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Sustainable use of Indigenous Ecological Knowledge: A Case Study for Implementing the Nagoya Protocol

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Abstract

Sustainable development focuses on social and human, natural and economic factors. By recognising and protecting Indigenous ecological knowledge each of these factors is addressed. Many Australian government programs recognise that Indigenous communities hold knowledge critical to the conservation of biological diversity and natural resource management. In research commissioned for the NSW Office of Environment and Heritage in 2013, the Indigenous Knowledge Forum proposed a legislative 'Competent Authority' framework for 'Recognising and Protecting Aboriginal Knowledge Associated with Natural Resource Management'. The Authority would provide the governance framework for administering a legal regime covering the creation, maintenance and protection of community knowledge databases. The Garuwanga Project is about finding the best legal structure of governance for Indigenous Australians to manage their traditional knowledge and culture, including their ecological knowledge, and enable Australia to comply with the Nagoya Protocol. The aim is to provide the communities with a path to sustainable development and capacity building. This project addresses concerns over the form, independence and funding of such an Authority, as well as local Indigenous representation, by facilitating Aboriginal Community engagement in identifying, evaluating and recommending an appropriate Competent Authority legal structure. Most competent authorities around the world are government based organisations or departments, however, Aboriginal communities have expressed great concern about such institutions having any form of control over their traditional knowledge. Accordingly, what is unique about the Garuwanga Project is the proposal for a competent authority that is independent of government. This paper will report on the governance model proposed by the Garuwanga Project in its Discussion Paper together with the preliminary outcomes of the consultations with Aboriginal communities across Australia.

Key words: Indigenous Ecological Knowledge, Nagoya Protocol, Competent Authority, Aboriginal Communities, Sustainable Development, Capacity Building.

1. INTRODUCTION

The need to protect Indigenous ecological knowledge from misuse is recognised under several international instruments including the United Nations Declaration on the Rights of Indigenous Peoples (UN 2007, in the following shortly "UNDRIP"). In particular Article 31 of UNDRIP states:

1. Indigenous peoples have the right to maintain, control, protect and develop their cultural heritage, traditional knowledge and traditional cultural expressions, as well as the manifestations of their sciences, technologies and cultures, including human and genetic

resources, seeds, medicines, knowledge of the properties of fauna and flora, oral traditions, literatures, designs, sports and traditional games and visual and performing arts. They also have the right to maintain, control, protect and develop their intellectual property over such cultural heritage, traditional knowledge, and traditional cultural expressions.

2. In conjunction with indigenous peoples, States shall take effective measures to recognize and protect the exercise of these rights.

However, UNDRIP is not a binding instrument but eminent scholars have argued that UNDRIP reflects certain norms of customary international law (Anaya & Wiessner 2007, Graham & Wiessner 2011, and Davis 2012). Meanwhile, the two key international instruments which are binding in this context are the Convention on Biological Diversity 1992 (UN 1992, in the following shortly “CBD”) and its Nagoya Protocol on Access to Genetic Resources and the Fair and Equitable Sharing of Benefits Arising from their Utilization 2010 (UN 2010, in the following “Nagoya Protocol”). Australia ratified the CBD in 1993 and is a signatory to the Nagoya Protocol, which calls for countries to put in place two main measures: (i) ensuring that prior informed consent of Indigenous communities is obtained for access to their traditional knowledge, more specifically Indigenous ecological knowledge, and (ii) that fair and equitable benefit-sharing mechanisms are agreed upon for the use of that knowledge, keeping in mind community laws and procedures as well as customary use and exchange (Nagoya Protocol Articles 7 & 13). Australia has yet to ratify the Nagoya Protocol, however, several Australian states and territories have already incorporated regulations that attempt to comply with the requirements of the Nagoya Protocol. But this piecemeal approach leaves much to be desired when striving for national consistency.

What has become evident in recent times is the improvement to Australia’s natural environment when an holistic approach to natural resource management is adopted incorporating Indigenous ecological knowledge (Commonwealth of Australia 2013). What also must be recognised is that, for Indigenous peoples, land and knowledge are inherently connected and access to traditional lands is an important aspect of cultural expression and well-being. Consequently, through a legal framework of recognition and protection of Indigenous ecological knowledge, the sharing of benefits from such knowledge can promote the achievement of economic self-sufficiency for those Indigenous communities (Stoianoff 2016). This will be illustrated through the project case study “Garuwanga: Forming a Competent Authority to protect Indigenous knowledge” (in the following “Garuwanga Project”). The term “Garuwanga” is in the D’harawal language and means ‘Dreaming Cycle’, a reference to both Aboriginal creation story and the climate and environmental cycles of the Earth.

