CHAPTER 1:  INTRODUCTION

1.1 Problem statement

Australia’s Aboriginal and Torres Strait Islander peoples are a heterogeneous society, with similarly diverse needs and aspirations in relation to the commercialisation of their traditional plant foods (bush foods). Interests may reflect the worldviews, social structures or development aspirations of an Aboriginal and Torres Strait Islander group, or the cultural and economic aims of an Aboriginal and Torres Strait Islander individual. These interests position Aboriginal and Torres Strait Islander peoples as key stakeholders in bush food commercialisation.

There are few laws to support the diverse interests of Aboriginal and Torres Strait Islander peoples in bush food commercialisation. Current legal research tends to focus on single-instrument solutions for specific problems, such as ways to control the use of secret bush food knowledge or promote cultural products. This thesis proposes a combination of methods to create a more comprehensive framework, using multiple legal and institutional interventions in different ways to allow for very diverse interests in bush food commercialisation. As such, its approach is strategic rather than doctrinal.

1.2 The meaning of ‘bush food commercialisation’

Australia is home to at least 24,000 native plants species and 145 Aboriginal and Torres Strait Islander language groups. Aboriginal and Torres Strait Islander peoples have used some native plants as foods for millennia. Some species have a special spiritual status within a group, and are the subject of traditional songs, stories and

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2 Michael Davis, Bridging the gap or crossing a bridge? Indigenous knowledge and the language of law and policy, in Reid W, Berkes F, Wilbanks T and Capistrano D (eds), Bridging scales and knowledge systems (Washington, Island Press, 2006) 145, 153; see also Veronica Dodson, Annpemirrrente: relationships between bush foods, people, country and all things (Video, Arrernte People of Central Australia and DKCRC, 2009); Merne Altyerre-ipenhe, above n 1.


4 Merne Altyerre-ipenhe, above n 1, 12.
ceremonies. Some Aboriginal and Torres Strait Islander group members have special rights and responsibilities in relation to a species, such as the right to make decisions about species use and the duty to conserve species knowledge in accordance with customary law.

The wild harvest of bush foods for commercial purposes provides Aboriginal and Torres Strait Islander peoples with an opportunity to fulfil cultural responsibilities, socialise, exercise, earn money, connect with land and carry out environmental management activities. The harvest also provides a space for peoples to share and develop the knowledge necessary to sustain their traditional food systems; it is about far more than collecting and consuming food.

‘Bush food commercialisation’ is the transformation of bush foods into marketable products. This thesis uses the phrase ‘bush food commercialisation’ interchangeably with ‘commercial development’ and ‘development’. Popular commercial species include macadamia, lemon myrtle, wattle seed, bush tomato, Kakadu plum, muntries and quandong. Recent estimates place the sale of raw bush food materials at over A$18 million annually (excluding macadamias), with the sale of products derived from these materials potentially increasing this figure ‘by up to 500%’. Macadamia sales add a further A$200 million to this figure.

Marketable, tangible bush food products include nursery seeds and seedlings, and food products like restaurant meals and gourmet sauces, jams and pies.

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5 Ibid 16.
8 Dodson, above n 2; Merne Altyerre-Ipenhe, above n 1, 13.
11 Ibid vii.
12 Ibid.
Intangible products include copyrights in cookbooks and rights to exclusively exploit artificially created plants for up to 25 years.\(^\text{15}\)

The methods used in this thesis focus attention on commercialisation pathways. The methods identify pivotal transactions, and where changes to these transactions might help Aboriginal and Torres Strait Islander peoples obtain legal leverage to advance their interests. The path taken to make each type of product differs. For example, the path taken to transform raw bush food ingredients into gourmet food products differs to that taken to develop and exploit new bush food varieties. Each of these commercial paths involves a different set of transactions and, thus, different possible mechanisms to advance Aboriginal and Torres Strait Islander interests. The key contribution of this thesis is the exploration of these paths and proposals for legal and institutional changes to make them more conducive to Aboriginal and Torres Strait Islander interests.

1.3 **How this thesis came about**

In 2010, the Australian Government began funding the Cooperative Research Centre for Remote Economic Participation (CRC-REP) to develop practical responses to the economic challenges affecting remote Australia.\(^\text{16}\) The CRC-REP supports a range of projects to further this goal.\(^\text{17}\) One of these is Plant Business.\(^\text{18}\)

The aim of Plant Business is to develop new bush tomato varieties from which Aboriginal and Torres Strait Islander peoples may obtain benefits.\(^\text{19}\) This is essentially a scientific process. A broader aim is to design a bush food commercialisation model acceptable to Aboriginal and Torres Strait Islander peoples.\(^\text{20}\) The vision is of a model that encompasses scientific, cultural, commercial and legal aspects of commercialisation. To this end, Plant Business provided funding

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\(^{20}\) CRC-REP, above n 18; CRC-REP, ‘Conversations’, above n 19, 6.
for a PhD on strategies to support the interests of Aboriginal and Torres Strait Islander peoples in bush food commercialisation.21

Research for this PhD commenced in April 2012, with confirmation of candidature in November 2012. Between 2010 and April 2012, a series of conversations occurred between:

- Aboriginal and Torres Strait Islander elders and bush food developers;
- Non-Indigenous bush food developers;
- Associate Professor Slade Lee (Plant Business project leader and plant scientist based at Southern Cross University);
- Professor Paul Martin (Principle Supervisor of this thesis and Director of the Australian Centre for Agriculture and Law, University of New England).22

In 2011, a group of central Australian women with cultural responsibilities for bush food published ethical guidelines to generate commercial support for their needs and aspirations in bush food development.23 Between April 2012 and November 2012, conversations also occurred between the aforementioned people and the PhD researcher, along with the conduct of preliminary literature reviews.

