knowledge is shared.

Taking the time and interest to build relationships between people will underpin positive experiences in knowledge sharing. Relationship-building demands that all partners recognise and respect multiple cultural backgrounds and knowledges in creating a safe space for sharing. This includes demonstrating respect for Country and for different world views.

At the same time we look to our Indigenous leaders to use their knowledge to represent the majority of Traditional Owners in decision-making for the group, so the group may move forward as a whole.

On a practical level, interpretation may be required, including for land and sea decision-making processes, to ensure Traditional Owners accurately understand the information being presented, and the impact of any decisions that are made and potential outcomes from them.

Respectfully working together with knowledge can foster reconciliation. Not working respectfully re-enforces the legacies of colonisation and can leave us feeling disappointed, angry and distrustful of future knowledge partnerships.

As well as acting ethically and morally, creating tools together that build transparency and support open communication in the engagement can build trust and a foundation for a good relationship. Protocols for how partners work together (MOUs, research agreements, etc.) are critical to starting the conversation. These documents can outline: the range of mutual benefits from the engagement; financial and other resource commitments to the partnership; ICIP considerations including benefit-sharing arrangements; and legacy discussion in terms of who owns the data that will come from the partnership and how will it be managed after the formal engagement stops. Some of these tools and process are discussed in the next sections.

Actions towards best practice

We, and our partners and allies, can **build trust and strong relationships through:**

Indigenous people can choose to engage in partnerships that allow sufficient time and resources for knowledge work.

Partners can understand the importance of time to enable proper decision-making and the building of trust as foundations for respectful working relationships.

Together Indigenous people and partners can invest in building trust and respect as a foundation for positive partnerships that assure mutual benefits.

5.2.3 Protocols

Protocols can be negotiated between Indigenous and non-Indigenous partners to facilitate sharing of knowledge the right way, and these can operate at many levels, including at the community or individual-scale.

Good collaborative partners should negotiate protocols to precede and underpin the engagement. Such protocols should include agreement on the activities and responsibilities of each partner; an open discussion about the budget; acknowledgement and consideration of background intellectual property (IP) – the unique knowledge each research party is bringing to the table – and how the IP will be shared. Formalised agreements between institutions offer a higher level of protection to IP, as the agreements are binding.

Community-based agreements can focus on the operational details of engagement on the ground: where partners can and can't go on Country, and when they must be accompanied; how the group will communicate throughout the life of the project; and what flexible arrangements are built into the project plan if cultural responsibilities take Indigenous partners away from the

project etc. Protocols also need to consider not only how knowledge is shared during the process of undertaking a project, but what happens once the project is finished, especially when the knowledge may be embedded in reports, publications and databases and then shared digitally.

Attention to protocols might be really important in some cases. Acting inappropriately, for example not seeking correct permissions for visiting or travelling through Country can cause significant distress to Traditional Owners, who are responsible for your safety and well-being while you are on their land and sea.

This ethical approach to knowledge partnerships is also important to avoid Indigenous knowledge being disconnected from the local context from which it has come, and where it belongs.

Consent for sharing knowledge

Critical to the sharing of knowledge is free, prior and informed consent (FPIC). The UN Declaration on the Rights of Indigenous Peoples, and many other international and national laws and policies, recognise FPIC as the best practice approach to engaging with Indigenous knowledge. This includes land and sea management, research projects, knowledge partnerships and engagement in decision-making around conservation and development proposals. The FPIC process requires that individuals and groups are provided with sufficient, accessible information, including full consideration of risks and benefits of the proposal, for them to make an informed decision about whether to consent to the proposal. Partners should ensure that their project budgets accommodate payment of interpreters where appropriate, to ensure that Indigenous partners are adequately informed when giving consent.

Unlike consultative processes, the requirement for consent entitles Indigenous Peoples to determine the outcome of decision-making that affects them. Knowledge brokers can ascertain consensus on behalf of Traditional Owners – these models of knowledge brokering are diverse. Sometimes this might involve one individual (for example a senior Traditional Owner), an extended family group, multiple family groups, or the entire language group (a meeting of which might be facilitated by a Land Council or a Prescribed Body Corporate).