The Garuwanga Project is about finding the best legal structure of governance for Indigenous Australians to manage their traditional knowledge and culture and enable Australia to comply with the Nagoya Protocol. The objective is to provide the communities with a path to sustainable development and capacity building. To achieve this, the Garuwanga Project has three aims (Indigenous Knowledge Forum 2018, p.1) :

1. identify and evaluate a variety of legal governance structures for a Competent Authority suitable for administering an Indigenous Knowledge protection regime;
2. facilitate Aboriginal Community engagement in making that determination; and
3. recommend a type of Competent Authority structure based on what is important to Aboriginal Communities and how such a Competent Authority should operate.

This chapter explains the theoretical framework for the Garuwanga Project emphasizing the significance of the methodology employed to ensure that Aboriginal community engagement is the driving force behind the solutions sought. Then, each of the milestones of the project are identified and discussed in the results section of the chapter before providing preliminary conclusions.

2. THEORETICAL FRAMEWORK

2.1 Competent Authority framework

Many Australian government programs recognise that Indigenous communities hold knowledge critical to the conservation of biological diversity and natural resource management. In research commissioned for the New South Wales (NSW) Office of Environment and Heritage (OEH) in 2013, the University of Technology Sydney (UTS)-based Indigenous Knowledge Forum (IKF) proposed a legislative 'Competent Authority' framework for recognising and protecting Aboriginal Knowledge associated with natural resource management. The Authority would provide the governance framework for administering a legal regime covering the creation, maintenance and protection of Aboriginal community knowledge databases.

A 'Competent Authority' is any person or organisation 'that has the legally delegated or invested authority, capacity, or power to perform a designated function' (European Commission 2018 p.3). Once ratified, Australia is required under Article 13 of the Nagoya Protocol to designate both a 'competent national authority' and a 'national focal point' on access and benefit sharing. The responsibilities of the Competent National Authority are for:

- (i) granting access or issuing written evidence that access requirements have been met; and
- (ii) for advising on applicable procedures and requirements for obtaining prior informed consent and entering into mutually agreed terms (Nagoya Protocol Article 13).

The National Focal Point, on the other hand, is responsible for providing information on procedures for obtaining prior informed consent and mutually agreed terms including benefit sharing as well as providing information on the competent national authorities, Indigenous and local communities, and third party stakeholders (Nagoya Protocol, Article 13). As Article 13.3 of the Nagoya Protocol makes it possible for the competent national authority and the national focal point to be the same organisation, it was quite reasonable for the Indigenous Knowledge Forum (IKF) to propose a Competent Authority to effectively perform both functions in its 2014 White Paper to the NSW Government entitled *Recognising and Protecting Indigenous Knowledge Associated with Natural Resource Management* (IKF 2014, in the following also "the 2014 White Paper"). The question then arose as to the legal structure such a competent authority would take.

2.2 Garuwanga Project case study

In answering that question, the Garuwanga Project addresses concerns over the form, independence and funding of such a Competent Authority, as well as local Indigenous representation, by facilitating Aboriginal Community engagement in identifying, evaluating and recommending an appropriate Competent Authority legal structure. An action research methodology was employed within an Indigenous research paradigm. The anticipated outcome of the Garuwanga project is an appropriate legal structure for such a Competent Authority derived from an analysis of existing Australian

Indigenous governance frameworks as well as those frameworks adopted in countries with existing Indigenous knowledge protection regimes.

What is significant about this project is the grassroots approach to achieving this outcome. The Garuwanga project was designed to ensure the engagement of Aboriginal Communities in the choice of the most appropriate governance framework for the Competent Authority providing transparency and accountability. While the initial impetus for research into the form of the Competent Authority emerged in relation to regimes proposed for the state of New South Wales, this project provides a model for an authority for a national regime with a similar purpose. Once ratified, Australia’s obligations under the Nagoya Protocol will be national, not just state based, but can be rolled out state by state and territory by territory and it is recognised that the concept of such an authority could be a local or regional community agency. Further, the determination of a Competent Authority acceptable to the beneficiaries it is meant to serve would have implications for nations in similar positions to Australia such as New Zealand, Canada and the USA.

The Garuwanga Project commenced during the second half of 2016 with a series of milestones to achieve over a three year period. In summary, the following Table 1 provides the outline of the activities and their timeframes. At the time of presenting this paper at the International Sustainable Development Research Society conference in Sicily in June 2018, Activities 1 - 5 had been completed.