These discussions, publications and reviews affirmed the diversity of needs and aspirations Aboriginal and Torres Strait Islander peoples have in relation to the commercialisation of their traditional plant foods. Interests may reflect different customary legal systems, relationships with local lands and resources, political and economic motivations, and personalities and capacities.24 Possible interests include:

- control over the use of plants and knowledge;
- respect for Aboriginal and Torres Strait Islander knowledge, skills and practices;

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22 See generally ibid.
23 Merne Altyerre-ipenhe, above n 1, 4.
• acknowledgement of Aboriginal and Torres Strait Islander contributions to bush food development;
• fair compensation for these contributions;
• fair remuneration for the authorised uses of plants and knowledge;
• maintenance of cultural practices such as wild harvest;
• transmission of knowledge to Aboriginal and Torres Strait Islander youth;
• sharing of plant cultural stories with consumers;
• development of bush food enterprises and commercial partnerships; and
• meaningful involvement in bush food governance processes.  

It is arguably patronising for any researcher to determine that any of these interests (such as traditional cultural interests) is more important or ‘valid’ than any other (such as the economic interests of a modern Aboriginal and Torres Strait Islander entrepreneur). The aim of this PhD thesis reflects the need to advance a diversity of interests rather than attempting to prioritise which interests of which people are most important.

1.4 Research aim

The aim of this thesis is as follows:

Identify possible legal and institutional strategies to support the diverse interests of Aboriginal and Torres Strait Islander peoples in bush food commercialisation.

In this thesis, legal arrangements refer to laws and regulations. Institutional arrangements refer to the policies, systems, and processes that public and private organisations use to plan and manage their activities.

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1.5 Research problem and knowledge gap

The thesis aim acknowledges the diversity of Aboriginal and Torres Strait Islander interests. It differs to current approaches in the bush food research that focus on institutional solutions for specific problems.²⁶ For example, Cleary proposes regional cooperatives to help connect remote wild harvesters with urban buyers.²⁷ Miers considers the capacity of Aboriginal and Torres Strait Islander landowners to carry out horticulture.²⁸ Morse suggests a series of measures to support remote bush food enterprises.²⁹ While all such research contributes, this thesis aims for a more comprehensive approach that encompasses as many Aboriginal and Torres Strait Islander interests as possible.

As well as being atomistic in focus, there is very little research on how the laws relevant to bush food commercialisation may improve support in practice for Aboriginal and Torres Strait Islander interests. There is also no integration of law reform proposals with mechanisms for altering commercial outcomes. As the outcomes of legal arrangements depend on the context of their application, a piecemeal approach to solution finding is unlikely to accelerate effective improvement.

A primary concern from examining the broader literature is the lack of legal support for Aboriginal and Torres Strait Islander peoples to control and benefit from the use of their knowledge.³⁰ Authors recommend a range of single-instrument solutions to address this problem. The most popular of these is a new law that would grant Aboriginal and Torres Strait Islander peoples the right to consent to the use of

²⁸ Geoff Miers, 'Cultivation and Sustainable Wild Harvest of Bushfoods by Aboriginal Communities in Central Australia' (RIRDC, 2004).
²⁹ Morse, above n 14.
their secret knowledge and share in the benefits of that use.\textsuperscript{31} Such a new approach is often termed a \textit{sui generis}—literally: “of its own kind”\textsuperscript{32}. In practice, these \textit{sui generis} approaches are likely to have limited use in bush food commercialisation because a lot of Aboriginal and Torres Strait Islander knowledge is freely available.\textsuperscript{33} This may partially explain why:

In Australia, there are currently few examples of ethical and equitable intellectual property negotiations in relation to IEK [Indigenous Ecological Knowledge] of plants used in the food, biopharmaceutical or biomedical industries. There are even fewer, if any, examples of substantive payments or other benefit-sharing returns to Aboriginal and Torres Strait Islander groups.\textsuperscript{34}

It is also likely that an all-encompassing \textit{sui generis} response to the challenges outlined in this thesis would take a very long time to create and negotiate, and that the political processes for its adoption would be challenging and perhaps lead to a compromised approach. That is not to say \textit{sui generis} approaches have no role to play, just that it may be unduly optimistic to rely on this strategy alone to support diverse Aboriginal and Torres Strait Islander interests in this context within any reasonable timeframe. Similar difficulties affect other solutions proposed in the literature, leading to the expectation that they may fail to effectively address the overall set of needs and aspirations Aboriginal and Torres Strait Islander peoples may have in bush food commercialisation. This thesis aims to address that problem by proposing a ‘cocktail’ of interventions which provide alternative routes to a single goal: meeting the aspirations of Aboriginal and Torres Strait Islander peoples in the commercialisation of ‘their’ foods.

### 1.6 Research questions

The main question this thesis seeks to answer is as follows:

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\textsuperscript{31} See eg, Terri Janke and Peter Dawson, 'New Tracks: Indigenous Knowledge and Cultural Expression and the Australian Intellectual Property System', Submission to IP Australia, \textit{Finding the Way: A Conversation with Aboriginal and Torres Strait Islander Peoples}, 31 May 2012, 10; Smallacombe, Davis and Quiggin, above n 25, 42-43; Janke, above n 25, 161.

\textsuperscript{32} Smallacombe, Davis and Quiggin, above n 25, 29; Merne Altyerre-ipenhe, above n 1, 5-6, 14.


\textsuperscript{34} Merne Altyerre-ipenhe, above n 1, 23.
What legal and institutional strategies may improve support for the diverse interests of Aboriginal and Torres Strait Islander peoples in bush food commercialisation?

Related sub-questions address these issues in an implicit hierarchy:

(1) To what extent can current legal and institutional arrangements (not limited to government) support the diverse interests of Aboriginal and Torres Strait Islander peoples in bush food commercialisation?

(2) What innovative uses of current legal and institutional arrangements may improve support for Aboriginal and Torres Strait Islander interests in bush food commercialisation?

(3) What more radical measures, including new laws, might further improve support for Aboriginal and Torres Strait Islander interests in bush food commercialisation by addressing issues beyond the scope of existing rules and institutional arrangements?

