



## Northern Australia Aboriginal Kakadu Plum Alliance (NAAKPA) Submission on Protecting Indigenous Knowledge to IP Australia.

### Introduction

The Northern Australia Aboriginal Kakadu Plum Alliance (NAAKPA) was established in August 2018 with the support of the Indigenous Land Corporation. It consists of nine Aboriginal Corporations involved in the harvesting and processing of Kakadu plum/ gubinge across northern Australia. NAAKPA aims to support its members to become industry leaders in the research, harvest, processing and marketing of Kakadu Plum/Gubinge by empowering Aboriginal enterprises and families across northern Australia to draw on land assets and intellectual property within their communities. In this submission NAAKPA has focused on two key issues identified by the Discussion Paper commissioned by IP Australia on Indigenous Knowledge and published in March 2018;

- Issue 4: Misappropriation and misuse of Traditional Knowledge and
- Issue 5: Use of Indigenous genetic resources and associated Traditional Knowledge

These issues relating to Indigenous Knowledge are connected with the management of plant and land resources related to the production of Kakadu Plum and other bushfoods. This submission will present concerns and examples NAAKPA has around the issues identified above along with a recommendations to address concerns. We understand the challenges of protecting Indigenous Knowledge in a Westminster system introduced to communities under a colonial model and these recommendations seek to work with current systems so as to improve protections for Indigenous Knowledge.

The definitions used for Indigenous Knowledge in this submission are consistent with the definitions provided in the Discussion Paper cited from page 17 and are reprinted here;

The term 'Indigenous Knowledge' (IK) is knowledge that comes from Indigenous Australians. 'Indigenous Knowledge' has two distinct categories:

- **Traditional Knowledge (TK)** refers to the knowledge resulting from intellectual activity in a traditional context, and includes know-how, practices, skills and innovations. Traditional Knowledge can be found in a wide variety of contexts, including: agricultural knowledge; scientific knowledge; technical knowledge; ecological knowledge; medicinal knowledge, including related medicines and remedies; cosmology; and biodiversity-related knowledge. This includes knowledge about genetic resources.
- **Traditional Cultural Expressions (TCE)** also referred to as 'expressions of folklore' refers to tangible and intangible forms in which traditional knowledge and cultures are expressed, communicated or manifested. Examples include languages, music, performances, literature, song lines, stories and other oral traditions, dance, games, mythology, rituals, customs, narratives, names and symbols, designs, visual art and crafts and architecture.

### The bushfoods Industry; keeping it Indigenous

Indigenous Australians have lived on the Australian continent for more than 30,000 years and during this time have acquired and developed extensive knowledge of endemic plants and animals. It has been

suggested Indigenous Australians use more than 200 plant species for food<sup>1</sup>, and a greater number for medicinal purposes<sup>2</sup>. This knowledge has given impetus to a growing bushfood industry which in 2010 was estimated as having a farm gate value of \$15 million to \$25 million (AUD) with industry employment estimated at between 500 to 1,000 people with up to half said to be Indigenous people living on remote communities<sup>3</sup>. Other studies indicate similar figures of \$10 million to \$16 million (AUD) for the value of the bushfood industry with growing demand<sup>4</sup>, and the Kakadu Plum Industry was estimated at \$240,000 (AUD) in 2012 with a harvest of 12 tonnes of whole fruit<sup>5</sup>. A study of stakeholder enterprises in the native foods industry shows the vast majority are non-Aboriginal, with only an estimated 23% of stakeholder businesses being Aboriginal or Torres Strait Islander<sup>6</sup>. This situation raises concerns as to whether Indigenous Australians are the direct beneficiaries of bushfood enterprises and whether they have control of Indigenous Knowledge used in the native food sector. The value of Indigenous Knowledge to the bushfood sector is not only technical knowledge of the characteristics of plants but also the value derived from how Indigenous Knowledge is expressed as stories which have a commercial 'brand value'.

By investing in Aboriginal enterprises to manage and lead the future direction and growth of the native food sector, Australia is ensuring that Indigenous Knowledge is utilised and used appropriately by enterprises who understand and are a part of its continuity and transmission. For example, one Aboriginal enterprise was approached by a party interested in using traditional yams as an ingredient in a boutique vodka- the proposal was rejected by the Aboriginal enterprise as an inappropriate use of the plant resource. In this example, the Aboriginal community decides appropriate use of Indigenous Knowledge and resources, not third parties. The other advantage of building up the capacity of Aboriginal enterprises is communities can engage in an economic activity on their land and bring much needed economic benefits back into the community.