Table 1: Research Plan and Timetable

Activity	Description	Expected Timeframe
Activity 1	Comparative Study Report	Year 1 first half
Activity 2	Research Roundtable (RR) meetings for data gathering	Year 1 second half
Activity 3	RR meetings for evaluation of legal structures	Year 2 first half
Activity 4	Drafting of Discussion Paper	Year 2 first half
Activity 5	Community consultations	Year 2 second half
Activity 6	Transcription/Analysis of Community Consultations	Year 3 first quarter
Activity 7	Report on preferred form of Competent Authority	Year 3 second & third quarter
Activity 8	Indigenous Knowledge Forum	Year 3 fourth quarter

The partner organisations involved in the Garuwanga Project represent different types of Aboriginal communities from across Australia. Consultations and discussions took place with Aboriginal communities and organisations in urban, rural and remote locations including Broome and the West Kimberley in Western Australia, as well as Sydney and the Southern Highlands/South Coast in New South Wales. Accordingly, the limitation of the results of these consultations is that they may not reflect the views and opinions of Torres Strait Islander communities nor Aboriginal communities from different regions around Australia. Informed consent was obtained for all community consultations. Consent processes were carried out in compliance with University of Technology Sydney (“UTS”) ethics approval processes and principles. For these consultations, free, prior informed consent was sought, and obtained from all participants either in written form, or verbally as a group. The following section describes the methodology employed to achieve the outcome of a proposed legal structure for a competent authority.

2.3 Innovative methodology

Employing a variation on the Delphi method (Guglyuvatyy and Stoianoff 2015), the Garuwanga Project is methodologically and conceptually innovative. The Project makes use of mixed modes of

research applied in a structured way underpinned by an action research methodology. An Indigenous research paradigm is applied empowering Aboriginal communities in the research process thereby developing a model of respect, engagement and reciprocity for Aboriginal and non-Aboriginal researchers to work together.

2.3.1 Mixed modes of research

The use of mixed modes of research has been applied in a structured way, commencing with a doctrinally based comparative analysis of existing protection regimes employing a competent authority for their governance. Inspiration for the extent of the comparative study undertaken, 69 nations, came from attendance at the 2015 World Expo in Milan where numerous nation states showcased their traditional knowledges and farming practices that resulted in potential export markets (Bureau International des Expositions 2015). Given the World Expo theme of “Feeding the Planet, Energy for Life”, it became apparent from that event that both government and non-government organisations were instrumental in promoting indigenous food resources and Indigenous knowledges regarding the same. Simultaneously, the project has collected data of Aboriginal governance case study examples in existence around Australia drawing upon the list of community concerns identified in the 2014 White Paper (IKF 2014) as the initial criteria for evaluating these different forms of governance.

The evaluation of these regimes and governance case studies has been carried out through the Research Roundtable employing a variation on a Group Delphi method. The Delphi method aims to obtain the most reliable consensus of a panel of experts. These experts are encouraged to revise their answers to a series of questions in view of “collective intelligence” so that the panel may move to a consensual view (Guglyuvatyy and Stoianoff 2015). While the Delphi method is traditionally based on anonymity utilising a series of questionnaires, the ‘*Group Delphi*’ method assembles the expert panel in a structured communication process often using rotating subgroups to address the relevant questions, building consensus and defining disagreement using plenary discussions between iterations to foster peer review (Stoianoff and Walpole 2016).

In the Garuwanga project, the expert panel is in the form of a Research Roundtable bringing together the chief investigators, the Aboriginal partner investigators and several other Indigenous and non-Indigenous experts (additional investigators) in a variety of relevant fields. Criteria have been identified and discussed in an open plenary process in order to achieve consensus for the preparation of a discussion paper presented to the Aboriginal communities being consulted via the project Aboriginal Partner Organisations. These consultations have been carried out in the form of focus group sessions with Elders and knowledge-holders from each of the communities. The outcome of those sessions are to be analysed for incorporation into the drafting of the final report recommending the most appropriate and acceptable form of governance.

2.3.2 Action research methodology

Underpinning the Garuwanga Project is an action research methodology (Lewin 1946, Reason and Bradbury 2013) which emphasises cooperative or collaborative inquiry whereby all active participants are fully involved in research decisions as co-researchers. Hence the Chief Investigators, Partner Investigators and members of the Partner Organisations are researching together through

the mechanism of the Research Roundtable (See Appendix) and thereafter the community consultations as described above.

2.3.3 Indigenous research paradigm

The project applies an Indigenous research paradigm (Wilson 2001, Czaykowska-Higgins 2009) encompassing epistemologies (ways of knowing) through stories, narrative and reflection, connectedness to Country, culture and spirituality in a collaborative and interdisciplinary process. When referring to “Country” in this context, it is in recognition that ‘Aboriginal communities have a cultural connection to the land, which is based on each community's distinct culture, traditions and laws’ and ‘takes in everything within the landscape - landforms, waters, air, trees, rocks, plants, animals, foods, medicines, minerals, stories and special places’ (OEH 2019). This proved successful under the 2014 White Paper (IKF 2014) process as a means of ensuring deeper understanding of the concerns of Aboriginal communities, especially the knowledge-holders charged with protecting the knowledge of a community.