1.7 Social value of the research

The non-binding United Nations Declaration on the Rights of Indigenous Peoples reflects more than 20 years of academic research and Indigenous advocacy. Article 43 contends that the wellbeing of Indigenous peoples depends upon their capacity to control, maintain, and develop their traditional resources, knowledge, skills and practices, and their meaningful involvement in legislative and administrative measures likely to affect their interests. Australia’s endorsement of the Declaration demonstrates acceptance of this proposition.

In 2009, the United Nations reported that Australians had the third highest standard of living in the world, but the standard of living of Aboriginal and Torres Strait Islander peoples ranked 103rd. The inequity is startling. Since 2009, all Australian governments have committed to improving Aboriginal and Torres Strait

36 Jenny Macklin, 'Statement on the United Nations Declaration on the Rights of Indigenous Peoples' (Minister for Families, Housing, Community Services and Indigenous Affairs, 2009); see also Pat Dudgeon et al, 'Effective Strategies to Strengthen the Mental Health and Wellbeing of Aboriginal and Torres Strait Islander People' (Closing the Gap Clearinghouse, 2014) 3.
Islander wellbeing. Although some recent programs have produced marginal improvements, an acute wellbeing gap remains. For instance:

Aboriginal and Torres Strait Islander males born between 2010 and 2012 can expect to live 69.1 years, 10.6 years less than non-Indigenous males. Aboriginal and Torres Strait Islander females can expect to live 73.7 years, 9.5 years less than non-Indigenous females.

Similar gaps exist in education, employment, health and the criminal justice system.

This thesis follows the logic that people who can realise their own needs and aspirations generally have greater wellbeing. Supporting Aboriginal and Torres Strait Islander peoples to realise their diverse interests in bush food commercialisation is one part of this picture. Supportive strategies may also help transform current policy approaches that are argued to promote government dependency to ones that empower Aboriginal and Torres Strait Islander peoples.

1.8 Research challenges and assumptions

The identification of possible strategies to support diverse Aboriginal and Torres Strait Islander interests must confront some grand challenges. A particular challenge posed by the diversity of interests is that ‘each interest involves different issues, and recognition of some may come at a cost to others’. It is also impossible to predict all the interests Aboriginal and Torres Strait Islander peoples may have.

Another challenge is the need to start somewhere in developing a set of comprehensive strategies to support Aboriginal and Torres Strait Islander interests in bush food commercialisation. While this thesis makes every effort to evaluate

38 Council of Australian Governments (COAG), 'National Indigenous Reform Agreement (Closing the gap)' (Commonwealth of Australia, 2009).
41 Steering Committee for the Review of Government Service Provision, above n 39, 4.5-4.7
42 See generally ibid ch 4.
43 See Robert Nemeskeri et al, 'System Dynamics to Diagnose and Devise Patterns for Sustainable Consumption and Production' (SYSCONS, 2008) 43-44.
45 Ibid.
possibilities ‘in terms of the success of their practical application’, actual effectiveness will depend upon ‘the quality of implementation’. This thesis starts the journey to implementation by developing policy concepts for Aboriginal and Torres Strait Islander peoples to consider further.

Existing power structures pose the ultimate challenge. For example:

‘Respect’ and ‘recognition’ at the deeper levels of culture involve challenges to the institutionalised power structures of the dominant culture. Coming to grips with this political contest requires far more than legal and institutional mechanisms that protect and allow Indigenous peoples to exploit cultural symbols such as art and ritual, or even arrangements which give legal force to traditional control over access to places and information.

In recognition of these challenges, this thesis proceeds upon three key assumptions. First, the work is conceptual. It aims to identify possibilities that Aboriginal and Torres Strait Islander peoples might choose to pursue. It does not judge the legitimacy of different interests, or the conflicts that might arise between them. The second assumption and underlying logic of the thesis is that the best way of advancing Aboriginal and Torres Strait Islander interests in native biodiversity is by enabling them to pursue their own interests more effectively. This positions the plurality of interests as a reality we need to understand, not a problem we need to solve. The final point is that the analysis does not deal with past or potential future actors or roles. It proceeds on the assumption that current political, legal, commercial and cultural structures will largely exist in the future and, while change is inevitable, forecasting what change will occur is beyond the scope of this work.

1.9 Thesis structure

This is a ‘thesis-by-publication’ through the University of New England, Australia. Under the rules of the University, a thesis-by-publication is one where the substantive body comprises self-contained journal papers. These need not have

47 Martin et al, above n 44.
48 Ibid.
49 Ibid.
been published, or submitted to any journal at the time of thesis examination.\textsuperscript{51} In this thesis, the papers are at varying stages of publication.

This thesis-by-publication does not contain a section designated as the ‘literature review’, as the relevant literature is reviewed within each journal paper and so a separate chapter would be redundant. There is also unavoidable repetition between papers because they stand alone, so some background is required for each paper. An introduction precedes each substantive chapter to help guide the reader through the thesis as efficiently as possible.

Chapters 3-6 contain the substantive body of this thesis. Each chapter has a journal paper under peer review at a reputed journal, and a policy brief summarising key points from the journal paper. The policy briefs have been prepared for the Cooperative Research Centre for Remote Economic Participation, for circulation to stakeholders and government bodies as part of the process of consultation about the implementation of new arrangements, based on this research. That consultation process has commenced and is ongoing.

1.9.1 \textbf{Aim and purpose of each chapter}

Chapter 2 outlines the combination of methods used to identify possible strategies to support the diverse interests of Aboriginal and Torres Strait Islander peoples in bush food commercialisation. It provides a reference point for people to critique or advance the possibilities outlined in this thesis.

The identification of strategies to support interests in a specific context must begin with an understanding of relevant interests, challenges and resources.\textsuperscript{52} The journal paper in Chapter 3 explores key Aboriginal and Torres Strait Islander interests in detail. The paper also highlights issues that may arise in developing strategies to support each interest, and existing laws that are relevant to possible strategies. The paper is supported by the co-authored book chapter in Appendix 1 that explores the challenges facing Aboriginal and Torres Strait Islander peoples in asserting their cultural interests.