**Recommendation 1:** To increase the number of Aboriginal stakeholder enterprises in the bush foods sector, the Australian Government needs to provide a greater range of business investment opportunities and capacity building resources for Aboriginal communities to build enterprises so they can benefit directly from their Indigenous Knowledge in relation to bushfoods and native plants and animals.

## Bioprospecting and biodiscovery

Australia is one of 17 megadiverse countries holding approximately 10% of the world's biodiversity, with 80% of that biodiversity unique to Australia<sup>7</sup>. Within this biodiversity in Australia, more than 200 plant

<sup>1</sup> Lee, L S 2012 'Horticultural development of bush food plants and rights of Indigenous people as traditional custodians- The Australian bush tomato example: a review' *The Rangeland Journal*, 34(4): 359-373

<sup>2</sup> Lassak, E and McCarthy T 2011 'Australian medicinal plants: a complete guide to identification and usage, 2<sup>nd</sup> edition, Chatswood, NSW Reed New Holland.

<sup>3</sup> Clarke, M 2013, 'Native Foods R & D Priorities and Strategies 2013-2018, RIRDC Publication No 13/023, page 4-5, viewed 09/12/18: <https://www.agrifutures.com.au/wp-content/uploads/publications/13-023.pdf>

<sup>4</sup> PwC Indigenous Consulting, 2017 'Emerging Business Models for the Kakadu Plum Industry', Agrifutures Australia Publication No 18/003 pg 15, viewed 18/12/18, <https://www.agrifutures.com.au/wp-content/uploads/publications/18-003.pdf>

<sup>5</sup> Ibid, pg 23.

<sup>6</sup> PwC Indigenous Consulting, 2017 'Native Foods Export Roadmap' for Australian Native Food Industry Limited, pg 19.

<sup>7</sup> Prip, C, et al, "The Australian ABS framework: a model case for bioprospecting?", Fridtjof Nansens Institutt, ABS Capacity Development Institute, March 2014.

species have and continue to be used by Aboriginal and Torres Strait Islander people as traditional foods and more than a dozen of these are considered to offer commercial potential<sup>8</sup>.

In order to protect this biodiversity from being exploited by other countries, Australia signed and ratified the Convention on Biological Diversity (CBD) (1992)<sup>9</sup>. The Nagoya Protocol was established to augment the CBD as a supplementary agreement, and though Australia is a signatory to the Nagoya Protocol, it has not ratified it as yet. Within the Nagoya Protocol Article 7 highlights the importance of prior informed consent in accessing resources held by indigenous communities recognising the importance of traditional knowledge:

- **Article 7. Access to Traditional Knowledge Associated with Genetic Resources**

*In accordance with domestic law, each Party shall take measures, as appropriate, with the aim of ensuring that traditional knowledge associated with genetic resources that is held by indigenous and local communities is accessed with the prior and informed consent or approval and involvement of these indigenous and local communities, and that mutually agreed terms have been established<sup>10</sup>.*

Furthermore, Article 15 of the Nagoya Protocol requires signatories to take measures to provide that genetic resources are utilised in accordance with prior informed consent and mutually agreed terms within national jurisdictions:

- **Article 15: Compliance with Domestic Legislation or Regulatory Requirements on Access and Benefit-sharing**

*1. Each Party shall take appropriate, effective and proportionate legislative, administrative or policy measures to provide that genetic resources utilized within its jurisdiction have been accessed in accordance with prior informed consent and that mutually agreed terms have been established, as required by the domestic access and benefit-sharing legislation or regulatory requirements of the other Party.*

*2. Parties shall take appropriate, effective and proportionate measures to address situations of non-compliance with measures adopted in accordance with paragraph 1 above.*

*3. Parties shall, as far as possible and as appropriate, cooperate in cases of alleged violation of domestic access and benefit-sharing legislation or regulatory requirements referred to in paragraph 1 above<sup>11</sup>.*

In addition to the CBD and the Nagoya Protocol, Australia is a signatory to the UN Declaration on the Rights of Indigenous Peoples 2007<sup>12</sup> and Article 11 and 31 are consistent with the Nagoya protocol:

- **Article 11:**

*1. Indigenous peoples have the right to practise and revitalize their cultural traditions and customs. This includes the right to maintain, protect and develop the past, present and future manifestations of their cultures, such as archaeological and historical sites, artefacts, designs, ceremonies, technologies and visual and performing arts and literature.*

*2. States shall provide redress through effective mechanisms, which may include restitution, developed in conjunction with indigenous peoples, with respect*