2.3.4 Aboriginal empowerment

Australia has a history of paternalism in relation to the making of laws for the ‘benefit’ of Indigenous Australians (Maddison 2008) . Consequently, it was imperative for this project that Aboriginal communities be empowered through direct involvement in the research process. In this way community-led solutions could be achieved through axiologies (ways of doing) and ontologies (ways of being), once again through the Research Roundtable and community consultation process.

2.3.5 Model of respect, engagement and reciprocity

The model of respect, engagement and reciprocity for Aboriginal and non-Aboriginal researchers to work together to solve a problem was initiated under the process of developing the 2014 White Paper (IKF 2014). The Garuwanga Project provides a reinforcement of that model utilising the National Health and Medical Research Council (NHMRC) Guidelines for Ethical Conduct in Aboriginal and Torres Strait Islander Health Research (now updated NHMRC 2018) and the Australian Institute for Aboriginal and Torres Strait Islander Studies (AIATSIS) 2012 Guidelines for Ethical Research in Australian Indigenous Studies (AIATSIS 2012). The outcome is a more refined model of legal research and a mechanism for Aboriginal self-determination.

3 RESULTS

3.1 Comparative Study

Most competent authorities around the world are government based organisations or departments, however, Aboriginal communities have expressed great concern about such institutions having any form of control over their traditional knowledge (2014 White Paper, IKF 2014). Accordingly, what is unique about the Garuwanga Project is the proposal for a competent authority that is independent of government. In the first activity for the project a comparative study was prepared (Wright et al. 2017). The study focussed on the following issues:

- (i) the functions of the Competent Authority
- (ii) the structure of the Competent Authority including corporate structure and membership
- (iii) the funding of the Competent Authority, and

- (iv) the accountability of the Competent Authority including reporting obligations.

The legislation of 69 countries with Indigenous populations were examined. A Competent Authority regulating access to and benefit sharing in relation to the use of traditional knowledge was found in the legislation of 20 of the 69 countries examined. Of those 20 countries only two, Cook Islands and Vanuatu, established Competent Authorities separate to their government (Wright et al. 2017; for Cook Island and Vanuatu see Martin et al. 2019).

Meanwhile, each of the Aboriginal partner investigators prepared reports on the governance structures utilised by their respective Partner Organisations. Similarly, some of the additional investigators to the Research Roundtable prepared reports regarding the governance structures utilised in their respective organisations when dealing with Indigenous knowledge and culture. These reports were expanded during the course of the first 18 months of the project and incorporated in the ensuing discussion paper. In the Research Roundtable discussions that followed, it was evident that in order to properly evaluate these governance structures a more detailed set of evaluation criteria were required than originally anticipated. At the conceptual stage of the project the criteria for analysis of the various governance structures were:

- (i) suitability to the domestic legal and regulatory context;
- (ii) expectations of the functions and powers of competent authority to be established under the White Paper; and most importantly
- (iii) those Aboriginal laws and customs considered relevant by the Aboriginal partner investigators, and other Aboriginal members of the Research Roundtable.

However, the Research Roundtable determined it was necessary to identify first what constituted good governance from an Indigenous perspective. To this end a report was then prepared for consideration by the Research Roundtable in the formulation of a set of governance principles to be applied to the different legal forms of governance already in operation through different organisations operating in Australia.

3.2 Governance Principles

Dodson and Smith (2003 p. 1) considered governance for sustainable development of Indigenous Australian communities and defined governance as:

the processes, structures and institutions (formal and informal) through which a group, community or society makes decisions, distributes and exercises authority and power, determines strategic goals, organises corporate, group and individual behaviour, develops rules and assigns responsibility.

As to what constitutes good governance, consideration was given to the common principles identified by the United Nations Development Programme (UNDP 1997 pp. 5-6) as underpinning good governance, namely:

- a) Participation in decision-making processed by all interested parties;
- b) Operation in accordance with the rule of law;
- c) Transparency in decision-making and other processes;
- d) Responsiveness to all stakeholders;
- e) Consensus oriented in the best interests of the group;

- f) Equity toward all stakeholders;
- g) Effectiveness and efficiency in the use of resources;
- h) Accountability to stakeholders and the public; and
- i) Broad and long-term strategic vision.