\textsuperscript{51} Ibid.
\textsuperscript{52} Paul Martin and Donna Craig, ‘Accelerating the Evolution of Environmental Law Through Continuous Learning from Applied Experience’ in Paul Martin and Amanda Kennedy (eds), \textit{Implementing Environmental Law} (Edward Elgar, Forthcoming).
In addition to understanding the interests at stake, it is necessary to understand the context in which these interests arise. The journal paper in Chapter 4 begins by exploring current research on Aboriginal and Torres Strait Islander interests in bush food commercialisation, and the relevance of international developments to these interests. It then outlines a method for understanding bush food commercialisation transactions.

The journal papers in Chapters 4, 5 and 6 assess the extent of legal support for Aboriginal and Torres Strait Islander interests in the development of gourmet food products and new bush food varieties, and the governance processes that shape bush food commercialisation. Each paper identifies the legal and institutional possibilities within these contexts. The findings together form an integrated framework of multiple interventions that together or separately may improve support for Aboriginal and Torres Strait Islander interests in bush food commercialisation.

Chapter 7 concludes the thesis by synthesising key research findings, the significance of the research, and areas of further research.

Table 1.1 provides an overview of the chapters.
Table 1.1: Outline of the content of each chapter

| Chapter 1 | Explains the background to the thesis  
Outlines the research aim, problem and questions  
Outlines thesis structure |
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<tbody>
<tr>
<td>Chapter 2</td>
<td>Outlines research methods and ethics</td>
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</table>
| Chapter 3 | *Journal Paper one (and Policy Brief one):* ‘Key issues and opportunities in developing laws to support the diverse interests of Aboriginal and Torres Strait Islander peoples in the commercialisation of traditional plant foods’ (submitted to *International Journal of Sustainable Development and World Ecology*)  
- Explores some Aboriginal and Torres Strait Islander interests in bush food commercialisation  
- Detects issues in developing strategies to support these interests  
- Considers the potential of law to support these interests |
| Chapter 4 | *Journal Paper two (and Policy Brief two):* ‘Strategies to Support the Interests of Aboriginal and Torres Strait Islander Peoples in the Development of Gourmet Bush Food Products’ (submitted to *International Journal of Cultural Property*)  
- Reviews the relevance of current literature and international developments  
- Outlines a method for developing strategies  
- Assesses support for Aboriginal and Torres Strait Islander interests in the development of gourmet food products  
- Identifies possible strategies to improve support for these interests in this context |
| Chapter 5 | *Journal Paper three (and Policy Brief three):* ‘Strategies to support the Interests of Aboriginal and Torres Strait Islander Peoples in the Development of New Native Plant Varieties’ (submitted to *Australian Intellectual Property Journal*)  
- Assesses support for Aboriginal and Torres Strait Islander interests in the development of new bush food varieties  
- Identifies possible strategies to improve support for these interests in this context |
- Assesses support for Aboriginal and Torres Strait Islander involvement in bush food commercialisation governance processes  
- Identifies possible strategies to improve support for Aboriginal and Torres Strait Islander involvement in these processes |
| Chapter 7 | Synthesises research findings  
Outlines areas of future research and a way forward from this research |
CHAPTER 2: RESEARCH METHODS AND ETHICAL FRAMEWORK

This Chapter outlines the methods used to identify possible strategies to support diverse Aboriginal and Torres Strait Islander interests in bush food commercialisation, and the ethical framework in which the research occurred. The discussion provides a reference point for people to critique the possibilities outlined in this thesis.

2.1 Research methods

The methodology chosen for this research responds to the following project rationale:

To work with and for Aboriginal and Torres Strait Islander peoples in conceptualising feasible legal and institutional strategies to support their diverse interests in bush food commercialisation.

The dominant legal research method is legal analysis.\(^5\) Its application typically leads to recommendations for law reform.\(^4\) However, Martin and Craig contend that legal analysis alone cannot capture the complexities, values and practicalities inherent in a complex socio-economic system ‘that places emphasis upon wealth’.\(^5\) They support the use of multiple methods to produce environmental law scholarship of real-world value.\(^6\) This is consistent with an applied policy methodological approach.

This thesis uses a combination of six methods to further this end. The methods are not used sequentially. They are iterative and revisited at different stages throughout the project to advance the research aim. They are as illustrated in Figure 2.1:

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54 Martin and Craig, above n 52.
55 Ibid.
56 Ibid; see also Jennifer Mason, ‘Mixing methods in a qualitatively driven way’ (2006) 6(1) Qualitative Research 9, 19.
The combination reflects aspects of strategic decision-making and mixed methods approaches to problem-solving. Mixed methods approaches provide ‘multiple viewpoints, perspectives, positions, and standpoints’ on a problem:

By combining multiple observers, theories, methods, and empirical materials, researchers can hope to overcome the weakness or intrinsic biases and the problems that come from single-method, single-observer, single-theory studies.

The rest of this chapter explains the role of each method in the research project.

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57 Martin and Craig, above n 52.
2.1.1 Engaged scholarship

This thesis aims to identity possible legal and institutional strategies that align with the interests of Aboriginal and Torres Strait Islander peoples. This involves understanding what Aboriginal and Torres Strait Islander peoples want. The research uses an ‘engaged scholarship’ approach to inform this understanding.

Traditional academic research is the pursuit of knowledge ‘for its own sake’.60 Engaged scholarship is ‘user inspired research, where the community defines the problem and in partnership with the researcher looks for a solution’.61 It is a two-part process involving the discovery of knowledge and its ‘integration’ into real life, with each part informed by the people affected by the problem.62 At the heart of the approach lies a philosophical commitment to work ‘with’ or ‘for’ rather than ‘on’ the Aboriginal and Torres Strait Islander researcher partners.