<sup>8</sup> Lee, L S 2012 'Horticultural development of bush food plants and rights of Indigenous people as traditional custodians- The Australian bush tomato example: a review' *The Rangeland Journal*, 34(4): 359-373

<sup>9</sup> <https://www.cbd.int/convention/>

<sup>10</sup> <https://www.cbd.int/abs/text/articles/default.shtml?sec=abs-07>

<sup>11</sup> <https://www.cbd.int/abs/text/articles/default.shtml?sec=abs-15>

<sup>12</sup> <https://www.humanrights.gov.au/our-work/aboriginal-and-torres-strait-islander-social-justice/projects/un-declaration-rights>



*to their cultural, intellectual, religious and spiritual property taken without their free, prior and informed consent or in violation of their laws, traditions and customs.*

- **Article 31:**

*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.*

There are limited protections for Indigenous Knowledge from bioprospecting and biopiracy with only two Australian jurisdictions providing some protections for Indigenous Knowledge<sup>13</sup>. This means outside of Crown lands and the Northern Territory there are very little protections for Indigenous Knowledge relating to plants and animals in the context of bioprospecting. These jurisdictional ‘loop holes’ not only expose Indigenous Knowledge to exploitation by non-Aboriginal third parties within Australia, but also internationally. The macadamia nut is an example of an endemic plant used by Aboriginal people for many millennia being taken offshore to establish plantations overseas, with no benefits coming back to Aboriginal people or non-Aboriginal Australians. Australia produces about 40,000 tonnes of macadamia nuts annually with a farm gate value of \$286.5 million (AUD) in 2016, representing about 40% of Australia’s horticultural exports<sup>14</sup>. But Australia only produces one quarter of annual worldwide production of macadamia nuts, with South Africa the largest producer, followed by a range of countries found in South America, Africa and the Middle East. Globally, the macadamia nut industry is worth \$1 billion (USD) annually.

**Recommendation 2:** Australia needs to ratify the Nagoya Protocol and harmonise state and territory jurisdictions to recognise and protect Indigenous Knowledge utilising the Nagoya Protocol framework. Indigenous peoples have the right to control how their traditional knowledge is exploited in relation to bushfoods.

### Protecting Indigenous knowledge from Bioprospecting and Biodiscovery

Over the last two decades there has been a growing interest in commercially expanding the application and use of native plants for foods, as health additives, for botanical medicines and ingredient enhancers<sup>15</sup>. In addition, this interest also includes bioprospecting and developing new and novel products from biochemical components found in native foods and medicinal plants. For example there are currently 19 patents and applications for Kakadu Plum/Gubinge or *Terminalia ferdinandiana* filed worldwide, involving the fruit, bark

<sup>13</sup> Environment Protection and Biodiversity Conservation Regulations 2000 (Commonwealth)- viewed 10/12/18: <https://www.legislation.gov.au/Details/F2015C00673> (Section 8A); Biological Resources Act NT 2006-veiwed 10/12/18 : <https://legislation.nt.gov.au/api/sitecore/Bill/APDF?id=17268>

<sup>14</sup> Australia Macadamia Society, viewed 12/12/18: <https://www.australianmacadamias.org/industry/about/about-the-macadamia-industry>

<sup>15</sup> Gorman, J , Griffiths, A, and Whitehead P 2006 ‘An analysis of the use of plant products for commerce in remote Aboriginal communities of northern Australia’, Economic Botany, 60(4), pg 362-373.

and leaves of the plant<sup>16</sup>, information which draws on Indigenous Knowledge. Many Aboriginal communities are protective of their Indigenous Knowledge when it comes to plants, either due to traditional restrictions on different types of knowledge or the growing concern of losing control of specific knowledge to external parties who are not aware or concerned about traditional customs and beliefs.

This type of situation is prevalent amongst university researchers who seek to engage with Aboriginal communities to study native bush foods and medicines, recording Indigenous Knowledge about specific plant characteristics as well as sourcing biological samples for further laboratory study. Very often research objectives are predetermined by researchers, with no community consultation in a process which relieves Aboriginal people of their Indigenous Knowledge and biological samples. This type of data collection has been described as a 'smash and grab'<sup>17</sup> where researchers front up to Aboriginal communities recording Indigenous Knowledge and taking biological resources for their own research. There are examples where researchers have entered into 'collaboration contracts' directly with communities, without any attempt to follow legislation such as the NT Biological Resources Act to source biological material<sup>18</sup>.