From an Australian governmental perspective there are two examples of good governance principles that were considered relevant to the Garuwanga Project: Australian Public Service Commission 'Building Better Governance' Guide (Australian Public Service Commission 2007) and the Good Governance Guide produced for Local Government in the state of Victoria (MAV 2012). In both examples much of the UNDP principles are included with some notable differences (Table 2).

Common Principles underpinning Good Governance (UNDP1997 pp. 5-6)	Good Governance Guide for Local Government (MAV 2012)	'Building Better Governance' Guide (Australian Public Service Commission 2007)
Accountability	Accountability: Obligation to report, explain and be responsible for decisions and the consequences of such decisions.	Accountability — being answerable for decisions and having meaningful mechanisms in place to ensure the agency adheres to all applicable standards
Transparency	Transparency: Decision making processes should be clear and easy to understand.	Transparency/openness — having clear roles and responsibilities and clear procedures for making decisions and exercising power
		Integrity — acting impartially, ethically and in the interests of the agency, and not misusing information acquired through a position of trust
Rule of Law	Follows the Rule of Law: Decisions and actions are consistent with relevant legislation, regulations or policies.	
Responsiveness	Responsive: The organisation responds to needs of stakeholders 'while balancing competing interests in a timely, appropriate and responsive manner.'	
Equitable	Equitable and inclusive: Decisions are made taking into consideration the interests of all stakeholders and all stakeholders have an opportunity to participate in the process.	
Effectiveness & efficiency	Effective and efficient: Processes should be followed	Efficiency — ensuring the best use of resources to further the

	and decisions made in a manner that makes ‘the best use of the available people, resources and time to ensure the best possible results.’	aims of the organisation, with a commitment to evidence-based strategies for improvement
Participation	Participatory: Decision making processes should allow for participation by all parties that are interested in or affected by a decision.	Stewardship — using every opportunity to enhance the value of the public assets and institutions that have been entrusted to care
		Leadership — achieving an agency-wide commitment to good governance through leadership from the top.
Broad and long-term strategic vision		

Table 2. Comparison of Good Governance Principles

What is interesting about the comparison in Table 2 is that the principles of good governance acknowledged by the Local Government groups closely reflect those espoused by the UNDP and are reflective of a grass-roots approach to governance. Meanwhile, the differences in the principles highlighted by the Australian Public Service Commission as listed in table 2, reflect a top down approach to governance emphasising a paternalistic view of governance. Clear further research was required in order to identify principles of good governance that would be acceptable for the establishment and operation of a competent authority.

To this analysis was added an exploration of recent research on Indigenous governance. As a guide for Indigenous communities and organisations, the Australian Indigenous Governance Institute established an online Indigenous Governance Toolkit (AIGI 2019). With a focus on effective or legitimate governance, the toolkit provides resources on various aspects of governance, including: understanding governance; culture and governance; leadership; rules and policies; management and staff; nation building and development. This is important as ‘achieving effective and legitimate governance can be particularly challenging because it involves working across Indigenous and western ways of governing, and trying to negotiate the demands of both’ (AIGI 2019). The Toolkit references the significant research under the Indigenous Community Governance Project carried out by the Centre for Aboriginal Economic Policy Research at Australian National University. That project documented that Indigenous Australians across the country used similar culture-based principles to design their governing arrangements (AIGI, 2019).

Specifically, the work of Hunt et al (2007 p. 21) from the Centre for Aboriginal Economic Policy Research identified the following principles:

- ‘networked governance models; nodal networks and gendered realms of leadership;
- governance systems arising out of locally dispersed regionalism and ‘bottom-up’ federalism;
- subsidiarity and mutual responsibility as the bases for clarification and distribution of roles, powers and decision making across social groups and networks;

- cultural geographies of governance;
- and an emphasis on internal relationships and shared connections as the foundation for determining the ‘self’ in self-governance, group membership and representation’.

The culmination of these differing yet similar sets of governance principles led the Research Roundtable of the Garuwanga Project to consider formulating a set of governance principles that would assist in the identification and evaluation of the most appropriate legal structure for the Competent Authority. The principles build on those espoused in the Indigenous Governance Toolkit and provide the necessary criteria for developing the Competent Authority under the Garuwanga Project. The following principles were identified at the Garuwanga Research Roundtable Meeting on 16 October 2017:

- Relationships/Networks
- Trust/Confidence
- Independence from government
- Community participation
- Guarantees/Confidentiality
- Transparency/Accountability
- Facilitation
- Advocacy
- Communication
- Reciprocity.

An explanation for each of these principles can be found in the discussion paper for the Garuwanga Project (IKF, 2018). The aim was to develop a set of culturally appropriate governance principles against which a variety of already existing governance structures could be evaluated in order to identify the most suitable structure for the Competent Authority. In so doing, these governance principles effectively define a model of governance that might be acceptable to Indigenous Australians more generally. As to whether a particular legal structure is more suitable to achieve such a governance model was the purpose of preparing a discussion paper and carrying out the focus group community consultations.