The particular cultural protocols of each situation underpin FPIC, and need space to evolve and play out. For instance, we can add our own clauses to the FPIC processes that are presented to us to ensure that the right individuals (including Elders and/or decision-making authorities) are part of the consent process, and therefore the FPIC process has legitimacy at the local level.

Our knowledge will stay strong if we adhere to our internal protocols and develop new outward-facing protocols that give us a strong say about how our knowledge can be used, and by whom.

Actions towards best practice

We, and our partners and allies, can **strengthen our knowledge sharing through following free, prior and informed consent (FPIC):**

Partners can make sure enough time and resources are available for decision-making according to the particular cultural protocols.

Indigenous people can ensure that their own cultural protocols are included to ensure that the right individuals (including Elders and/or decision-making authorities) are part of the consent process and that it has legitimacy at the local level.

Together, Indigenous people and partners can promote correct processes for FPIC and require that all research, conservation and development proposals on Country adhere to FPIC.

5.3 SHARING AND WEAVING KNOWLEDGE

We will share knowledge when it benefits Traditional Owners. Where sharing our knowledge and weaving it together with other knowledge systems provides benefits we can learn together, and see a richer picture of our world. Our case studies show that sharing and weaving knowledge is challenging and requires great care to deliver mutual benefits.

In this section we draw on modified versions of the diagrams used in the Kimberley Indigenous Saltwater Science Project to present options related to:

- Steps and stages in sharing and weaving knowledge
- Tools and processes for sharing and weaving knowledge.

5.3.1 Steps for sharing and weaving knowledge

Sharing and weaving Indigenous knowledge with western science has been accelerating in recent years for several reasons[159]. Indigenous land and sea managers often weave knowledge to manage new and complex land and sea management issues. Externally funded Indigenous land and sea management ranger programs sometimes draw on western science to build ecological monitoring and evaluation programs into their work plans. Sometimes scientific rigour lends support to the development of land and sea management-based enterprises. For example, in developing a methodology for traditional burning regimes to offset carbon emissions.

All effective projects for sharing and weaving knowledge are based on Traditional Owners and partners coming together to form strong agreements, based on trust, respect and adherence to protocols, and support for cultural governance – ensuring that time and resources are available for the decision-making processes about knowledge to be properly followed (Figure 5.4, centre).

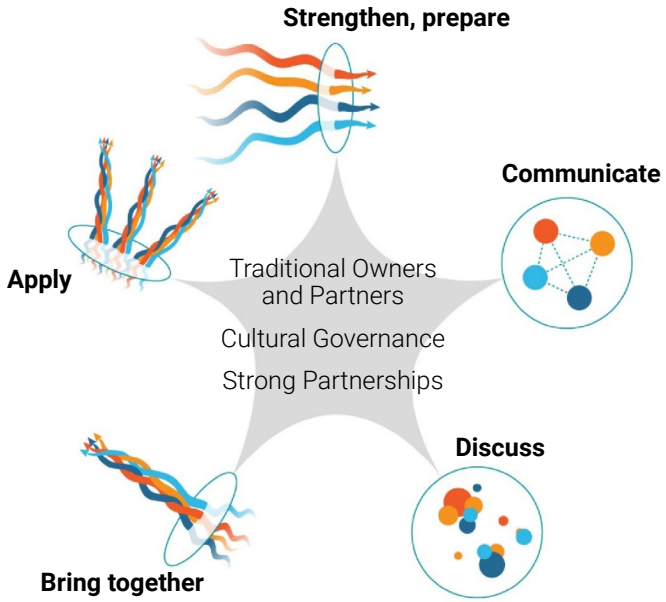

Figure 5.4. Key steps that can help Traditional Owners and partners in sharing and weaving knowledge.

Once these central relationships and processes are in place, key steps that can help Traditional Owners and partners in sharing and weaving knowledge are: strengthen, prepare; communicate; discuss; bring together; and apply.