In both commercial and research activities, the identification of patentable intellectual property is an important motivation for research organisations and bioprospecting companies. It is through patents and rights under the Plant Breeders Rights that companies and researchers are able to make a return on their investment in collecting Indigenous Knowledge and conducting research on biological samples. While IP Australia does not have jurisdiction internationally, it is able to influence patent and plant breeders' rights applications within Australia to ensure that indigenous Knowledge is protected.

Working with Recommendation 2, whereby the Nagoya Protocol is ratified, companies and research organisations utilising native plants and animals should be required to enter into access and benefit sharing agreements consisting of prior informed consent and mutually agreed terms. This format should be utilised as part of due diligence undertaken by IP Australia when reviewing patent and plant breeders rights' applications. In other words a prerequisite of a patent or plant breeders rights' application involving native plants or animals should include evidence of an Access and Benefit Sharing Agreement. By including this requirement, researchers would be required to negotiate research objectives using Indigenous Knowledge with Aboriginal communities, who would then have a say in how their Indigenous Knowledge is commercialised as well as the biological and genetic resources they manage. There are a variety of different technological tools which can be deployed to strengthen patent due diligence application processes such as isotopic fingerprinting for food provenance which is utilised on a commercial scale to protect the integrity of supply and distribution chains in relation to product quality.

**Recommendation 3:** IP Australia introduce a due diligence process for patent and plant breeder rights applications whereby applications involving native plant or animal species are required to produce evidence of an access and benefit sharing agreement where Indigenous Knowledge has been utilised. The onus of providing evidence of an Access and Benefit Sharing Agreement should be placed on the applicant seeking the patent.

<sup>16</sup> Robinson D., Raven, M, 2017. 'Identifying and Preventing Biopiracy in Australia: patent landscapes and legal geographies for plants with Indigenous Australian uses'

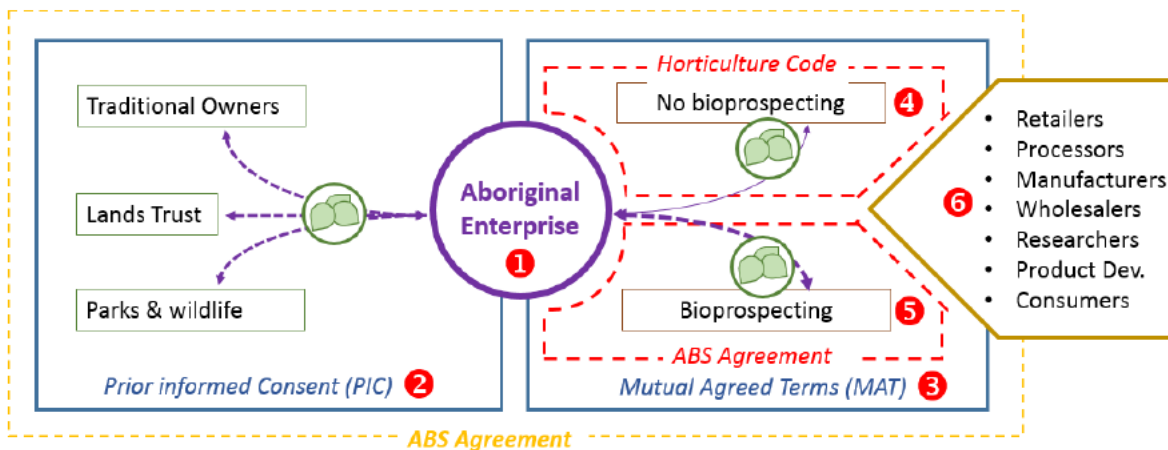
<sup>17</sup> Collins P. Negotiating selves: Reflections on 'unstructured interviewing'. Sociological Research Online 1998. Available from URL: <http://www.socresonline.org.uk/3/3/2.html> . Accessed 13 March 2005.

<sup>18</sup> Personal discussion with Northern Australia Aboriginal Kakadu Plum Alliance members, October 2018.

### A micro framework to augment the macro system

The three recommendations made above to build the capacity and investment in Aboriginal Enterprises, ratification of the Nagoya Protocol and the requirement of access and benefit sharing agreements for patent and plant breeder right applications dealing with native plants and animals provides a mixed system of protections for Indigenous Knowledge. At the micro level there are further complexities between different stakeholders, and operators within the bushfood space and the Northern Australia Aboriginal Kakadu Plum Alliance (NAAKPA) is working to develop the following model and tools to support the mixed systems of protections outlined in the recommendations above.

### The NAAKPA model



**1** In the proposed NAAKPA model the Aboriginal enterprise harvesting/growing, and processing Kakadu Plum is at the centre of the processes and the relationships. This straddles two specific spheres- the Prior Informed Consent and the Mutual Agreed Terms. Together these two spheres create an Access and Benefit Sharing Framework consistent with the Nagoya Protocol.