Engaged scholarship processes used in this thesis include observation, dialogue and field trips. The thesis topic, aim and problem reflect the results of pre-project talks with Aboriginal and Torres Strait Islander peoples and the Plant Business Advisory Group, convened in 2011 to provide overarching guidance to the Plant Business project.63 Plant Business Advisory Group members include:

- Pat Torres: Aboriginal and Torres Strait Islander wild harvester and owner of Mayi Harvests, a bush food produce business;64
- Rayleen Brown: Aboriginal and Torres Strait Islander owner and co-founder of Kungkas Can Cook, a bush food catering business;65
- Max Emery: manager of Desert Garden Produce, an Aboriginal and Torres Strait Islander owned and operated bush food produce business;66
- Juleigh Robins: author and director of Outback Sprit, a gourmet bush food manufacturing business;67

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60 Sharon Paynter, 'Tackling Wicked Problems Through Engaged Scholarship' (2014) 7(1) Journal of Community Engagement and Scholarship 48, 48; see also Martin and Craig, above n 52.
61 Paynter, above n 60, 49.
62 Ibid.
63 See generally CRC-REP, Conversations, Cups of Tea ..., above n 19, 6.
• Andrew Fielke: chef and proprietor of Tuckeroo, a bush food manufacturing and distribution business; 68
• Jenni Lightowler: lawyer with expertise in intellectual property and Cooperative Research Centres; 69 and
• Slade Lee: plant scientist and Plant Business project leader. 70

Important engagement opportunities throughout the research process included four Advisory Group meetings, continuous dialogue with Advisory Group members, a field trip to Rainbow Valley in the Northern Territory, and cultural immersion experiences in Ntaria (NT) and Iga Warta (SA). Each of these provided an opportunity for discussion, observation and information exchange. The researcher also brings an awareness of Aboriginal and Torres Strait Islander interests gained from detailed discussions with Aboriginal and Torres Strait Islander peoples on prior cultural heritage research. Together, the interactions have helped ensure the research remains sensitive to the needs of Aboriginal and Torres Strait Islander peoples and the problems and practicalities peculiar to bush food commercialisation.

2.1.2 Desktop study
A desktop study is ‘a preliminary investigation and report into something collating currently available relevant information’. 71 It involves the gathering and evaluation of published information from a wide variety of sources. 72 Desktop studies help identify earlier discoveries relevant to the topic, and gaps in current knowledge. 73 Desktop study processes involve searching, collating, reading and synthesising published information.

An early part of this thesis was a desktop study of information published by:

• Aboriginal and Torres Strait Islander peoples;

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73 Belspo, above n 72; Education and Training Unit for Democracy and Development, above n 72.
• academics;
• international agencies;
• domestic government agencies;
• Rural Industries Research and Development Corporation;
• Commonwealth Science and Industrial Research Organisation;
• botanical and herbarium collections; and
• bush food developers.

The results of this study underpin the Issues Paper presented at the PhD Confirmation of Candidature in November 2012 (see Appendix 2).

Desktop studies have also occurred at each research stage. The findings have shaped the choice of methods outlined in this chapter, the exploration of interests, issues and opportunities in Chapter 3, the literature review and transaction mapping method in Chapter 4, and the reviews of current and potential possibilities in Chapters 4, 5 and 6.

2.1.3 Transaction mapping
‘Systems change … represents a new phase in the evolution of environmental policy approaches’. 74 It comes about from systems thinking. Systems thinking ‘recognises that the … impact of a single product, process or practice can only be understood through an appreciation of the wider system of which it is part’. 75 For example, a law that works in one context may not work in another. 76 A holistic understanding of context can lead to the identification of workable solutions that respond to context-specific needs, goals, interactions and transactions. 77

‘In the area of natural resource management, research has incorporated notions of systems thinking since at least the early 1940s’. 78 Systems mapping involves

75 Geels et al, above n 74, i.
76 Martin and Craig, above n 52.
77 Ibid.
78 Sedlackoa et al, above n 74, 34.
‘visually mapping the system of interest’ and identifying parts to change. Environmental law scholars have used systems mapping to understand complex policy problems and identify workable interventions in the area of sustainable consumption, sustainable development, and biofuel production.

This thesis uses systems mapping to understand the transactions peculiar to the development of gourmet bush food products (Chapter 4) and new plant varieties (Chapter 5), and the governance processes that shape bush food commercialisation (Chapter 6). The logic is that by understanding these transactions, it is possible to objectively consider how to adjust the legal and institutional arrangements supporting them to better reflect the interests of Aboriginal and Torres Strait Islander peoples. Application of the approach does not avoid implementation challenges arising from political will, social attitudes, commercial behaviour and community opposition, but it does help advance possibilities for further deliberation.

2.1.4 Doctrinal research and analysis

The use of multiple methods in legal research does not avoid the need to identify, analyse and synthesise the law. This process is referred to in law academia as doctrinal research and analysis, the traditional legal research method.

Doctrinal research, at its best, involves rigorous analysis and creative synthesis, the making of connections between seemingly disparate doctrinal strands, and the challenge of extracting general principles from an inchoate mass of primary materials.

Doctrinal processes include:

- identification of primary material (including legislation and case law);

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80 Sedlacek et al, above n 74.
81 Chris Mcgrath, Does Environmental Law Work? How to Evaluate the Effectiveness of an Environmental Legal System (Lambert Academic Publishing, 2010); Paul Martin and Miriam Verbeek, Sustainability Strategy (Federation Press, 2006).
83 See Martin and Verbeek, above n 81; Martin and Gal, above n 82, 5-6.
84 Martin and Gal, above n 82.
85 Hutchinson and Duncan, above n 53, 85.
86 Ibid 105.
• analysis of primary material content, effects and interrelationships; and
• synthesis of issues and making of tentative conclusions.\textsuperscript{87}

The processes are informed by studies of background material such as legal dictionaries, textbooks, policy papers and journal articles.\textsuperscript{88}

This thesis uses doctrinal analysis to evaluate current and future legal avenues of support for Aboriginal and Torres Strait Islander interests in gourmet food production, new plant variety development and bush food governance. In the spirit of engaged scholarship, and respecting recent calls to move beyond the use of single methods in legal research,\textsuperscript{89} the doctrinal findings are informed by dialogue with Aboriginal and Torres Strait Islander peoples, observations, desktop studies of non-legal information and studies of bush food commercialisation transactions.