Strengthen, prepare: involves ensuring people are able to practise and maintain their Indigenous knowledge in a culturally safe place, and that relevant western scientific knowledge is available. This is necessary to inform ethical decision-making. All our case studies highlight the importance of song, dance, story, language and the vital activities needed to support these, such as language and culture hubs. Preparing this knowledge for sharing may involve checking with the key knowledge holders to ensure that the sharing and weaving knowledge is about to begin. For the scientific knowledge holders, it may involve reviewing and identifying the key scientific resources. This should be undertaken in consideration of, and in consultation with, Traditional Owners.

Communicate: involves presenting knowledge from a knowledge system into a format that can be understood by people with a different knowledge system. Our case studies show many examples of different ways to communicate. Indigenous knowledge of seasonal cycles has been communicated as seasonal calendars with English words and photographs. However, translating between Indigenous languages and English is very important. Indigenous language interpreter services provide critical cross-cultural translation services for working across knowledge systems. A skilled interpreter and/or translator can translate knowledge concepts, expressed verbally or in sign-language, across world views, helping to ensure that knowledge protocols aren't breached through miscommunication. Interpretation removes pressure from Indigenous people to express their ideas clearly in English, which may be our second, third or fourth language. External partners should seek advice from Indigenous partners as to whether an interpreter is required when seeking engagement. Interpreter services are available in Western Australia, the Northern Territory, Queensland and South Australia. Some also provide training in cross-cultural communication – a useful skill when working with Indigenous people.

Discuss: requires us to talk together and interact around our different knowledges. Our work on fire management has shown how we need to negotiate, through discussions around a table, to bring together our Indigenous and scientific knowledge to create burning methodologies that support carbon-offset enterprises. The Hin Lad Nai case study showed how discussions around a poster of scientific knowledge about pollinators can lead to identification of key points of agreement across knowledge systems.

Bring together: involves producing a document, video, plan or workshop that weaves our Indigenous and scientific knowledge systems. Indigenous Protected Area management plans often show how Indigenous and scientific knowledge can be woven together.

Apply: requires us to apply the new, (partly) woven knowledge, which has been shown to deliver co-benefits as outlined in the partnership agreement. For example, we have brought western science approaches and Indigenous knowledge together to create a rigorous methodology for evaluating the core benefits of carbon abatement projects, led and implemented by Indigenous practitioners (Case Study 3-4).

5.3.2 Communication tools for sharing and weaving knowledge

- Indigenous-led and co-developed tools are most appropriate for sharing and weaving knowledge
- Tools that promote the intergenerational transfer of knowledge are highly valued

The case studies demonstrate that co-created tools can facilitate the communication of specific messages or can be used amongst Indigenous participants, government staff and scientists towards facilitating relationship building and promoting discussion. Co-produced communication tools can also promote learning about culture and language, as well as assist understanding across knowledge systems. For example:

- Indigenous researchers, co-researchers and participants created a 3D map (Section 3.9) to express their values and aspirations with members of the wider community, to develop a common understanding and highlight different perspectives.
- The Mobile Language Team promoted intergenerational learning through their Arabana on-Country language camps (Case Study 2-3).
- The Kimberley Indigenous Saltwater Science Project (Case Study 3-9) developed a set of resources for weaving Indigenous and scientific knowledge together to support future Kimberley saltwater science projects, with relevance more broadly.
- Seasonal calendars have been created as tools for communicating cross-cultural and intergenerational values within and across Indigenous communities; and to communicate environmental governance interests and aspirations with decision-makers as in the case of the Ngan'gi Seasons calendar (Section 2.7).

Actions towards best practice

We, and our partners and allies, can **strengthen our knowledge by co-creating knowledge sharing tools:**

Partners can create opportunities for Indigenous partners to co-create tools that promote, and support inclusion of, Indigenous knowledge in environmental decision-making.

Indigenous people can continue to realise opportunities for building understanding and respect for Indigenous knowledge systems – through sharing of knowledge in diverse forms and styles.

Together, Indigenous people and partners can push the boundaries of co-learning through co-creation of innovative tools that draw on multiple knowledges and understandings and create new avenues for intergenerational learning.