3.3 Discussion Paper

The discussion paper (IKF 2018) sets out the different steps taken by the Research Roundtable in carrying out the Garuwanga Project. It provides the key results of the Comparative Study and identifies the key features of available Australian legal structures. Using those key features, the discussion paper goes on to examine a range of examples of legal entities established for the benefit of Aboriginal and Torres Strait Islander Peoples. The examination covers governance structure, membership, key legislation and winding up of the entity.

The discussion paper (IKF 2018) goes on to analyse prescribed bodies corporate, which are Aboriginal and Torres Strait Islander Corporations created for common law native title holders to hold or manage native title, and independent statutory bodies. Differing forms of Aboriginal Land Councils in operation across Australia are examined, and then, after briefly exploring the role of the equitable construct of a trust, the key governance principles identified and developed by the Research Roundtable are outlined and applied to the Partner Organisations that form the case studies for the

Garuwanga Project. As a result, each organisation meets those key governance principles differently (Table 2).

Governance Principles	Unregistered Aboriginal Organisation (a Circle)	Incorporated not-for-profit Aboriginal Organisation	Incorporated registered Charity Aboriginal Organisation	Indigenous business incorporated as a Proprietary Limited corporation
Relationships/ Networks	According to Aboriginal cultural law	Registered under State Associations legislation	Incorporated under State Associations legislation and registered charity under national law	Indigenous business registered as a private corporation. Facilitates the delivery of legal and consulting services to Aboriginal communities, companies, individuals.
Trust/ Confidence	Critical with decisions based on consensus	Decision – making by consensus: either unanimous or agree to not interfere if not agree	At the annual general meeting, members choose a 6 person governing committee. Code of Conduct adopted.	Directors hold trust and confidence of the Aboriginal organisations, elders and communities with which they work.
Independence from government	Totally	Independent other than for compliance with registration purposes	Independent other than for compliance with registration purposes	Independent other than for compliance as a registered proprietary company
Community participation	100%	100%	100%	Private organisation providing pro bono services to Aboriginal communities, organisations and senior elders.

Guarantees/ Confidentiality	Issue to issue and no formal records	Board of Directors maintain confidentiality	Governing committee and Managing Director	Operate under legal practice ethical standards respecting Aboriginal laws and traditions
Transparency/ Accountability	Processes understood by members – consensus driven	Board proceedings are reported generally at the Annual General Meeting. The organisation provides an Annual Report but no financial reporting	Governing committee reports to members at annual general meeting with financial accounts prepared and audited. Day to day operations managed by Managing Director	Legal services operate under Professional Standards Legislation and legal practice guidelines. Consulting services are in line with transparency+ accountability requirements of grant agreements it manages
Facilitation	This is the purpose of the Circle	Its function is to facilitate activities on behalf of or in support of interested stakeholders	It is a cultural broker into alternative and innovative Indigenous community cultural and economic development, Indigenous knowledge, the environment, rivers, natural resource management, mining and agricultural industries	Project and meeting facilitation and not-for-profit sector governance at local, regional, state and national levels, including to support Indigenous organisations and business operators
Advocacy	On culturally specific and local issues	Local level advocacy	From local to national levels, from community to national academic and government research partnerships	The directors advocate on behalf of Aboriginal interests in local, national, international forums

Communication	Outreach and education activities	Communication and outreach activities with other Aboriginal organisations and local government	Using informal networks, local and national media, committee representation and conference presentations as well as publishing on own website	To clients and on behalf of clients according to Professional Standards Legislation and legal practice guidelines
Reciprocity	Practice of recognition is through the Circle. Recognised by the Circle then total acceptance	Practice of recognition – recognised by organisation then total acceptance	Indigenous cultural framework grounded in collective wellbeing such that individual wellbeing is dependent on the wellbeing of the group	Abides by Aboriginal cultural protocols relating to reciprocity, making every effort to maintain fairness and goodwill and consider reciprocity obligations

Table 2 Application of the the Governance Principles (adopted from IKF 2018 p. 35-40)

All four organisations met the governance principles in their own way but all with respectful regard for Aboriginal law, culture and traditions. This was able to be achieved while three of the organisations were required to comply with the abstract constructs of incorporation under federal and state laws of Australia, despite their grounding in colonial-based law. A full analysis of the range of examples of legal entities established for the benefit of Aboriginal and Torres Strait Islander Peoples has yet to be conducted in the light of the governance principles. However, the case studies in Table 2 provide encouraging results in this regard, emphasising that no matter the legal structure adopted under Australian law, the governance principles can still apply.