2.1.5 Peer review

Peer review was used to develop the written communication skills of the researcher and improve the quality of research results. Journal peer review involves independent experts evaluating the publication potential of a paper.\textsuperscript{90}

It is based on the concept that a larger and more diverse group of people will usually find more weaknesses and errors in a work … and will be able to make a more impartial evaluation of it than will just the person or group responsible for creating the work.\textsuperscript{91}

For journals, peer review is a filtering process used to protect journal integrity. For authors, the value of peer review is ‘tied to providing feedback so that a manuscript can be improved through revision’.\textsuperscript{92} This helps authors strengthen their

\textsuperscript{87} Ibid 106.
\textsuperscript{88} Ibid.
\textsuperscript{89} See eg, Yeasmin and Rahman, above n 59, 154; Martin and Craig, above n 52.
\textsuperscript{91} the Linux Information Project, Peer Review Definition (2005) <http://www.linfo.org/peer_review.html>.
writing and communication skills,\textsuperscript{93} the quality of which affects the dissemination of ideas.

The nature of humanity makes journal peer review imperfect. For instance, reviewers can be biased and subjective;\textsuperscript{94} researchers can respond poorly to criticism and fail to extract salient points.\textsuperscript{95} On the other hand:

At its best, the peer review system provides not only expert advice, but also a strong incentive for authors to heed the advice and to improve the paper.\textsuperscript{96}

This thesis mitigates some of the pitfalls of peer review by using it in combination with other methods. For instance, feedback on an early paper helped focus the legal research and analysis process on bush food commercialisation rather than all native plant commercialisation. The benefits of the peer review used in this thesis will last long after submission, through post-publication discussion and critique.\textsuperscript{97}

\subsection{2.1.6 Sharing research findings}

The rationale of this research project was to work with and for Aboriginal and Torres Strait Islander peoples in conceptualising strategies to support their interests. A logical corollary of this is the return of research findings to Aboriginal and Torres Strait Islander peoples for them to deliberate and act upon if they wish.\textsuperscript{98} An additional consideration is the need to generate support for Aboriginal and Torres Strait Islander preferences amongst other bush food stakeholders. This twofold basis for sharing research findings reflects the notion of applied legal research, where the

\begin{itemize}
\item \textsuperscript{93} The Teaching Center, \textit{Using Peer Review to Help Students Improve Writing} (2013) <http://teachingcenter.wustl.edu/strategies/Pages/peer-review.aspx#.VX6XVfmqpBe>.
\item \textsuperscript{95} The Teaching Center, above n 93.
\item \textsuperscript{97} European Food Information Council, above n 94; SAGE, above n 96.
\item \textsuperscript{98} C A Butiu and M Pascaru, ‘Triangulation and results restitution in social service needs assessment’ (2014) 46 \textit{Revista de Cercetare si Interventie Sociala} 273, 278-79.
\end{itemize}
aim ‘is not scientific (the pursuit of knowledge as an end) but pragmatic (the pursuit of knowledge for applied ends)’. 99

This research returned findings to Aboriginal and Torres Strait Islander field partners through presentations, emails and summary papers. This honours a benefit-sharing agreement reached at the outset of the Plant Business project between Aboriginal and Torres Strait Islander field partners and the CRC-REP. 100 Over the past three years, the managing entity of the CRC-REP (Ninti One) has been sharing these research findings with other bush food stakeholders to stimulate awareness of and support for Aboriginal and Torres Strait Islander interests in bush food commercialisation. This has created a pathway for the potential further development and adoption of the findings of this research. Relevant stakeholders include government departments, regional natural resource management boards, Aboriginal and Torres Strait Islander land councils and bush food developers. These discussions are ongoing, with Ninti One committed to helping Aboriginal and Torres Strait Islander peoples advance their preferred strategic options.

2.2 Ethical framework

This thesis has been conducted within the ethical framework of the CRC-REP and its managing entity, Ninti One. Ninti One is an independent, not-for-profit research institute based in Alice Springs. 101 It is governed by a majority Aboriginal and Torres Strait Islander board who approve all research projects, including Plant Business. 102 Ninti One has internal ethical policies with which researchers must comply. 103 The policies embody the best-practice research standards outlined in the Australian Institute of Aboriginal and Torres Strait Islander Studies Guidelines for Ethical Research in Indigenous Studies 2012. 104 This section outlines the measures taken by the Plant Business project and PhD researcher in compliance with Ninti One polices.

99 Martin and Craig, above n 52.
100 CRC-REP, Conversations, Cups of Tea ..., above n 19, 15.
104 See Australian Institute of Aboriginal and Torres Strait Islander Studies, Guidelines for Ethical Research in Australian Indigenous Studies (AIATSIS, 2012); Ninti One (2012), above n 103, 1.
2.2.1 Ninti One Aboriginal and Torres Strait Islander research engagement protocol

The Ninti One Aboriginal and Torres Strait Islander research engagement protocol provides a starting point for negotiations between Ninti One researchers and Aboriginal and Torres Strait Islander peoples. ‘It is … an active document that is specific to each research project, within the framework of best practice outlined’. 105 Best practice processes for each project include:

- obtaining Aboriginal and Torres Strait Islander consent to carry out research; 106
- collaborating with Aboriginal and Torres Strait Islander peoples to design and deliver research aims; 107
- supporting the active participation, employment and training of Aboriginal and Torres Strait Islander peoples in all research stages; 108
- convening an Aboriginal and Torres Strait Islander advisory group; 109 and
- sharing research benefits with Aboriginal and Torres Strait Islander partners. 110