5.3.3 Data management tools for sharing and weaving knowledge

- Indigenous Peoples seek control over data that are collected about us, our knowledge, or our land and sea Country
- Data collected needs to be returned to us in a useable and accessible form, and we require access to digital platforms so we can manage this data
- Agreements are essential for ensuring that data are collected, analysed, stored and shared in accordance with cultural protocols and the wishes of Indigenous partners, and it is important that funding agreements also align with these arrangements
- Data needs to be appropriately managed within digital platforms to ensure that principles around Indigenous data sovereignty are respected
- Project budgets and timelines must account for appropriate data sharing and dissemination – this includes meetings and events to report back, share data, and provide training where appropriate.

Partners need to ensure that their head agreements with funding agencies (especially government funding) includes provisions that allow for the different types of data ownership or sharing (or not sharing) that Indigenous partners may want – noting that some Indigenous knowledge may not be covered by copyright, which is increasingly the way research outputs are protected. There is also a tension as government policies are requiring greater open access (e.g. via Creative Commons) to publicly funded data. This may not be appropriate in all cases where ICIP is included.

We expect that data collected by industry representatives, government, researchers, land and sea rangers, or any other individuals or groups working with our people or on our land is returned to us in a useable and accessible form. This may mean that the data collectors need to ensure local Indigenous partners have the capacity to access and use the data, via appropriate tools and technologies, i.e. data is collected and handed over in a form we can understand and use.

Indigenous partners can experience challenges and lack of power if knowledge sharing agreements are not adhered to. We should engage as far as possible in determining the rules of engagement with partners early on. This might include the close development of agreements for knowledge and data sharing, ensuring that these are sufficiently funded and accommodate post-activity/project engagement: trips to report back, share data, and provide training where appropriate, and access to data management systems or platforms.

Actions towards best practice

We, and our partners and allies, can **strengthen our control over data and its use:**

Partners can make sure to negotiate a research agreement with local Indigenous groups, and that project planning allocates time and budget for appropriate data sharing and dissemination – this includes trips to report back, share findings and data, and provide training where appropriate.

Indigenous people can make sure that an appropriate research agreement is in place to ensure that data is collected, analysed, stored and shared in accordance with cultural protocols and their wishes.

Together, Indigenous people and partners can promote data management practices that keep knowledge strong and ensure that Indigenous people have access to data for their own needs.

5.4 INDIGENOUS NETWORKS FOR SHARING KNOWLEDGE

We are engaging strongly with global networks that support Indigenous Peoples to bring forward their knowledge and practices to solve international environmental challenges. These include the World Indigenous Network, the International Indigenous Forum on Biodiversity and Ecosystem Services and the Indigenous and Local Knowledge Centres of Distinction. These networks are important as they promote Indigenous-led knowledge practices globally and offer peer-to-peer learning opportunities for Indigenous land and sea management practice.

Such networks are also important in supporting:

- Learning about good partners, projects and approaches to keeping knowledge strong, our way
- Learning from others about best practice protocols and processes for managing partnerships
- Building strength and inspiration through solidarity.

In recent years we've created some great opportunities at the national level to come together to build strength in knowledge through peer-to-peer learning. Over the past three years (2017–2019) Indigenous Ranger Forums have been held in northern Australia to promote knowledge sharing between rangers and land and sea management-related partners (government agencies, research organisations, industry, NGOs and philanthropics) from across the north. At the most recent Forum (2019), held on Kenbi Country near Darwin, rangers discussed the importance of the Guidelines in the context of building knowledge between ranger groups. Rangers felt there was a lot of similar trial and error occurring within each

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ranger group and in isolation to other groups' learning: the opportunity for greatly shared learning between ranger groups was obvious. The idea of a national Indigenous land and sea network has previously been discussed and deserves further exploration.

Actions towards best practice

We, and our partners and allies, can **strengthen our knowledge through land and sea networks:**

Partners can support pan-regional, pan-national and international sharing of land and sea knowledge for enhanced environmental management.

Indigenous people can strengthen existing networks for knowledge sharing, to identify best practice methods and tools for bringing Indigenous knowledge into land and sea management and enterprise development. This might take the form of a national Indigenous land and sea management network.

Together, Indigenous people and partners can raise the profile of Indigenous land and sea management knowledge through national and international forums.