The discussion paper (IKF 2018) finished with a series of questions centred around the three project criteria for analysis of the various governance structures. During the course of the project those criteria were revised as follows:

- suitability to the domestic legal and regulatory context;
- expectations of the functions and powers of competent authority; and
- ensuring a Competent Authority reflects Aboriginal and Torres Strait Islander customary laws, and cultural protocols.

The discussion questions were developed to help determine what type of Competent Authority would suit the needs of Indigenous communities to protect Indigenous knowledge in Australia. The questions were designed to facilitate discussion for the engagement of Aboriginal and Torres Strait Islander Peoples in community consultations.

Under the criteria of ensuring a Competent Authority that reflects Aboriginal and Torres Strait Islander customary laws, and cultural protocols, the following questions were utilised:

- What do you consider to be the most important features for a Competent Authority?
- What existing organisations do you think provide effective models for Aboriginal and Torres Strait Islander interests?
- What existing organisations do you think provide ineffective models for Aboriginal and Torres Strait Islander interests?
- How should local competent authorities (LCAs) be formed?
- Should all employees, officers and councillors be Aboriginal or Torres Strait Islander people?

While the responses to these questions were still being analysed as at April 2019, there was little deviation from the presumptions underpinning the earlier research which led to the development of the White Paper in 2014 (IKF 2014). In the process of developing the White Paper in 2014, consultations were held with Aboriginal communities in north western New South Wales, the Gamilaroi Peoples. Despite being in remote rural country, their view points coincided with those expressed by the more urban based Aboriginal communities around Sydney and the south coast of New South Wales which participated in the Garuwanga Project. This would seem to indicate the impact of a shared past given that New South Wales was first to be settled by British colonists and hence the Aboriginal peoples of New South Wales were the first Indigenous communities in Australia to be impacted by colonisation and to be dispossessed of their lands and waters. Meanwhile, the First Peoples of the Kimberley in Western Australia were one of the last to experience colonisation and have also taken much greater steps toward self-determination through the establishment of an Independent Land Council, native title land claims and establishment of a variety of cultural organisations.

When considering the expectations of the functions and powers of the Competent Authority, the participants in the community consultations were asked to consider:

- Should there be a single national competent authority (NCA)?
- Should a NCA carry out the duties of the NCA and the national focal point?

While there was overall recognition that a national body would be required for international reporting purposes under the Nagoya Protocol, discussions centred upon the need for local or regional control. This is in keeping with *Empowered Peoples Design Report* (Empowered Communities 2015 p. 22) which emphasises the importance of widely sharing powers and responsibilities “among individuals, families and communities at the local, subregional and regional levels”. That report further notes that current practices of “placing nearly all responsibility with central governments disempowers Indigenous people and impedes development”, and so to reverse this impact and provide the means for empowerment, governments must share or relinquish “certain powers and responsibilities and [support] Indigenous people with resources and capability building to assume these powers and responsibilities” (Empowered Communities 2015 p. 22).

On the issue of the suitability of the structure and operation of a Competent Authority to Australian legal and regulatory contexts, the following questions were discussed:

- What form do you think the Competent Authority should take? (for example, an Aboriginal Corporation, statutory body, charitable trust, and how many tiers: local, regional, national?)
- How should decision-making within the Competent Authority operate taking into account that the Competent Authority needs to meet criteria under the Nagoya Protocol?
- Should the national registrars for men's business and women's business databases and registries be able to delegate authority to others in the Competent Authority?

Here again the responses to these questions were still being analysed as at April 2019 but the discussion paper does provide a variety of options for consideration. What is apparent is the importance of "cultural fit" in recognition that Indigenous communities across Australia are different with different needs, expectations and cultural protocols. The Australian Institute of Family Studies emphasised that, in order to facilitate trusting relationships, an organisation must '...work with existing Indigenous leaders and organisational structures established in the community;...seek feedback from both Indigenous peak bodies and community members' (Australian Institute of Family Studies, 2015). Further, to strengthen governance capacity of Indigenous communities, Tsey et al. (2012 p. 163) suggest that "community ownership" is required for Indigenous empowerment to flourish and that

[o]rganisational capacity strengthening for good governance can take many forms. Governance capacity is greatly strengthened when Indigenous people create their own rules, policies, guidelines, procedures, codes and so forth, and design the local mechanisms to enforce those rules and hold their own leaders accountable... .