One of the first actions taken by the Plant Business project leader was the convening of the Plant Business Advisory Group. 111 Another early action was the instigation of discussions with Western Aranda elders from Ntaria and Tjuwanpa Outstations in the Northern Territory. 112 The driving force behind approaching people from this area was their traditional connections with the bush tomato, the focus species of the scientific aspects of the Plant Business project. At the end of 2011, after more than six months of discussions and planning, the Ninti One board approved the Plant Business project proposal. 113

The next stage of the Plant Business project was to formalise agreed benefit-sharing arrangements with Western Aranda peoples through their legal

105 Ninti One (2012), above n 103, 1.
106 Ibid 2.1.
107 Ibid 2.2.
108 Ibid 3.4.
109 Ibid 2.3.
110 Ibid 4.2.
111 See CRC-REP, Conversations, Cups of Tea …, above n 19.
112 Ibid.
113 Ibid 9.
represents, the Central Land Council. These negotiations are ongoing. Alongside this process was the formalisation of an agreement with Western Aranda elders to collect plant samples from their land. Ninti Aboriginal Community Researchers and Tjuwanpa Women Rangers facilitated these negotiations. Negotiations with elders occurred in the local language (Western Aranda). ‘Those people decided what information we could collect, what information was restricted’, and the conditions of specimen collection such as appropriate training, payment and documentation.

2.2.2 Ninti One protocol for Aboriginal and Torres Strait Islander knowledge and intellectual property

This Ninti One protocol for Aboriginal and Torres Strait Islander knowledge and intellectual property is consistent with the principles outlined in the United Nations Declaration on the Rights of Indigenous Peoples. The purpose of the protocol is ‘to guide researchers toward best practice in ethics, confidentiality, equitable benefit-sharing and in managing research information’ and Aboriginal and Torres Strait Islander knowledge ‘throughout the research process’. The protocol requires Ninti One researchers to:

- secure ethical clearances from university ethics committees;
- adhere to the Australian Institute of Aboriginal and Torres Strait Islander Studies Guidelines for Ethical Research in Indigenous Studies;
- respect local Aboriginal and Torres Strait Islander protocols;
- clarify when Aboriginal and Torres Strait Islander knowledge may be used and how, and ensure all uses accord with that agreement;
- start benefit-sharing negotiations on the assumption of a 50/50 share between Ninti One and Aboriginal and Torres Strait Islander knowledge providers.

114 Ibid 11.
115 Ibid 15.
116 Ibid.
117 Ninti One (2012), above n 103, 4.
118 Ibid 2.
119 Ibid 4.1.
120 Ibid.
121 Ibid.
122 Ibid 5.1.
123 Ibid 6.1.
• return research results to Aboriginal and Torres Strait Islander participants ‘in ways that are relevant, accessible and meaningful’,\textsuperscript{124} and
• regularly report on compliance with Ninti One research protocols.\textsuperscript{125}

Ethical clearance from an Australian university is generally only required when Aboriginal and Torres Strait Islander peoples are the subject matter of the research.\textsuperscript{126} Although the subject matter of Plant Business was native plants and the subject matter of this PhD was laws and institutions, both projects secured premium ethics clearance in the form of a National Ethical Application Form (NEAF) approval.\textsuperscript{127} These approvals committed project researchers to the *Guidelines for Ethical Research in Indigenous Studies*. In addition, the Plant Business project leader secured government approval for the project from the Central Australian Human Research Ethics Committee.\textsuperscript{128}

Negotiations to collect plant samples were conducted in accordance with the engagement protocols of Western Aranda elders. The collection agreement covered when and how Aboriginal and Torres Strait Islander knowledge can be used, and how research results can be returned to Western Aranda peoples. Research results have been consistently returned to other Aboriginal and Torres Strait Islander field partners through project newsletters and presentations. Annual Ninti One reporting requirements ensure continued compliance with these practices. Equal benefit-sharing arrangements were agreed early in the project, and are now being formalised through the Central Land Council (on behalf of the Western Aranda elders).

### 2.3 Summary

This chapter has explained the rationale behind the research methodology, and described the role of each method in detail. It has also described the ethical framework from within which the research was conducted. The next chapter begins

\textsuperscript{124} Ibid 5.3.
\textsuperscript{125} Ibid.
\textsuperscript{127} Human Research Ethics Committee (Southern Cross University, HREC Approval Number: ECN-12-050, 2012)(see Appendix 3); Human Research Ethics Committee, Final report (University of New England, HREC Approval Number: HE14-018, 2014) (see Appendix 4).
\textsuperscript{128} Central Australian Human Research Ethics Committee (Northern Territory Government, Ethics Approval Number, HREC-12-61, 2012)(see Appendix 5).
the substantive journey towards the research aim by exploring major legal issues and opportunities that pertain to key Aboriginal and Torres Strait Islander interests.
CHAPTER 3: THE POTENTIAL OF LAW

3.1 What this Chapter does

The substance of this chapter is in the form of a journal paper: ‘Key Issues and Opportunities in Developing Laws to Support the Diverse Interests of Aboriginal and Torres Strait Islander Peoples in the Commercialisation of Traditional Plant Foods’ (provided in full in section 3.2). The paper reflects findings from a scoping study undertaken at the outset of the research, the objective of which was to explore the potential of Australian law to support the interests of Aboriginal and Torres Strait Islander peoples in bush food commercialisation. Key findings include the diversity of Aboriginal and Torres Strait Islander interests and the need to complement legal measures with institutional mechanisms to advance real-world outcomes. The findings underpin the choice of method outlined in Chapter 4, and the detailed investigations in Chapters 4, 5 and 6.