**2** In the Prior Informed Consent sphere, the Aboriginal enterprise manages the relationships between Traditional Owners, Lands Trusts and Parks and Wildlife regarding access to bushfoods for non-biological and biological use. Very often the Aboriginal enterprise is itself part of the traditional owner group who may/may not co-manage/ jointly manage parks and wildlife areas with government agencies and are in a suitable position to coordinate harvest/production with other land based management activities such as burning. In the Northern Territory and the Kimberley, lands trusts hold the title on land leased by Aboriginal communities and enterprises and are thus stakeholders who are required to be part of the prior informed consent process. Very often the Aboriginal enterprise will require a permit/land access agreement from the lands trusts to undertake a harvest and in the case of the Northern Territory are required to enter into a Section 19 land use agreement for any commercial activity. These relationships between Aboriginal enterprises and lands trusts may be formalised into contracts specifying the scope and protocol required for any decision making regarding access and use of native plants and animals.

**3** The second sphere managed by the Aboriginal Enterprise deals with external organisations based on their specific interested in regards to native plants and animals. The Aboriginal enterprise manages the 'front of house' for prospective commercial buyers of native plants and animals as well as researchers interested in bioprospecting.

**4** In the second sphere a distinction is drawn between the intentions of the resource user. For example if a resource user is interested in sourcing Kakadu Plum (or other bushfoods) for use as a non-biological



resource, in other words for use as a food then the Horticulture Code governs the sale and transaction of the Kakadu plum from the Aboriginal Enterprise to the new owner. There are caveats placed on the use of the Kakadu plum, restricting use of the fruit for bioprospecting purposes. This process is akin to the way books are sold and bought by a merchant to a consumer, whose use of the book and its contents is restricted by copyright law. In the same way, the new owner who has acquired native fruit under the Horticulture Code is restricted by Biodiversity legislation (similar to the NT Biological Resources Act 2006) from using the fruit for bioprospecting purposes.

5 For parties interested in bioprospecting then an access and benefit sharing agreement needs to be negotiated between the Aboriginal Enterprise and the interested party. The Aboriginal Enterprise will be negotiating on behalf of Traditional owners, Lands Trusts and Parks and wildlife and will be aware of Indigenous Knowledge issues.

6 This framework makes it easier for third parties to access native resources in a way which ensures Indigenous Knowledge is considered and managed. This framework means third parties do not need to negotiate directly with traditional owners, apply for permits through Parks and Wildlife and with lands trusts, making the process much easier, less complex and cheaper. Without such a framework, third parties would have to deal with all parties for prior informed consent, making it more difficult, costly and time consuming to get a result. Of greater concern is if the process of compliance is too complex, then third parties would avoid complying at all.

### Tools to support the framework

This framework can be further supported and strengthened in a number of ways which the NAAKPA consortium is currently working on;

#### For Bioprospecting:

- NAAKPA is working with the Northern Territory Government to develop a template for Access and Benefit Sharing Agreements which meets the requirements of the NT Biological Resources Act 2006. This template will be shared with all Aboriginal Enterprises in the native food sector for use along with an explanatory guide;
- A template for reporting on bioprospecting activities which the Aboriginal Enterprise can complete with the bioprospector for submission to Government regulators monitoring biodiscovery activity. In this way Aboriginal Enterprises become enablers for bioprospecting and thus ensuring Indigenous Knowledge is protected in the process;
- Develop a template for a certificate of provenance to be issued by the Aboriginal Enterprise. This provides a certification of provenance from the Aboriginal Enterprise to the resource user which can be used to ensure authenticity of the resource accessed for bioprospecting;
- Establish a consultative forum or committee which can be used as a reference and consulting body for regulators when reviewing issues related to bioprospecting and biodiscovery involving Indigenous Knowledge. This body would consist of traditional owners, Aboriginal enterprises, lands trusts and Parks and Wildlife.

#### For non-biological resource use;

- The Horticulture Produce Agreement to include a caveat restricting use of purchased fruit for bioprospecting purposes;



- **Develop short form contracts citing similar restrictions on use of fruit for bioprospecting purposes for the sale of small quantities of fruit;**
- **Develop fruit quality specifications for native foods for use in conjunction with Horticulture Produce Agreements (HPAs);**
- **Delivery capacity building workshops for Aboriginal Enterprises to manage bushfoods business activities, particularly on the use of HPAs and the Horticulture Code.**