3.4 Governance and Sustainable Development

Capacity for governance is essential for sustainable development. Further, the United Nations Development Program considers the capacity for governance "a prerequisite for effective responses to poverty, livelihood, environmental and gender concerns" (Smith and Bauman 2014 p. 9). As sustainable development focuses on social and human, natural and economic factors, then by recognising and protecting Indigenous ecological knowledge each of these factors is addressed. Further, establishing a competent authority in accordance with the Nagoya Protocol to govern such a protection regime lives up to the expectations of the Brundland Report (World Commission on Environment and Development 1987). In that report, only development that "meets the needs of the present without compromising the ability of future generations to meet their own needs" (World Commission on Environment and Development 1987) is considered sustainable. Smith and Bauman (2014 p. 9) therefore point out that "[d]evelopment and governance are thus inter-linked" and go on to define "[g]overnance development" as

The processes by which people, organisations and groups as a whole, develop their abilities to do the collective and individual job of governing. That includes performing governing functions, designing institutions, structures and processes, solving problems and disputes, setting and achieving objectives, and understanding and dealing with their own development needs in a broader context and sustainable way (Smith and Bauman 2014 p. 9).

This is the whole point of the Garuwanga Project and why it was developed utilising an action research methodology within an Indigenous research paradigm. Indigenous empowerment is crucial to achieving sustainable development. As the Empowered Peoples Design Report points out "a development approach foregrounds the role of individual, family and collective agency and

responsibility“ in achieving “success in closing socioeconomic disparity“ thereby avoiding the “crippling effect of dependence“ that the current Australian social policies of welfare payments have produced (Empowered Communities 2015, p. 13).

Smith and Bauman (2014) explain the importance of Indigenous culture in the link between governance institutions and achieving development outcomes. Cultural practices can have a central role in Indigenous governance by “harness[ing] the strength and resilience of cultural roots in ways that are credible and workable today“ (Smith and Bauman 2014 p. 10). This is why it was important for the Garuwanga Project to consider the development of relevant governance principles against which potential models for a competent authority could be assessed as

[f]or Aboriginal and Torres Strait Islander peoples, the challenge lies in how to achieve a balance in their governance arrangements between interrelated cultural, social and economic priorities and the other forces of ‘western’ governance acting upon them (Smith and Bauman 2014 p. 10).

4 CONCLUSIONS AND IMPLICATIONS FOR A SUSTAINABLE DEVELOPMENT

This chapter has reported on the governance model proposed by the Garuwanga Project for the establishment of a competent authority to protect Indigenous knowledge and culture in Australia while complying with the Nagoya Protocol. The objective has been to provide Indigenous Australian communities with a path to sustainable development and capacity building. Through an extensive comparative study, detailed analysis of the range of legal structures available for the establishment of an independent competent authority under Australian law, and a series of focus group consultations across a range of Indigenous Australian communities, the Garuwanga Project has demonstrated the importance of Indigenous empowerment in achieving sustainable development. Central to Indigenous empowerment is the emedding of culture and cultural practices as the bedrock of Indigenous governance. In this way governance capacity is strenghtened enabling communities to define their “own needs and then designed and controlled the response“ (Australian Institute of Family Studies 2015) and thereby achieve self-determination.

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APPENDIX: Garuwanga Project Research Roundtable Membership

Name	Organisation	Role
Uncle Gavin Andrews	Banyadjaminga Swaag Incorporated	Partner Investigator
Aunty Frances Bodkin	D'harawal Traditional Knowledgeholders and Descendants Circle	Partner Investigator
Dr Virginia Marshall	Triple BL Pty Ltd/ANU	Partner/Chief Investigator
Dr Anne Poelina	Madjulla Association	Partner Investigator
Professor Natalie Stoianoff	University of Technology Sydney	Lead Chief Investigator & Chair, Research Roundtable
Professor Fiona Martin	University of New South Wales	Chief Investigator
Professor Andrew Mowbray	University of Technology Sydney	Chief Investigator
Dr Michael Davis	University of Technology Sydney	Research Fellow
Dr Evana Wright	University of Technology Sydney	Former Research Fellow/ now Additional Investigation Team Member

Dr Ann Cahill	University of Technology Sydney	Former Research Fellow
Neva Collings	University of Technology Sydney	Garuwanga PhD Student
Paul Marshall	Triple BL Pty Ltd	Additional Investigation Team Member
Ian Perdrisat	Madjulla Association	Additional Investigation Team Member
Associate Professor Gawaian Bodkin-Andrews	University of Technology Sydney	Additional Investigation Team Member
Dr Marie Geissler	University of Wollongong	Additional Investigation Team Member
Associate Professor Alexandra George	University of New South Wales	Additional Investigation Team Member
Professor Bradford Morse	Thompson Rivers University	Additional Investigation Team Member
Associate Professor Daniel Robinson	University of New South Wales	Additional Investigation Team Member