To honour the applied aims of the research, the journal paper has been reworked into a policy brief. The brief is basically a simplified document for wider dissemination to Aboriginal and Torres Strait Islander individuals, groups and representative bodies, non-Indigenous bush food developers and law, policy and decision makers. It is provided in section 3.3, and serves as the summary and conclusion section of the chapter.

3.2 Journal paper one


Please Note: This article is subject to copyright. It is available at the following:

3.3 Policy brief one

Kylie Lingard, ‘The Potential of Law to Support Aboriginal and Torres Strait Islander Interests in Bush Food Commercialisation’ (Ninti One, 2015).

Consultation for this brief occurred between December 2014 and July 2015 with the author, Plant Business Advisory Group, CRC-REP, Ninti One and principle thesis supervisor. The final version was agreed upon on 2 August 2015.

Please Note: This policy brief is subject to copyright. It is available at the following:
Lingard K. 2015. The potential of law to support Aboriginal and Torres Strait Islander interests in bush food commercialisation. Ninti One Ltd. Alice Springs.
CHAPTER 4: GOURMET BUSH FOOD PRODUCTS

4.1 What this Chapter does

The previous chapter presented findings from a scoping study on the capacity of Australian law to support Aboriginal and Torres Strait Islander interests in bush food commercialisation. The findings inform the detailed examination in this chapter on strategies to support Aboriginal and Torres Strait Islander interests in the development of gourmet bush food products like sauces, jams and chutneys. The development process encompasses other bush food commercialisation pathways, including the commercial harvesting of wild plants, the commercial production of bush foods on private land and the processing of raw ingredients for sale to gourmet product developers. The other major type of bush food commercialisation in Australia is the development of new bush food plant varieties; the next chapter (Chapter 5) considers strategies to support Aboriginal and Torres Strait Islander interests in this commercial context.

The substance of this chapter is in the form of a journal paper: ‘Strategies to Support the Interests of Aboriginal and Torres Strait Islander Peoples in the Development of Gourmet Bush Food Products’ (provided in full in section 4.2). The paper has three objectives:

- explore current research and the relevance of international developments to bush food commercialisation in Australia;
- assess current avenues of support for Aboriginal and Torres Strait Islander interests in the development of gourmet bush food products; and
- identify possible strategies to support Aboriginal and Torres Strait Islander interests in gourmet bush food product development.

The introduction and parts of the paper repeat much of the information already provided in the paper reproduced in Chapter 3, a necessity to ensure that it is a stand-alone document for publication. The key findings are that:

- the incorporation of major international developments into Australian law is unlikely to support the diversity of Aboriginal and Torres Strait Islander interests in bush food commercialisation; and
there is value in mapping commercialisation transactions to identify feasible legal and institutional interventions to support Aboriginal and Torres Strait Islander interests in bush food commercialisation.

The findings lend support to the adoption of a new approach to Aboriginal and Torres Strait Islander interests in bush food commercialisation.

As with Chapter 3, the findings explained in the journal paper inform a policy brief: ‘Strategies to Support Aboriginal and Torres Strait Islander Interests in the Development of Gourmet Bush Food Products’. The brief is reproduced in full in section 4.3.

4.2 Journal paper two


Please Note: This paper is subject to copyright. It is available at the following:

4.3 Policy brief two

Kylie Lingard, ‘Strategies to Support Aboriginal and Torres Strait Islander Interests in the Development of Gourmet Bush Food Products’ (Ninti One, 2015).

*Consultation for this brief occurred between December 2014 and July 2015 with the author, Plant Business Advisory Group, CRC-REP, Ninti One and principle thesis supervisor. The final version was agreed upon on 2 August 2015.*

Please Note: This policy brief is subject to copyright. It is available at the following:

Lingard K. 2015. ‘Strategies to support Aboriginal and Torres Strait Islander interests in gourmet bush food product development’. Ninti One Ltd: Alice Springs.

CHAPTER 5: NEW NATIVE PLANT VARIETIES

5.1 What this chapter does

Chapter 4 discussed the possible legal and institutional strategies to support Aboriginal and Torres Strait Islander interests in the development of gourmet bush food products. This chapter examines the legal and institutional arrangements shaping another type of bush food commercialisation pathway: the development of new native plant varieties. Chapters 4 and 5 combined address most types of bush food development that occur in Australia at present.

The substance of the chapter is in the form of a journal paper: ‘Strategies to Support Aboriginal and Torres Strait Islander Interests in the Development of New Native Plant Varieties’ (provided in full in section 5.2). The paper has been accepted for publication in the Australia Intellectual Property Journal. The paper has two objectives:

• assess current avenues of support for Aboriginal and Torres Strait Islander interests in the development of new native plant varieties; and
• identify legal and institutional interventions that may improve support for Aboriginal and Torres Strait Islander interests in this commercial context.

The research discussed in this chapter reveals new uses of some of the strategies identified in Chapter 4. It also affirms the difference between strategies developed ‘in-context’ and those developed by examining specific legal instruments. This lends further support to the use of transaction mapping in developing strategies to support Aboriginal and Torres Strait Islander interests in bush food commercialisation.

As with the previous chapter, the paper informs a policy brief: ‘Strategies to Support Aboriginal and Torres Strait Islander Interests in the Development of New Native Plant Varieties’ (provided in full in section 5.3). The brief in this chapter introduces key findings from the journal paper and additional findings from later research.
5.2 Journal paper three


Please Note: This paper is subject to copyright. It is available at the following:
5.3 Policy brief three

Kylie Lingard, ‘Strategies to Support Aboriginal and Torres Strait Islander Interests in the Development of New Native Plant Varieties (Ninti One, 2015).

Consultation for this brief occurred between December 2014 and July 2015 with the author, Plant Business Advisory Group, CRC-REP, Ninti One and principle thesis Supervisor. The final version was agreed upon on 2 August 2015.

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Lingard K. 2015. ‘Strategies to support Aboriginal and Torres Strait Islander interests in the development of new native plant varieties’. Ninti One Ltd: Alice Springs.